



**ENVIRONMENTAL IMPACT STATEMENT
State Significant Development SSD-5746**

**Proposed Expansion of Existing Mainfreight Facility
including Storage of Dangerous Goods (Chemical Storage Facility)**

**30-50 Yarrawa St, Prestons
(Lots 101 & 102 DP 1117691 and Lot 2 DP 28729)**



April 2013

Document Control Table

Document Reference:	062882-Mainfreight_EIS_Final.doc		
Date	Version	Author	Checked By
21 November 2012	Draft	N. Murray	C. Wilson
01 February 2013	Draft Rev A	N. Murray	C. Wilson
15 February 2013	Draft Rev B	N. Murray	C. Wilson
25 February 2013	Issue for Test of Adequacy	N. Murray	C. Wilson
08 April 2013	Final	N. Murray	C. Wilson

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Environmental Impact Statement

Expansion to Existing Mainfreight Facility including Storage of Dangerous Goods
30-50 Yarrowa Street, Prestons NSW

CLAUSE 78A(8A) CERTIFICATE

Declaration Form

Submission of Environmental Impact Statement (EIS)

prepared under the *Environmental Planning and Assessment Act 1979*
Clause 78A(8A)

EIS Prepared By

Name

Nathaniel Murray

Qualifications

Bachelor of Town Planning, UNSW (Hons)

Address

Suite 601, Level 6
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Sydney NSW 2000

In Respect Of

Proposed expansion to existing Mainfreight Warehouse Facility including storage of dangerous goods (Chemical Storage Facility)

Development Application

Applicant Name

Goodman Property Services (Aust) Pty Ltd (Contact: Will Dwyer)

Address

Level 17, 60 Castlereagh St
Sydney NSW 2000

Land to be Developed

30-50 Yarrowa Street, Prestons NSW comprising:

- Lots 101 and 102 in Deposited Plan 1117691; and
- Lot 2 in Deposited Plan 28729

EIS

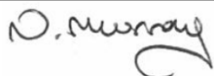
An Environmental Impact Statement (EIS) is attached.

Certificate

I certify that I have prepared the contents of this EIS and to the best of my knowledge:

- it is in accordance with Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*,
- contains all available information that is relevant to the environmental assessment of the development, activity or infrastructure to which the statement relates, and
- that the information contained in the statement is neither false nor misleading.

Signature



Name

Nathaniel Murray

Qualification

BTP (Hons), UNSW

Date

16 April 2013



Environmental Impact Statement

Expansion to Existing Mainfreight Facility including Storage of Dangerous Goods (Chemical Storage Facility)
30-50 Yarrowa Street, Prestons NSW

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GLOSSARY OF TERMS

TERM	MEANING
AU\$	Australian Dollars
DGRs	Director-General's Requirements
DoP&I	Department of Planning and Infrastructure
EIS	Environmental Impact Statement
EP&A Act	Environmental Planning and Assessment Act 1979 (as amended)
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
Goodman	Goodman Property Services (Aust) Pty Ltd
LCC	Liverpool City Council
Metro Strategy	<i>Metropolitan Plan for Sydney 2036</i>
MGC Planning	McKenzie Group Consulting Planning (NSW) Pty Ltd
OEH	NSW Office of Environment and Heritage
PHA	Preliminary Hazard Analysis
S149 Certificate	<i>Planning Certificate issued pursuant to Section 149 of the EP&A Act</i>
SEPP	State Environmental Planning Policy
Sqm or m²	Square metres
SREP	Sydney Regional Environmental Plan
SSD	State Significant Development
The Site	30-50 Yarrowa Street, Prestons (Lots 101-102 DP1117691 and Lot 2 DP28729)



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30-50 Yarrowa Street, Prestons NSW

EXECUTIVE SUMMARY

This Environmental Impact Statement (EIS) has been prepared by McKenzie Group Consulting Planning (NSW) Pty Ltd (MGC Planning) on behalf of Goodman Property Services (Aust) Pty Ltd. The proposal seeks to extend an existing warehouse and distribution facility operated by Mainfreight at 30-50 Yarrowa Street, Prestons (the Site) to provide enlargement to the warehouse/storage area and will include the storage of dangerous goods. The expansion will also include ancillary dock office, extension of the existing heavy vehicle breezeway, new vehicle access arrangements and additional parking and landscaping.

The Site is owned by Goodman Property Services (Aust) Pty Ltd (Goodman) and will continue to accommodate the logistics operations of Mainfreight who will relocate existing warehousing operations from its Moorebank site to the proposed facility once enlarged.

The existing Mainfreight facility at 50 Yarrowa Street comprises:

- Two warehouse buildings joined by an awning creating a breezeway;
- Two offices (both 2 levels);
- A weighbridge and a covered truckwash facility with water recycling facilities;
- Refuelling facility for trucks (diesel) and forklifts (LPG);
- Hardstand area, site landscaping, and parking areas;
- Entrance/exit to Yarrowa Street for cars and truck on the north-west corner, and an exit to Yarrowa Street for truck; and
- Site signage and perimeter fencing.

No buildings or activities currently exist on 30-40 Yarrowa Street; however, this land has been previously disturbed by past agricultural activities and site preparation works associated with adjoining development.

The proposed operations at the expanded facility will include the storage and handling of dangerous goods including aerosol cans, acidic solids, acidic liquids and alkali liquids. Other non-dangerous goods and materials will also be stored on the site.

The quantity of materials to be stored and handled on the site trigger the definition of a Major Hazard Facility within the meaning of Chapter 6B of the *Occupational Health and Safety Regulation 2001*. As such, the proposal is required to be assessed under the provisions of the recently gazetted *State Environmental Planning Policy (State and Regional Development) 2011* as State Significant Development (SSD).

The process of applying for SSD under the *Environmental Planning and Assessment Act 1979* (the EP&A Act) requires a request for Director-General's Requirements (DGRs). DGRs were requested for the proposed development on 11 December 2012 (Reference: SSD-5746) and subsequently issued by the Department of Planning and Infrastructure (DoP&I) on 01 February 2013.

In addition to general requirements, the DGRs for the proposal outlined a number of Key Issues to be addressed as part of an EIS, including:

- Hazards and Risks
- Transport and Access
- Air Quality
- Noise and Vibration
- Soil and Water
- Waste
- Visual and Design
- Heritage

The findings of this EIS identify that the proposal, including storage of dangerous goods, can be accommodated without generating impacts above that considered appropriate by the relevant legislation.



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Further, the proposed warehouse and distribution activities are consistent with the intended use of the heavy industrial land use zoning of the Yarrunga Industrial Area, and is consistent with the NSW 2021 and the Sydney Metropolitan Strategy by allowing an existing business to develop and expand (within NSW) and creating employment opportunities.

Based on the findings of this EIS, the proposal supports the continued development of the Yarrunga Industrial Area, providing employment and contributing to the retention and growth of distribution and supply industry in Sydney.

The proposal is suitable for the local context and will not result in any significant environmental impact. As such, it is recommended that the proposal be supported by the Department of Planning and Infrastructure.



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PART A PRELIMINARY

1.1 INTRODUCTION

This Environmental Impact Statement (EIS) has been prepared by McKenzie Group Consulting on behalf of the Proponent, Goodman Property Service (Aust) Pty Ltd, and is submitted to the New South Wales Department of Planning and Infrastructure (DoP&I) in support of development at 30-50 Yarrowa Street, Prestons, New South Wales.

This application seeks approval for the expansion of an existing warehouse and distribution centre to allow for increased storage space, including storage of dangerous goods, additional loading and unloading facilities, dock office, site access, parking and landscaping.

The site is owned by Goodman Property Services (Aust) Pty Ltd (Goodman) and will remain leased and operated by Mainfreight. The operations will include storage and handling of goods including aerosol cans, flammable liquids, oxidising substances, corrosive substances and miscellaneous dangerous goods. Other non-dangerous goods and materials will also be stored on the site. Products will be packaged for offsite retail sale (no manufacturing is to occur on-site).

The quantity of materials to be stored and handled on the site trigger the definition of a Major Hazard Facility within the meaning of Chapter 6B of the *Occupational Health and Safety Regulation 2001*. As such, the proposal constitutes State Significant Development (SSD) under *State Environmental Planning Policy (State and Regional Development) 2011* and requires the preparation of an EIS.

This EIS describes the site and proposed development, provides relevant background information and responds to the DGR's and assesses the proposed development in terms of the relevant matters set out in relevant legislation, environmental planning instruments and planning policies.

The structure of the EIS is as follows:

- Part A Preliminary
- Part B Site Analysis
- Part C Proposed Development
- Part D Legislative and Policy Framework
- Part E Consultation
- Part F Environmental Risk Assessment
- Part G Statement of Commitments
- Part H Project Justification
- Part I Conclusion

1.2 PROJECT TEAM

The Project Team involved in the preparation of this application are:

- Mainfreight (Tenant/Operator)
- Goodman Property Services (Land Owner and Applicant)
- McKenzie Group Consulting Planning (NSW) Pty Ltd (Town Planning Consultant)
- McKenzie Group Consulting Pty Ltd (Building Surveying Consultant)
- OneGroup ID (Access and Risk Consultant)
- Nettleton Tribe Architects (Architectural Consultant)
- RawFire (Fire Services Consultant)
- Costin Roe Consulting Pty Ltd (Civil Engineering Consultant)
- Site Image (Landscape Consultant)
- Australian Bushfire Protection Planners (Bushfire Consultant)
- Traffix (Traffic Consultant)
- SLR Consulting (Waste Management and Air Quality Consultant)
- Cardno (Acoustic Consultant)
- Fowlstone (Consultation Consultant)



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1.3 OVERVIEW OF MAINFREIGHT OPERATIONS

Mainfreight began its operations in Auckland, New Zealand, in 1978, soon growing into New Zealand's most extensive freight network. While 1984 saw the opening of the first Mainfreight International branch, investment in Australian operations began in 1989 driven by a desire to treat New Zealand and Australia as a single market. Mainfreight's presence in Australia continued to expand through both acquisition and branch proliferation across strategic locations.

Mainfreight became global in 1999 with the acquisition of businesses in both Asia and the United States. Full ownership of our Asian operations was completed in 2007 and today Mainfreight has several branches operating out of China, and expansion further continued in America with the purchase of Target Logistics Services in 2007.

In 2011 Mainfreight acquired the business of Wim Bosman Group providing further opportunities to expand Mainfreight's international global network with branches throughout Europe.

As a global logistics provider, Mainfreight offers managed warehousing and international and domestic freight forwarding. With team and branches across Australia, China, Europe, New Zealand and the United States Mainfreight continues to expand its global footprint.

Freight services range from small individual parcels through to full shipping containers with specialist in-house teams managing requirements for hazardous goods, perishables, fragile items, liquids, fashion, or government services.

The proposal will enable Mainfreight to carry out its operations in an efficient and safe manner that will have economic benefits across the Sydney Region as it will result in consolidation of operations at the existing Prestons site with those to be brought over from a Moorebank site. The proposal will result in reduced costs associated with segregated transport requirements, delivery scheduling and travel times.



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1.4 STRATEGIC PLANNING CONTEXT

Yarrunga Release Area

The Yarrunga Release Area (approximately 227 hectares) is within the Liverpool Local Government Area and is bounded by the M7 Motorway on the north and east, Kurrajong Road to the south and Cabramatta Creek to the west. The existing Preston Industrial Area located to the east on either side of the M7 Motorway adjoins the Yarrunga Release Area.

In late 2005 Liverpool City Council resolved to rezone the entire release area for industrial purposes. Amendments to the *Liverpool Local Environmental Plan 1997* (Amendment No. 98) were gazetted on the 20th July 2007 and, with the adopted *Liverpool Industrial Development Control Plan*, enabled the Yarrunga Release Area to be developed.

1.5 DEVELOPMENT BACKGROUND

The previous development applications that have been approved in relation to the subject lands are outlined in **Table 1**. Note that the subject allotments were previously identified as Lot 26 DP 2359 and Lot 1 DP 28729.

DA	Description
1064/2006	Demolition of two single storey dwellings and outhouses on Lot 26 DP 2359.
1065/2006	Demolition of two storey brick/tile dwelling on Lot 1 DP 28729.
1672/2006	Lot 26 DP 2359 and Part Lot 1 DP 28729 bulk earthworks including land filling, the construction of retaining walls and sedimentation and erosion control works.
1093/2007	Construction of a Warehouse/Freight Distribution Centre and its use by Mainfreight, on Lot 26 DP 2359 and Part Lot 1 DP 28729, including: <ul style="list-style-type: none">▪ Two warehouse buildings with a total floor area 20,510m² joined by an awning of 2,160 m²;▪ Two offices (both 2 levels) with a total floor area of 1,300m²;▪ Hardstand area, site landscaping, and parking areas;▪ A weighbridge and a covered truckwash facility with water recycling facilities;▪ Refuelling facility for trucks (diesel) and forklifts (LPG);▪ full construction of Yarrawa Road from the site east to Bernera Road and upgrade works to the western side of the intersection;▪ construction of an entrance/exit to Yarrawa Street for cars and truck on the north-west corner, and an exit to Yarrawa Street for trucks; and▪ Site signage and perimeter fencing.
153/2008	Extension of Mainfreight Building 2 to provide an additional 7,574m ² of warehouse floorspace. The awning between Buildings 1 and 2 has also been increased by 1,312m ² . No change to entry/exit arrangements with Yarrawa Street or landscaping.
153/2008/A	Section 96 Application to include truck wash facility adjacent to eastern boundary.
1636/2012	Civil works on Lots 102 DP 1117691 and Lot 2 DP28729 comprising: <ul style="list-style-type: none">▪ Minor site earthworks to create building pad;▪ Retaining wall;▪ Stormwater services;▪ Water services; and▪ Sewer services. A copy of the consent for DA 1636/2012 is provided as Appendix 1 .

Copies of the consents for DAs 1093/2007, 153/2008 and 153/2008/A above along with a Works As Executed Plan are included within **Appendix 3** to provide background to the proposal.

The request for Director-Generals Requirements (DGRS) for the current State Significant Development application was made on 11 December 2012. The DGRs were subsequently issued by the Department of Planning and Infrastructure on 01 February 2013.



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1.6 THE PROPONENT

The proponent is Goodman Property Services (Aust) Pty Ltd. See **Table 2** for contact details.

Contact Name	Will Dwyer
Position	Head of Strategic Planning
Company Details	Goodman Property Services Pty Ltd
	Level 17, 60 Castlereagh Street
	Sydney, NSW 2000
Contact Number	Ph: 9230 7312

1.7 CAPITAL INVESTMENT VALUE

The capital investment of this project is estimated at AU\$12,500,000.00 (twelve million, five-hundred thousand dollars), subject to final costing and tender clarifications.

1.8 DIRECTOR-GENERALS REQUIREMENTS

Application to receive the DGRs was submitted to DoP&I on 11 December 2012 (Reference: SSD-5746). The DGRs were subsequently issued on 01 February 2013.

The DGRs issued are annexed as **Appendix 2**. An overview of how the requirements have been satisfied within the EIS is outlined in **Table 3**. This document is also consistent with the minimum requirements for Environmental Impact Statements in clauses 6 and 7 of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*.

General Requirements	Satisfied by...
<ul style="list-style-type: none">▪ <i>clear description of the existing operations carried out on the site and how the site operates lawfully under the Environmental Planning and Assessment Act 1979 including any reliance on use rights and/or planning approvals;</i>	Parts A and B of this EIS outline the operations of Mainfreight, development approval background. Appendix 3 includes a Works As Executed plan for the existing facility.
<ul style="list-style-type: none">▪ <i>detailed description of the development, including:</i><ul style="list-style-type: none">– <i>need for the proposed development;</i>– <i>justification for the proposed development;</i>– <i>likely staging of the development;</i>– <i>the nature and destination of materials to be received and distributed; and</i>– <i>plans of all proposed building works</i>	Part C outlines the proposed development. Supporting plans and documents provide additional detail.
<ul style="list-style-type: none">▪ <i>consideration of all relevant environmental planning instruments and policy documents, including identification and justification of any inconsistencies with these instruments and documents (e.g. the Work Health and Safety Regulation 2011);</i>	Part D addresses the legislative and policy framework applicable to the proposal.
<ul style="list-style-type: none">▪ <i>risk assessment of the potential environmental impacts of the development, identifying the key issues for further assessment;</i>	The PHA provided at Appendix 8 addresses the potential risks associated with the storage of dangerous goods. The findings of the PHA are discussed in Section 6.2



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<ul style="list-style-type: none"> ▪ <i>detailed assessment of the key issues specified below, and any other significant issues identified in this risk assessment, which includes:</i> <ul style="list-style-type: none"> – <i>a description of the existing environment, using sufficient baseline data;</i> – <i>an assessment of the potential impacts of all stages of the development, including any cumulative impacts, taking into consideration relevant guidelines, policies, plans and statutes; and</i> – <i>a description of the measures that would be implemented to avoid, minimise and if necessary, offset the potential impacts of the development, including proposals for adaptive management and/or contingency plans to manage any significant risks to the environment.</i> 	<p>Part B provides a Site Analysis detailing existing site conditions.</p> <p>Part D outlines the strategic and legislative context.</p> <p>The PHA provided at Appendix 8 addresses the potential risks associated with the storage of dangerous goods and mitigation measures.</p> <p>The findings of the PHA are discussed in Section 6.2</p>
<ul style="list-style-type: none"> ▪ <i>a consolidated summary of all the proposed environmental management and monitoring measures, highlighting commitments included in the EIS.</i> 	<p>The Statement of Commitments in Part G outline the intentions to comply with management measures and monitoring as well as any conditions on approval.</p>
<ul style="list-style-type: none"> ▪ <i>A report from a qualified quantity surveyor providing:</i> <ul style="list-style-type: none"> – <i>A detailed calculation of the capital investment value (as defined in clause 3 of the Environmental Planning and Assessment Regulation 2000) of the proposed development, including details of all assumptions and components from which the CIV calculation is derived.</i> – <i>an estimate of the jobs that will be created during the construction and operational phases of the proposed development.</i> – <i>certification that the information provided is accurate at the date of preparation.</i> 	<p>A Quantity Surveyors report is currently being prepared and will be submitted to DoPI.</p>
<p>Key Issues</p>	<p>Satisfied by...</p>
<ul style="list-style-type: none"> ▪ Hazards and Risks – <i>including:</i> <ul style="list-style-type: none"> – <i>an assessment of the hazards and risks associated with the proposal and the existing operations on site (and the potential for off site impacts) including details of hazardous materials used or stored on the premises during operation.</i> – <i>A Preliminary Hazard Analysis (PHA) must be prepared in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 6 Hazard analysis and Multi-level Risk Assessment. The PHA should:</i> <ul style="list-style-type: none"> • <i>consider the risks from the proposed development (including loading/unloading and transport activities); and</i> • <i>demonstrate that the proposed development would-comply with the criteria set out in Hazardous Industry Planning Advisory Paper No 4 Risk Criteria for Land Use Safety Planning.</i> – <i>technical information on the environmental protection equipment to be installed on the premises such as air, water and noise controls, spill cleanup equipment and fire management and containment measures;</i> – <i>an assessment of any potential bushfire risks; and consideration of any nearby Transgrid easements.</i> 	<p>A Preliminary Hazard Analysis (PHA) in accordance with <i>HIPAP No. 6 Hazard Analysis and Multi-Level Risk Assessment</i> has been prepared by OneGroup ID.</p> <p>The PHA is annexed as Appendix 8 and is discussed in Section 6.2 of this EIS.</p>



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<ul style="list-style-type: none"> ▪ Transport and Access – including: <ul style="list-style-type: none"> – accurate predictions of the traffic generated by the development; – a detailed assessment of the potential impacts of the development on the capacity, efficiency and safety of the road network including the cumulative traffic generated by all existing and the proposed development; – details of any upgrades to road infrastructure that would be required due to the development; and – site accesses, internal roads and vehicular parking required as a result of the development. 	<p>A Traffic Impact Assessment has been prepared by Traffix (Appendix 10) and includes a Truck Parking Management Plan.</p> <p>Transport and Access has been considered in Section 6.3 of this EIS.</p>
<ul style="list-style-type: none"> ▪ Air Quality — including: <ul style="list-style-type: none"> – a quantitative assessment of the potential air quality impacts during construction and operation of the proposed development (including odour, dust, fugitive and greenhouse gas emissions). This assessment shall also consider potential impacts of the proposal on any nearby sensitive receivers; and – details of the proposed management and monitoring measures. 	<p>An Air Quality Impact Assessment has been prepared by SLR Consulting (Appendix 19).</p> <p>Section 6.4 addresses air quality considerations.</p> <p>The PHA annexed as Appendix 8 also considers the potential environmental impact results from the proposed storage of dangerous goods.</p>
<ul style="list-style-type: none"> ▪ Noise and Vibration — including: <ul style="list-style-type: none"> – a noise impact assessment, including an assessment of predicted noise impacts and road traffic noise during both construction and operation; – the potential impacts of the proposal on any nearby sensitive receivers; – consideration of vibration impacts from excavation works; and – details of the proposed noise mitigation, monitoring and management measures. 	<p>An Acoustic Report is attached as Appendix 16.</p> <p>The noise and vibration matters are discussed in Section 6.5 of this EIS.</p>
<ul style="list-style-type: none"> ▪ Soil and Water – including a detailed assessment of potential soil, surface and groundwater impacts, particularly on nearby sensitive water sources/bodies. 	<p>Costin Roe have prepared a Civil Engineering design and Report that addresses the management of soil and water (Appendices 5 and 6). This report includes an erosion and sediment control plan and water quality measures.</p> <p>The PHA annexed as Appendix 8 also considers the potential environmental impact results from the proposed storage of dangerous goods.</p> <p>Section 6.6 provides details of the potential impact on soil and water.</p>
<ul style="list-style-type: none"> ▪ Waste – including: <ul style="list-style-type: none"> – the measures that would be implemented to ensure that the proposal is consistent with the aims, objectives, and guidance in the DECCW's Waste Classification Guidelines; and – details of the quantities and classification of waste including chemicals and hazardous materials that will be generated, disposed of, handled and managed on site and stockpiled. 	<p>A detailed Waste Management Plan has been prepared by SLR consulting (Appendix 12).</p> <p>Waste matters are addressed in Section 6.7 of this EIS.</p>



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<ul style="list-style-type: none"> ▪ Visual and Design – including: <ul style="list-style-type: none"> – details of building design and how the facility would be built and fitted- out to handle the proposed storage of dangerous goods (i.e. bunding and tanker loading/unloading areas); and – any potential visual impacts on surrounding receivers from public areas. 	<p>Design is considered in Part C – Proposed Development as well as Section 6.8 of this EIS.</p> <p>The proposal has also been designed to address the recommendations of supporting reports. The proposed design is shown in the plans annexed as Appendix 4.</p> <p>An Access Review has also been undertaken to ensure compliance the DDA provisions (Appendix 11).</p>
<ul style="list-style-type: none"> ▪ Heritage 	<p>Heritage is discussed in Section 6.9 of this EIS.</p>
<p>Plans and Documents</p>	<p>Satisfied by...</p>
<p><i>The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Environmental Planning and Assessment Regulation 2000. These documents should be included as part of the EIS rather than as separate documents</i></p>	<p>All relevant documents and plans have been prepared and provided as Appendices. The full list of documents and plans is outlined in Section 3.2</p>
<p>Consultation</p>	<p>Satisfied by...</p>
<p><i>During the preparation of the Environmental Impact Statement, you should consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups or affected landowners.</i></p> <p><i>In particular you must consult with the:</i></p> <ul style="list-style-type: none"> ▪ Environmental Protection Authority; ▪ Office of Environment and Heritage; ▪ NSW Office of Water; ▪ Transport for NSW (including NSW Roads and Maritime Service); ▪ NSW Fire Brigades; ▪ NSW WorkCover; ▪ Transgrid; ▪ Liverpool City Council; and ▪ the local community and stakeholders <p><i>The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.</i></p>	<p>Details of the consultation undertaken in the preparation of this EIS is outlined in Part E.</p> <p>A Report outlining the community consultation process is provided as Appendix 13 while records of consultation with authorities are provided as Appendix 14.</p>

For the purpose of appropriately determining the potential cumulative impacts of the proposal, the following matters have been considered in addition to the Key Issues outlined in the DGRs:

- Bushfire – including a Bushfire Protection Assessment (**Appendix 9**) – See Section 6.10
- Socio-economic Impact – See Section 6.11
- Cumulative Impact – See Section 6.12



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PART B SITE ANALYSIS

2.1 SITE LOCATION

Land which is the subject of this application is identified as Lots 101 & 102 DP 1117691 and Lot 2 DP 28729, being 30-50 Yarrawa Street, Prestons NSW (**Figure 1**).

The allotments that make up the site are detailed in **Table 4**.

<i>Property Description</i>	<i>Address</i>	<i>Area (approximate)</i>	<i>Road Frontage (approximate)</i>
Lot 101 DP 1117691	50 Yarrawa St, Prestons	4.8ha	242m
Lot 102 DP 1117691	40 Yarrawa St, Prestons	2.0ha	80m
Lot 2 DP 28729	30 Yarrawa St, Prestons	1.6ha	100m
TOTAL		8.4ha	422m

The development area forms part of a larger industrial estate, in which there are three (3) sites (**Figure 2**). At the time of this application, only Site 1 has been developed and accommodates the Mainfreight Distribution Centre. The proposal will seek to expand this facility onto 30-40 Yarrawa Street which lies immediately to the east and is known as Site 2. Site 3 lies to the south of Sites 1 and 2, with frontage to Yarrunga Street, and is subject to a separate application lodged by Southern Logistics.

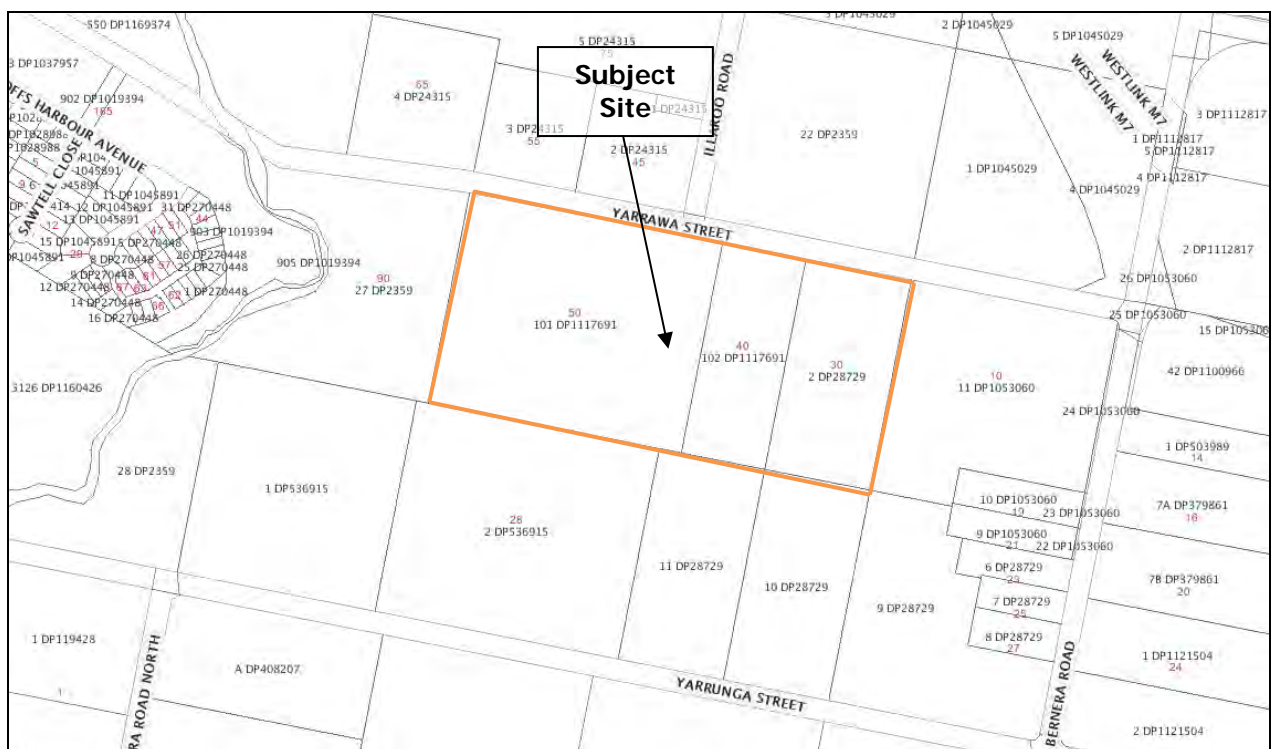


Figure 1. Site Location

(Source: Land and Property Information, 2012)



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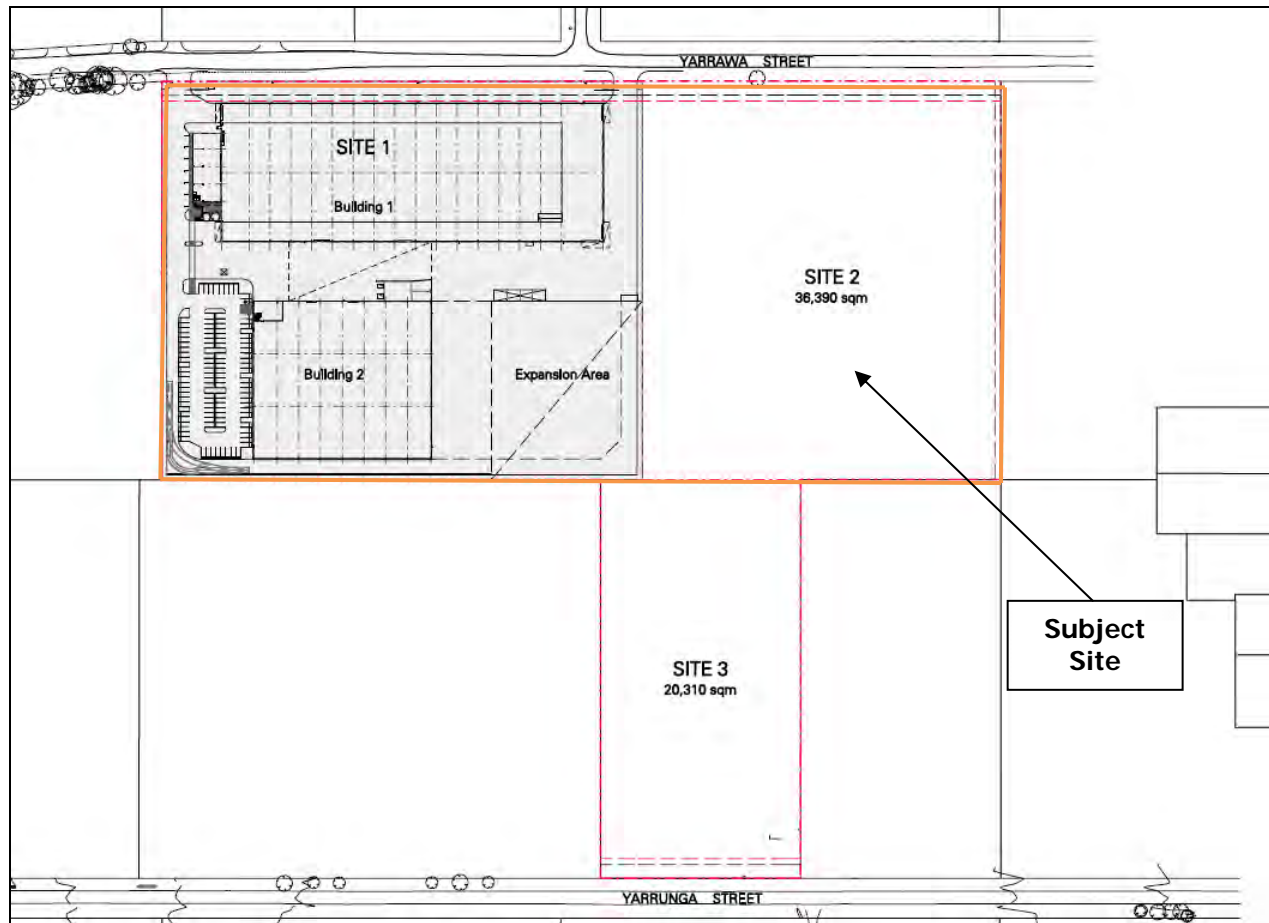


Figure 2. Estate Layout

(Source: Land and Property Information, 2012)

2.2 EXISTING SITE CHARACTERISTICS

No buildings or activities currently exist on 30-40 Yarrowa Street (Lots 102 DP 1117691 and Lot 2 DP28729); however, this land has been previously disturbed by past agricultural activities and site preparation works associated with adjoining development.

Currently, two (2) detention basins exist within the northwest portion of the site while the remainder exists as grassland interspersed with small stands of bush and a scattering of individual trees. The site's natural gradient drops 7m from the high point in the south-west corner to the low point at the north-east corner of the site. The highest elevation is approximately RL 36.0m (AHD) and the lowest at RL 29.0m.

There is no existing formalised drainage system on the expansion land and stormwater flows are currently conveyed overland to the Yarrowa Road drainage system in the form of sheet flow.

An existing 50-metre wide TransGrid easement traverses across the northeast portion of Lot 2. The easement is associated with the sub-station located on the northern side of Yarrowa Street, opposite the site, and accommodates a high capacity tower positioned across the boundary of Lot 2 and adjoining lot to the east.



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This area has recently been the subject of a development application with Liverpool City Council (DA1636/2012) which approved civil works on comprising:

- Minor site earthworks to create building pad;
- Retaining wall;
- Stormwater services;
- Water services; and
- Sewer services.

The existing Mainfreight facility on the adjoining site known as 50 Yarrawa Street (Lot 101 DP 1117691) comprises:

- Two warehouse buildings joined by an awning creating a breezeway;
- Two offices (both 2 levels);
- A weighbridge and a covered truckwash facility with water recycling facilities;
- Refuelling facility for trucks (diesel) and forklifts (LPG); and
- Hardstand area, site landscaping, and parking areas;
- Entrance/exit to Yarrawa Street for cars and truck on the north-west corner, and an exit to Yarrawa Street for truck; and
- Site signage and perimeter fencing.

While the facility is collectively referred to as a warehouse and distribution centre, to allow for site legibility the two existing warehouse buildings are identified as:

1. The Transport Shed (being the one closest to Yarrawa Street in the north of the site); and
2. The Logistics Shed, the warehouse at the south or rear of the site.

Both sheds are used for warehousing and distribution, with the main difference being the ability of vehicles including PUDs (Pick Up and Delivery vans), B-Doubles and Semitrailers to drive through the Transport Shed. Conversely, the Logistics Shed is fitted out with a formal racking system from which goods are loaded onto Semitrailers via dedicated loading bays or breezeway.

Goods are located in the most appropriate Shed based on customer order requirements and delivery vehicle type/size that will be used in the unloading/loading process. Each Shed is provided with an individual traffic management process as outlined in Section 3.2.2 below.

An aerial photograph of the site is provided as **Figure 3**.

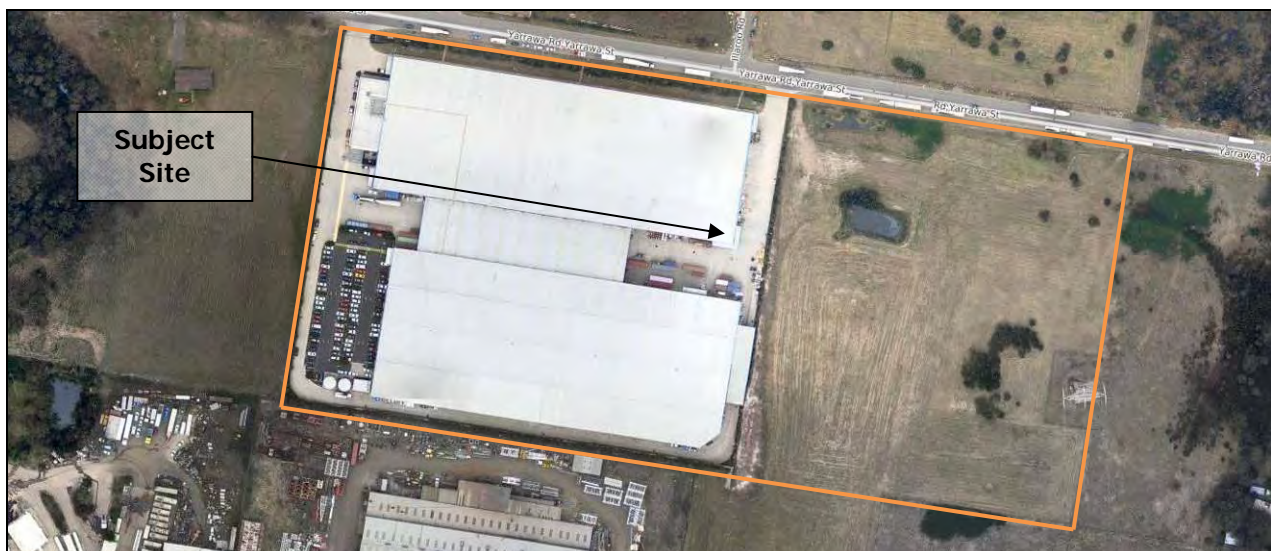


Figure 3. Aerial Photograph of Subject Site
(Source: Google, 2012)



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2.3 LAND OWNERSHIP

The land owner is Goodman Property Services (Aust) Pty Ltd (Goodman).

Owners' consent authorising the application for development has been provided as part of the submission documentation.

2.4 SITE CONTEXT

The site forms part of a larger industrial precinct generally bound by Cabramatta Creek to the west, Hoxton Park Drive to the north, Wonga Road to the east and Kurrajong and Yarrunga Roads to the south.

The industrial precinct was known as the Yarrunga Release Area and covered approximately 227 hectares. In late 2005, Liverpool Council resolved to rezone the release area for industrial purposes. While a number of sites within this industrial precinct are yet to be developed and remain in an agricultural state, there is significant evidence of growth with land in close proximity to the subject site having been developed for warehousing, infrastructure and extractive industry.

While more densely populated residential suburbs are located beyond the boundaries of the industrial precinct, including the emerging suburb of Carnes Hill to the west, pockets of low density rural-residential development remain throughout the precinct including residences located along Bernera Road to the east of the site.

Industrial activities are beginning to dominate the area in response to the connectivity benefits provided by the M7 Motorway corridor and its links to the M5 Motorway only 3 kilometres southeast of the site. The Hume Highway, Camden Valley Drive, Cowpasture Road, Hoxton Park Drive also provide high levels of connectivity locations across the region from the site.

It is noted that full construction of Yarrowa Road from the site east to Bernera Road and upgrade works to the western side of the intersection were undertaken by Goodman as part of the existing Mainfreight facility (upgrade details provided as **Appendix 18**).

Site 3 of the Goodman Estate adjoins part of the southern boundary of the subject site. A development application has been submitted to Liverpool City Council for the development of this adjoining site as a container storage facility and ancillary warehouse. The infrastructure approved under DA 1636/2012 will support the future development of this facility.

The sites' context is shown in **Figure 4**.

2.5 SITE SUITABILITY

The proposal represents an extension to an existing facility within an area that has been zoned for heavy industry. No site constraints are identified that would prevent or restrict the use of the enlarged facility as a warehouse and distribution centre for household products including the storage and handling of dangerous goods. In particular, the development has been designed to address the easement and bushfire aspects of the site whilst also integrating with the established facility.

The site is also located close to major roads making it a convenient location with good accessibility to and within the region. Activities will be suitably removed from residential areas with no significant impact expected to eventuate.



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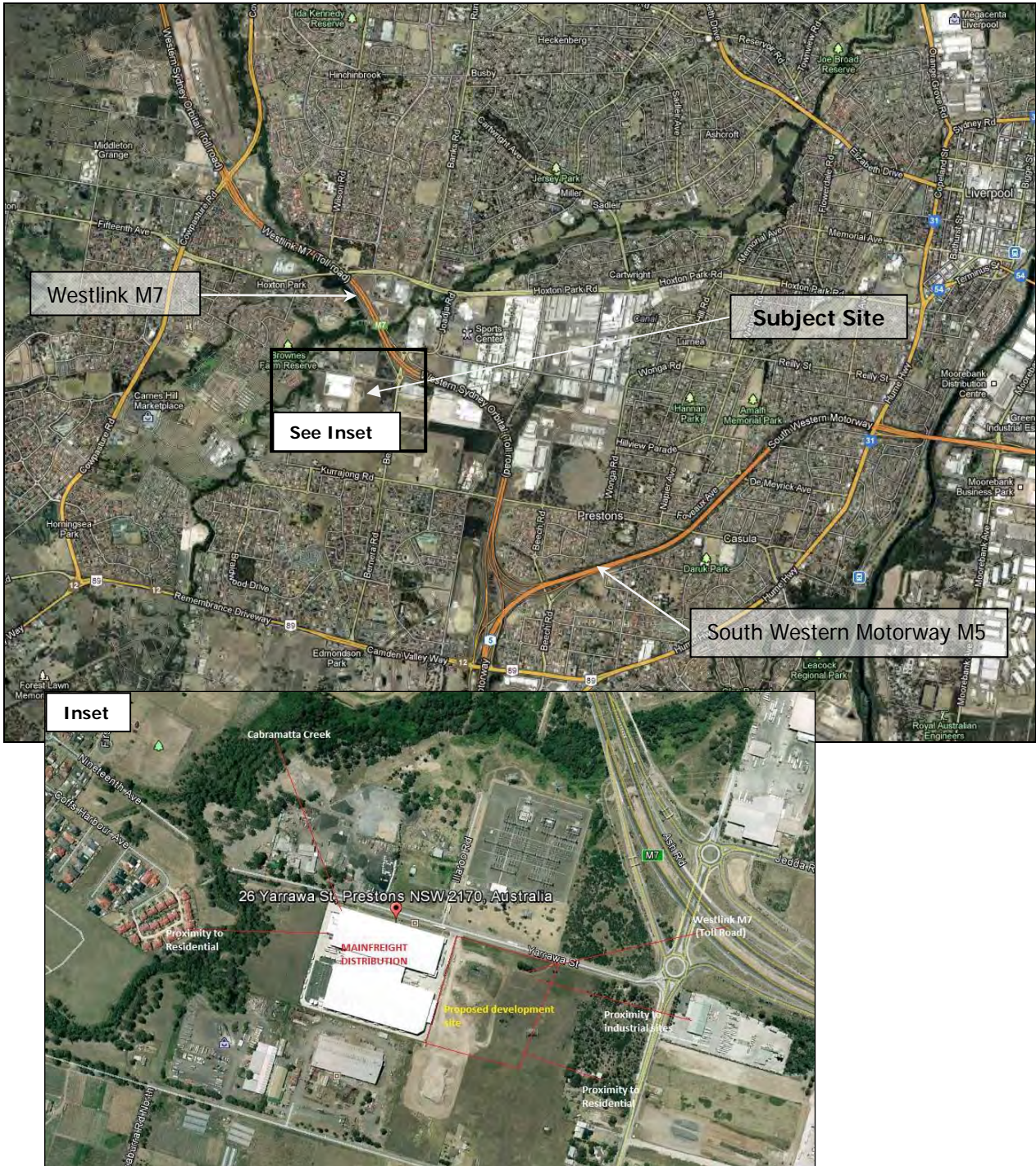


Figure 4. Site Context
(Source: GoogleMaps and One Group ID, 2013)



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PART C PROPOSED DEVELOPMENT

3.1 OBJECTIVES OF THE PROPOSAL

The intention of the proposal is to provide a facility that meets the requirements of Mainfreight's logistical operations within a location that:

- is large enough to accommodate the operations currently occurring over several sites;
- allows for the activities as a permissible use;
- has appropriate access;
- is compatible with surrounding development and local context;
- will result in minimal impact on the environment; and
- will allow for the implementation of suitable mitigation measures where required.

The site and proposed design are considered to meet the objectives of the project as it allows for the storage of goods in a manner that extends off a purpose-built facility on a site that does not present any significant constraints.

It is anticipated that the consent for the existing Mainfreight facility will be surrendered and the entire facility (existing plus proposed) will be covered by an approval issued in relation to this State Significant Development application.

3.2 DESCRIPTION OF THE PROPOSAL

The proposed development involves the extension of the existing Mainfreight distribution centre and use of the facility for the storage and handling of dangerous goods comprising aerosol cans, flammable liquids, oxidising substances, corrosive substances and miscellaneous dangerous goods. Other non-dangerous materials will also continue to be stored and handled on site.

Elements of the proposal are outlined in detail below:

3.2.1 Built Form

Warehouse Expansion

The proposal involves the addition of approximately 13,250m² of new warehouse space that will be located adjoining the eastern elevation of the existing Mainfreight warehouse at the rear of the site, known as the Logistics Shed. 1,570m² of this space will be provided as dangerous goods storage. A new dock office of 200m² and mezzanine storage space (1,035m²) will also be provided in addition to the Logistics Shed expansion.

Extension of approximately 1,710m² to the existing Transport Shed (being the building closest to Yarrowa Street) will also be undertaken.

Expanding the central breezeway linking the two buildings by 2,350m² will enable all weather loading/unloading facilities.

Hardstand and Driveway Arrangements

Approximately 16,835m² of new hardstand area will be provided along with 1,315m² of heavy duty area and 1,570m² of light duty area. This includes new driveways for heavy vehicles and cars at the eastern end of the Yarrowa Street road frontage. The new heavy vehicle driveway will replace the existing driveway off Yarrowa Street that is located adjacent to the eastern end of the existing Transport Shed.

The driveway at the western end of the Yarrowa Street road frontage will remain.



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The existing truck wash bay located along the eastern elevation of the Logistics Shed will be relocated to the eastern end of the expansion area. The wash bay has *been designed to exclude rainwater and must ensure that wastewater is fully contained in the bay and cannot enter the stormwater system.*

The proposal includes 70 line marked spaces within a new parking area in the eastern portion of the site. One (1) of these spaces will be provided for persons with a disability. An additional 40 provisional spaces will be provided adjacent to the northern boundary, within the hardstand area. The total number will be reflective of anticipated employment numbers and forecasted growth.

In keeping with TransGrid requirements, a kerb and bollard arrangement has been designed to prevent heavy vehicles coming within 15 metres of the base of the electricity tower. Maintenance access will be provided via two gates adjacent to the tower.

A Truck Parking Management Plan (TPMP) has been prepared as part of the Traffic Impact Assessment at **Appendix 10**, and shows the locations where the heavy vehicles would be parked, with the majority located centrally within the new hardstand area and additional parking provided along the south side of the existing warehouse building.

Landscaping

Formal landscaping is to be undertaken to the Yarrowa Street frontage where the terrain will include a batter as a result of the earthworks design. Landscaping with the transmission easement will be of suitable height to avoid conflict with TransGrid maintenance or service provision.

The species selection and layout has been designed to integrate the theme established by the existing Mainfreight facility and will be concentrated along the Yarrowa Road frontage to filter the built form from the street.

Signage

The proposal seeks the approval for provision of one (1) Business Identification Signage upon the new extension. The signage will be positioned on the North Elevation of the Logistics Shed and comprise the Mainfreight logo. The sign will be 8m x 2m and non-illuminated.

General way-finding at the site entry is also to be provided to improve site legibility and safety.

3.2.2 Operations

Proposed Activities and Use

Mainfreight Distribution's core business includes capital city metro pickup and delivery, along with interstate and intrastate LTL (less than truckload) freight services to and from any town or city in Australia. These services compliment the company's international freight forwarding and warehousing capabilities. The freight to be handled at this facility will include dangerous or hazardous materials. See Section 3.2.4 below. The existing materials stored within the site include hair care products (non-flammable), bikes, non-hazardous adhesives, fruit juices, packaging and home wares and will continue to be handled following the proposed expansion of the facility.

The logistics operation provides client companies with warehouse storage and distribution facilities to complement their supply chain operations. The services offered in relation to the existing facility include:

- Inventory Management
- Multi-client pick & pack facilities.
- Bulk warehousing and distribution.
- Full on-site warehouse and despatch management.
- Time definite delivery.
- Dedicated customer service agents.
- Web (internet) consignment track and trace.
- Inventory visibility and web order processing.
- E-commerce system interfacing



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No manufacturing of products is undertaken within the existing facility and is not proposed as part of the extension. Activities to be undertaken include the receipt, storage and dispatch of products for the bulk warehousing and distribution services, involving:

- Unloading and loading of finished goods via trucks and shipping containers;
- Management of inventory in a racked and stacked environment;
- Order fulfilment including picking and packing of finished orders to customers;
- Loading of transport vehicles;
- Management of product returns;
- Inspection of goods for QA purposes; and
- Product embellishment.

These services will be continued within the proposed expansion area.

Hours of Operation

The proposed hours of operation for the facility are 24-hours, seven (7) days per week, as per the existing facility.

However, while the facility will have 24-hour activities, the heavy vehicle movements (deliveries/loading) will only occur between 5am and 7pm. Within this period, the peak hours for the heavy vehicles will be 6am-9am (morning peak) and 3pm-7pm (afternoon peak). As such, the period between 7pm and 5am will only involve warehouse operations.

Employment

The total staff number for the site following the proposed expansion will be 197 persons (141 warehouse staff and 56 office staff).

Heavy Vehicle Movements

The proposed vehicle movements are essentially split into two distinct precincts:

3. Movements associated with the Transport Shed (being the one closest to Yarrowa Street); and
4. Traffic flow for the warehouse at the rear of the site, known as the Logistics Shed.

These precincts are then broken down into morning and afternoon periods, as follows:

- *Transport Shed*

The morning vehicle movements are expected to involve 90 PUD's of 2-12 tonnes each moving through the facility. These vehicles will enter from the western boundary entry and go through the northern side of the transport shed and continue out of the eastern exit.

Approximately 30 B-Doubles and 10 Semis that will enter from the eastern boundary and head through the southern side of the transport shed where they will unload. The empty truck will then exit out of the Transport Shed by turning left to drive around the rear warehouse.

The afternoon traffic flow will have the 30 B-Doubles and 10 Semis that have been parked since the morning unloading moving out from their parking behind the warehouse of in the yard and will travel between the buildings under the breezeway and will turn right at the western end of the Transport Shed where they will then enter the transport shed on the Yarrowa Street side to load up. After loading, these vehicles will exit the transport shed and circulate back around and through the breezeway to go to the weighbridge located in the western end of the breezeway before exiting on the western end of the site.

The PUD's (90) who are returning from their deliveries and pickups will enter the site at the eastern end and head across the yard to the southern side of the Transport Shed where they will unload for the product to be gathered and put into line haul tracks for interstate delivery. They will then exit at the western end.



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- *Logistics Shed*

Semis (total of 10 for whole day) as well as trucks carrying containers (20 for the whole day) will enter from the east and go to their respective door (either docks on expansion shed or side load at either shed) and unload or load, then exit the site through the breezeway at the western end of the site.

3.2.3 Site Preparation

The levels for the proposed building have been approved under DA 1636/2012. No major alterations to these approved earthworks. A minor amendment to the approved earthworks DA will be required to suit the current architectural layout of this development which requires adjustment to the proposed piped stormwater alignment and overland flow path alignment.

The proposed alignment for the inter-allotment drainage lines are along the southern boundary and along the eastern portion of the development allow for the requirements of the electrical transmission line and tower easement present on the site. Allowance for the conveyance of overland flow has been made in the design of the development.

3.2.4 Dangerous Goods

A summary of storage quantities for the dangerous goods to be stored on the site are illustrated in **Table 5** below.

Dangerous Goods Class	Operating Quantity (kg)	Estimated Maximum Quantity (kg)
2.1	347,260	380,000
3	83,820	88,660
5.1	63,698	78,500
8	1,165	1,500
9	4,249	4,620

3.2.5 Drawings

Drawings for the proposed development are outlined in **Table 6**.

<i>Architectural</i>		
Drawing No.	Description	Author
4167_DA000	Cover Sheet	Nettleton Tribe Architects
4167_DA001	Site Plan / Ground floor Plan	Nettleton Tribe Architects
4167_DA002	Site Plan / Roof Plan	Nettleton Tribe Architects
4167_DA011	Building 1 – Ground Floor Plan Expansion	Nettleton Tribe Architects
4167_DA012	Building 1 – Roof Plan Expansion	Nettleton Tribe Architects
4167_DA015	Building 2 – Ground Floor Plan Expansion	Nettleton Tribe Architects
4167_DA016	Building 2 – Mezzanine Floor Plan Expansion	Nettleton Tribe Architects
4167_DA017	Building 2 – Roof Plan Expansion	Nettleton Tribe Architects
4167_DA018	Building 2 – Dock Office	Nettleton Tribe Architects
4167_DA020	Site Elevations	Nettleton Tribe Architects
4167_DA021	Building 1 – Elevation Expansion	Nettleton Tribe Architects
4167_DA025	Building 2 – Elevation Expansion	Nettleton Tribe Architects
4167_DA031	Sections	Nettleton Tribe Architects
4167_DA041	Building 1 – Rendered Elevations	Nettleton Tribe Architects
4167_DA045	Building 2 – Rendered Elevations	Nettleton Tribe Architects



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Landscape		
Drawing No.	Description	Author
SS12-2543_000	Cover Sheet	Site Image
SS12-2543_101	Landscape Plan	Site Image
SS12-2543_102	Landscape Plan	Site Image
SS12-2543_501	Landscape Detail	Site Image
Civil Engineering		
Drawing No.	Description	Author
Co8753.08-DA10	Drawing List and General Notes	Costin Roe
Co8753.08-DA15	Site Masterplan	Costin Roe
Co8753.08-DA20	Erosion and Sediment Control Plan	Costin Roe
Co8753.08-DA25	Erosion and Sediment Control Details	Costin Roe
Co8753.08-DA40	Concept Stormwater Master Plan	Costin Roe
Co8753.08-DA41	Concept Stormwater Plan – Sheet 1	Costin Roe
Co8753.08-DA42	Concept Stormwater Plan – Sheet 2	Costin Roe
Co8753.08-DA45	Concept Stormwater Plan Details	Costin Roe
Co8753.08-DA51	Finished Levels Plan – Sheet 1	Costin Roe
Co8753.08-DA52	Finished Levels Plan – Sheet 2	Costin Roe
Co8753.08-DA70	Approved Infrastructure Design Comparison Plan	Costin Roe

3.2.6 Supporting Documents

Documents provided in support of the proposal are outlined in **Table 7**.

Table 7 – Document Schedule		
Appendix No.	Description	Author
Appendix 1	Consent for DA 1936/2012	Liverpool City Council
Appendix 2	Director-Generals Requirements	Department of Planning and Infrastructure
Appendix 3	Works As Executed Plan for Existing Facility	Nettleton Tribe Architects
Appendix 4	Proposed Development Architectural Plans	Nettleton Tribe Architects
Appendix 5	Civil Engineering Plans	Costin Roe
Appendix 6	Civil Engineering Report	Costin Roe
Appendix 7	Landscape Plan	Site Image
Appendix 8	Preliminary Hazard Analysis	OneGroup ID
Appendix 9	Bushfire Protection Assessment	Australia Bushfire Protection Planners
Appendix 10	Traffic Impact Assessment	Traffix
Appendix 11	Access Review	OneGroup ID
Appendix 12	Waste Management Plan	SLR Consulting
Appendix 13	Consultation Report	Fowlstone
Appendix 14	Consultation Record	Various (Complied by McKenzie Group Consulting)
Appendix 15	Building Code of Australia Compliance Report	McKenzie Group Consulting
Appendix 16	Acoustic Report	Cardno
Appendix 17	Fire Safety Strategy	Raw Fire
Appendix 18	Previous Yarrawa Street Upgrade Works	Costin Roe
Appendix 19	Air Quality Impact Assessment	SLR Consulting



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3.3 SITE PREPARATION

As mentioned, the site has been the subject of a Development Approval (DA 1636/2012) that provides for civil works on Lots 102 DP 1117691 and Lot 2 DP28729 comprising:

- Minor site earthworks to create building pad;
- Retaining wall;
- Stormwater services;
- Water services; and
- Sewer services.

The proposed expansion under the subject SSD application does not require any major modification of the civil works approved under DA 1636/2012 with the exception of adjustment to the proposed piped stormwater alignment and overland flow path alignment to suit the new building position. The minor differences between the approved infrastructure design and the proposal are indicated on Drawing Co8753.08-DA70 - Approved Infrastructure Design Comparison Plan provided as part of **Appendix 5**.

3.4 PROJECT NEED

Mainfreight has identified a number of constraints to their operations in having goods located over several existing facilities which include the following:

- Exceeded warehouse storage capacity for current and forecasted goods inventory;
- The site layout for warehousing is disparate resulting in underutilised and ill-configured material handling to suit the current needs of the business;
- Inadequate warehouse storage space is available to accommodate smooth material flows and improve safe working areas;
- Need for a purpose built area for the storage and handling of mixed packaged dangerous goods.

An operational review was also conducted to more comprehensively understand the operational needs of the business within a new facility. The review included the following aspects:

- A review and assessment of product inflows, storage, and outflows;
- Consideration of internal layout including traffic flows and materials handling equipment;
- Requirements for materials handling equipment;
- Office and communication needs and staff amenity needs;
- Security and segregation needs for healthcare products;
- Staffing numbers; and
- The level of management and operational overheads.

In response to the operational needs of its current storage facility, Mainfreight has determined that an expansion to its existing Prestons facility is required to accommodate its increased need for storage space. The proposed project is considered necessary to improve the operational efficiencies of Mainfreight's existing business within NSW, and facilitate its future growth.



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3.5 CONSIDERATION OF ALTERNATIVES

The options considered, and subsequently dismissed, in arriving to the current proposal included:

'Do Nothing' Scenario

This option was dismissed as the need to have a facility to store goods, including potentially hazardous materials, would remain.

If the proposal was not to go ahead, the existing Mainfreight facility at Prestons would continue as currently operated and the undeveloped portion of the site would likely be developed for other industrial purposes.

Development on an Alternative Site

A number of sites throughout the Sydney Region were considered for the location of a new or expanded Mainfreight facility. The proposed site was identified as the preferred option as it fulfils Mainfreight's logistical and operational requirements. In particular, the site:

- is located to integrate with a site already accommodating a Mainfreight facility;
- has been appropriately zoned for the intended use;
- has all essential infrastructure required to service the development;
- has already been granted approval for civil works which is suitable for the intended design and purpose;
- can accommodate mitigation measures for any identified potential environmental impacts;
- has close proximity to the regional road network provides increased economic benefits;
- is not an area of heritage or archaeological significance; and
- is within an industrial context with appropriate distance from residential areas.



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PART D LEGISLATIVE AND POLICY FRAMEWORK

This Part of the EIS assesses and responds to the legislative and policy requirements for the project in accordance with the *Environmental Planning and Assessment Act 1979* (EP&A Act), Regulations and the DGRs.

List of Approvals Required Prior to Carrying Out of Development

Pursuant to Clause 1(d)(v) of the *Environmental Planning and Assessment Regulations 2000*, the following approvals (other than development approval) must be obtained prior to the carrying out of the development:

- Environmental Protection Licence under the *Protection of the Environment Operations Act 1979*
- Approval under Section 138 of the *Roads Act 1993*

It is noted that Section 89J of the EP& Act states that the following authorisations are not required for State significant development that is authorised by development consent:

- (a) the concurrence under Part 3 of the *Coastal Protection Act 1979* of the Minister administering that Part of that Act,
- (b) a permit under section 201, 205 or 219 of the *Fisheries Management Act 1994*,
- (c) an approval under Part 4, or an excavation permit under section 139, of the *Heritage Act 1977*,
- (d) an Aboriginal heritage impact permit under section 90 of the *National Parks and Wildlife Act 1974*,
- (e) an authorisation referred to in section 12 of the *Native Vegetation Act 2003* (or under any Act repealed by that Act) to clear native vegetation or State protected land,
- (f) a bush fire safety authority under section 100B of the *Rural Fires Act 1997*,
- (g) a water use approval under section 89, a water management work approval under section 90 or an activity approval (other than an aquifer interference approval) under section 91 of the *Water Management Act 2000*.

It is noted also that the reference to State Significant Development in these provisions includes a reference to any investigative or other activities that are required to be carried out for the purpose of complying with any environmental assessment requirements in connection with a development application.

Controls and Policies

The following current and draft Commonwealth, State, Regional and Local planning controls and policies have been considered in the preparation of this application:

- **Commonwealth Planning Context**
 - *Environment Protection and Biodiversity Conservation Act 1999*
- **State Planning Context**
 - *Environmental Planning and Assessment Act 1979*
 - *Environmental Planning and Assessment Regulation 2000*
 - *Occupational Workplace Health and Safety Regulation*
 - *Protection of the Environment Operations Act 1979*
 - *Threatened Species Conservation Act 1995*
 - *NSW 2021 : A Plan to Make NSW Number One*
 - *State Environmental Planning Policy (State and Regional Development) 2011*
 - *State Environmental Planning Policy (Infrastructure) 2007*
 - *State Environmental Planning Policy (Western Sydney Employment Area) 2009*
 - *State Environmental Planning Policy No. 16 – Bushland in Urban Areas*
 - *State Environmental Planning Policy No.33 – Hazardous and Offensive Development*
 - *State Environmental Planning Policy No. 44 – Koala Habitat Protection*
 - *State Environmental Planning Policy No 55 – Remediation of Land*
 - *State Environmental Planning Policy No.64 – Advertising Structures and Signage*
 - *Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment*
 - *Sydney Regional Environmental Plan No. 9 – Extractive Industry (No. 2)*



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- **Regional Planning Context**
 - Metropolitan Plan for Sydney 2036
 - Metropolitan Transport Plan 2010
 - Draft South West Subregional Strategy

- **Local Planning Context**
 - Liverpool Local Environmental Plan 2008
 - Liverpool Development Control Plan 2008

This planning framework is considered in detail in the following sections:

4.1 COMMONWEALTH PLANNING CONTEXT

4.1.1 Environment Protection and Biodiversity Conservation Act 1999

The site has been previously cleared of vegetation. The proposed development will not require the removal of any vegetation. No protected fauna exists on the site.

4.2 STATE PLANNING CONTEXT

4.2.1 Environmental Planning and Assessment Act 1979

The Environmental Planning and Assessment Act 1979 (EP&A Act) is the overarching governing document for all development in NSW and pursuant to Section 89D(2) provides that:

A State environmental planning policy may declare any development, or any class or description of development, to be State significant development.

The proposed development has been identified as State Significant Development under State Environmental Planning Policy (State and Regional Development) 2011 as outlined below.

4.2.2 Environmental Planning and Assessment Regulation 2000

Section 4(1) of the *Environmental Planning and Assessment Regulation 2000* (the Regulations) states that development described in Part 1 of Schedule 3 is declared to be Designated Development for the purposes of the Act.

The following development is listed in Part 1 of Schedule 3 of the Regulations:

10 Chemical storage facilities

- (a) *that store or package chemical substances in containers, bulk storage facilities, stockpiles or dumps with a total storage capacity in excess of:*
 - (i) 20 tonnes of pressurised gas, or
 - (ii) 200 tonnes of liquefied gases, or
 - (iii) 2,000 tonnes of any chemical substances, or

- (b) *that are located:*
 - (i) within 40 metres of a natural waterbody or wetland, or
 - (ii) in an area of high watertable or highly permeable soil, or
 - (iii) in a drinking water catchment, or
 - (iv) on a floodplain.

The proposed storage of aerosol cans, flammable liquids, oxidising substances, corrosive substances and miscellaneous dangerous goods exceeds the above storage thresholds; therefore the proposed development triggers the definition of 'designated development'. However, as the proposal has also been



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identified as State significant Development, the Designated Development provisions are not applicable. As such, no further undertaking of the proposal under the category of Designated Development has occurred.

4.2.3 Occupational Health and Safety Regulation 2001

Pursuant to Clause 10(3) of Schedule 1 to *State Environmental Planning Policy (State and Regional Development) 2011*, where a proposal satisfies the definition of a 'Major Hazard Facility' under Chapter 6B of the *Occupation Health and Safety Regulation 2001* (OHS Regulation), that development is identified as State Significant Development (See Section 4.2.7 below).

Chapter 6B defines 'major hazard facility' as:

- (a) a facility at which Schedule 8 materials are present or likely to be present in a quantity that exceeds their threshold quantity, or
- (b) a facility where the aggregate quantity ratio of Schedule 8 materials present or likely to be present exceeds 1.0, or
- (c) a facility at which Schedule 8 materials are present or likely to be present, not being a facility to which paragraph (a) or (b) applies, that is, for the time being, determined by WorkCover to be a major hazard facility under Part 6B.5.

The aerosol and oxidising goods proposed to be stored within the development exceed the threshold quantity for compressed and liquefied gases under Table 2 of Schedule 8 to the OHS Regulation which is reproduced in **Figure 5** below.

The proposal is defined as a Major Hazard Facility under the OHS Regulation and as such is State Significant Development.

This EIS has been prepared to address the planning approval requirements under the *Environmental Planning and Assessment Act 1979* and its Regulations for SSD.

Following determination, and prior to occupation, the requirements for licensing and WorkCover notification and approval under the OHS Regulation for Major Hazard Facilities will be initiated.



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Material	Description	Threshold quantity (tonnes)
Explosive materials	Explosives of Class 1.1A	10
	All other Explosives of Class 1.1	50
	Explosives of Class 1.2	200
	Explosives of Class 1.3	200
Compressed and liquefied gases	Compressed or liquefied gases of Class 2.1 or Subsidiary Risk 2.1	200
	Liquefied gases of Subsidiary Risk 5	200
	Compressed or liquefied gases that meet the criteria for Very Toxic in Table 4 to this Schedule	20
	Compressed or liquefied gases that meet the criteria for Toxic in Table 4 to this Schedule	200
Flammable materials	Liquids that meet the criteria for Class 3 Packing Group I (Except for crude oil in remote locations)	200
	Crude oil in remote locations that meets the criteria for Class 3 Packing Group I	2000
	Liquids that meet the criteria for Class 3 Packing Group II or III	50,000
	Liquids with flashpoints <61°C kept above their boiling points at ambient conditions	200
	Combustible solids that meet the criteria for Class 4.1 Packing Group I	200
	Spontaneously combustible materials that meet the criteria for Class 4.2 Packing Group I or II	200
	Materials which liberate flammable gases or react violently on contact with water and that meet the criteria for Class 4.3 Packing Group I or II	200
	Materials which belong to Classes 3 or 8 Packing Group I or II which have Hazchem codes of 4WE (materials which react violently with water)	500
Oxidizing materials	Oxidizing materials identified in the ADG Code as being goods too dangerous to be transported	50
	Oxidizing materials that meet the criteria for Class 5.1 Packing Group I or II	200
Peroxides	Peroxides identified in the ADG Code as being goods too dangerous to be transported	50
	Organic Peroxides that meet the criteria for Class 5.2	200
Toxic solids and liquids	Materials that meet the criteria for Very Toxic in Table 4 to this Schedule	20
	Materials that meet the criteria for Toxic in Table 4 to this Schedule	200

Notes to Table 2.

- ADG Code** means the current edition of the *Australian Code for the Transport of Dangerous Goods by Road and Rail*.
- Class** means the Class of dangerous goods referred to in the current edition of the *Australian Code for the Transport of Dangerous Goods by Road and Rail*.
- Packing Group** means the particular Packing Group determined from the current edition of the *Australian Code for the Transport of Dangerous Goods by Road and Rail*.
- Materials referred to in the Table belong to a Class or Packing Group regardless of whether or not they are packaged for transport or under pressure.
- The quantities specified for explosives relate to the weight of explosive exclusive of any non-explosive components.
- If explosives of different Hazard Divisions are present in the same area or storage, all of the explosives shall be classified in accordance with Table 3 to this Schedule.

Figure 5. Extract of Table 2 from Schedule 8 of OHS Regulation 2001

(Source: www.legislation.nsw.gov.au)



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4.2.4 Protection of the Environment Operations Act 1979

Schedule 1 of the *Protection of the Environment Operations Act 1979* (POEO Act) contains a core list of activities that require a licence before they may be undertaken or carried out. The definition of an 'activity' for the purposes of the POEO Act is:

"an industrial, agricultural or commercial activity or an activity of any other nature whatever (including the keeping of a substance or an animal)."

As the proposal involves the keeping of a substance, the definition of an activity is satisfied and the provisions of the POEO Act apply.

In its correspondence to DoP&I, the Office of Environment and Heritage (OEH) indicates that the proposal meets the requirements for an environmental protection licence under the POEO Act. Activities involving the storage of chemicals that require an Environmental Protection Licence is outlined in Clause 9 of Schedule 1 as reproduced below:

9 Chemical storage

(1) This clause applies to the following activities:

chemical storage waste generation, meaning chemical substances storage that involves having on site any prescribed waste (that is, hazardous waste, restricted solid waste or liquid waste, or any combination of them).

general chemicals storage, meaning the storage or packaging in containers, bulk storage facilities or stockpiles of any chemical substance classified as a dangerous good in the Transport of Dangerous Goods Code, other than the following:

(a) petroleum or petroleum products,

(b) radioactive substances within the meaning of the Radiation Control Act 1990.

petroleum products storage, meaning the storage or packaging of petroleum or petroleum products in containers, bulk storage facilities or stockpiles.

(2) Each activity referred to in Column 1 of the Table to this clause is declared to be a scheduled activity if it meets the criteria set out in Column 2 of that Table.

Table

Column 1 Activity	Column 2 Criteria
chemical storage waste generation	involves having on site at any time more than 5 tonnes of prescribed waste, not including excluded material (where 1,000 litres of liquid is taken to weigh 1 tonne)
general chemicals storage	capacity to store more than 20 tonnes (pressurised gases), 200 tonnes (liquefied gases) or 2,000 tonnes (chemicals in any other form)
petroleum products storage	capacity to store more than 200 tonnes (liquefied gases) or 2,000 tonnes (chemicals in any other form)

The proposal meets the criteria as 'general chemical storage' outlined in this Clause.

While a licence will be required for the proposal, an application to obtain the licence can only be made upon approval of the development by DoP&I. The intention to obtain the necessary approval forms one of the commitments to be undertaken by Mainfreight as outlined in the draft Statement of Commitments provided in Part G of this EIS.



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4.2.5 Threatened Species Conservation Act 1995

The site of the proposed development has approved for major earthworks under DA 1636/2012. The proposed development will not require the removal of any further vegetation or habitat.

Consideration of potential hazards on the environment was also undertaken within the Preliminary Hazard Analysis (PHA) prepared by OneGroup ID (**Appendix 8**) which concluded the risk to the biophysical environment associated with release of contaminated fire water from the Dangerous Goods Store is low.

Should the fire fighting systems operate for more than 20 minutes there is a strong likelihood that contaminated fire water will begin to escape the containment compounds and be released into the surrounding environment.

In any spill event, the effects would be short term and the contaminants are not expected to accumulate.

4.2.6 NSW 2021: A Plan to Make NSW Number One

NSW 2021 was developed by the NSW State Government to set economic, social and environmental directions for NSW. It sets targets, priorities and actions for delivery of services across the State. The strategies outlined in the Plan include:

- *Rebuild the economy*
- *Return quality services*
- *Renovate infrastructure*
- *Strengthen our local environment and communities*
- *Restore accountability to government*

The Chapter on Rebuilding the Economy is most relevant to the proposal as it provides objectives for achieving growth and prosperity. The plan makes a commitment that support large and small businesses and describes the importance of the private sector's role in maintaining and creating highly productive jobs to underpin the State's ability to realise higher standards of living for all people.

Mainfreight is a large company providing significant employment throughout NSW. The proposed continued use of the site in an expanded facility represents an important move by the company to enhance the compliance and efficiency of current operations within NSW.

The proposed development will contribute to the ongoing growth of the company and will strengthen their ability to maintain and create jobs within the Sydney Metropolitan Region. *NSW 2021* provides the policy context for the State Government to support and assist a company such as Maifreight in achieving significant benefits for NSW.

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

Proposals involving activities that are listed in Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011* are declared to be State Significant Development (SSD) under the new framework introduced in October 2011.

Schedule 1 includes:

10 Chemical, manufacturing and related industries

(1) *Development that has a capital investment value of more than \$30 million for the purpose of the manufacture or reprocessing of the following (not including labelling or packaging):*

- (d) *soap, detergent or cleaning agents,*
- (e) *paints, ink, dyes, adhesives, solvents,*
- (f) *pesticides or inorganic fertiliser,*
- (g) *pharmaceuticals or veterinary products,*



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- (h) *ammunition or explosives,*
 - (i) *oils, fuels, gas, petrochemicals or precursors,*
 - (j) *polymers, plastics, rubber or tyres,*
 - (k) *batteries or carbon black.*
- (2) *Development with a capital investment value of more than \$30 million for any of the following purposes:*
- (a) *liquid fuel depots,*
 - (b) *gas storage facilities,*
 - (c) *chemical storage facilities.*
- (3) *Development for the purpose of the manufacture, storage or use of dangerous goods in such quantities that constitute the development as a major hazard facility within the meaning of Chapter 6B of the Occupational Health and Safety Regulation 2001.*

Based on a review of the inventory provided by Mainfreight and discussions with dangerous goods consultants from OneGroup ID, the proposal will be State Significant Development (SSD) as the development satisfies the requirements of a Major Hazard Facility under Subclause (3) above.

Chapter 6B of the Occupational Health and Safety Regulation 2001 (OHS Regulation) defines a Major Hazard Facility as follows:

major hazard facility means:

- (a) *a facility at which Schedule 8 materials are present or likely to be present in a quantity that exceeds their threshold quantity,*

While other materials are to be stored on-site, it is evident that just the Class 2.1 materials to be stored on-site places the development into the category of a Major Hazard Facility even without the need to review the additional Classes. The threshold quantity for compressed and liquefied gases (Class 2.1) materials in Schedule 8 of the OHS Regulation is 200 tonnes.

Based on the Inventory prepared by Mainfreight, the Class 2.1 materials to be stored on-site will exceed the threshold of 200 tonnes where a total of approximately 347 tonnes is anticipated.

As such, the proposal is classified as SSD and will need to follow the new procedures established for this category of development. An application seeking DGRs for the preparation of an EIS for SSD was lodged with DoP&I on 11 December 2011. This EIS has been prepared in accordance with the DGRs issued and the State and Regional Development SEPP.

4.2.8 State Environmental Planning Policy (Infrastructure) 2007

State Environmental Planning Policy (Infrastructure) 2007 (SEPP Infrastructure) repeals the former *State Environmental Planning Policy No. 11 – Traffic Generating Development* and, pursuant to Clause 104, provides for certain proposals, known as Traffic Generating Development, to be referred to NSW Roads and Maritime Services (RMS) for concurrence.

Schedule 3 lists the types of development that are defined as Traffic Generating Development. The referral thresholds for 'Industry' development are:

- *20,000m² or more in area with site access to any road; or*
- *5,000m² or more in area where the site has access to a classified road or to a road that connects to a classified road (if access is within 90 metres of connection, measured along the alignment of the connecting road).*

The development does not propose an increased industrial floor area in excess of 20,000m² warehouse floor area with access to Yarrowa Road; however, the total floor area of the facility will exceed this threshold. As such, the proposal will require referral to RMS under the provisions of SEPP (Infrastructure) 2007.



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The Traffic Impact Assessment prepared by Traffix (**Appendix 10**) addresses the matters that must be considered by RMS.

It is noted that consultation with the RMS has been undertaken in the preparation of this EIS (see Section 5.6).

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

State Environmental Planning Policy (Western Sydney Employment Area) 2009 (Employment Area SEPP) does not apply to the site.

4.2.10 State Environmental Planning Policy No. 19 – Bushland in Urban Areas

State Environmental Planning Policy No. 19 – Bushland in Urban Areas (SEPP 19) applies to the local government areas listed in Schedule 1 to the SEPP. The Liverpool Local Government Area is identified within this list and is subject to the provisions of SEPP 19.

The proposal does not seek to remove trees or affect any land zoned or reserved for public open space purposes. Additionally, the site does not adjoin any land that is zoned or reserved for public open space.

The provisions of SEPP 19 do not apply to the proposed development.

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

State Environmental Planning Policy No. 33 – Hazardous and Offensive Development (SEPP 33) provides definitions for hazardous and offensive development as well as potentially hazardous and offensive development and outlines the items that a consent authority must consider to assess whether the development is hazardous or offensive.

The aims of SEPP 33 are:

- (a) to amend the definitions of hazardous and offensive industries where used in environmental planning instruments, and
- (b) to render ineffective a provision of any environmental planning instrument that prohibits development for the purpose of a storage facility on the ground that the facility is hazardous or offensive if it is not a hazardous or offensive storage establishment as defined in this Policy, and
- (c) to require development consent for hazardous or offensive development proposed to be carried out in the Western Division, and
- (d) to ensure that in determining whether a development is a hazardous or offensive industry, any measures proposed to be employed to reduce the impact of the development are taken into account, and
- (e) to ensure that in considering any application to carry out potentially hazardous or offensive development, the consent authority has sufficient information to assess whether the development is hazardous or offensive and to impose conditions to reduce or minimise any adverse impact, and
- (f) to require the advertising of applications to carry out any such development.

Clause 3 of SEPP 33 states:

potentially hazardous industry means a development for the purposes of any industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would pose a significant risk in relation to the locality:

- (a) to human health, life or property, or



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*(b) to the biophysical environment,
and includes a hazardous industry and a hazardous storage establishment.*

***potentially offensive industry** means a development for the purposes of an industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would emit a polluting discharge (including for example, noise) in a manner which would have a significant adverse impact in the locality or on the existing or likely future development on other land, and includes an offensive industry and an offensive storage establishment.*

The proposed activity could meet one or both of these definitions as the activities to be undertaken involve the storage and handling of materials that could pose a hazard under certain circumstances without the implementation of any mitigation measures.

A Preliminary Hazard Analysis (PHA) in accordance with the provisions of the SEPP and the Department of Planning's 'Multi-Level Risk Assessment' and 'Guidelines for Hazard Analysis' was therefore prepared by OneGroup ID.

The Qualitative Risk Assessment found that hazards due to spills of the dangerous goods had an overall low risk rating with the nominated risk controls implemented. This hazard was deemed not to require further development of the consequences or frequency. Fire hazard was found to have an overall medium to high risk depending upon the level of risk controls and the risk was further investigated using a level 2 (partial quantification) risk assessment.

The dominant fire hazard arose from the storage of aerosol cans that contain personal care products. None of the products contained within the cans are described as having any toxic materials so smoke from burning contents will not contain any unburned toxic materials.

The PHA is annexed as **Appendix 8** and concluded:

The preliminary screening performed in accordance with SEPP 33 found that the proposed warehouse extension is potentially hazardous with regard to the storage of class 2.1 flammable gases in aerosol cans and to class 5.1 oxidising substances, being personal care bleaches. The screening for risks associated with transport found the movements were below the nominated thresholds and do not represent an undue risk to the general public.

The risk assessment process, as determined by HIPAP No. 6, showed that the dominant hazard is fire associated with the storage of aerosol cans. Based upon implementation of the fire prevention controls and timely emergency response to a fire event the frequency of a threat to life was determined to be well inside acceptable limits. The consequences of a fire were also not found to have any significant effect beyond the site boundary. The personal care products do not contain toxic substances indicating that smoke generated from a fire would also not include any unburned toxic substances.

The class 5.1 oxidising substances are water based personal care bleaches and the risk assessment did not find them to be a significant hazard to nearby people, neighbours or to the surrounding biophysical environment.

The risk assessment also found that the risk to the biophysical environment associated with release of contaminated fire water from the Dangerous Goods Store is low.

It is the conclusion of this report that the proposed warehouse extension is not hazardous to the surrounding land uses as determined from the safety assessment process described within HIPAP No. 6.



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4.2.12 State Environmental Planning Policy No. 44 – Koala Habitat Protection

As outlined above, the expansion land has been the subject of an approval to undertake earthworks and services. As a result of these approved works, no vegetation occurs on the site which may form habitat for koalas.

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

No known contamination issues affect the subject site. The land has been previously used for grazing and market gardening and rural residential activity. No intensive purposes such as industrial use are known to have occurred on the site that would otherwise indicate that the land is unlikely to have been contaminated.

A portion of the site was used as a stockpile for material extracted for the earthworks approved under DA 1672/2006 (the existing Mainfreight facility in Stage 1). A Virgin Excavated Natural Material (VENM) classification for the excavated soil was undertaken by Environmental Investigation Services in November 2008. The soil was considered to be VENM with slight levels of zinc and arsenic that were not considered to be indicative of contamination.

The area nominated as 'Exclusion Zone' in the Phase 1 Investigation was excluded from the VENM investigation as it contained building material including brick and rubble that was used to create a temporary accessway. This material was then spread on the site to complete the temporary track and egress to the site boundary for disposing of the stockpiled material to an off-site location.

The Phase 1 Aecom report recently updated indicates that the site is in much the same condition as it was in 2005, that is, predevelopment.

Liverpool City Council considered the likelihood of contamination as part of its assessment of the earthworks DA (DA 1636/2012) for the site and has imposed the following conditions:

24. The stockpiled material in the exclusion zone is to be validated to ensure that the material is appropriately classified for its intended (sic) use.

...

48. The development, including all civil works and demolition, must comply with the requirements of the Contaminated Land Management Act, 1997, State Environmental Planning Policy No. 55 - Remediation of Land, and Managing Land Contamination - Planning Guidelines (Planning NSW EPA 1998).

Additional conditions relating to new fill are also provided under the consent and will be complied with.

4.2.14 State Environmental Planning Policy No. 64 – Advertising Structures and Signage

State Environmental Planning Policy No. 64 (SEPP 64) applies to all signage:

- (a) that, under another environmental planning instrument that applies to the signage, can be displayed with or without development consent, and*
- (b) is visible from any public place or public reserve.*

The proposal seeks the approval for provision of one (1) Business Identification Signage upon the new extension. The signage will be positioned on the North Elevation of the Logistics Shed and comprise the Mainfreight logo. The sign will be 8m x 2m and non-illuminated.

General way-finding at the site entry is also to be provided to improve site legibility and safety.

Signage is also permissible with consent on the site.



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Pursuant to Clause 8 of SEPP 64, a consent authority must not grant development consent to an application to display signage unless the consent authority is satisfied:

- (a) *that the signage is consistent with the aims/objectives of the Policy, and*
- (b) *that the signage satisfies the assessment criteria specified in Schedule 1 of the SEPP.*

These matters are addressed below.

Aims and Objectives of SEPP 64

SEPP 64 aims:

- (a) *to ensure that signage (including advertising):*
 - (i) *is compatible with the desired amenity and visual character of an area, and*
 - (ii) *provides effective communication in suitable locations, and*
 - (iii) *is of high quality design and finish, and*
- (b) *to regulate signage (but not content) under Part 4 of the Act, and*
- (c) *to provide time-limited consents for the display of certain advertisements, and*
- (d) *to regulate the display of advertisements in transport corridors, and*
- (e) *to ensure that public benefits may be derived from advertising in and adjacent to transport corridors.*

The parameters established for the signage ensures that all elements will be located within the confines of the site. This location places the signage in the context of a larger industrial precinct characterised by development that will have begun to see development exhibiting signage of a similar scale and design to the proposed development.

The signage will be appropriate in providing identification to the site, add to the ability to navigate the precinct and contribute to the industrial sense of place. The signage will not have any significant impact on any transport corridor, defined under the SEPP as:

- (a) *land comprising a railway corridor,*
- (b) *land comprising a road corridor,*
- (c) *land zoned industrial under an environmental planning instrument and owned, occupied or managed by the RTA or RailCorp.*

For the purpose of this definition, road corridor is further defined as:

- (a) *land comprising a classified road or a road known as the Sydney Harbour Tunnel, the Eastern Distributor, the M2 Motorway, the M4 Motorway, the M5 Motorway, the M7 Motorway, the Cross City Tunnel or the Lane Cove Tunnel, and associated road use land that is adjacent to such a road,*
- (b) *land zoned for road purposes under an environmental planning instrument,*
- (c) *land identified as a road corridor in an approval of a project by the Minister for Planning under Part 3A of the Act.*

Signage that is erected in accordance with the established design parameters is considered to be compatible with the stated aims as it provides only for business identification purposes and will not be out of context for the locality or intended purpose.

Assessment Criteria

Part 2 of SEPP 64 provides that a consent authority must consider the matters in Schedule 1 of the SEPP prior to granting consent to development involving signage. The assessment criteria under Schedule 1 of the SEPP are addressed in **Table 8**.



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Table 8 – SEPP 64 Assessment Criteria	
Criteria	Proposal Compliance
1 Character of the area	
<i>Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located?</i>	Yes, the proposal will be undertaken within an industrial precinct that has begun to experience development involving facilities with Business Identification Signage. The visual catchment of the proposed signage will not extend to any major transport route once the estate is fully developed.
<i>Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?</i>	Yes, as above.
2 Special areas	
<i>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?</i>	No, the site is suitably removed from sensitive receptors including residential areas, open space and heritage items.
3 Views and vistas	
<i>Does the proposal obscure or compromise important views?</i>	No, the building on which the signage will be positioned is not located in any important views.
<i>Does the proposal dominate the skyline and reduce the quality of vistas?</i>	No, the development will be restricted to one (1) new sign and will be of a size and design suitable for the intended use and context. Furthermore, the signage will not be dominant on the skyline given the position of the signage located on the façade on the building, below the roof level.
<i>Does the proposal respect the viewing rights of other advertisers?</i>	Yes, the development will be restricted to one (1) new sign associated with the extension and will not obstruct viewing towards any other signage.
4 Streetscape, setting or landscape	
<i>Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?</i>	Yes, the signage is appropriate for the setting provided on the site and the location of the site within the Yarrunga Industrial Precinct.
<i>Does the proposal contribute to the visual interest of the streetscape, setting or landscape?</i>	Yes, the signage is to be used to provide an identity to a building without becoming visually dominant.
<i>Does the proposal reduce clutter by rationalising and simplifying existing advertising?</i>	Yes, there the development will be restricted to one (1) new sign.
<i>Does the proposal screen unsightliness?</i>	No, the signage will not be used as a visual screen or filter.
<i>Does the proposal protrude above buildings, structures or tree canopies in the area or locality?</i>	No, the signage will not be dominant on the skyline. It will be located below the roof level.
<i>Does the proposal require ongoing vegetation management?</i>	No.
5 Site and building	
<i>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?</i>	Yes, the sign will be of suitable scale and design for its intended purpose as Business Identification Signage. The signage will only occupy a small proportion of the building façade and restricted to one (1) sign per street elevation per tenant
<i>Does the proposal respect important features of the site or building, or both?</i>	Yes, the signage will not be the dominant visual feature of the building and will remain below the roof line.
<i>Does the proposal show innovation and imagination in its relationship to the site or building, or both?</i>	Yes, signage will be logically positioned to identify the tenant and develop the site profile. The sign also contributes to the industrial character of the precinct.
6 Associated devices and logos with advertisements and advertising structures	
<i>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?</i>	Not applicable.



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7 Illumination	
<i>Would illumination result in unacceptable glare?</i>	The proposed signage will not be illuminated.
<i>Would illumination affect safety for pedestrians, vehicles or aircraft?</i>	As above.
<i>Would illumination detract from the amenity of any residence or other form of accommodation?</i>	As above.
<i>Is the illumination subject to a curfew?</i>	As above.
<i>Can the intensity of the illumination be adjusted, if necessary?</i>	As above.
8 Safety	
<i>Would the proposal reduce the safety for any public road?</i>	The signage will not be positioned to cause any hazard for any road.
<i>Would the proposal reduce the safety for pedestrians or bicyclists?</i>	The sign is not considered to reduce safety for pedestrians or bicyclists.
<i>Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?</i>	The sign will not cause disruption of any sightlines from public areas.

Advertisements

Part 3 of SEPP 64 outlines a number of additional matters to be considered for certain signs. This Part does not apply to Business Identification Signage and is not applicable to the proposal.

Based on the above, where the proposed signage is undertaken in accordance with the specified parameters, the development will be consistent with the provisions of SEPP 64.

4.2.15 Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment

Greater Metropolitan Regional Environmental Plan No.2 – Georges River Catchment (REP 2) applies to the Liverpool Local Government Area (**Figure 6**).



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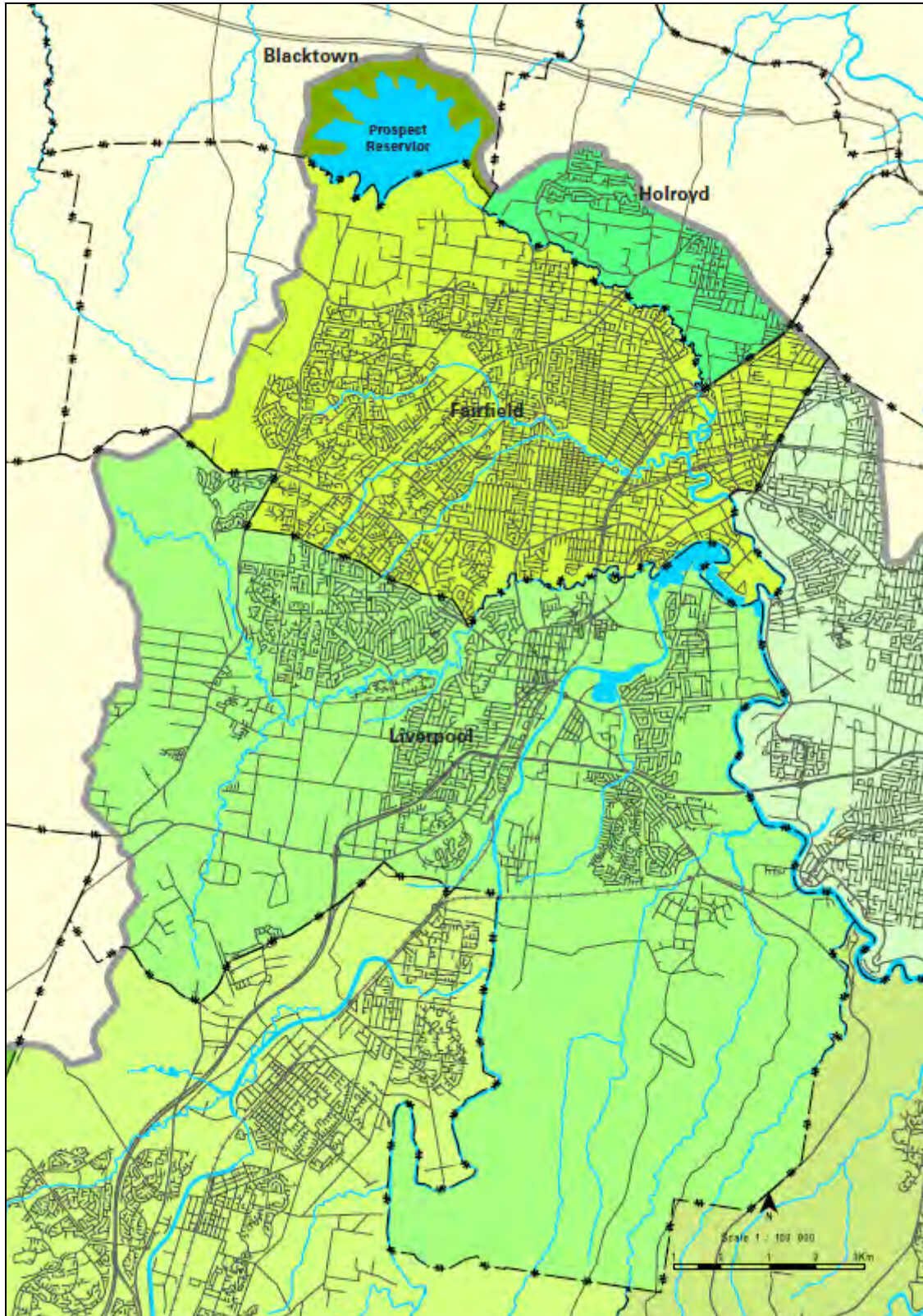


Figure 6. Greater Metropolitan Regional Environmental Plan No.2 – Georges River Catchment Map 1 (DUAP, 1999)



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The general aims and objectives of REP 2 are:

- (a) to maintain and improve the water quality and river flows of the Georges River and its tributaries and ensure that development is managed in a manner that is in keeping with the national, State, regional and local significance of the Catchment,*
- (b) to protect and enhance the environmental quality of the Catchment for the benefit of all users through the management and use of the resources in the Catchment in an ecologically sustainable manner,*
- (c) to ensure consistency with local environmental plans and also in the delivery of the principles of ecologically sustainable development in the assessment of development within the Catchment where there is potential to impact adversely on groundwater and on the water quality and river flows within the Georges River or its tributaries,*
- (d) to establish a consistent and coordinated approach to environmental planning and assessment for land along the Georges River and its tributaries and to promote integrated catchment management policies and programs in the planning and management of the Catchment,*
- (e) (Repealed)*
- (f) to provide a mechanism that assists in achieving the water quality objectives and river flow objectives agreed under the Water Reform Package.*

The specific aims and objectives of REP 2 are:

Environmental protection and water quality and river flows

- (a) to preserve and protect and to encourage the restoration or rehabilitation of regionally significant sensitive natural environments such as wetlands (including mangroves, saltmarsh and seagrass areas), bushland and open space corridors within the Catchment, by identifying environmentally sensitive areas and providing for appropriate land use planning and development controls,*
- (b) to preserve, enhance and protect the freshwater and estuarine ecosystems within the Catchment by providing appropriate development,*
- (c) to ensure that development achieves the environmental objectives for the Catchment.*

Regional role and land use

- (a) to identify land uses in the Catchment which have the potential to impact adversely on the water quality and river flows in the Georges River and its tributaries and to provide appropriate planning controls aimed at reducing adverse impacts on the water quality and river flows,*
- (b) to conserve, manage and improve the aquatic environment within the Catchment which is a significant resource base for the aquaculture industry, by providing controls aimed at reducing pollution entering the Catchment's watercourses,*
- (c) to protect the safety and well being of the local and regional community in accordance with standards and processes aimed at improving the water quality and river flows in the Catchment to enable recreation,*
- (d) to aid in the improvement of the environmental quality of Botany Bay in conjunction with other regional planning instruments.*

The proposal is consistent with the aims and objectives of REP 2 as it seeks to construct an extension to an approved industrial facility on land that has been significantly modified and provided with essential infrastructure to manage stormwater quality and quantity. The development will also include management of stormwater flows as well as erosion and sediment control to mitigate against potential impacts.

The planning principles outlined in REP 2 are addressed in **Table 9** below.



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Table 9 – REP 2 Planning Principles	
General Planning Principles	Proposal Compliance
(a) <i>the aims, objectives and planning principles of this plan</i>	The aims and objectives as outlined above have been considered. The proposal is consistent with the relevant matters.
(b) <i>the likely effect of the proposed plan, development or activity on adjacent or downstream local government areas,</i>	As per general engineering practice and the guidelines of LCC, the proposed stormwater drainage system for the development will comprise a minor and major system to safely and efficiently convey collected stormwater run-off from the development. The Civil Engineering Report prepared by Costin Roe (Appendix 6) notes that during the construction phase, a Sediment and Erosion Control Plan will be in place which ensures the downstream drainage system and receiving waters are protected from sediment laden runoff. Best Management Practices have been applied to the operational aspects of the development to ensure that the quality of stormwater runoff is not detrimental to the receiving environment. Roof, hardstand, car parking, roads and other extensive paved areas will be treated by the Stormwater Treatment Measures.
(c) <i>the cumulative impact of the proposed development or activity on the Georges River or its tributaries,</i>	The measures outlined in the Civil Engineering Report to manage stormwater quality and quantity will prevent any significant cumulative impact.
(d) <i>any relevant plans of management including any River and Water Management Plans approved by the Minister for Environment and the Minister for Land and Water Conservation and best practice guidelines approved by the Department of Urban Affairs and Planning (all of which are available from the respective offices of those Departments),</i>	No plans of management apply to the subject site. A stormwater management plan is included in the Civil Engineering Report (refer to Sections 4, 5 and 6 of Appendix 6). The report details operation and maintenance of the proposed stormwater system. Drawing Co8753.08-DA40 (Appendix 5), has also been produced to show the isolation points, Gross Pollutant Trap's and overland flow paths.
(e) <i>the Georges River Catchment Regional Planning Strategy (prepared by, and available from the offices of, the Department of Urban Affairs and Planning),</i>	The proposal is consistent with the relevant provisions of the Georges River Catchment Regional Planning Strategy.
(f) <i>all relevant State Government policies, manuals and guidelines of which the council, consent authority, public authority or person has notice,</i>	The proposal is consistent with the heavy industry land use zoning of the site and is consistent with the State Government's Metropolitan Strategy for employment lands within the South West sub-region.
(g) <i>whether there are any feasible alternatives to the development or other proposal concerned.</i>	Alternatives to the proposed development are outlined in Section 3.5 of the EIS.
Specific Planning Principles	Proposal Compliance
(1) Acid sulfate soils <i>Disturbance of acid sulfate soil areas is to be avoided or minimised and those areas are to be protected in accordance with the requirements set out in the Acid Sulfate Soils Assessment and Management Guidelines prepared by the Acid Sulfate Soils Management Advisory Committee. Measures to minimise that disturbance are to take into account the following:</i> (a) <i>verification of the existence, locations and extent of acid sulfate soils,</i> (b) <i>the capacity of land to sustain the proposed land uses, having regard to:</i> (i) <i>potential impacts on surface and groundwater quality and quantity, and</i>	The proposal will not disturb any acid sulfate soils as all major earthworks have been undertaken under previous DA 1636/2012.



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<p>(ii) <i>potential impacts on ecosystems and on biodiversity, and</i></p> <p>(iii) <i>potential impacts on agricultural, fisheries and aquaculture productivity, and</i></p> <p>(iv) <i>any likely engineering constraints and impacts on infrastructure, and</i></p> <p>(v) <i>cumulative environmental impacts.</i></p>	
<p>(2) Bank disturbance <i>Disturbance of the bank or foreshore along the Georges River and its tributaries is to be avoided and those areas and any adjoining open space or vegetated buffer area must be protected from degradation.</i></p>	No bank disturbance will occur as part of the proposal.
<p>(3) Flooding <i>The following are to be recognised:</i></p> <p>(a) <i>the benefits of periodic flooding to wetland and other riverine ecosystems,</i></p> <p>(b) <i>the pollution hazard posed by development on flood liable land in the event of a flood,</i></p> <p>(c) <i>the cumulative environmental effect of development on the behaviour of flood water and the importance of not filling flood prone land.</i></p>	The Civil Engineering Report (Appendix 6) identifies that the site is located approximately 450m east of Cabramatta Creek. The flooding characteristics of the creek are outlined in the <i>Cabramatta Creek Floodplain Management Study & Plan 2004</i> produced by Bewsher Consulting Pty Ltd and reveals that the site is not subject to Q100 ARI flooding.
<p>(4) Industrial discharges <i>The discharging of industrial waste into the Georges River or its tributaries must be avoided and the requirements of the relevant consent authority and licensing authority must be met in those instances where industrial discharges into the river and its tributaries occur.</i></p>	No industrial discharges will be undertaken as part of operations. Where a spill occurs, suitable measures are in place to avoid significant impact to the environment.
<p>(5) Land degradation <i>Land degradation processes, such as:</i></p> <p>(a) <i>erosion,</i></p> <p>(b) <i>sedimentation,</i></p> <p>(c) <i>deterioration of soil structure,</i></p> <p>(d) <i>significant loss of native vegetation,</i></p> <p>(e) <i>pollution of ground or surface water,</i></p> <p>(f) <i>soil salinity and acidity, and</i></p> <p>(g) <i>adverse effects on habitats and sensitive natural environments (aquatic and terrestrial) within the Catchment,</i></p> <p><i>must be avoided where possible, and minimised where avoidance is not possible.</i></p>	An Erosion and Sediment Control Plan has been included within the Civil Engineering Report provided as Appendix 6 .
<p>(6) On-site sewage management <i>The potential adverse environmental and health impact associated with effluent disposal is to be recognised and guarded against by meeting the criteria set out in the Environment Health Protection Guidelines: On-site Sewage Management for single households and the provisions of the Local Government (Approvals) Regulation 1993.</i></p>	The proposal will utilize existing mains sewage infrastructure. No on-site effluent disposal or processing will occur.
<p>(7) River-related uses <i>Uses located on immediate foreshore land on the Georges River and its tributaries must be water-related and public access to the foreshore of the river and its tributaries must be provided in order to enhance the environment of the Catchment.</i></p>	No use of the River is proposed.
<p>(8) Sewer overflows <i>The adverse impact of sewer overflows, including exfiltration, on the environment within the Catchment, and specifically on the water quality of the river and its tributaries, is to be recognised and that issue is to be addressed through appropriate planning and management of development within the Catchment.</i></p>	The proposal will utilize existing mains sewage infrastructure. No excessive demand on this infrastructure is to be expected from the proposal.



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<p>(9) Urban/stormwater runoff <i>The impacts of stormwater runoff, including sewage contaminated runoff into or near streams within the Catchment, is to be minimised and mitigation measures that address urban stormwater runoff are to be implemented in accordance with the local council requirements and the Managing Urban Stormwater series of documents. Development is also to be in accordance with the NSW State Rivers and Estuaries Policy available from offices of the Department of Urban Affairs and Planning. Stormwater management must be integrated so that quality, quantity and land use aspects are all encompassed.</i></p>	<p>The Civil Engineering Report identifies that the design of the stormwater system for this site has been based on relevant national design guidelines, Australian Standard Codes of Practice, Liverpool City Council Development Design Specification D5: Stormwater Drainage, Liverpool City Council On-site Detention Policy, Liverpool City Council Handbook for Drainage Design Criteria and accepted engineering practice.</p> <p>Runoff from buildings will generally be designed in accordance with AS 3500.3 National Plumbing and Drainage Code Part 3 – Stormwater Drainage.</p> <p>Overall site runoff and stormwater management will generally be designed in accordance with the Institution of Engineers, Australia publication "Australian Rainfall and Runoff" (1987 Edition), Volumes 1 and 2 (AR&R).</p> <p>Storm events for the 2 to 100 Year ARI events have been assessed.</p>
<p>(10) Urban development areas <i>The environment within the Catchment is to be protected by ensuring that new or expanding urban development areas are developed in accordance with the Urban Development Program and the Metropolitan Strategy and that the requirements of the NSW Floodplain Development Policy and Manual (prepared by and available from the Department of Land and Water Conservation) are also satisfied. It is important to ensure that the level of nutrients entering the waterways and creeks is not increased by the development.</i></p>	<p>The proposal will be undertaken on land that has been zoned for industrial purposes and is recognized within the Draft South West Sub-regional Strategy for provision of employment.</p>
<p>(11) Vegetated buffer areas <i>Appropriate buffer widths (as identified in item 21 relating to Development in Vegetated Buffer Areas in the Planning Control Table in Part 3) must be retained as a means of improving surface runoff entering into the Georges River or its tributaries.</i></p>	<p>No buffers are required for the development site given its distance from any watercourse or tributary of Georges River.</p>
<p>(12) Water quality and river flows <i>Water quality and river flows within the Catchment are to be improved through the implementation of environmental objectives for water quality and river flows agreed between the Minister for Environment and the Minister for Land and Water Conservation and by the application of consistent decisions affecting the use and management of land.</i></p>	<p>Stormwater Treatment Measures will be in place to manage quality, including:</p> <ul style="list-style-type: none"> ▪ Gross Pollutants >98% reduction ▪ Total Suspended Solids >70% reduction ▪ Total Nitrogen 0% reduction ▪ Total Phosphorous >30% reduction <p>The PHA finds that some materials intended to be handled on the site could have an impact on the natural environment in an emergency event; however, given the measures proposed to mitigate identified potential hazards, any spill is unlikely to reach the surrounding environment. Where the unlikely event of a spill into the environment does occur, the PHA indicates that the spill events are unlikely to have long-term effects on the environment.</p>
<p>(13) Wetlands <i>Wetlands must be protected through the application of consistent land use and management decisions that take into account the potential impact of surrounding land uses, incorporate measures to mitigate adverse effects and are in accordance with the NSW Wetlands</i></p>	<p>No impact on wetlands will occur from the proposed development.</p>



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<i>Management Policy (prepared by and available from the Department of Land and Water Conservation). Wetlands must also be protected by requiring adequate provisions where clearing, construction of a levee, draining or landscaping is to be undertaken.</i>	
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Part 3 of REP 2 outlines controls for specific activities within the Georges River Catchment, including 'Chemical or Fuel Storage on Land' and 'Hazardous or Offensive, or Potentially Hazardous or Offensive Industries':

Chemical or Fuel Storage on Land

Chemical or Fuel Storage on Land is prohibited on flood liable land. As the location of the expansion and dangerous goods store is located on land that is not flood liable, the development is permissible with consent under REP 2.

Hazardous or Offensive, Or Potentially Hazardous or Offensive Industries

Hazardous or Offensive, Or Potentially Hazardous or Offensive Industries (as defined in *State Environmental Planning Policy No 33—Hazardous and Offensive Development*) are prohibited on land within 40 metres of a watercourse. As the location of the expansion and dangerous goods store is located on land that is not within 40m of a watercourse, the development is permissible with consent under REP 2.

The specific matters for consideration in relation to development outlined above are addressed in **Table 10**.

Table 10 – REP 2 Matters for Consideration	
Matters for Consideration	Proposal Compliance
<i>That adequate provisions have been made to contain water that may be contaminated by its use for fire control purposes.</i>	As outlined in the PHA, water that is used for fire-fighting purposes will be captured on-site in accordance with Australian Standards.
<i>Whether the proposal meets the requirements of the local council's stormwater management plan or, if no such plan is prepared, the local council's stormwater management objectives or policy determined by the council.</i>	As outlined in the Civil Engineering Report (Appendix 6) the proposal meets the requirements of Council's stormwater requirements. A stormwater management plan is included in the Civil Engineering Report (Appendix 6) Drawing Co8753.08-DA40 (Appendix 5), has also been produced to show the isolation points, Gross Pollutant Trap's and overland flow paths.
<i>Whether the proposal is in accordance with the local council's soil erosion and sediment management plan or policy.</i>	As outlined in the Civil Engineering Report (Appendix 6) the proposal meets the requirements of Council's erosion and sediment control requirements.
<i>Any impacts on groundwater.</i>	No impact on groundwater is to occur from operation of the facility. In the rear event of a spill or emergency, measures have been implemented to capture runoff. Where any spill exceeds containment, the PHA identifies that the substances likely to be present will not have any long term impact on the environment.
<i>Provision for on-site bush fire hazard reduction where relevant.</i>	A Bushfire Protection Assessment has been undertaken by ABPP (Appendix 9) which identifies that the site is not impacted by bushfire prone vegetation however the buffer zone to the Category 1 Bushfire Prone Vegetation on the land to the east impacts the site. The Assessment found that the location of the building provides a defendable space between the building and the bushfire prone vegetation on the land to the east. The defendable space setback width exceeds the 'flame zone' width required to address the NSW Rural Fire Service's requirements for Class 5 – 10 buildings. Integrated landscaping measures to reduce risk and operational maintenance will also contribute to reducing risk.



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As the proposal falls into the development categories identified above, the matters for consideration relating to industrial development under REP 2 are not applicable.

4.2.16 Sydney Regional Environmental Plan No. 9 – Extractive Industry (No. 2)

Sydney Regional Environmental Plan No. 9 – Extractive Industry (No.2) aims to manage extractive material resources in an appropriate manner to balance environmental, social and economic values across a number of local government areas, including Liverpool.

The proposal will not have an impact of natural resources greater than that previously assessed under the feasibility undertaken to zone the land for industrial activity and subsequent development approval for the existing Mainfreight facility.

4.3 REGIONAL PLANNING CONTEXT

4.3.1 Metropolitan Plan for Sydney 2036

In December 2005 the NSW Government launched City of Cities – A Plan for Sydney's Future. In December 2010 the Strategy was updated and integrated with the Metropolitan Transport Plan to deliver a new 25 year Metropolitan Plan for Sydney 2036 (the Metro Strategy). The Metro Strategy focuses on building the role of cities across the metropolitan area through integrating transport and land use planning, concentrating growth in centres to improve access to jobs, facilities and services and includes the following aims:

- *Mitigate and adapt to the impacts of climate change;*
- *Integrate infrastructure, particularly transport, with land uses as part of managing growth, city efficiency and sustainability;*
- *Strengthen governance, monitoring and implementation arrangements to secure delivery of outcomes;*
- *Address the Federal Government's new national criteria to improve capital city planning for all States and Territories, and*
- *Respond to the challenges of Sydney's faster than previously expected population growth.*

This project supports the Metropolitan Plan for Sydney 2036 by providing industry jobs and facilitating supply and distribution services for the region. It is an effective use of the approved industrial warehouse, suitable for the location and is compatible with other industrial uses on the site. The site is also within a strategic Employment Lands area of the Metropolitan Region as indicated in **Figure 7**.



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Figure 7 – Strategic Centres and Employment Lands (Source: Metropolitan Plan for Sydney 2036, NSW Department of Planning, 2010)

4.3.2 Metropolitan Transport Plan 2010

The Metropolitan Transport Plan 2010 'Connecting the City of Cities' is the NSW State Government's policy document for delivery of public transport services to a growing population across the Sydney Metropolitan area.

The Metropolitan Transport Plan 2010 aims to improve the commute to work, improve community access to transport and services, provide an efficient and integrated customer focused transport system and revitalise neighbourhoods with improved transport hubs.

The subject site has good access to the arterial road network making it easily accessible for the transportation of goods. Vehicle movements for the site have been previously approved and no significant disruption to existing level of service of the road network will result from the proposal.

4.3.3 Draft South West Subregional Strategy

The Draft South West Subregional Strategy translates objectives of the NSW Government's Metropolitan Strategy and the State Plan to the local level. The South West Subregional Strategy includes the local government areas of Camden, Campbelltown, Liverpool and Wollondilly and identifies an additional 284,000 dwelling houses and 208,500 new jobs as a growth target for the subregion as a whole. This includes a doubling of jobs in the Liverpool LGA alone.

The Subregional Strategy states the following characteristics for Prestons:

Prestons is the largest industrial area in Liverpool LGA having an area of over 235 ha. Development of the adjoining area (Yarrunga), which was recently rezoned, will add a further 202 ha. At its nearest point, the Prestons/Yarrunga area is only 2 km west of Liverpool City Centre and is linked to it by Hoxton Park Road. It is located on the Parramatta–Liverpool Transitway, and the proposed bus link between Edmondson Park Town Centre and Liverpool, providing access to both services and higher education facilities. In 2001 around 2,250 people were employed in the area.

The eastern part of the Prestons area has been zoned for industrial development since the 1970s and developed with manufacturing, heavy industry, transport terminals and heavy vehicle servicing, logistics and



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warehousing. There are a number of large floor plate logistics companies and some smaller factory units along Lyn Parade and Hoxton Park Road, where these are interspersed with retail/urban service uses. The Liverpool Catholic Club and Sports complex occupy large sites west of Ash Road, while the western part contains a mix of heavy industry, works depots and electricity substations and urban support services.

Direct access is provided to the M7 Motorway via a four way interchange at Bernera Road. This links to the national highway network and gateway infrastructure such as the port and airport. This land is therefore strategically located for freight and logistics as well as manufacturing and urban support. Fragmentation of the larger holdings and the expansion of retail development would limit its value for these uses.

The Key Functions of the Prestons area are identified under the strategy as freight and logistics, manufacturing-light, manufacturing-heavy and utilities/urban services.

A Key action for the South West Subregion is also for The Department of Planning and Councils to identify areas in Prestons (amongst other areas) for industrial activities requiring large sites. The position of the development site within land already zoned for industrial purposes with access to the M7 Motorway provides an opportunity to contribute to the achievement of this key outcome.

Specifically, the proposed development is consistent with the Strategy in that it will:

- contribute to the development of Liverpool LGA as a hub for warehousing and distribution;
- contribute to achieving employment targets for Liverpool which requires 11,000 new jobs by 2036; and
- provide an appropriate use of industrial lands for industrial use and employment purposes.

4.4 LOCAL PLANNING CONTEXT

4.4.1 Liverpool Local Environmental Plan 2010

The relevant provisions of *Liverpool Local Environmental Plan 2008* (LLEP 2008) are considered below:

Zoning and Permissibility

The subject land is zoned 'IN3 Heavy Industrial' under the provisions of LLEP 2008 (**Figure 8**).

The objectives of the Heavy Industrial zone are:

- *To provide suitable areas for those industries that need to be separated from other land uses.*
- *To encourage employment opportunities.*
- *To minimise any adverse effect of heavy industry on other land uses.*
- *To support and protect industrial land for industrial uses.*
- *To preserve opportunities for a wide range of industries and similar land uses by prohibiting land uses that detract from or undermine such opportunities.*

The proposed development is consistent with the objectives of the IN3 Heavy Industrial zone as it will facilitate future employment-generating development for Warehouse or distribution centre activities that are permitted within this zone.

For the purposes of LLEP 2008, **warehouse or distribution centre** means:

a building or place used mainly or exclusively for storing or handling items (whether goods or materials) pending their sale, but from which no retail sales are made.



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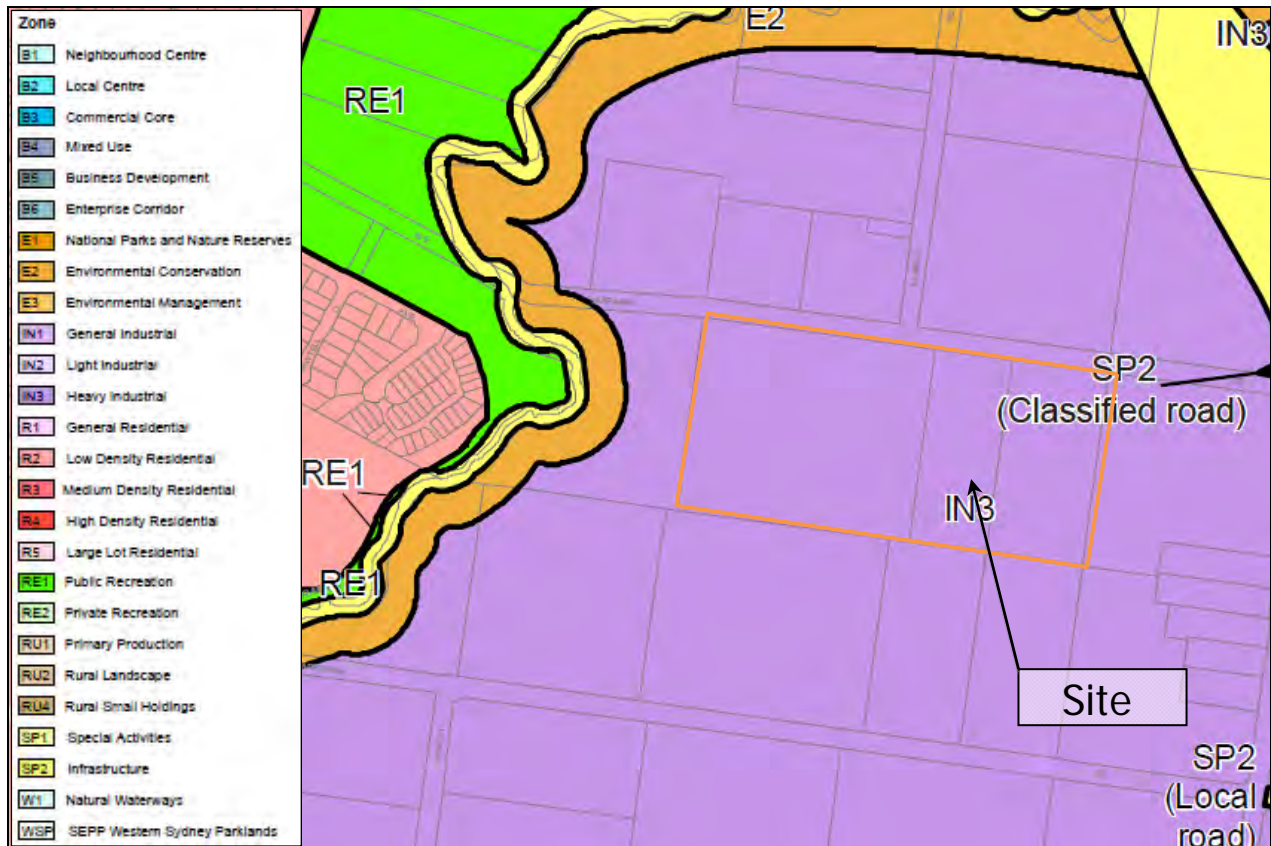


Figure 8. Liverpool Local Environmental Plan 2008 Zoning Map
(Liverpool Council, 2008)

Subdivision

Subdivision does not form part of the proposal. Consolidation of the allotments will be undertaken prior to occupation.

Floor Space Ratio

No Floor Space Ratio controls apply to the site (Figure 9).

Architectural Roof Features

No architectural roof features are proposed as part of the subject development application.

Height of Buildings

The proposal will maintain consistency with the height of existing Mainfreight facility (RL43.00) having a maximum building height of 12.2metres. The proposal will be substantially lower than the permitted height of 30 metres as shown in Figure 10.

Preservation of Trees or Vegetation

No vegetation is to be impacted by the proposal as the site has been previously disturbed and approved for earthworks under DA 1636/2012.

Heritage Conservation

The site does not contain an item of environmental heritage and does not adjoin any heritage item.

The site is not located within a heritage conservation area. See Figure 11.

As the site has been approved for earthworks, no indigenous archaeology is expected to occur on the site.



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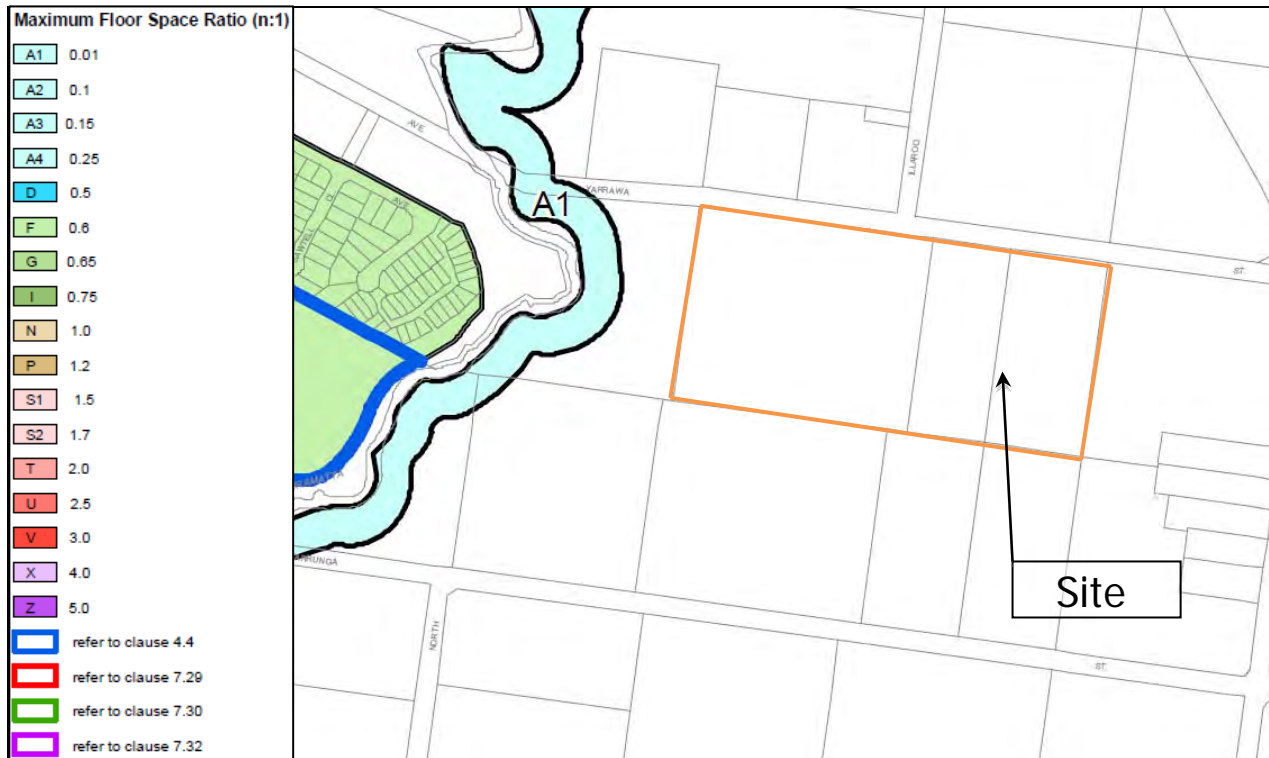


Figure 9. Liverpool Local Environmental Plan 2008 Floor Space Ratio Map
(Liverpool Council, 2008)

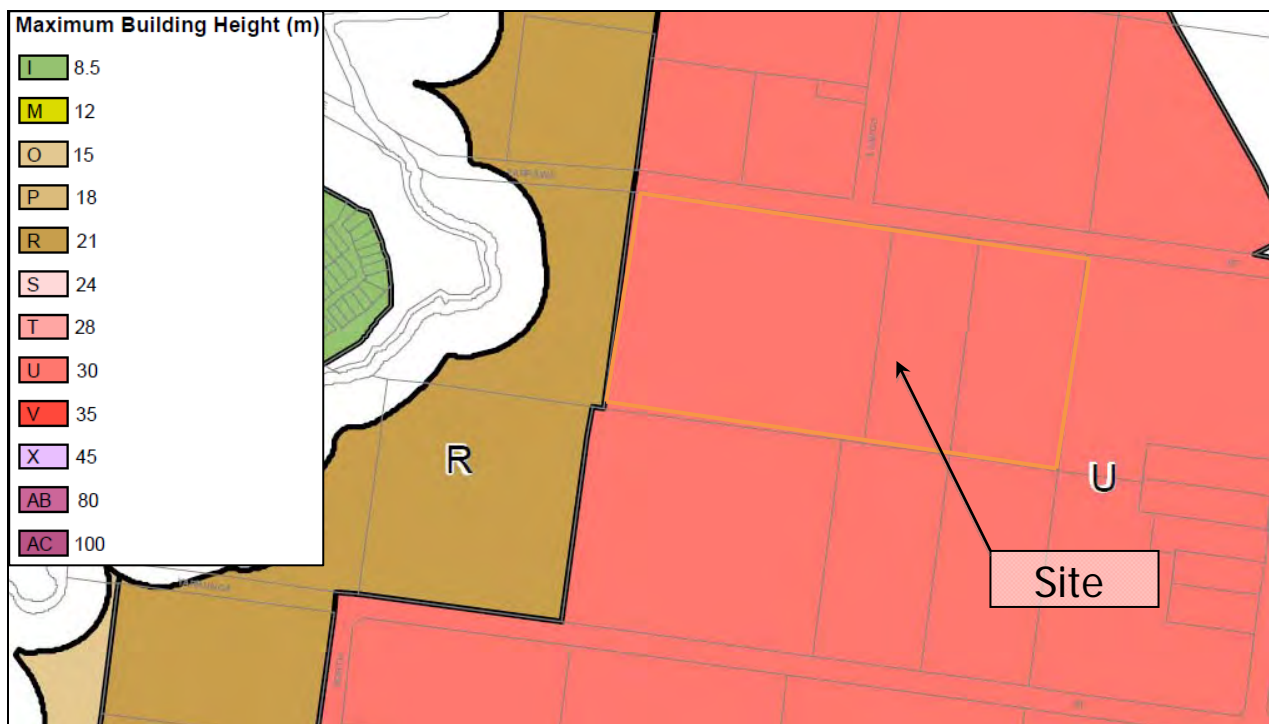


Figure 8. Liverpool Local Environmental Plan 2008 Height of Buildings Map
(Liverpool Council, 2008)



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Figure 11. Liverpool Local Environmental Plan 2008 Heritage Map
(Liverpool Council, 2008)

Bushfire Prone Land

Australian Bushfire Protection Planners (ABPP) have prepared a Bushfire Protection Assessment to address the bushfire prone land classification affecting the eastern portion of the site (**Figure 12**). The report (**Appendix 9**) has reviewed the proposed development against the deemed-to-satisfy provisions of *Planning for Bushfire Protection 2006* and found that the location of the building provides a defensible space between the building and the bushfire prone vegetation on the land to the east.

The defensible space setback width exceeds the 'flame zone' width required to address the NSW Rural Fire Service's requirements for Class 5 – 10 buildings.

Management of the defensible spaces/landscaped areas within the development site shall also comply with the following:

- Maintain a clear area of low cut lawn or pavement adjacent to the building;
- Keep areas under shrubs and trees raked and clear of combustible fuels;
- Utilise non-flammable materials such as Scoria, pebbles and recycled crushed bricks as ground cover to landscaped gardens in close proximity to building;
- Trees and shrubs should be maintained in such a manner that tree canopies are separated by 2 metres and understorey vegetation is not continuous [retained as clumps].

The landscape plan has been prepared to address these items.

Environmentally Significant Land

The Environmentally Sensitive Land Map (**Figure 13**) indicates that the site does not contain any environmentally sensitive land. The proposal will not affect any nearby land identified as being environmentally sensitive.



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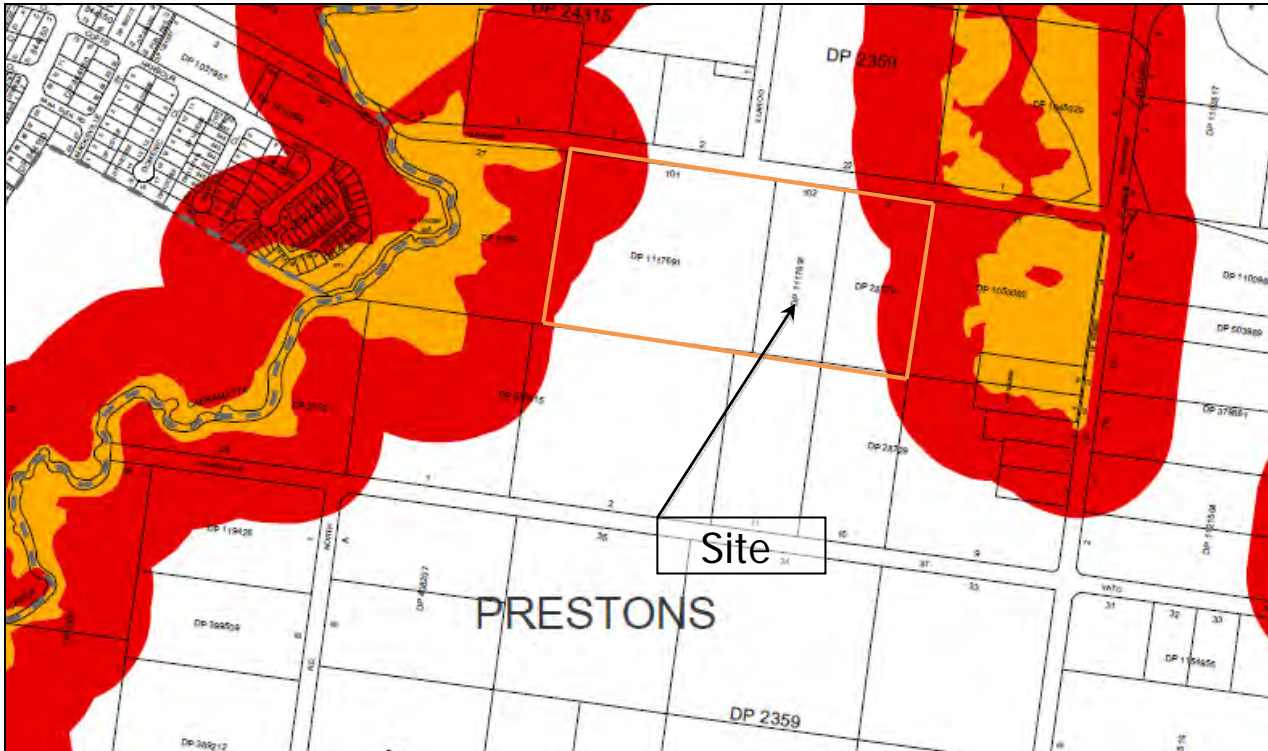


Figure 12. Bushfire Prone Land Map (Liverpool Council, 2008)

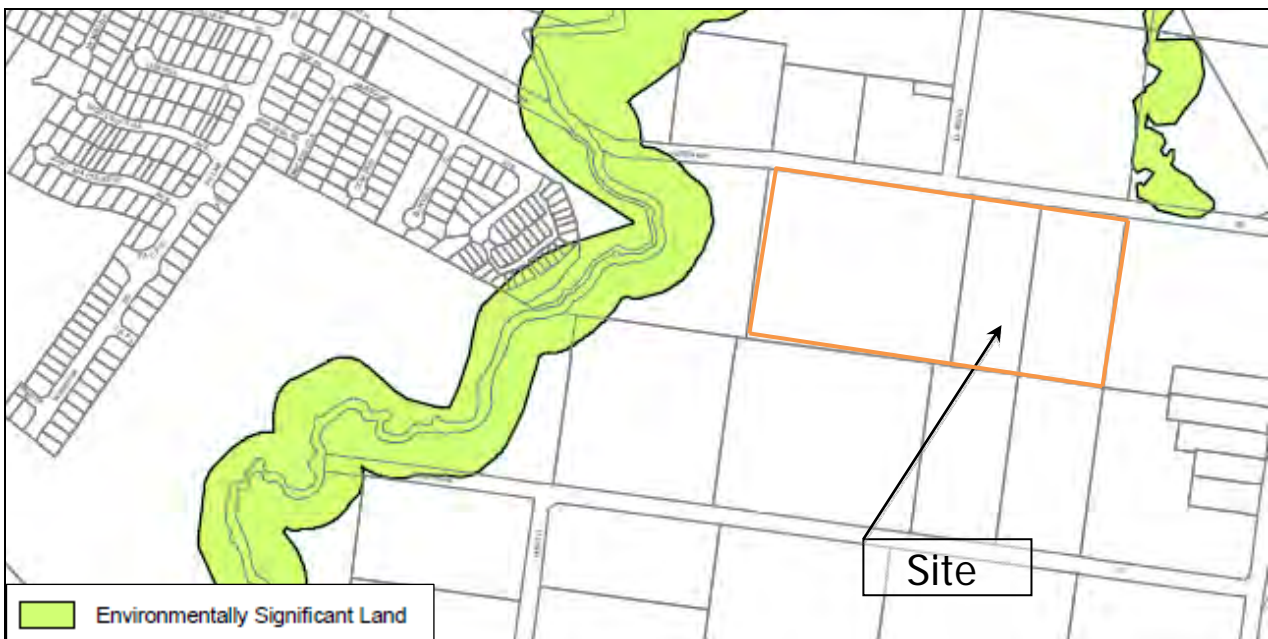


Figure 13. Liverpool Local Environmental Plan 2008 Environmentally Sensitive Land Map (Liverpool Council, 2008)

Acid Sulphate Soils

The site is not identified as containing any Acid Sulphate Soils.

Development in Flight Paths

The development is not affected by any airport restrictions.

Flood Planning



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The Flood Planning Area Map (**Figure 14**) indicates that while a small portion of land in the north west corner of the existing Mainfreight site is Flood Prone Land, the land upon which the expansion will be located is not flood affected.

The Civil Engineering Report prepared by Costin Roe confirms that the site is not within a flood affected area (**Appendix 6**).

No portion of the site and is not within a Flood Planning Area.

Key Sites Map

The site is not identified as a Key Site.

Urban Release Area

The site is not identified as an Urban Release Area.

Land Reservation Acquisition

The Land Reservation Acquisition Map (**Figure 15**) indicates that the site is not subject to land acquisition.

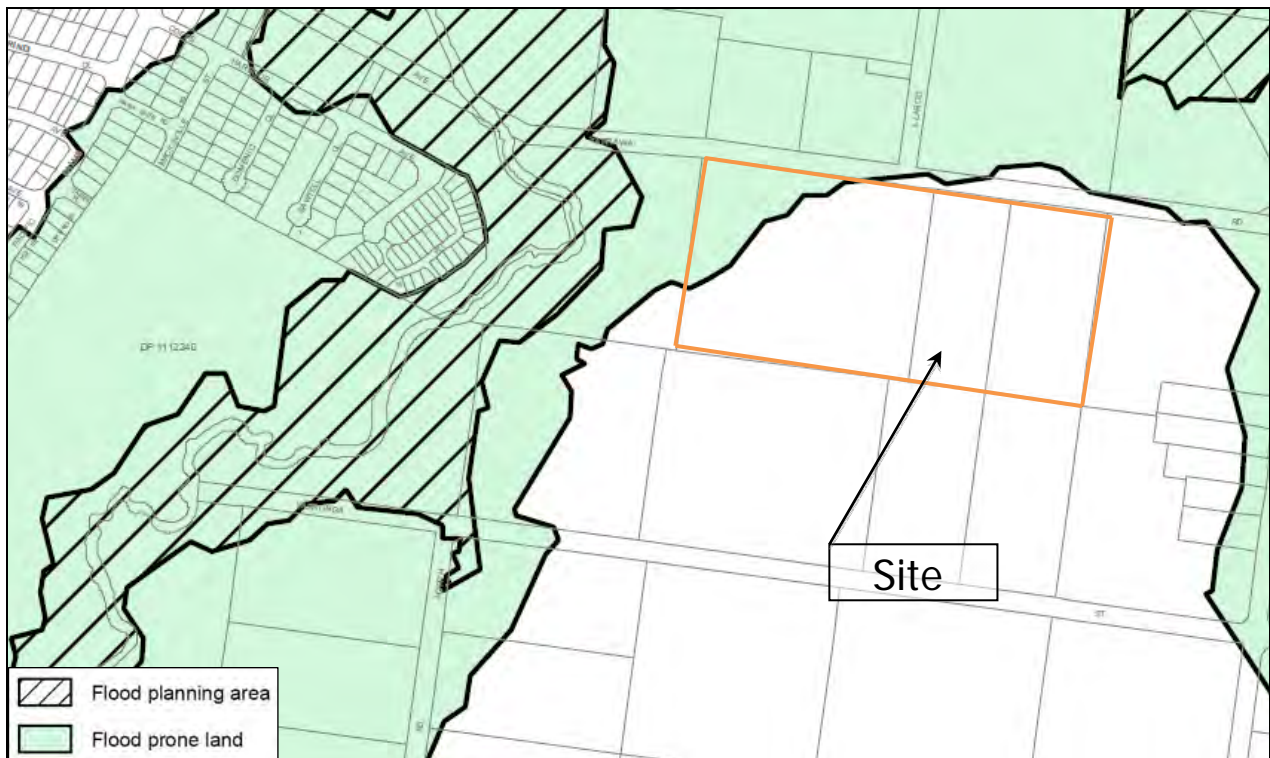


Figure 14. Liverpool Local Environmental Plan 2008 Flood Planning Area Map
(Liverpool Council, 2008)



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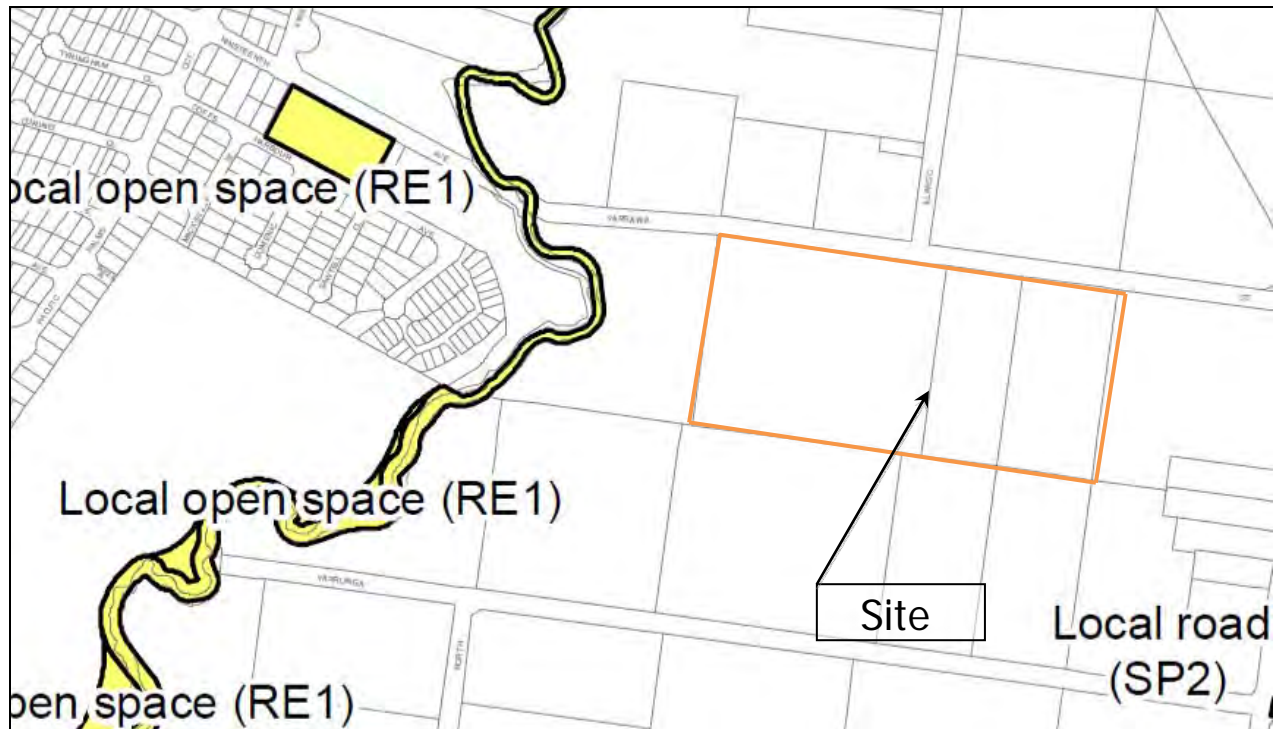


Figure 15. Liverpool Local Environmental Plan 2008 Land Reservation Acquisition Map
(Liverpool Council, 2008)

4.4.2 Liverpool Development Control Plan 2008

It is noted that Section 11 of *State Environmental Planning Policy (State and Regional Development) 2011* states:

11 Exclusion of application of development control plans

Development control plans (whether made before or after the commencement of this Policy) do not apply to:

(a) State significant development

Notwithstanding, the proposal is generally consistent with the provisions of the *Liverpool Development Control Plan 2008* (LDCP) as applicable to industrial development. The relevant provisions are addressed below.

Part 1.1 – General Controls for All Development

▪ **Tree Preservation**

The site has been previously developed to allow for earthworks approved under DA 1636/2012. No further removal of vegetation is to be undertaken as part of the subject application.

▪ **Landscaping and Incorporation of Existing Trees**

A Landscape Plan has been prepared by Site Image and is annexed as **Appendix 7**. The landscape design continues the theme established for the existing Mainfreight facility whilst responding the TransGrid requirements for plantings near the transmission easement.

▪ **Bushland and Fauna Habitat Preservation**

The site is not identified as being environmentally significant land and has been previously cleared.



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- ***Bushfire Risk***

A portion of land within the eastern part of the site is identified as being Vegetation Buffer to Bushfire Prone Land. A Bushfire Protection Assessment by ABPP (**Appendix 9**) concludes that the location of the building provides the required defendable space between the building and the bushfire prone vegetation on the land to the east.

Additional landscaping recommendations have been implemented and the facility will be operated in accordance with operational recommendations.

- ***Water Cycle Management***

Stormwater Management details are outlined in the Engineering Plans at **Appendix 5** and in the Civil Engineering Report at **Appendix 6**.

A civil engineering strategy for the site has been developed which provides a best fit solution within the constraints of the existing landform and proposed architectural layout. Within this strategy a stormwater quantity and quality management strategy has been developed to reduce both peaks flows and pollutant loads in stormwater leaving this site. The stormwater management for the development has been designed in accordance with the Liverpool City Councils Design Specification D5 & D7, OSD Policy and Stormwater Handbook for Design.

During the construction phase, a Sediment and Erosion Control Plan will be in place which ensures the downstream drainage system and receiving waters are protected from sediment laden runoff.

During the operational phase of the development, a treatment train incorporating the use of the proprietary Rocla CDS system is proposed to mitigate the likely increase in stormwater pollutant load generated by the development. The expected pollution reduction from the Rocla CDS unit are effective in reducing pollutant loads in stormwater discharging from the site and meet the requirements of council pollutant based reductions.

Best Management Practices have been applied to the development to ensure that the quality of stormwater runoff is not detrimental to the receiving environment.

- ***Development Near a Watercourse***

The proposal is not in close proximity to the banks of the Georges River and is not within an open space or environmental protection zone.

- ***Erosion and Sediment Control***

An Erosion and Sediment Control Plan is included within the Civil Engineering Plans and Report at **Appendix 5** and **Appendix 6** respectively. The ESCP indicates that the proposal can be undertaken without undue pollution to receiving waters.

- ***Flooding Risk***

A portion of the existing Mainfreight facility site is identified as being Flood Prone Land. The proposed expansion is on land that is not identified as being subject to a flood risk.

- ***Contaminated Land Risk***

The previous uses of the land do not suggest that the site is contaminated.

A Virgin Excavated Natural Material (VENM) classification to soil excavated on part of the site was undertaken by Environmental Investigation Services in November 2008. The soil was considered to be VENM and the slight levels of zinc and arsenic were not considered to be indicative of contamination.



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▪ **Salinity Risk**

The site is identified as having moderate potential for containing Saline Soils on the Salinity Potential in Western Sydney Map (**Figure 16**).

Where moderate potential for salinity is identified, the DCP requires a determination of whether the proposed development involves salinity risk activities. In determining whether the proposal involves salinity risk activities, the DCP notes:

Salinity risk activities are those activities which are considered to have a greater risk associated with them in area of salinity potential, based on level of ground disturbance, water-use, and the potential to alter hydrological conditions and/or salt concentrations. This may include, but is not limited to: quarrying, intensive agriculture, activities involving high levels of irrigation, large scale artificial waterbodies, infiltration into the soil or groundwater, waste water re-use or treatment systems or major landscape reshaping.

The proposed development does not seek to undertake any significant earthworks as the required levels have been obtained under an existing approval for the site (DA 1636/2012). No further consideration of salinity is required.



Figure 16. Saline Soils on the Salinity Potential in Western Sydney Map
(DIPNR, 2002)

Acid Sulfate Soils Risk

The site is not identified as being affected by Acid sulphate Soils.

Weeds

No noxious weeds have been identified on the site. No weeds will be introduced within the landscape design for the proposed expansion.



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Demolition of Existing Developments

No structures currently exist on Lots 2 and 102 that will require demolition.

Minor demolition of a small portion of the existing facility will occur to enable the new expansion to connect with established structures. This includes relocation of the existing truck wash bay as well as the splay that is provided at the south east corner of the main warehouse.

Previously constructed dams will be in-filled as part of the approved earthworks, with new water management systems to be implemented to manage runoff as outlined in the Civil Engineering Report and Plans.

Minor reduction of hardstand area and the existing heavy vehicle driveway located at the eastern end of the existing transport shed will also be relocated further east to allow for the extension of the loading dock associated with this shed.

The existing gas bullet positioned within the breezeway will also be relocated.

On-Site Sewage Disposal

No on-site sewage disposal will be undertaken as part of the proposal.

Aboriginal Archaeology

The site is not identified as containing any item of indigenous or archaeology heritage and has been highly disturbed in accordance with approved earthworks.

Part 1.2 – Additional General Controls for Development

▪ ***Car Parking and Access***

The parking rates applicable to warehouse and distribution centre's under LDCP are:

- 1 space per 35m² of office Lettable Floor Area;
- 1 spaces per 75m² of warehouse Lettable Floor Area or 1 space per 2 employee; and
- 1 space per 100 spaces must be allocated as parking for a person with a disability.

The proposal includes 70 line marked spaces within a new parking area in the eastern portion of the site. One (1) of these spaces will be provided for persons with a disability. An additional 40 provisional spaces will be provided adjacent to the northern boundary, within the hardstand area.

The proposed vehicle movements are essentially split into two distinct precincts:

5. Movements associated with the Transport Shed (being the one closest to Yarrowa Street); and
6. Traffic flow for the warehouse at the rear of the site, known as the Logistics Shed.

These precincts are then broken down into morning and afternoon periods, as follows:

▪ ***Transport Shed***

The morning vehicle movements are expected to involve 90 PUD's of 2-12 tonnes each moving through the facility. These vehicles will enter from the western boundary entry and go through the northern side of the transport shed and continue out of the eastern exit.

Approximately 30 B-Doubles and 10 Semis that will enter from the eastern boundary and head through the southern side of the transport shed where they will unload. The empty truck will then exit out of the Transport Shed by turning left to drive around the rear warehouse.



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The afternoon traffic flow will have the 30 B-Doubles and 10 Semis that have been parked since the morning unloading moving out from their parking behind the warehouse of in the yard and will travel between the buildings under the breezeway and will turn right at the western end of the Transport Shed where they will then enter the transport shed on the Yarrowa Street side to load up. After loading, these vehicles will exit the transport shed and circulate back around and through the breezeway to go to the weighbridge located in the western end of the breezeway before exiting on the western end of the site.

The PUD's (90) who are returning from their deliveries and pickups will enter the site at the eastern end and head across the yard to the southern side of the Transport Shed where they will unload for the product to be gathered and put into line haul tracks for interstate delivery. They will then exit at the western end.

- **Logistics Shed**

Semis (total of 10 for whole day) as well as trucks carrying containers (20 for the whole day) will enter from the east and go to their respective door (either docks on expansion shed or side load at either shed) and unload or load, then exit the site through the breezeway at the western end of the site.

The design of the internal arrangements including truck manoeuvring, carpark aisles/bays etc have been designed in accordance with relevant standards. Truck turning paths showing the satisfactory provision for circulation movements of articulated vehicles are provided as part of the Traffic Impact Assessment at **Appendix 10**.

With regard to the semi-trailer trucks, the Truck Parking Management Plan included within the Traffic Impact Assessment identifies an area (spaces A1 – A20, each of which is 19 metres long and 3.5 metres wide) where 20 semi-trailer trucks can be accommodated on the hardstand area. Each of these spaces can be accessed independently via reverse in, reverse out manoeuvres.

Spaces T1 – T30, each of which is 12.5 metres long and 3.5 metres wide, can accommodate the 30 B-Double rear trailers. Spaces B1 – B20, each of which is 15.6 metres long and 3.5 metres wide will provide parking for 20 of the B-Double front truck-and-trailer units while the area along the south side of the existing warehouse building will accommodate the remaining 10 B-Double front units.

It is noted that the truck swept paths indicate that vehicles parked within the identified parking areas on the hardstand do not obstruct trucks from entering and exiting the two adjacent loading docks and the breezeway.

- **Subdivision of Land and Buildings**

No subdivision of land or buildings forms part of the proposed development. Consolidation of the existing facility with the expansion land is to be undertaken prior to the issue of an occupation certificate.

- **Water Conservation**

Rainwater harvesting is proposed for this development with re-use for non-potable applications. Internal uses include such applications as toilet flushing while external applications will be used for irrigation. The aim is to reduce the water demand for the development and to satisfy the requirements of Liverpool Council.

In general terms the rainwater harvesting system will be an in-line tank for the collection and storage of rainwater. At times when the rainwater storage tank is full rainwater can pass through the tank and continue to be discharged via gravity into the stormwater drainage system. Rainwater from the storage tank will be pumped for distribution throughout the development in a dedicated non-potable water reticulation system.



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Rainwater reuse is provided on the existing facility in the form of a 100kL rainwater tank which services the truck wash, irrigation and toilet flushing. The need for additional rainwater reuse will be assessed during the detail design stage of the project. Any additional rainwater tanks will be sized with reference to the NSW Department of Environment and Conservation document *Managing Urban Stormwater: Harvesting and Reuse*, using a simple water balance analysis to balance the supply and demand as part of the detailed design analysis stage of the project.

- **Energy Conservation**

The proposal will comply with the relevant provisions of Part J the Building Code of Australia or suitable alternative solutions.

The proposal has been designed to maximise the use of natural light where possible. Materials and finishes have also been selected to maximise energy efficiency by reducing the need to artificially heat and cool the facility.

- **Landfill**

The proposal does not include significant cutting and/or filling of land as the levels have been established under the approved earthworks DA.

- **Waste Disposal and Re-use Facilities**

A Waste Management Plan for the proposed development is provided as **Appendix 12** and details the operational waste management methods.

- **Outdoor Advertising and Signage**

Signage comprising the Mainfreight corporate logo is to be installed. The signage will not be visually dominant features of the development and will match the established theme for the facility.

Part 7 – Development in Industrial Zones

- **Site Area**

The site is in excess of the minimum 2,000m² requirement for industrial development.

- **Site Planning**

The proposal will not require the removal of any tree or significant vegetation.

The levels have been approved by Liverpool City Council within an earlier DA.

- **Setbacks**

The setbacks between the proposed expansion areas and the site boundaries are as follows:

- **Front Setback:** Transport Shed – 11.0 metres (no reduction on existing setback)
Logistics Shed – 111.0 metres
Hardstand – 11.0 metres (no reduction on existing setback)
- **Rear Setback:** Transport Shed – 40.5 metres (no reduction on existing setback)
Logistics Shed – 10.5 metres (no reduction on existing setback)
Hardstand – 2.0 metres (no reduction on existing setback)
- **Eastern Side Setback:** Transport Shed – 176 metres
Logistics Shed – 34.2 metres
Hardstand – 25.6 metres (2.5 metres when measured from eastern edge of new car park)
- **Western Side Setback:** Transport Shed – 222 metres (no reduction on existing setback)
Logistics Shed – 232 metres (no reduction on existing setback)
Hardstand – 232 metres (no reduction on existing setback)

- **Landscaped Area**



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A Landscape Plan has been provided as part of the Development Plans at **Appendix 7**. Landscaping comprises a mix of trees, shrubs and garden beds including ground covers that will integrate with the landscape treatment already provided for the existing Mainfreight facility.

Landscaping is concentrated along the Yarrowa Road frontage and has been kept to a minimum near the transmission line easement in accordance with TransGrid requirements.

- ***Building Design, Streetscape and Layout***

As outlined above, the development has been designed to accommodate the operational requirements of Mainfreight as well as to avoid risks associated with proximity to the transmission easement.

The materials, finishes, and colours will continue the design established on the site by the existing facility.

The proposed alignment for the inter-allotment drainage lines are along the southern boundary and along the eastern portion of the development allowing for the requirements of the electrical transmission line and tower easement present on the site. Allowance for the conveyance of overland flow has been made in the design of the development. In particular, Sections 4.6 & 4.7 of the Civil Engineering Report (**Appendix 6**) covers overland flow & flooding requirements.

Further details of the design are provided in Section 6.8 below.

- ***Car Parking and Access***

The parking and access for the proposal is designed to address operational needs of Mainfreight as addressed in the Traffic and Parking Implications Report attached at **Appendix 10**.

- ***Amenity and Environmental Impact***

No external processes will be undertaken fronting a classified road or near to residential areas.

No stockpiling of materials is to occur as part of the ongoing operations of the facility.

The Qualitative Risk Assessment within the PHA identified irritant fumes or smoke evolved from a fire may spread to neighbouring properties, but these are not expected to contain any amounts of toxic materials that could have a serious respiratory affect on nearby people.

The aerosols are predominantly personal care products for general consumer use. None of the products contain listed toxic materials as described by the Australian Dangerous Goods Code. The warehouse will contain up to 380,000 L of products in aerosol cans. These are stored in a section of the Dangerous Goods Store that is designed to capture 43,620 L plus 20 minutes sprinkler output. Given the small size of each can it is very unlikely that a spill would reach the surrounding environment.

The oxidising agents are predominantly personal hair-care bleaches for the hair and beauty industry and for general consumer use. These chemicals would have a serious, short term effect on aquatic life but would not persevere or have an accumulating effect. The warehouse will contain up to 80,000 L of these products. These are stored in a section of the Dangerous Goods Store that is designed to capture 7,000 L plus 20 minutes sprinkler output. It is unlikely that a spill would reach the surrounding environment.

Some strongly alkaline corrosive materials, and environmentally sensitive substances are also stored but these are held in small quantities. Release of these materials would increase the pH of any aquatic environment and contaminated soil. The effect would be short term as they are not expected to accumulate.

Spills are very likely to be captured on-site in containment compounds from where they can be safely disposed of by certified chemical disposal companies.



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The proposed controls for the containment of spills and fire-water are:

- Internal bunded spill compounds in the Dangerous Goods Store in accordance with the requirements of AS 3833, as follows:
 - Class 2.1 & 3 43,620 L plus 20 minutes sprinkler output
 - Class 5.1 7,000 L plus 20 minutes sprinkler output
 - Class 8 & 9 1,373 L plus 20 minutes sprinkler output
- Recessed Loading Dock capable of containing up to 430,000 L.
- Valve for isolation of stormwater run-off.

Spills could occur during loading or unloading of vehicles in the Loading Dock. The recessed Loading dock has a capacity of 430,000 L which is enough to capture the largest spill and any incidental water, e.g. rainwater or fire water.

▪ **Site Services**

The site is provided with all essential services. No significant upgrade is required to provide the utilities to the proposed facility.

No visual impact is to occur from any service infrastructure or equipment.

▪ **Change of use of existing buildings**

The proposal does not involve a change of use of an existing building.

▪ **Non Industrial Developments**

The proposal does not involve any components that are not related or ancillary to the intended warehousing and distribution use.

4.5 DRAFT ENVIRONMENTAL PLANNING INSTRUMENTS

No draft Environmental Planning Instruments apply to the proposed development.



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PART E CONSULTATION

Details of consultation in relation to the proposed development is summarised below.

5.1 COMMUNITY CONSULTATION

Fowlstone was engaged to manage the community consultation in respect of the subject application. A Report outlining this consultation is annexed as **Appendix 13**.

The rationale for the community consultation process was to '*adequately and appropriately* consult with stakeholders potentially affected by the proposed redevelopment, having regard to the *NSW Department of Planning Guidelines for Major Project Community Consultation*.

In summary, the following steps were taken to make potentially impacted stakeholders aware of the plans, provide mechanisms for concerned stakeholders to raise issues, and for Goodman Property Services to respond to those concerns:

1. Display copies of the proposed plans at Liverpool City Council for exhibition and collection
2. Place an advertisement in the local paper outlining the proposed development and detailing where interested parties can obtain more information and make submissions
3. Inform immediate neighbours on Yarrowa and Yarrunga Streets of the proposed development through a letterbox drop
4. Establish email and postal addresses to receive any comments, questions or requests for further information

The community consultation process conducted by Goodman Property Services took place over a ten day period, from 6 February to 15 February 2013. The process included notifying potentially impacted stakeholders through an advertisement in a local newspaper with a readership over 100,000, notifying immediate residents through letters delivered to their homes, the display of the proposed development at Liverpool City Council, and the establishment of multiple avenues for interested parties to raise concerns, such as phone, email and mail.

Despite this extensive engagement with the local community on the proposed plans for 30-50 Yarrowa Street, Prestons NSW 2170, no residents or interested parties have expressed concern with this proposal.

5.2 NSW DEPARTMENT OF PLANNING AND INFRASTRUCTURE

The formal date of applying for Director-Generals Requirements for SSD was the 11 December 2012 and included a report outlining the proposed development and planning context. The Director-Generals Requirements were issued on 01 February 2013.

In accordance with the requirements of the DGRs issued, notification was made by telephone and email to Emma Barnet (Environmental Planning Office, DoPI) on 07 February 2012 regarding the intention to lodge the State Significant Development application from two weeks of that day. A copy of this correspondence is annexed as Part A to **Appendix 14**.

Further liaison was held between McKenzie Group Consulting and DoPI regarding requirements for lodgement.

No design detail consultation has been undertaken with DoPI.

5.3 LIVERPOOL CITY COUNCIL

A formal pre-Development Application Meeting was undertaken with Liverpool Council on Thursday 30 November 2012.



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It is noted that the nature and quantity of the dangerous goods were not confirmed at the time of this meeting and the potential status of the project as State Significant Development was only briefly discussed.

Attendees at this pre-DA meeting were:

- Venetin Aghostin (Senior Development Planner – Liverpool Council)
- Indira Seneviratne (Engineer – Liverpool Council)
- Zeaul Hoque (Flood Engineer – Liverpool Council)
- Charles Wiafe (Manager, Transport and Traffic – Liverpool Council)
- Nathaniel Murray (Planning Manager – McKenzie Group Consulting)

McKenzie Group Consulting subsequently confirmed the proposal's status as State Significant Development to Council via email on 20 December 2012. Council subsequently advised on 21 December 2012 that not further consultation would be required as a result of this change in approval process and that Council would respond to DoPI once contacted.

Council issued Minutes of the pre-DA meeting of 30 November 2012 on 02 February 2013 and issued a copy of their comments to DoPI on 07 February 2013.

See Part B of **Appendix 14** for Council consultation record.

5.4 TRANSGRID

Further to the advice issued by TransGrid to Council as part of the assessment of DA 1636/2012 (dated 21 November 2012) and advice issued by TransGrid to Goodman in 2005 regarding use of land within the easement, further consultation was undertaken via a meeting held on 14 February 2013.

Attendees at this meeting were:

- Graham Hobbs (TransGrid)
- David Turvey (TransGrid)
- Tim Cowdroy (TransGrid)
- Mike Hercus (Goodman)
- Will Dwyer (Goodman)
- Adrian Tesoriero (Goodman)

The purpose of the meeting was to determine the design requirements in proximity to the transmission easement and tower traversing the eastern portion of the site. The following outcomes were agreed:

1. *Transgrid would, at Goodman cost, remove the earth straps and install a new earthing system at the base of the tower.*
2. *Goodman to expect the following conditions to be imposed and should design its development accordingly:*
 - (a) *no structures under the easement except those referred to below.*
 - (b) *protection of the tower by an outer perimeter (approx. 15m) consisting of a median strip type kerb 150mm high and removable bollards that are earthed*
 - (c) *earthed and isolated fence under the easement (normal fence outside the easement).*
 - (d) *car parking light towers — no higher than 4m*
 - (e) *heavy duty hardstand paving 15m radius around the tower.*
 - (f) *Nothing metallic within 30m of stanchion and nothing non-metallic within 16m of stanchion*
 - (g) *Landscaping not to exceed 4m in height*
 - (h) *Boundary fence to continue under stanchion*



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- (i) ensure an observer is present during construction at all times to avoid conflict with Transgrid assets*
- 3. Note that future tower may be situated where we are showing truck parking so that we should ensure that wherever the tower goes in that corridor there is no conflict.*

The proposed development has been designed to reflect the outcomes of the meeting.

See Part C of **Appendix 14** for TransGrid consultation record.

5.5 WORKCOVER NSW

The Project Team is statutorily required to notify WorkCover NSW of any proposal to operate a Major Hazard Facility and for any dangerous goods storage.

Dialogue regarding the proposal will be initiated with WorkCover notifying that the proposed storage facility in Prestons will be a Major Hazard Facility in accordance with any approval conditions and regulatory requirements.

The Project Team is of the understanding that the information submitted will satisfactorily meet the needs of WorkCover.

5.6 ROADS AND MARITIME SERVICES

Traffix contacted RMS to identify additional matters to be considered in relation to the EIS on 30 January 2012 (prior to the issue of DGR's). Advice received from RMS at that time was to wait for the formal agency comments that would be provided to DoPI for inclusion in the DGR's. A copy of the comments issued to DoPI were then issued to Traffix on 31 January 2013.

Additional contact was made on 08 February 2013 with James Hall and Stella Qu of RMS in relation to route selection for the transportation of dangerous goods.

James Hall of RMS provided a response to this query via telephone on 19 February 2013 stating that there are no formal selection of routes for the transport of dangerous goods and that the accepted practice of keeping dangerous goods out of tunnels would be acceptable.

See Part D of **Appendix 14** for RMS email consultation record.

5.7 FIRE AND RESCUE NSW

The Project Team will liaise with Fire and Rescue following consideration of the application by DoPI.

5.8 ENVIRONMENTAL PROTECTION AUTHORITY

McKenzie Group Consulting contacted the EPA on 06 February 2013 to identify any additional items to those outlined in EPA comments that need to be addressed as part of the EIS for the subject application.

Mr Nicholas Israel at EPA advised that all matters had been raised in the comments provided to DoPI and confirmed the need for an Environmental Protection Licence following approval.

5.9 NSW OFFICE OF ENVIRONMENT AND HERITAGE

It is noted that no comments were received from the Office of Environment and Heritage as part of the DGRs.



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In consideration that the site is not located in close proximity to any European heritage and is unlikely to retain any indigenous heritage due to past disturbance and approval for earthworks, no consultation in relation to heritage is considered necessary.

Similarly, in relation to flora and fauna, the site exists in a highly disturbed state with no existing vegetation. As such, no consultation in respect of ecology with OEH is required.



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PART F ENVIRONMENTAL RISK ASSESSMENT

6.1 DIRECTOR GENERAL'S REQUIREMENTS

The Director General's Environmental Assessment Requirements were received on 01 February 2013. The Key Issues include:

- Hazards and Risks
- Transport and Access
- Air Quality
- Noise and Vibration
- Soil and Water
- Waste

For the purpose of appropriately determining the potential cumulative impacts of the proposal, the following matters have been considered in addition to the Key Issues in the DGRs:

- Bushfire
- Socio-economic Impact
- Cumulative Impacts

The matters are addressed in the following sections:

6.2 HAZARDS AND RISKS

A Preliminary Hazard Analysis (PHA) has been prepared by OneGroup ID and is annexed as **Appendix 8**. This report provides a comprehensive analysis of the proposed storage of dangerous goods on site. The PHA was prepared in accordance with the requirements of:

- State Environment Planning Policy 33 (SEPP 33), DOP 1992; and
- Hazardous Industry Planning Advisory Paper 6 (HIPAP 6) – Guidelines for Hazard Analysis, DOP 2011

The products that formed part of the investigation were identified as being stored in cartons in their original retail packages and are not opened for the purpose of decanting or repackaging the goods. These products include hazardous materials that are described **Table 11**, being:

- Consumer Health Care Products
- Consumer Personal Care Products
- Paint and Related Materials
- Industrial Catalysts and Curing Agents



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Dangerous Goods Class	UN Numbers	Description	Operating Quantity (kg)	Estimated Maximum Quantity (kg)
2.1	1950	Aerosols	347,260	380,000
3	1170	Ethanol	8,714	10,000
3	1193	Methyl Ethyl Ketone	154	360
3	1219	Iso-Propyl Alcohol	42,705	45,000
3	1263	Paint & related material	22	300
3	1266	Perfumery Products with flammable solvents	29,461	30,000
3	1993	Flammable liquid N.O.S.	2,764	3,000
5.1	2984	Aqueous Hydrogen Peroxide, 8 – 20%	61,970	70,000
5.1	3085	Oxidising solid, corrosive, N.O.S.	3,223	3,500
5.1	3215	Persulphates, inorganic, N.O.S.	4,505	5,000
8	1719	Caustic Alkaline Liquid, N.O.S.	1,165	1,500
9	3077	Environmentally Hazardous Substance, Solid, N.O.S.	86	120
9	3082	Environmentally Hazardous Substance, Liquid, N.O.S. Perfumery Products	4,163	4,500

The proposed quantities of dangerous goods that would be stored exceeds the criteria for a Major Hazard Facility under the definitions the *Occupational Health and Safety Regulation 2001*, and as such, is classified as a State Significant Development under Schedule 1, Clause 10(3) of *State Environmental Planning Policy (State and Regional Development) 2011*. The storage of the dangerous goods is the subject of this application.

Additionally, the quantities for both aerosols and class 5.1 oxidising agents are above their respective screening thresholds and the storage is considered potentially hazardous by SEPP 33. Consequently SEPP 33 applies to the proposed warehouse development and a Preliminary Hazard Analysis (PHA) is required to support the development application.

The PHA has been based on the design that stores the hazardous materials in a dedicated Dangerous Goods Store located at the south-east corner of the new warehouse. Rack Storage will be used for the majority of items with racks constructed to no more than 5 rows high and arranged such that flammable liquids and aerosols will be stored in a separate bunded area to those for the class 5.1 oxidising and for the class 8 corrosive materials.

Within the Dangerous Goods Store the aerosol storage area will be enclosed in a wire mesh cage to prevent the cans becoming missiles in the event of a fire and spreading the fire to other flammable and combustible materials. The external wall between the warehouse and the external Truck Wash Bay will be fire separated with a fire rating of at least 60/60/60 to a height greater than 1 m above the highest package.

6.2.1 Hazard Identification and Consequence Analysis

The PHA identifies potential causes of hazardous event and the consequences of that event based on the inventory outlined above and the proposed dangerous goods store design. A categorisation of the 'Risk' associated with each hazard is provided based on the criteria in **Table 12**.



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Table 12 – Risk Criteria

Risk Level	Description of Risk
Low	The event is unlikely to have consequences that could noticeably impact on nearby persons, neighbours or the local environment.
Medium	The event could have small impacts on nearby persons, neighbours or the local environment. Controls are likely to restrict the consequences to within the site boundaries and have negligible impact on the surrounding land use.
High	The event is likely to impact on nearby persons, neighbours or the local environment. The event escalates into other areas or other activities.

Potential events and possible consequences identified for the storage of dangerous materials within the facility without controls and following implementation of mitigation measures are outlined in detail in the PHA. The outcomes of the Qualitative Risk Assessment are summarised in **Table 13** below.

Table 13 – Risk Assessment

Area/Event	Hazard	Possible Consequence	Risk – no controls	Mitigation Measures	Residual Risk – with controls
Aerosol Storage	Spill of Aerosol can contents	<ul style="list-style-type: none"> ▪ Fumes could cause respiratory ailment to operators ▪ Unlikely to affect neighbouring land uses ▪ Captured in bund. Negligible damage to environment. ▪ Unlikely to propagate into large event due to need to breach many small cans. 	Medium	<ul style="list-style-type: none"> ▪ Safety training of personnel ▪ Emergency Response Plan ▪ Bunded aerosol spill compound ▪ Spill kits provided ▪ PPE supplied ▪ Safety shower/eyewash to be provided 	Low
	Fire in DG Store	<ul style="list-style-type: none"> ▪ Smoke fumes could cause serious to fatal respiratory ailment to operators ▪ Heat radiation could cause burns to operators. ▪ Cans could become missiles and harm operators inside the caged area. ▪ Smoke and fumes could spread to neighbouring properties ▪ Smoke damage to local environment ▪ Release of materials into the environment if fire water exceeds bund capacities. ▪ Heat radiation initiates fires in other dangerous goods (mainly in flammable liquids) 	High	<ul style="list-style-type: none"> ▪ Aerosols stored in caged area within the DG Store ▪ Control of ignition sources ▪ Sprinkler system to be provided ▪ Fire hose reels and portable fire extinguishers provided ▪ Fire fighting training of personnel ▪ Emergency Response Plan ▪ PPE supplied 	Medium



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Storage of solid oxidising agents	Spill of contents from packages	<ul style="list-style-type: none"> ▪ Contact with skin or eyes ▪ Inhalation of fine powders causing respiratory harm ▪ Reaction with incompatible materials with release of harmful fumes ▪ Unlikely to affect neighbouring land uses ▪ Captured in bund. Negligible damage to environment. ▪ Unlikely to propagate into large event 	Low	<ul style="list-style-type: none"> ▪ Safety training of personnel ▪ Emergency Response Plan ▪ Bunded aerosol spill compound ▪ Spill kits provided ▪ PPE supplied ▪ Segregation from incompatible materials ▪ Safety shower/eyewash to be provided 	Low
	Fire from external areas	<ul style="list-style-type: none"> ▪ The materials will vigorously support combustion. ▪ Smoke and fumes could spread to neighbouring properties. ▪ Smoke damage to local environment. ▪ Release of materials into the environment if fire water exceeds bund capacities. ▪ Heat radiation initiates fires in other dangerous goods (mainly in flammable liquids and aerosols) 	Medium	<ul style="list-style-type: none"> ▪ Control of ignition sources ▪ Sprinkler system to be provided ▪ Fire hose reels and portable fire extinguishers provided ▪ Fire fighting training of personnel ▪ Emergency Response Plan ▪ PPE supplied 	Low
Storage of Caustic Liquids	Spill of contents from packages	<ul style="list-style-type: none"> ▪ Contact with skin or eyes causing serious chemical burn injuries ▪ Reaction with incompatible materials with release of harmful fumes ▪ Unlikely to affect neighbouring land uses ▪ Captured in bund. Negligible damage to environment. ▪ Unlikely to propagate into large event 	Low	<ul style="list-style-type: none"> ▪ Safety training of personnel ▪ Emergency Response Plan ▪ Bunded aerosol spill compound ▪ Spill kits provided ▪ PPE supplied ▪ Safety shower/eyewash to be provided 	Low
	Fire from other areas	<ul style="list-style-type: none"> ▪ Reaction with incompatible materials with release of harmful fumes and smoke ▪ Small quantities indicate that fumes and smoke are unlikely to affect neighbouring land uses ▪ Release of materials into the environment if fire water exceeds bund capacities. ▪ Unlikely to propagate into large event. 	Medium	<ul style="list-style-type: none"> ▪ Control of ignition sources ▪ Sprinkler system to be provided ▪ Fire hose reels and portable fire extinguishers provided ▪ Fire fighting training of personnel ▪ Emergency Response Plan ▪ PPE supplied 	Low



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Storage of Environmentally Hazardous Substances (solids and liquids)	Spill of contents from packages	<ul style="list-style-type: none"> ▪ Escape into local drains or waterways. ▪ Unlikely to affect neighbouring land uses. ▪ Escape into local drains or waterways causing damage to aquatic life-forms. ▪ Conviction against EPA Legislation. ▪ Unlikely to propagate into large event. 	Medium	<ul style="list-style-type: none"> ▪ Emergency Response Plan ▪ Bunded spill compound ▪ Spill kits provided ▪ PPE supplied 	Low
	Fire from other areas	<ul style="list-style-type: none"> ▪ Smoke fumes could cause serious respiratory ailment to operators ▪ Heat radiation could cause burns to operators. ▪ Unlikely to affect neighbouring land uses ▪ Smoke damage to local environment ▪ Release of materials into the environment if fire water exceeds bund capacities. ▪ Heat radiation initiates fires in other dangerous goods (mainly in flammable liquids). 	High	<ul style="list-style-type: none"> ▪ Control of ignition sources ▪ Sprinkler system to be provided ▪ Fire hose reels and portable fire extinguishers provided ▪ Fire fighting training of personnel ▪ Emergency Response Plan ▪ PPE supplied 	Medium
Assembling Orders outside of DG Store	Spill of contents from dangerous goods packages	<ul style="list-style-type: none"> ▪ Fumes could cause respiratory ailment to operators. ▪ Contact with skin or eyes. ▪ Inhalation of fine powders causing respiratory harm. ▪ Escape into local drains or waterways ▪ Unlikely to affect neighbouring land uses ▪ Captured in local vicinity. Negligible damage to environment. ▪ Unlikely to propagate into large event. 	Medium	<ul style="list-style-type: none"> ▪ No drains in immediate area ▪ Emergency Response Plan ▪ PPE supplied ▪ Spill kits provided ▪ Good natural ventilation ▪ Safety shower/eyewash to be provided 	Low
Loading and Unloading Operations	Spill of contents from dangerous goods packages	<ul style="list-style-type: none"> ▪ Fumes could cause respiratory ailment to operators. ▪ Contact with skin or eyes causing chemical burns. ▪ Inhalation of fine powders causing respiratory harm. ▪ Escape into local drains or waterways. ▪ Slip hazard for personnel and forklifts. ▪ Unlikely to affect neighbouring land uses. ▪ Captured in recessed loading dock. ▪ Small amount may flow to drain. 	Medium	<ul style="list-style-type: none"> ▪ No drains in immediate area ▪ Emergency Response Plan ▪ PPE supplied ▪ Spill kits provided ▪ Good natural ventilation ▪ Safety shower/eyewash to be provided ▪ Interceptor provided for drains in loading dock 	Low



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		<ul style="list-style-type: none"> ▪ Unlikely to propagate into large event. 			
	Fire from other areas	<ul style="list-style-type: none"> ▪ Smoke fumes could cause serious respiratory ailment to operators. ▪ Heat radiation could cause burns to operators. ▪ Unlikely to affect neighbouring land uses. ▪ Smoke damage to local environment. ▪ Release of materials into the environment from drains in loading dock. ▪ Unlikely to propagate into large event. 	High	<ul style="list-style-type: none"> ▪ Fire hose reels and portable fire extinguishers provided ▪ Fire fighting training of personnel ▪ Emergency Response Plan ▪ PPE supplied ▪ Interceptor provided for drains in loading dock 	Medium

The risk mitigation strategies proposed for spills of hazardous materials resulted in an overall Low risk rating and this hazard does not require further quantification of the risk.

The Qualitative Risk Assessment identified fire as the major risk to the safety of people and to property loss. Further risk analysis for the fire hazard was undertaken as outlined below.

It is noted that the PHA included a Transport Screening analysis which found that very few dispatches will exceed the 5 tonne threshold for dangerous goods and any such dispatches would be expected to average less than one per week. The estimated number of traffic movements does not exceed the transport screening threshold and the requirement from SEPP 33 to provide a transport route evaluation to support the development application is not required.

6.2.2 Further Investigation

The risk assessment undertaken in the PHA identified, qualitatively, the risks associated with the identified hazardous events. Those risks described as 'Low' after the implementation of mitigation controls are considered unlikely to contribute significantly to the risk produced by the warehouse operations and do not require any further quantification.

The hazardous events further investigated and the resulting risk for the potential hazard are addressed as follows:

Containment of Spills or Contaminated Fire-water

- *Description*
A spill of hazardous materials could result in release of the material into the environment causing damage. This release could also be of contaminated fire-water from emergency response to a fire situation.
- *Consequence*
The majority of the goods held within the Dangerous Goods Store are flammable aerosols, flammable liquids and personal care oxidising agents (e.g. hair bleach). Spills from these products would release vapours that could cause respiratory irritation to nearby people. None of the materials proposed are identified as containing any toxic ingredients (class 6.1). Many of the released vapours would be flammable and capable of creating an explosive fuel/air mixture. For this reason ignition sources are excluded from the spill containment areas.

Some strongly alkaline corrosive materials are also stored but these are held in small quantities. Release of these materials would increase the pH of any aquatic environment and contaminated soil. The effect would be short term as they are not expected to accumulate.



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Spills are very likely to be captured on-site in containment compounds from where they can be safely disposed of by certified chemical disposal companies.

A fire in the Dangerous Goods Store is likely to result in the release of package contents with subsequent burning of flammable materials. The water used as part of the fire fighting will become contaminated with the products and the residues from burning. The spill compounds are designed to capture approximately 25% of the product storage along with the first 20 minutes of output from the sprinkler system. The output beyond 20 minutes is likely to exceed the bund capacities and be release onto the site.

▪ *Controls*

The proposed controls for the containment of spills and fire-water are:

- Internal banded spill compounds in the Dangerous Goods Store in accordance with the requirements of AS 3833, as follows:

Class 2.1 & 3 43,620 L plus 20 minutes sprinkler output

Class 5.1 7,000 L plus 20 minutes sprinkler output

Class 8 & 9 1,373 L plus 20 minutes sprinkler output

- Recessed Loading Dock capable of containing up to 280,000 L.
- Valve for isolation of stormwater run-off.

Isolation valves are also proposed for existing stormwater within the breezeway. Refer to drawings Co8753.08-DA40 and DA41 at **Appendix 5** as well as Section 6.3 of the Civil Engineering Report (**Appendix 6**).

Fire in Aerosol Storage Area

▪ *Description*

A fire within the aerosol storage area is likely to cause the retail cans to overheat and pressurize beyond their burst pressure. This would release the contents of the cans, part of which will be flammable gases, which would further contribute to the fire. Depending upon how the cans fail the fire could be spread by the cans becoming missiles spreading contents for as much as 100 m, producing a fireball up to 17.8 m diameter, or projecting a stream of burning liquids up to 2 m. The aerosols will be stored in a caged area within the Dangerous Goods Store to restrict the range of any cans that become missiles to this area and reduce the spread of the fire.

In terms of smoke, the chemical manifests do not describe any toxic goods as defined by the Australian Dangerous Goods Code. The Qualitative Risk Assessment identified irritant fumes or smoke evolved from a fire may spread to neighbouring properties, but these are not expected to contain any amounts of toxic materials that could have a serious respiratory affect on nearby people.

▪ *Consequences*

The consequences of such fires are difficult to quantify depending upon the behavior of the cans when they fail and the nature of the flammable gases and liquids within. For the purpose of this PHA the distances to heat radiation levels were determined assuming that the retail cans held 100g of propane as the propellant. This is based on the conservative estimate of 40% propellant in a can containing 250 ml of contents.

For a single can the distance from source for a heat radiation level of 23 kW/m² was determined to be 4.3 m. At this heat radiation level unprotected steel can reach thermal stress temperatures which can cause failure (HIPAP 45). The cans will be stacked close together and will be inside this distance indicating that others will suffer significant heat stress and are likely to also burst.

The heat radiation that could be experienced has been calculated for the amount of propane propellant combusted in 3 seconds. The aggregate quantity of propane was determined to be 28.8



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kg. These distances resulting are large but will be contained within the walls of the warehouse and are not expected to impact on neighbouring properties in the initial stages of a fire.

In the initial stages a fire is contained to the warehouse where the oxygen available to feed the fire is not sufficient to allow complete combustion of the available fuel. The smoke cloud generated is a mixture partially and fully combusted products, many of which will be respiratory and eye irritants to people. Such fires will continue to burn at a restricted rate as determined by the available oxygen until (without controls limiting the fire) the fabric of the building collapses allowing introduction of much more oxygen. The size of the fire increases significantly generating a large smoke plume and flames above the roof of the building. The heat causes the smoke plume to lift-off to significant height and is not expected to have major consequences for neighbouring properties.

The most significant consequences are likely to be from smoke generated in the earlier stage of a fire and the time before failure of the building fabric.

- *Controls*

There are many causes of fires in warehouses that include electrical faults, sparks from cutting or grinding, welding, shrink wrapping, smoking, arson, use of normal (unprotected) vehicles (such as forklifts), storage near sources of heat, spillage of incompatible chemicals and external fires.

The design and operation for the Dangerous Goods Store is to proceed in accordance with the requirements of AS 3833- 2007 as well as management requirements. These include:

- Storage of aerosols within a wire mesh cage having openings no larger than the smallest aerosol can.
- Installation of an appropriate sized sprinkler system
- Fire hose reels and portable extinguishers will be provided in appropriate locations
- Containment of contaminated fire water in accordance with AS 1940-2004
- Exclusion or control of ignition sources near flammable aerosol and liquid storage
- Fire separation from Truck-wash Bay
- Dangerous Goods Store will have concrete outer walls to protect from radiant heat from surrounding areas
- Staff will be trained in the use of rapid response fire fighting equipment and how to alert emergency services
- No smoking policy for the warehouse
- All electrical fittings suitable for hazardous zone 2 area in accordance with Australian Standards
- Vehicles unload in the recessed dock and do not enter the warehouse
- Forklift specified for use in hazardous zone 2 areas
- Site is secured behind mesh fencing
- Security patrols out of hours
- A hot work permit system is used with risk assessment prior to work starting
- Incompatible materials are stored in independent banded areas
- Dangerous Goods Store is 4 hour fire separated from surrounding areas



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6.2.3 Risk Assessment

Individual Risk

The PHA finds that the calculated individual risk of 0.335×10^{-6} p.a. does not exceed the DOP suggested risk criteria for land use safety planning. Consequently, a full Quantitative Risk Analysis is not required.

Risk to the Biophysical Environment

Some of the materials handled in the Dangerous Goods Store could impact on the local natural environment. A spill that escaped the site containment could harm aquatic, bird and plant life. The criteria set out by HIPAP No. 4 for the risk assessment to the biophysical environment are related to the threat to the long term viability of a species or the ecosystem. These criteria are determined from an accidental event rather than from the actions of continuous operation.

Release of Aerosol Products

The aerosols are predominantly personal care products for general consumer use. None of the products contain listed toxic materials as described by the Australian Dangerous Goods Code. The warehouse will contain up to 380,000 L of products in aerosol cans. These are stored in a section of the Dangerous Goods Store that is designed to capture 43,620 L plus 20 minutes sprinkler output. Given the small size of each can it is very unlikely that a spill would reach the surrounding environment.

Release of Oxidising Agents

The oxidising agents are predominantly personal hair-care bleaches for the hair and beauty industry and for general consumer use. These chemicals would have a serious, short term effect on aquatic life but would not persevere or have an accumulating effect. The warehouse will contain up to 80,000 L of these products. These are stored in a section of the Dangerous Goods Store that is designed to capture 7,000 L plus 20 minutes sprinkler output. It is unlikely that a spill would reach the surrounding environment.

Alkaline Corrosive Substances and Class 9 Miscellaneous Chemicals

Some strongly alkaline corrosive materials, and environmentally sensitive substances are also stored but these are held in small quantities. Release of these materials would increase the pH of any aquatic environment and contaminated soil. The effect would be short term as they are not expected to accumulate.

Spills are very likely to be captured on-site in containment compounds from where they can be safely disposed of by certified chemical disposal companies.

Release of Contaminated Fire Water

A fire in the Dangerous Goods Store is likely to result in the capture of contaminated fire water. The contaminants would be from the contents of the personal care products and small amounts from some strongly alkaline materials and environmentally sensitive materials. Should the fire fighting systems operate for more than 20 minutes there is a strong likelihood that contaminated fire water will begin to escape the containment compounds and be released into the surrounding environment.

As for the spill scenarios above, the effects would be short term and the contaminants are not expected to accumulate.

Release of Dangerous Goods during Unloading and Loading Operations

Spills could occur during loading or unloading of vehicles in the Loading Dock. The recessed Loading dock has a capacity of 280,000 L which is enough to capture the largest spill during loading and unloading operations and any incidental water, e.g. rainwater or fire water.



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6.2.4 Conclusion

The PHA prepared by OneGroup ID provides a qualitative risk assessment for the proposal. Hazards identified as having a 'Low risk' were deemed to not require further development of the consequence or frequency of the hazard, given the implementation of the nominated controls. Hazards that were found to be 'Medium' risks were examined in more detail for both consequence and frequency to quantify the risk.

Based on the outcome of the investigations, the PHA found:

The preliminary screening assessment determined that the proposed warehouse extension is potentially hazardous with regard to the storage of class 2.1 flammable gases in aerosol cans and to class 5.1 oxidising substances, being personal care bleaches. The number of transport movements of the dangerous goods did not exceed the threshold and is not determined as potentially hazardous in accordance with HIPAP No. 6.

The Qualitative Risk Assessment found that hazards due to spills of the dangerous goods had an overall low risk rating with the nominated risk controls implemented. This hazard was deemed not to require further development of the consequences or frequency. Fire hazard was found to have an overall medium to high risk depending upon the level of risk controls and the risk was further investigated using a level 2 (partial quantification) risk assessment.

The dominant fire hazard arose from the storage of aerosol cans that contain personal care products. None of the products contained within the cans are described as having any toxic materials so smoke from burning contents will not contain any unburned toxic materials. Based upon implementation of the fire prevention controls and timely emergency response to a fire event the frequency of a threat to life was determined to be well inside acceptable limits. The consequences of a fire were also not found to have any significant effect beyond the site boundary.

The class 5.1 oxidising agents will be segregated from flammable materials within the Dangerous Goods Store in accordance with AS 3833-2007₁. These products are water based personal care bleaches and are not considered a significant hazard to nearby people, neighbours or to the surrounding biophysical environment.

The risk to the biophysical environment associated with release of contaminated fire water from the Dangerous Goods Store was found to be low.

6.3 TRANSPORT AND ACCESS

The Traffic Impact Assessment prepared by Traffix (**Appendix 10**) identifies that the site is conveniently located with respect to the arterial and local road systems serving the region. The facility is accessed via Yarrowa Street which forms the western approach to the roundabout at Bernera Road. This roundabout is constructed with a large diameter central island and with generally two circulating traffic lanes. It includes on and off ramps to the M7 Motorway. The locality is therefore able to effectively distribute traffic onto the wider road network, minimising traffic impacts.

The findings of the Assessment are summarised below:

6.3.1 Existing Facility

The existing site provides loading and parking areas with two driveway accesses on Yarrowa Street. The existing car park provides 107 off-street parking spaces.

Traffic surveys carried out in November 2012 indicated the following with regard to staff-related (light vehicle) traffic:

- The morning peak hour occurred from 7:45am to 8:45pm;



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- Morning peak hour volumes were observed to be 59 vehicles per hour (42 IN / 17 OUT);
- The evening peak hour occurred from 5:00pm to 6:00pm; and
- Evening peak hour volumes were observed to be 54 vehicles per hour (4 IN / 50 OUT).

With regard to Operational (heavy vehicle) traffic, the surveys indicated the following:

- The morning peak hour also occurred from 7:45am to 8:45pm;
- Morning peak hour volumes were observed to be 42 trucks per hour (25 IN / 17 OUT);
- The afternoon peak hour occurred also from 5:00pm to 6:00pm; and
- Afternoon peak hour volumes were observed to be 95 trucks per hour (45 IN / 50 OUT).

A total of 160 persons work within the current facility.

6.3.2 Staff Increase and Car Parking

As part of the partial consolidation of the Moorebank facility into the Prestons facility, Mainfreight has indicated that they propose transferring 37 of their Moorebank staff members to the Prestons facility as indicated below:

Existing staff: Office – 46
Warehouse – 114
TOTAL – 160

Proposed staff: Office – 56
Warehouse – 197
TOTAL – 197

Liverpool Development Control Plan (DCP) 2008 – Part 1.2 nominally requires car parking for warehouses to be provided at the rates shown below:

- Warehouse – 1 space per 75m²
- Office – 1 space per 35m²

Based on a total warehouse area of 43,070m² and office area of 1,472m² upon completion, the parking requirement is 617 spaces. When combined with the existing 107 spaces, the proposed 110 spaces will bring the total parking provision on the site to 217 spaces.

The Traffic Impact Assessment notes that while the scheme proposes significantly less parking than is recommended under strict application of the DCP guidance, the following site specific parking demand calculations have been undertaken in order to assess the adequacy of the proposed parking provision:

Firstly, Mainfreight has provided information indicating that staffing levels at the Prestons site will increase by 23%. Recognising that the majority of on-site parking demand is generated by staff, it can therefore be assumed that parking demand would also increase by 23%. By applying this to the peak surveyed demand of 122 parking spaces, it can be determined that the future development could generate a peak demand for 150 parking spaces.

Secondly, the percentage increase in building area can also be used as a factor for determining future parking demand. In this regard it is noted that the total building area is proposed to increase by 55% from 29,382m² to 45,577m². By applying this to the peak surveyed demand of 122 parking spaces, it can be determined that the future development would generate a peak demand for 189 parking spaces.

Therefore, it can be expected that the completed development could generate a peak parking demand of 150 – 189 parking spaces. In response, the development proposes 177 formed parking spaces with an area provisionally identified for a further 40 parking spaces



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that would take the total on-site parking provision up to 217 parking spaces. Having consideration for the potential variation in future parking demand, the approach of providing 177 spaces with an option to increase the provision to up to 217 spaces should this become necessary, is considered acceptable and avoids the potential for providing an over-supply of parking, which would be a waste of resources.

The DCP requires accessible car parking spaces be provided at a rate of 1 space per 100 car parking spaces or part thereof for industrial developments with parking above 20 spaces. Accordingly, the development provides two accessible parking spaces with one space each at the western and eastern car parks.

6.3.3 Traffic Generation

Using 23% staff increase factor, it can be determined that the future peak hour traffic flows would be:

- Morning peak hour - 73 trips (52 IN / 21OUT)
- Evening peak hour - 67 trips (5 IN / 62 OUT)

With regard to daily trips, the survey data recorded a total of 384 arrival and departure trips. Therefore, application of the 23% factor indicates that daily staff-related trips would be about 472 light vehicles per day.

6.3.4 Forecasted Heavy Vehicle Movements

The total number of heavy vehicles associated with the Transport Shed operations expected per day is:

- 30 B-Double articulated trucks;
- 20 Semi-trailer articulated trucks; and
- 200 Pickup and Delivery (PUD) vehicles (4, 6, 8 and 12 tonnes).

The 50 articulated trucks (long haul) are expected to arrive at the site during the 3-hour morning period from 6.00am to 9.00am, unload and park within the hardstand area. During the 3-hour afternoon/evening period from 3.00pm to 6.00pm, these 50 long haul vehicles would load and depart the site.

The 200 PUD vehicles identified above would operate throughout the day; however, the majority of the PUD trips would also occur during the 3-hour morning and afternoon periods identified above.

The heavy vehicle traffic generation associated with the Logistics Shed operations is expected to be:

- 20 rigid trucks carrying containers per day;
- 10 Semi-trailer articulated trucks per day; and
- rigid trucks and 1 semi-trailer during the peak hours, equivalent to 6 trips (3 IN / 3 OUT).

Based on the above, the future daily trip generation of operational traffic (trucks) to/from the site, would be 560 trips consisting of:

- 500 truck trips associated with the Transport Shed; and
- 60 truck trips associated with the Logistics Shed.

It is anticipated that these trips would be evenly distributed throughout the 3-hour morning and evening peak periods.

6.3.5 Net Increase Traffic

The development would generate generally similar levels of peak hour traffic during the evening peak hour as that presently generated by the existing use. During the morning peak hour, trips are forecasted to increase by 61 trips. This equates to just one additional trip every minute. It is



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considered that an increase in traffic volumes of this order would have a negligible impact on the surrounding road network, with these trips being split between entries and exits.

6.3.6 Network Performance

All trips would occur via the Westlink M7 interchange roundabout at the intersection of Yarrowa Street with Bernera Road, as occurs with the existing site operations. Based on observations of the interchange it is anticipated that these trips would be satisfactorily accommodated by the roundabout. Accordingly, detailed intersection performance modelling of the roundabout is not warranted.

Additionally, Goodman has already completed significant improvements to Yarrowa Street and the interchange roundabout as part of the construction of the existing facility. Therefore, in light of the negligible traffic generation anticipated for the expansion, no further upgrades to the surrounding road infrastructure are required.

6.3.7 Dangerous Goods Transport Routes

The Roads and Maritime Authority has advised that there are no designated dangerous goods routes, only sections of roads/motorways that vehicles carrying dangerous goods are prohibited from using, such as the M5 motorway tunnels located between the site and Port of Botany.

6.3.8 Access and Internal Site Design

Vehicular access to the site consists of three (separate access driveways):

- An existing entry and exit driveway at the western side of the property serving the western car park and as the exit route for the PUDs;
- Two new entry and exit driveways for trucks at the western and eastern sides of the hardstand area, also providing access to the provisional car parking spaces; and
- A new entry and exit driveway to the east of the site for access to the new staff car park.

The proposed driveways would be designed and constructed in accordance with AS 2890.1-2004 and AS 2890.2-2002, with the operational driveways designed to accommodate 26 metre B-Double articulated trucks.

Access and egress swept-path movements for a B-Double truck are provided within the Traffic Impact Assessment.

The separate entry and exit driveways allow trucks to enter, circulate through the site, unload and exit in a forward direction.

Parking spaces would generally be 2.5 metres in width and 5.5 metres in length and satisfy the requirements of AS 2890.1 for Class 2 parking with sufficient end of aisle space at the end of both car parks to allow vehicles to exit parking area in a forward direction.

Both disabled parking spaces would be provided with easy access to the pedestrian walkways. These spaces would be designed in accordance with the requirements AS 2890.6-2009, *Offstreet parking for people with disabilities*.

6.3.9 Servicing

In accordance with Council's DCP, adequate facilities for servicing the Mainfreight site would be provided on-site to ensure loading/unloading activities do not occur on street and compromise the safety, amenity and capacity of the public road system.

Service vehicles would enter and exit the site in a forward direction and loading facilities would be provided for the development in accordance with AS2890.2 – 2002.



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6.3.10 Public Transport

The site is approximately 6 kilometres to the west of Liverpool Railway Station, which provides services along the Cumberland, South, Inner West and Bankstown Lines. It can be seen that the site is currently poorly served by public transport. However, it is likely that once the surrounding industrial estate is fully developed, the opportunity to improve bus accessibility would be investigated.

In conclusion, the Traffic Impact Assessment finds that the proposed access, internal design principles, car parking and servicing have all been designed in accordance with Australian Standards and are considered acceptable and will operate safely and efficiently.

6.4 AIR QUALITY

The proposed storage of dangerous goods will not affect the air quality of the surrounding environment as all goods will be pre-packaged off site. The proposed development will generate very few air quality or odour emissions as a result of the proposed warehouse and distribution activity. Air quality impacts will primarily be generated by heavy vehicles travelling to and from the site. This is typical of any activity of the existing Mainfreight facility or other warehouse and distribution centre of a similar size across the metropolitan area.

No odour impact on adjoining land is anticipated from the storage of dangerous goods as the extent of any spill will be contained to the site. In the unlikely event that spills go beyond the site, these are not expected to be long term or accumulate to cause significant impact. The site will conduct operations in accordance with the Material Safety Data Sheet for each product and any licensing requirements issued by the EPA and WorkCover.

An Air Quality Impact Assessment has been undertaken by SLR Consulting and is attached as **Appendix 19**. In order to conduct a cumulative impact assessment, monitoring data from the nearest OEH monitoring site at Liverpool, located approximately 4 km slightly northeast of the proposed site, was used in this assessment. Due to its close proximity to the project site, the ambient environment at the selected monitoring site is likely to be similar to the environment surrounding the project site and has therefore been considered as representative of background levels for this assessment.

Due to a high proportion of missing data being recorded during recent years (2011 and 2012) by the OEH monitoring site at Liverpool, ambient monitoring data for the 2010 calendar year was used for this assessment. The results are summarised below. It is noted that the predicted impacts are based on worst case operational activity data and assume worst case background concentrations. As a result, all predictions in the assessment should be viewed as conservatively high, with levels expected to be lower during normal operation of the facility.

6.4.1 Construction Phase Impacts

Due to the irregularity and short duration of the emission sources during this phase, the works are not expected to have long-term health or ecological impacts beyond the Project boundaries. However, as these sources can result in high short-term releases of particulate matter, control measures should be put in place during this phase.

The control techniques for fugitive dust sources generally involve watering, minimisation of exposed areas, chemical stabilisation (where necessary), wind sheltering and source activity management. Proposed controls include the use of water sprays, a cattle grid (i.e. a truck shaker grid) and silt fencing to minimise construction phase impacts.

It is also recommended that the Site Manager (or delegated employee) should undertake daily environmental inspections of the works and worksite. This may include, but not be limited to:

- Visual inspection of airborne dust.
- Ensure roads leaving the site are free of soil, and prevention of soil tracking onto the road network.



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- Inspection of erosion and sediment controls.
- Inspection of stockpiles.
- Inspection of internal roads.
- Inspection of waste storage areas.
- Inspection of any rehabilitated areas (where relevant).
- Ensure site signage is clear and appropriate.

In addition to the above, the following procedures and requirements are recommended by SLR to be followed during the construction phase of the project to minimise the impact of dust and particulate generated in association with the proposed development:

- Sealing of roads (where possible) and regular watering of roads (as noted above) utilising water carts or a wet spray system.
- All unsealed trafficable areas should be kept sufficiently damp during working hours to minimise windblown or traffic generated dust emissions. Continued use of water on dirt roads helps the formation of a crust so that dust is not as easily generated.
- Trucks entering and leaving the site should be well maintained in accordance with the manufacturer's specification to comply with all relevant regulations. Fines may be imposed on vehicles which do not comply with smoke emission standards.
- If visible smoke can be seen from any equipment (while working on a construction site) for longer than 10 seconds duration, the equipment should be taken out of service and adequately repaired or tuned so that smoke is no longer visible for periods longer than 10 seconds.
- Hire agreements should contain provisions to stand down equipment which has excessively smoky exhaust.
- Truck movements should be controlled on site and restricted to designated roadways.
- Truck wheel washes or other dust removal procedures should be installed to minimise transport of dust off-site.
- Truck loads should always be covered with a lid or tarpaulin.
- No dust, soil or mud should be deposited from any vehicle on public roads. Where wheel washing facilities and/or truck shaker grids are provided at the construction works area, all drivers of construction vehicles shall utilise the wheel wash prior to leaving the works area and entering public roads.
- Any dust soil or mud deposited on public roads by sub-contractors construction activities and vehicle movements should be removed immediately and disposed of appropriately.
- If necessary, modifying construction activities during periods of high wind.
- Vegetated buffers should be considered for implementation around the site boundary to act as a physical barrier to the transport of pollutants in the direction of sensitive land uses (ie residences). Plant species considered should include primarily native, evergreen plant species of a diverse variety and height.

Additional measures have been identified within the Air Quality Impact Assessment as further considerations should they be required to further mitigate against construction impacts.

6.4.2 Operation Phase Impacts

Based on the existing meteorological conditions and likely emissions resulting from operations, the predicted cumulative 24-hour and annual average PM₁₀ concentrations at all receptors are below the relevant ambient air quality guideline. Based on these modelling results, it is concluded that the proposed operational activities are unlikely to cause any exceedences of 24-hour or annual average PM₁₀ air quality criteria at any surrounding sensitive receptor locations.



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For Total Suspended Particulates (TSP) the predicted incremental annual average TSP concentrations at all receptors are negligible in comparison to the ambient air quality guideline. Based on these modelling results, it is concluded that the proposed operational activities are unlikely to cause any exceedences of the annual average TSP criterion at any surrounding sensitive receptor locations.

Particulate emissions from traffic movements on paved roads and oxides of nitrogen (NO_x) for cumulative 1-hour and annual average NO₂ concentrations at all receptors are predicted to be below the applicable criteria. Based on the modelling results, the proposed operation is unlikely to give rise to any exceedences of air quality criteria for NO₂ at any surrounding sensitive receptor locations.

6.4.3 Greenhouse Gas Assessment

A comparison of the total annual GHG emissions from the Project against published net total GHG emissions for NSW and Australia during 2009 has also been conducted. Net emissions of 160.6 Mt CO₂-e and 564.5 Mt CO₂-e were reported for 2009 for NSW and Australia respectively by the (DCCEE, 2011). Total emissions from the Project would represent approximately 0.001% of total NSW 2009 emissions and approximately 0.004% of total Australian 2009 emissions.

It is clear from the values presented in the preceding sections that the principal source of GHG emissions at the Project relates to electricity usage, although the totals are relatively small when compared to NSW and Australian emission totals.

It has been identified that the electricity usage is the major contributor of greenhouse gas from the Project Site. The following list details some methods that could assist in the reduction of GHG emissions from operations at the Project Site:

- Consider the use of renewable energy technologies, such as wind, solar or biomass for externally-sourced electricity;
- Close regulation of the daily operation of lighting; and
- Implement solar-powered lighting about site where practical.

6.4.4 Conclusions

The estimated emissions from the proposed operations have then been assessed through atmospheric dispersion modelling techniques. The predicted results indicate that the proposed operational activities would comply with all relevant OEH ambient air quality criteria at all surrounding sensitive receptors.

It is noted that the predicted impacts are based on worst case operational activity data and assume worst case background concentrations. As a result, all predictions in the assessment should be viewed as conservatively high, with levels expected to be lower during normal operation of the facility.

Due to the irregularity and short duration of activities during the construction phase, a quantitative assessment has not been performed for these activities. Instead a range of control measures to minimise fugitive dust emissions have been outlined for inclusion in the Construction Environmental Management Plan for the project.

It is clear from the values presented in the preceding sections that the principal source of GHG emissions at the Project is electricity usage, although the totals are relatively small when compared to NSW and Australian emissions totals.

6.5 NOISE AND VIBRATION

The proposed land use will generate some noise impacts associated with traffic movements to and from the loading bays. These noise impacts are typical of any warehouse and distribution activity, including the existing operations of the Mainfreight facility.

The Acoustic and Vibration Assessment undertaken by Cardno (**Appendix 16**) has investigated the following aspects of the proposal:



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- Site noise emissions from warehousing and truck washing activities;
- Site noise emissions from the truck hardstand area and proposed car parking activity;
- Mechanical plant noise emissions;
- Road traffic noise;
- Sleep Disturbance, or wakeup effects;
- Construction noise and vibration impacts.

While the facility will operate 24-hours, the proposed operating times for heavy vehicles to/from the facility is only between 5am and 7pm. As the 5am until 7am period is classified as night time, the impacts of the Mainfreight extension to the Night time Assessment period have been assessed.

Findings of the report are provided as follows:

6.5.1 Context

The site is located away from residential development within a heavy industrial precinct that includes previous quarry activities. The nearest noise sensitive receivers were identified as being individual rural dwellings along Bernera Road east of the site, suburban residential development approximately 450m west of the site (Coffs Harbour Street, Hoxton Park) and suburban residential development 670m south of the site (Kurrajong Road, Prestons).

6.5.2 Ambient Noise Monitoring

Acoustic measurement locations were selected as follows:

- Location A – on the eastern industrial boundary, at approximately 30m distance from the proposed shed extension and was considered representative of ambient noise conditions to the northern and eastern environment, and industrial zoned properties (which we understand are currently occupied by caretakers) to the north along Bernera Road.
- Location B – on the southern side of the development. This site was chosen primarily to assess noise impacts to the nearest industrial boundaries (which we understand from Mainfreight is currently occupied by warehouse caretakers) at Favco Cranes, which buffers the site from residential areas further south of the site.
- Location C – 22 Michelago Circuit, Prestons, located 720m from the proposed expansion further south in a relatively new housing development at approximately. This residence is separated from Kurrajong Rd by a noise wall, which is approximately 2.0-2.5m in height. The noise wall separates the residence from traffic along Kurrajong Road and borders an egress through the noise wall. During the site visit, it was noted that road works were being undertaken on Kurrajong Road during the assessment.
- Location D – 23 Coffs Harbour Avenue, Prestons located approximately 450m from the proposed development in a new residential location. This residence was located on the western side of Coffs Harbour Avenue, behind an additional row of two storey apartments. Typical noise and activity was limited to local traffic noise, neighbourhood activity (children playing, dogs barking)

6.5.3 Predicated Noise Impacts

- *Warehouse Activity*

The assessment of warehouse noise impacts has been based upon the worst case assumptions sound power levels for proposed plant and equipment including:

- Two (2) B Doubles
- Two (2) Semi Trailers
- Two (2) Forklifts Operating in the Warehouse
- Two (2) Spray Hoses located externally on the eastern side at the truck wash bay based upon previous vehicle washing spray hose measurements;



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- An assumed warehouse mid-frequency reverberation time of 2.5 seconds at 500 Hz;
- Typical precast concrete construction and galvanised metal deck roofing construction;
- Warehouse roller doors were assumed to be 'open'; and
- A 10 dB(A) allowance for intervening building structures on the southern and western sides of the site.

The proposal was found to comply with the Industrial Noise Policy (INP) for all boundaries as well as at residential receivers.

Recommended practice engineering measures to achieve the limiting aggregate sound power level for operational noise include:

- The application of acoustic silencers;
 - Barrier screening and enclosures to rooftop plant;
 - Location of noisy plant away from the affected boundaries;
 - Use of screening and shielding for rooftop plant items;
 - Preferential selection of "quiet" option plant and equipment.
- *Truck Hardstand and Car Park*
Truck Hardstand and Car parking areas located on the north-eastern corner of the site, were assessed against the NSW INP. To assess typical worst case conditions during peak hour, the following typical worst case assumptions have been used:
- Five (5) B-doubles traversing the hardstand/car park area, at typical distances of 30m;
 - Two (2) semi-trailers traversing the hard stand/car park area, at typical distances of 30m;
 - A typical event duration of 15 seconds for each truck movement;
 - Assumed 28 cars trips (or 25% of the proposed 110 new car spaces) in 15 minutes, at typical distances of 10m from the eastern and northern Boundaries;
 - Typical event duration of 15 seconds for each car movement;
 - Seventeen (17) Pickup and Delivery Vehicles, traversing the car park hard stand area;
 - The existing noise wall to residences in Kurrajong Road conservatively provides 10 dB(A) attenuation to noise and activity from the site; and
 - The existing sheds were calculated provide 22 dB(A) attenuation to noise and activity from the site on the western boundary and residences at Coffs Harbour Avenue.

Predicted noise levels from vehicles in the hardstand area are predicted to comply with the INP criteria with the exception of the eastern boundary under inversion conditions at night.

- *Mechanical Plant*
Mechanical plant can be designed and operated to meet applicable noise criteria.
- *Sleep Disturbance*
Noise generation by activities within loading docks is a common issue in warehousing operations, based upon previous measurements in similar facilities. There are anticipated to be minimal impact on the nearest residential receivers from warehousing activity and use of the truck hard stand area.
- *Construction Noise*
The majority of construction activities are predicted to comply with the criteria at the residences, due to intervening shielding. Some exceedances are anticipated at neighboring industrial boundaries at distances less than 130m from the site boundaries. While piling activity is a relatively noise activity, we would anticipate that any activity of this nature can be easily controlled using best practice site measures outlined in AS2436-2010, such as the use of screw piling.

As the construction of the facility is anticipated to be undertaken by an independent construction contractor, the precise nature of the works plant and equipment is not yet known. However Cardno recommend that the construction contractor undertakes best practice measures, as



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outlined in AS2436-2010 'Guide to noise and vibration control on construction, demolition and maintenance sites.' Best practice construction noise mitigation measures may include:

- The selection screw piling, in lieu of percussive piling;
 - Scheduling noisier activities for less sensitive periods;
 - Selection of 'quiet' plant and equipment
 - Erection of site hoardings;
 - Use of intervening buildings to screen construction noise to the residential areas;
 - Distance attenuation for noisy plant items (or safe operating distances);
- *Road and Traffic Noise*
Traffic noise impacts on the local road network were assessed against current and projected traffic flows for the proposed facility. It is anticipated that traffic noise are estimated not exceed 2dB(A) along Yarrowa Street and that no additional consideration of road traffic noise mitigation measures will be required for this development.

6.5.4 Vibration

Given the large operating distances involved in this project, construction vibration is anticipated to have negligible effects during construction phase.

6.5.5 Conclusions

Investigation of the proposed development was undertaken as per the DPI and INP requirements and has determined that impacts from the operation of the facility will generally comply with the project specific criteria under neutral and inversion conditions. Some exceedance of the construction noise criteria are anticipated, although it is anticipated that these will not be at the residential receivers. Best practice construction noise management measures should be applied, as required.

6.6 SOIL AND WATER

Costin Roe have prepared detailed engineering plans and an accompanying report for the proposed development (**Appendices 5 and 6** respectively) which includes a Soil and Water Management Plan. A summary of the findings are provided as follows:

6.6.1 Existing Site Conditions

The site comprises undeveloped former rural land with a site area of 3.64 Ha. The sites natural gradient drops 7m from the high point in the south-west corner to the low point at the north-east corner of the site. The highest elevation is approximately RL36.0m (AHD) and the lowest at RL 29.0m.

There is no existing formalised drainage system on the site. Stormwater flows are currently conveyed overland to the Yarrowa Road drainage system in the form of sheet flow.

There are currently no inter-allotment drainage lines present over the site.

6.6.2 Bulk Earthworks

Bulk earthworks will be performed to facilitate the construction of the warehouse expansion. These were approved under DA 1636/2012 and include a retaining along the southern boundary. The retaining will be up to 4.5m in height and will comprise either soldier pile and shot-crete system or a segmental block system with no-fines concrete backfill.

Soil Erosion and Sediment Control measures will be implemented throughout the construction phase.

6.6.3 Embankment Stability

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



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Permanent batters will also be adequately vegetated or turfed which will assist in maintaining embankment stability. Stability of batters and reinstatement of vegetation shall be in accordance with the submitted drawings and the Soil and Water Management Plan.

6.6.4 Supervision of Earthworks

All geotechnical testing and inspections performed during the earthworks operations will be undertaken to Level 1 geotechnical control, in accordance with AS3798-1996.

6.6.5 Stormwater Drainage System

As per general engineering practice and the guidelines of LCC, the proposed stormwater drainage system for the development will comprise a minor and major system to safely and efficiently convey collected stormwater run-off from the development. The minor system is to consist of a piped drainage system which has been designed to accommodate the 1 in 20-year ARI storm event (Q20). This results in the piped system being able to convey all stormwater runoff up to and including the Q20 event. The major system through new paved areas has been designed to cater for storms up to and including the 1 in 100-year ARI storm event (Q100). The major system employs the use of defined overland flow paths to safely convey excess run-off from the site. See Sections 4.6 and 4.7 of the Civil Engineering Report (**Appendix 6**).

The design of the stormwater system for this site will be based on relevant national design guidelines, Australian Standard Codes of Practice, the standards of LCC and accepted engineering practice. Runoff from buildings will generally be designed in accordance with AS 3500.3 National Plumbing and Drainage Code Part 3 – Stormwater Drainage. Overall site runoff and stormwater management will generally be designed in accordance with the Institution of Engineers, Australia publication "Australian Rainfall and Runoff" (1988 Edition), Volumes 1 and 2 (AR&R).

Water quality and re-use are to be considered in the design, throughout new paved areas, to ensure that any increase in the detrimental effects of pollution are mitigated, LCC Water Quality Objectives are met and that the demand on potable water resources is reduced.

Calculation of the runoff from storms of the design ARI will be calculated with the catchment modelling software DRAINS.

The properties to the south of the development site (which front Yarrunga St) drain to the north and across the development site. Inter-allotment drainage will be provided for these properties under the DA 1636/2012. There is allowance for Q20 ARI storm events to be piped and Q100 ARI flows to be conveyed through the site as overland flow. A minor amendment to the proposed inter-allotment drainage line alignment under DA 1636/2012 will be required to accommodate the current architectural layout.

Based on the designed proposed and existing characteristics of the locality, no on-site detention is proposed or required for the proposed development; however, rainwater harvesting is proposed for this development with re-use for non-potable applications. Internal uses include such applications as toilet flushing while external applications will be used for irrigation. The aim is to reduce the water demand for the development and to satisfy the requirements of Liverpool Council.

In general terms the rainwater harvesting system will be an in-line tank for the collection and storage of rainwater. At times when the rainwater storage tank is full rainwater can pass through the tank and continue to be discharged via gravity into the stormwater drainage system. Rainwater from the storage tank will be pumped for distribution throughout the development in a dedicated non-potable water reticulation system.

Rainwater reuse is provided on the existing facility in the form of a 100kL rainwater tank which services the truck wash, irrigation and toilet flushing. The need for additional rainwater reuse will be assessed during the detail design stage of the project.



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In terms of water quality, roof, hardstand, car parking, roads and other extensive paved areas will be treated by the Stormwater Treatment Measures (STM's). The STM's shall be sized according to the whole catchment area of the expansion development. The STM's for the development shall be based on a treatment train approach as discussed in the NSW EPA document *Managing Urban Stormwater: Treatment Techniques* to ensure that all of the above objectives are met.

The proposed stormwater treatment system for the development is the Stormwater360 Vortech Hydrodynamic Separation Unit. The expected reduction of pollutants for the development are as follows:

- Gross Pollutants >98% reduction
- Total Suspended Solids >70% reduction
- Total Nitrogen 0% reduction
- Total Phosphorous >30% reduction

An oil baffle will also be specified which will ensure reductions in hydrocarbons and oils are made such that the requirements of the Liverpool City Council have been met.

A Gross Pollutant Trap is located at the most downstream pit that receives stormwater. The pit which is downstream of the GPT is a sealed junction pit which does not allow entry of stormwater. A grated drain has been introduced to capture stormwater from the driveway however no adjustment to the location of the GPT is considered necessary.

6.6.6 Flooding

The site is located approximately 450m east of Cabramatta Creek. The flooding characteristics of the creek are outlined in the *Cabramatta Creek Floodplain Management Study & Plan 2004* produced by Bewsher Consulting Pty Ltd and shows that the site is not subject to Q100 ARI flooding however it is at or near to the edge of the PMF flood extent.

The proposed site is located outside of the low risk flood management zone and that the Q100 flood level for the adjacent creek is approximately RL 30m (AHD) in line with the rear boundary and RL 29.5m (AHD) in line with the street boundary.

The proposed floor level for the building of RL 31.1m (AHD) will be clear of the Q100 flood level and allows for appropriate freeboard requirements.

6.6.7 Erosion and Sediment Control

An erosion and sediment control plan (ESCP) is shown in **Appendix 5** and detailed in **Appendix 6**. The erosion and sediment control measures will be maintained in a functioning condition until all earthwork activities are completed and the site stabilised.

6.7 WASTE

SLR consulting has prepared a detailed Waste Management Plan for the proposal (**Appendix 12**). The waste generated on the site will include; general industrial waste (including glass, paper, liquids), packing materials in the containers (including foam and cardboard), stretch wrap of the pallets (including sticky tape and plastic) and general waste from the site (including glass, paper and food waste). As the site is non-manufacturing, typically the bulk of the waste will be generated from re-palletising and wrapping of the pallets.

Goods shall be disposed of in accordance to the specific Product Safety Data Sheets available and are typically disposed at an approved waste disposal facility. Any spills shall be contained and disposed of in accordance with the Product safety data sheets and current legislation. No on-site waste treatment facilities will be used. Storage bins shall be provided for waste storage.

6.8 VISUAL AND DESIGN



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6.8.1 Building and Site Design

The proposed development involves:

- Eastward extension of the existing Logistics Warehouse adjacent to the southern boundary by 13,250m² (plus mezzanine storage area of 1,035m² and dock office of 200m²);
- Provision of a dedicated dangerous goods store within the Logistics Warehouse expansion (1,570m²)
- Eastward expansion of the Transport Warehouse adjacent to the northern boundary by 1,170m²
- Eastward extension of the Breezeway located between the Logistics Warehouse and the Transport Warehouse by 2,350m²

A comparison between the existing facility and the proposed facility is indicated in **Table 14**. A Site Plan indicating the existing and proposed development is provided as **Figure 17**.

Item	Existing	Proposed	Total at Completion
Site Area	48,746.5m ²	36,363m ²	85,109.5m ²
Transport Shed Warehouse	13,510m ²	1,710m ²	15,220m ²
Transport Shed Office	985m ²	Nil	985m ²
Logistics Shed Warehouse	14,600m ²	13,250m ²	17,850m ²
Logistics Shed Mezzanine Storage	Nil	1,035m ²	1,035m ²
Logistics Shed Office	287m ²	200m ²	487m ²
Breezeway	3,326m ²	2,350m ²	5,676m ²
Hardstand Area	12,443m ²	14,830m ² (see note 1)	27,273m ²
Light Duty Paved Area	2,746m ²	1,570m ²	4,316m ²
Heavy Duty Paved Area	Nil	1,315m ²	1,315m ²
Car Parking	107 spaces	110 spaces (see note 2)	117 spaces
Truck Wash Bay	1	1 (see note 3)	1

Notes to Table

1. 2005m² of existing hardstand will be removed with an additional 16,835m² proposed to get a total new hardstand area of 14,830m².
2. The proposed parking includes 70 line marked spaces plus 40 provisional spaces (totalling 110 spaces)
3. The existing truck wash bay is to be relocated.

The proposal has been specifically designed to respond to the unique characteristics of the site, with particular attention given to articulating the northern façade to address the frontage to Yarrowa Street. This has been achieved by re-introducing the same colours and scale associated with the existing facility. However, to reduce the appearance of a large shed-like structure, the expansion areas will be constructed from full height pre-cast concrete instead of continuing the existing sheet metal facade treatment.

The change in material will provide visual relief from continuous materials and provide a strong built form presentation. The modern industrial appearance will be complemented by variations in the horizontal finishes colours to reduce the perceived bulk and provide a thematic link to the existing facility.

Nine new loading docks are proposed as part of the northern elevation of the Logistics Shed extension to enable the required distribution activities. The loading/unloading areas will be protected by a new 10-metre wide awning that will contribute to the articulation of this facade. This building is also setback significant from the street frontage.

The loading docks along the eastern facade of the Transport Shed will be related in line with the extension and provided with 3-metre wide awnings.



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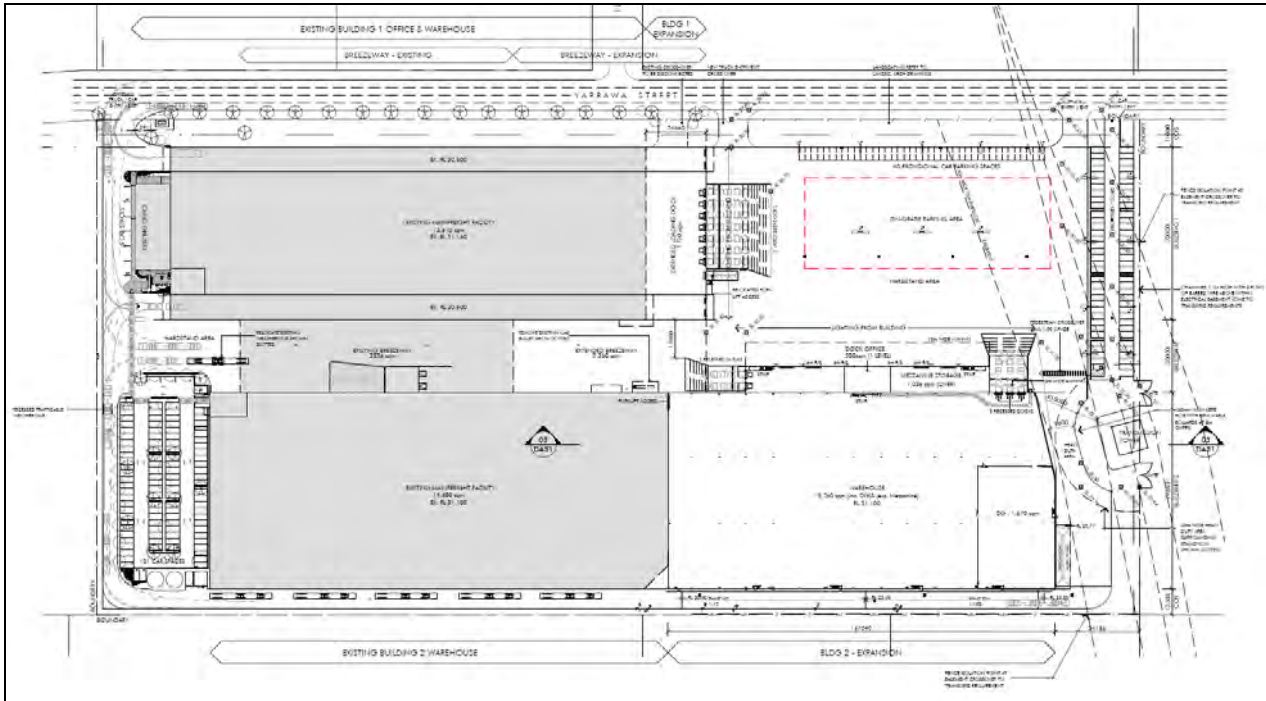


Figure 17. Site Plan indicating Existing and Proposed Development.
(Nettleton Tribe Architects, 2013)

The design approach minimises the industrial shed potential through visual breakup of structural features and is further complemented by landscape treatment to soften the built form. The proposal has also been designed to maximise natural ventilation and lighting where possible to minimise the need for artificial climate control.

The landscape design specifically incorporates a variety of landscape treatments including mature tree plantings using native selections, grass, and dense shrubs to achieve the intended purpose and maintain suitable site lines and avoid potential lurking areas.

Particular focus has been afforded to the northern boundary of the site adjoining Yarrawa Street to ensure appropriate presentation to this road as well as provide stability to the batters supporting the level change from the street level to the hardstand.

Landscaping to the eastern portion of the site has been designed to comply with the requirements of TransGrid including restriction of vegetation that has a mature of 4 meters and above as well as the bushfire risk management recommendations as outlined in **Appendix 9**.

The hardstand itself will allow for movement of heavy vehicles around the perimeter of the facility following the warehouse expansion and will include speed arrestors in the south east as required by TransGrid.

The hardstand will allow for one way anti-clockwise circulation of vehicles involved in the loading/unloading activities of the breezeway as well as suitable turning circles within the main hardstand area north of the Logistics Shed expansion.



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The proposed development has been designed to address the recommendations included in the PHA and is shown in the plans annexed as **Appendix 5**. In particular, the proposal will incorporate:

- Storage of aerosols within a wire mesh cage having openings no larger than the smallest aerosol can.
- Segregated spill containment compounds for incompatible materials, e.g. class 3 spills captured independently from class 5.1 spills.
- Installation of an appropriate sized sprinkler system
- Containment of contaminated fire water in accordance with AS 1940-2004.
- Fire separation from Truck-wash Bay.
- Separate bunded area for different classes of dangerous goods.
- Provision fire-fighting equipment including sprinkler system and portable extinguishers.
- Recessed Loading Dock capable of containing contaminated fire-fighting water.
- Valve for isolation of stormwater run-off.

6.8.2 Building Code of Australia Compliance

A BCA compliance report is provided as **Appendix 16** and indicates the proposal is capable of meeting the relevant requirements. A Fire safety Strategy (**Appendix 17**) has also been prepared in response to alternative solutions proposed.

6.8.3 Accessibility

One Group ID has prepared an Accessibility Review that confirms the proposal is capable of meeting the requirements of the relevant disability discrimination provisions (**Appendix 11**).

6.8.4 Stormwater Quality and Quantity

Water quality and re-use are to be considered in the design, throughout new paved areas, to ensure that any increase in the detrimental effects of pollution are mitigated, LCC Water Quality Objectives are met and that the demand on potable water resources is reduced.

Appendices 5 and 6 outline the proposed civil design.

6.8.5 Fittings, Appliances and Equipment

Low energy and water consumption fittings and appliances are to be installed throughout the facility, All equipment will be regularly serviced and maintained to ensure appropriate performance and minimise potential for environmental impact through malfunctions.

6.8.6 Crime Prevention Through Environmental Design

The proposed development is to be fully integrated into the existing safety and security measures established for the existing Mainfreight and has been designed in accordance with the Principles of Crime Prevention Through Environmental Design (CPTED) as follows:

- *Natural Surveillance*

The proposal relates to a facility that is operational 24-hours per days, seven days per week with staff providing surveillance throughout the entire week. The design of the facility ensures that activities are being undertaken in all locations of the site to ensure no opportunity for un-seen activities and anti-social behaviour.

Fencing and landscaping will be provided with a balance of filtering the built form whilst also minimising areas for potential lurking or blind spots. Outdoor lighting illuminating the hardstand area will also assist for the period between 6pm and 6am.

Electronic surveillance and security currently operating within the existing facility will also be extended to incorporate the new extension.



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- *Access Control*

Entry to the hardstand area of site is to be managed by staff managing loading facilities.

Staff and visitors must access the facility through the reception office located within walking distance of the car park. The office is logically positioned to be identified as the main entry point.

Perimeter fencing and landscaping also provide a physical barrier to accessing the site.

- *Space Management (Maintenance)*

Mainfreight operates a high profile business that relies on quality appearance of premises, vehicles and equipment. In this regard, Mainfreight has developed a maintenance program to ensure that the facility will remain clean and present the idea that the site is frequently occupied and looked after.

Opportunities for vandalism are reduced by the perimeter fencing and any persons who wish attempt to undertake antisocial activities are deterred as a result of their likely being caught by the regular site attendees.

- *Territorial Reinforcement*

The well-defined entries will provide indicators that the site is private and that entry is controlled. Perimeter fencing will provide clear delineation between public and private areas and reduce the risk of persons unknowingly entering the premises where they may be injured.

6.9 HERITAGE

The proposed land use will take place within a site that has been previously disturbed and approved for major earthworks. No further major earthworks or land clearing is proposed as part of this proposal as the site is to be prepared at the required levels under the existing approval (DA 1636/2012).

The site does not contain any items of European heritage significance and is unlikely to retain and Indigenous archaeology. A search of the AHIMS Registry maintained by the National Parks and Wildlife Service was undertaken as part of a previous Mainfreight DA (2007) to ascertain whether there were any recorded aboriginal sites listed on the existing site or in the vicinity. The search (#18251) revealed that there were no sites in the area bounded by Cabramatta Creek (west), Bernera Road (east) and Yarrowa and Kurrajong Streets (north and south respectively).

It is therefore not considered necessary to undertake further analysis of this issue.

6.10 BUSHFIRE

Lot 2 in DP 28729 is recorded on the Liverpool Council Bushfire Prone Land Map as containing part of the 100 metre wide buffer zone to Category 1 Bushfire Prone Vegetation identified within Lot 11 in DP 1053060 which is located to the east of the Site 2 development precinct. As such, Australian Bushfire Protection Planners (ABPP) has undertaken a Bushfire Protection Assessment (**Appendix 9**) to examine the measures required to minimise bushfire risk on the proposed development and determines the deemed-to-satisfy bushfire protection requirements in accordance with the provisions of *Planning for Bushfire Protection 2006*, and provides recommendations on the provision of Asset Protection Zones [Defendable Spaces] to the proposed building.

The findings are summarised below:

6.10.1 Construction Measures to Buildings

The minimum Defendable Space width required between the building and the bushfire prone vegetation on the land to the east is 7 metres for grassland fuels and 15 metres for woodland fuels in order to prevent flame contact on the building. The actual separation distance is > 34 metres from the eastern boundary of



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the development site to the building with the separation to the woodland vegetation on the adjoining land being an additional 70 metres from the eastern boundary of the development site – i.e. a total of 105 metres from the woodland vegetation to the eastern wall of the building. This separation width is beyond the maximum 100 metre separation used to determine construction standards to buildings in bushfire prone areas. The separation to the grassland vegetation to the north also exceeds the 100 metre maximum.

Based on these findings, there is no requirement for the application of bushfire construction standards to the proposed extensions.

6.10.2 Access standards for Firefighting Operations

Vehicular access to the proposed extension will be constructed to provide heavy rigid and articulated vehicle access to the proposed building, providing suitable access for fire-fighting appliances similar to NSW Rural Fire Service Category 1 Tankers and NSW FB Composite and Aerial Appliances.

6.10.3 Water Supplies for Firefighting Operations

The fire-fighting water supply to the new buildings shall comply with the Building Code of Australia [BCA] and A.S. 2419.1 – 2005. This requirement is reflected in the Fire Safety Strategy at **Appendix 17**.

6.10.4 Emergency Management for Fire Protection / Evacuation

Due to the low bushfire risk to the proposed extension there is no requirement for the preparation of a specific Bushfire Evacuation Plan or a Bushfire Management Plan.

6.10.5 Bushfire Hazard Management

Management of the landscaped gardens shall comply with the following:

- Maintain a clear area of low cut lawn or pavement adjacent to the buildings; Utilise non-flammable materials such as Scoria, pebbles and recycled crushed bricks as ground cover to landscaped gardens in close proximity to building;
- Keep areas under shrubs and trees raked and clear of combustible fuels;
- Trees and shrubs should be maintained in such a manner that tree canopies are separated by 2 metres and understorey vegetation is not continuous [retained as clumps].

The landscape plan has been designed to reflect these recommendations.

6.11 SOCIO-ECONOMIC IMPACT

The proposed warehouse and distribution centre is a suitable use of industrial land and will provide industry jobs for the region.

6.12 CUMULATIVE IMPACTS

No cumulative impact is identified or anticipated to result from the construction or operational phases of the proposal given its context in a developing area that has been identified for the intended activities. The proposal is also suitably separated from residential areas and is serviced by adequate infrastructure, including a capable road network. The proposal will not cause any significant amenity impact in the locality.

It is expected that the provision of employment will be a beneficial outcome for the region and will contribute to the growth of New South Wales in accordance with all legislative and policy requirements.



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PART G DRAFT STATEMENT OF COMMITMENTS

by Goodman Property Services (Aust) Pty Ltd
in relation to Expansion to Mainfreight Warehouse and Distribution Centre including the storage of dangerous goods (Chemical Storage Facility)
at 30-50 Yarrowa Street, Prestons

Mainfreight will undertake the proposed occupation of the Chemical Storage Facility at 30-50 Yarrowa Street, Prestons in accordance with the following commitments:

The following defines some of the terms and abbreviations used in the Statement of Commitments:

Approval	The Minister's approval to the Project
BCA	Building Code of Australia
Council	Liverpool City Council
Department	Department of Planning and Infrastructure
Director-General	Director-General of the Department (or delegate)
EIS	Environmental Impact Statement
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
Goodman	Goodman Property Services (Aust) Pty Ltd
Project	The development as described in the EIS
Site	Land to which the project application applies
WorkCover	NSW WorkCover

ADMINISTRATIVE COMMITMENTS

Commitment to Minimise Harm to the Environment

1. Goodman will implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction or operation of the project.

Occupation Certificate

2. Goodman will ensure an Occupation Certificate is obtained prior to the occupation of the facility for the purposes of storing dangerous goods.

Terms of Approval

3. Goodman will carry out the project generally in accordance with the:
 - a) Environmental Impact Statement;
 - b) Preliminary Hazard Analysis;
 - c) Drawings (Nettleton Tribe Drawing – 4167_DA01);
 - d) This Statement of Commitments; and
 - e) Any Conditions of Approval.
4. If there is any inconsistency between the above, the Conditions of Approval shall prevail to the extent of the inconsistency.
5. Goodman will ensure compliance with any reasonable requirement/s of the Director-General of the Department of Planning and Infrastructure arising from the Department's assessment of:
 - a) Any reports, plans, programs, strategies or correspondence that are submitted in accordance with this Approval; and



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- b) The implementation of any recommended actions or measures contained in reports, plans, programs, strategies or correspondence submitted by the Project Team as part of the application for Approval.

Structural Adequacy

6. Goodman will ensure that all new buildings and structures on the site are constructed in accordance with the relevant requirements of the BCA

Construction Traffic Management Plan

7. Goodman will ensure a Construction Traffic Management Plan is prepared and implemented in consultation with Council, and to the satisfaction of the Director-General. This plan will:
 - a) be submitted to the Director-General for approval prior to the commencement of construction;
 - b) describe the traffic volumes and movements to occur during construction;
 - c) detail proposed measures to minimise the impact of construction traffic on the surrounding network, including driver behaviour and vehicle maintenance; and
 - d) detail the procedures to be implemented in the event of a complaint from the public regarding construction traffic.

Operation of Plant and Equipment

8. Goodman will ensure that all plant and equipment used on site is maintained and operated in proper and efficient manner, and in accordance with relevant Australian Standards.

SPECIFIC ENVIRONMENTAL COMMITMENTS

Noise

9. Construction on the site will only be undertaken between 7am and 6pm Monday to Friday, and 7am and 1pm on Saturdays. No construction will be allowed on site on Sundays or public holidays.

Air

Construction Traffic

10. During construction:
 - a) all trucks entering or leaving the site with loads have their loads covered;
 - b) trucks associated with the project do not track dirt onto the public road network; and
 - c) the public roads used by these trucks are kept clean.

Dust Management

11. During the construction phase of the project, all reasonable and feasible measures to minimise the dust generated by the project.

Hazard and Risk

Pre-Occupation Certificate

12. Prior to the occupation of the facility (associated with storage of dangerous goods), Goodman will prepare a Fire Safety Study that shall address the relevant aspects of the Department of Planning and Infrastructure's *Hazardous Industry Planning Advisory Paper No. 2 – Fire Safety Study Guidelines*. The Fire Safety Study shall be kept on site and presented to the Director-General on request.

Pre-commissioning



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13. Prior to the commencement of commissioning of the project, Goodman ensure the plans and systems set out under subsections (a) to (b) below will be developed and implemented:

a) Emergency Plan

A comprehensive Emergency Plan and detailed emergency procedures will be prepared for the proposed land use. This plan will include detailed procedures for the safety of all people outside of the development who may be at risk from the development. The Plan shall be in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 1 – Industry Emergency Planning Guidelines*.

b) Safety Management System

A document setting out a comprehensive Safety Management System, covering all onsite operations and activities involving hazardous materials. The document shall clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to the procedures. Records will be kept onsite and will be available for inspection by the Council upon request. The Safety Management System will be developed in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 9 – Safety Management*.

Ongoing

14. Goodman will ensure the following is undertaken on an ongoing basis as part of the proposed development as outlined in subsections (a) and (b) below.

a) Incident Report

Within 24 hours of any incident or potential incident with actual or potential significant offsite impacts on people of the biophysical environment, a report will be supplied to the Department outlining the basic facts. A further detailed report will be prepared and submitted following investigations of the causes and identification of necessary additional preventive measures. That report will be submitted to the Department no later than 14 days after the incident or potential incident.

b) Hazard Audit

Twelve months after the commencement of operations of the proposed development or within such further period as the Department may agree, Goodman will carry out a comprehensive Hazard Audit of the proposed development and within one month of the audit submit a report to the Department.

The audit will be carried out at Goodman's expense by a duly qualified independent person or team approved by the Department prior to commencement of the audit. Further audits will be carried out every three years or as determined by the Department and a report of each audit will, within one month of the audit, be submitted to the Department. Hazard Audits will be carried out in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 5 – Hazard Audit Guidelines*.

The audit will include a review of the site Safety Management System and a review of all entries made in the incident register since the previous audit. The audit report will be accompanied by a program for the implementation of all recommendations made in the audit report. If Goodman intends to defer the implementation of a recommendation, justification will be included.



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Waste Management

15. Goodman will ensure that all waste generated on site during operation is classified in accordance with the Office of Environmental and Heritage's *Waste Classification Guidelines: Part 1 Classifying Waste* and disposed of to a facility that may lawfully accept the waste.

END

Name:

Signed:

Date:



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PART H PROJECT JUSTIFICATION

The proposal is considered to be justified in the context of environmental, social and economic terms and is compatible with the locality in which it is proposed.

This application is lodged on the basis of:

Supporting State, Regional and Local planning objectives

The proposal is consistent with the objectives, provisions and strategies outlined within the *Metropolitan Plan for Sydney 2036*, the *South West Subregional Strategy*, and *Liverpool Local Environmental Plan 2008*.

Appropriate use of an approved industrial building

The proposal will retain and contribute to the growth of important manufacturing and distribution services for the region. The strengthening of the service sector is important strategy for the economic welfare of Western Sydney as a region as well as NSW.

Environmental impacts have been minimised

Specialist hazard consultants have assessed the risks and determined that the development can be undertaken with minimal environmental impacts. No significant risk to the locality is to result from the proposal.

Compatibility with surrounding development

The proposed use is compatible with existing uses on the subject site and adjacent land. The investigations undertaken as part of this application conclude that no significant cumulative impact is to occur from the proposed use of the expanded facility for the storage of dangerous goods.

Ecologically Sustainable Development

The principles of ecologically sustainable development as outlined in Clause 7(4) of the EPA Regulations are addressed as follows:

- *Precautionary Principle*
No unmanageable threat or irreversible damage to the environment has been identified in relation to the proposal.
- *Inter-generational Equity*
No unreasonable use of resources, affectation of environmental processes or prevention of the use of land for future generations will occur from the proposal.
- *Conservation of Biological Diversity and Ecological Integrity*
The site has been previously disturbed and does not present any significant ecological integrity.

No processes, habitats or species outside the site are likely to be significantly affected by the development.

- *Improved Valuation, Pricing and Incentive Mechanisms*
The proposal seeks to implement measures to avoid, contain and address any associated waste or pollution through appropriate design and management.

The proposal will effectively enable improved cost efficiencies in the delivery of products across New South Wales as it consolidates existing scattered facilities, thereby minimising effects of increased transport, land and natural resources.



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PART I CONCLUSION

The proposed extension of the existing Mainfreight facility at 30-50 Yarrowa Street, Prestons will involve the storage and handling of dangerous goods that satisfy the requirements of a Major Hazard Facility under the *Occupation Health and Safety Regulation 2001*. As such, the development is defined as State Significant Development pursuant to Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011*.

The subject site is appropriately zoned to permit the proposed use and no departure from any development standard is required to enable the development. Additionally, the site is located close to major roads making it a convenient location with good accessibility to and within the region.

A Preliminary Hazard Analysis (PHA) has been prepared to address these issues in detail and concludes that from a hazards perspective, the proposal is below the risk criteria described in HIPAP No.4 and would not pose a significant risk in the locality.

No other cumulative impact is identified or anticipated to result from the construction or operational phases of the proposal given its context in a developing area that has been identified for the intended activities. The proposal is also suitably separated from residential areas and is serviced by adequate infrastructure, including a capable road network.

The proposal is consistent with the document entitled *NSW 2021: A Plan to Make NSW Number One* as well as the Sydney Metropolitan Strategy and draft South West Subregional Strategy by allowing an existing business to develop and expand (within NSW) and creating employment opportunities in a site earmarked for such development. The proposed development is also consistent with the legislative and policy framework for the local and regional area.

Based on the findings of this EIS, the proposal supports the continued development jobs in Western Sydney and contributes to the retention and growth of manufacturing, distribution and supply industry. The proposal is suitable for the local context and is appropriate based on social, cultural, economic and environmental considerations.

As such, it is recommended that the proposal be supported by the Department of Planning and Infrastructure.

