YIRIBANA LOGISTICS ESTATE

Environmental Impact Statement SSD-10272349

Prepared for

THE GPT GROUP

30 August 2021

URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

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Project Code	P0022231
Report Number	Final

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SIGNED DECLARATION

Submission of Environmental Impact Statement

Environmental Assessment prepared by:

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Address:	Urbis Pty Ltd Level 8, Angel Place 123 Pitt Street Sydney NSW 2000
In respect of:	SSD - 10272349

Applicant and Land Details:

Applicant:	The GPT Group
Applicant address	Level 51, MLC Centre, 19 Martin Place, Sydney, NSW 2000 Australia
Land to be developed:	754-770 and 784-786 Mamre Road, Kemps Creek, NSW 2178
Legal description:	Lots 59-60 DP 259135
Project Summary	Staged development and Concept Masterplan comprising five (5) industrial warehouses, internal road network, 35m environmental corridor, building locations, GFA, setbacks, car parking and built form parameters for the purpose of other manufacturing industries or warehouse or distribution centres.

We certify, to the best of our knowledge, the content of the Environmental Impact Statement:

- Complies with the relevant EIS requirements in Schedule 2 of the EP&A Regulation.
- Has been prepared having regard to the 'Preparing an Environmental Impact Statement: State Significant Development Guide'.
- Contains all available information relevant to the assessment of the project.
- Contains no false or misleading information.
- Contains a consolidated description of the project in a single chapter of the EIS.
- Addresses the SEARs for the project.

- Identifies and addresses the relevant statutory requirements for the project, including the relevant matters for consideration in environmental planning instruments.
- Contains an accurate summary of the findings of any community engagement and the detailed technical assessment of the impacts of the project.
- Contains a comprehensive evaluation of the impacts of the project as a whole, having regard to the economic, environmental and social impacts of the project and the principles of ecologically sustainable development.

Name/Position:	Bruce Colman Director	Natalie Yasmine Consultant
Signature:		
Date:	30.08..21	30.08.21

GLOSSARY AND ABBREVIATIONS

Reference	Description
ACHA	Aboriginal Cultural Heritage Assessment
ACHAR	Aboriginal Cultural Heritage Assessment Report
Aerotropolis SEPP	*State Environmental Planning Policy (Western Sydney Aerotropolis) 2020*
AHIMS	Aboriginal Heritage Information Management System
AQIA	Air Quality Impact Assessment
ARI	Average Recurrence Interval
ATC	Air Traffic Control
BAM	Biodiversity Assessment Method
BC Act	*Biodiversity Conservation Act 2016*
BC Reg	*Biodiversity Conservation Regulation 2017*
BDAR	Biodiversity Development Assessment Report
CC	Construction Certificate
CEEC	Critically Endangered Ecological Community
CDA	Concept Development Application
CEMP	Construction Environmental Management Plan
CIV	Capital Investment Value
CMP	Construction Management Plan
COC	Chemicals of Concern
CPCP	Cumberland Plain Conservation Plan
CRZ	Core Riparian Zone
CTMP	Construction Traffic Environmental Plan
DAs	Development Applications
DCAC	Darug Custodian Aboriginal Corporation
DCP	Development Control Plan
DGs	Dangerous Goods
District Plan	Our Greater Sydney: *Western City District Plan*

Reference	Description
DPC	Department of Premier and Cabinet
DPIE	NSW Department of Planning, Industry and Environment
Draft CPCP	*Draft Cumberland Plain Conservation Plan*
Draft MRP DCP	*Draft Mamre Road Precinct Development Control Plan*
DtS	Deemed to Satisfy
EP&A Act	*Environmental Planning and Assessment Act 1979*
EPA Reg	*Environmental Planning and Assessment Regulation 2000*
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
EPIs	Environmental Planning Instruments
EPL	Environment Protection License
EIS	Environmental Impact Statement
ELS	Employment Lands Strategy
ENM	Excavated Natural Material
EPA	NSW Environment Protection Authority
ESCP	Erosion and Sediment Control Plan
ESD	Ecologically Sustainable Design
GANSW	Government Architect for NSW
GHG	Green House Gas
GMP	Groundwater Management Plan
GPT	The GPT Group
GPTs	Gross Pollutant Traps
GSC	Greater Sydney Commission
HIPAP	Hazardous Industry Planning Advisory Paper
HIS	Heritage Impact Statement
Heritage Act	*NSW Heritage Act 1977*
IOP	Interim Operating Procedure
ISEPP	*State Environmental Planning Policy (Infrastructure) 2007*
LGA	Local Government Area

Reference	Description
LOG	Land Owner Group
LSPS	Local Strategic Planning Statement
MARV	Mean Annual Runoff Volume
MRP	Mamre Road Precinct
NCA	Noise Catchment Area
NGER	National Greenhouse and Energy Reporting
NRAR	Natural Resource Access Regulator
OEMP	Operational Environmental Management Plan
OLS	Obstacle Limitation Surfaces
OSD	On-Site Detention
PBP	Planning for Bushfire Protection
PCC	Penrith City Council
PCT	Plant Community Type
PLEP	*Penrith Local Environmental Plan 2010*
POEO Act	*NSW Protection of the Environment Operations Act 1997*
Precinct Plan	Draft Aerotropolis Precinct Plan
PHA	Preliminary Hazards Analysis
PSI	Preliminary Site Investigation
RAP	Remediation Action Plan
Region Plan	Greater Sydney Region Plan; *A Metropolis of Three Cities*
RMS	Roads and Maritime Services
Roads Act	NSW Roads Act 1973
RWDI	RWDI Australia Pty Ltd
SAII	Serious and Irreversible Impacts
SEARs	Secretary's Environmental Assessment Requirements
SEI	Stream Erosion Index
SEPP	State Environmental Planning Policy
SEPP 55	*State Environmental Planning Policy No.33 – Hazardous and Offensive Development*

Reference	Description
SEPP 55	*State Environmental Planning Policy No. 55 – Remediation of Land*
SEPP 64	*State Environmental Planning Policy No.64 – Advertising and Signage*
SIA	Social Impact Assessment
Site	754-770 and 784-786 Mamre Road, Kemps Creek
SQID	Stormwater Quality Improvement Devices
SRD SEPP	*State Environmental Planning Policy (State and Regional Development) 2009*
SSD	State Significant Development
SSDA	State Significant Development Application
SPS	Sewage Pump Station
Stage 1 LUIIP	Stage 1 Land Use and Infrastructure Implementation Plan
STFM	Strategic Traffic Forecasting Model
TfNSW	Transport for NSW
TIA	Traffic Impact Assessment
VIA	Visual Impact Assessment
VMP	Vegetation Management Plan
WCM	Water Cycle Management
WCMS	Water Cycle Management Strategy
WM Act	NSW Water Management Act 2000
WMP	Waste Management Plan
WSUD	Water Sensitive Urban Design
WSEA	Western Sydney Employment Area
WSA	Western Sydney Airport
WSAP	Western Sydney Aerotropolis Plan
WWTP	Wastewater Treatment Plant
YLE	Yiribana Logistics Estate

EXECUTIVE SUMMARY

The Environmental Impact Statement (**EIS**) has been prepared on behalf of The GPT Group (**GPT**) in support of a State Significant Development Application (**SSDA**) for the staged development of the Yiribana Logistics Estate (**YLE**) at 754-770 and 784-786 Mamre Road, Kemps Creek.

The SSDA seeks consent for the YLE concept masterplan and staged development the estate comprising five warehouse buildings for the purpose of other manufacturing industries and/or warehouse and distribution centres. The proposed development has an estimated capital investment value (**CIV**) of $170,880,390 (excl. GST) and accordingly, is classified as a State significant development (**SSD**) under Clause 8 and Schedule 1, Part 11 and Part 12 of the *State Environmental Planning Policy (State and Regional Development) 2011* (**SRD SEPP**).

Project Vision

The YLE has a vision to deliver a state-of-the-art industrial logistics estate within the Mamre Road Precinct (**MRP**) to service the future Western Sydney Airport and Aerotropolis and deliver on the precinct's imperative, that is; to provide industrial land supply, jobs and investment within the Western Parkland City. Specifically, the YLE will deliver the following outcomes:

- Deliver an innovative logistics estate that is compatible with the 24-hour airport operations at the future Western Sydney (Nancy-Bird Walton) International Airport.
- Create a sustainable logistics estate that responds to the changing landscape of industrial services.
- Deliver employment opportunities and support the realisation of the Mamre Road Precinct vision.
- Deliver a design which establishes relationships between built form, people and the environment.
- Create a logistics estate that responds to the existing environmental conditions.

Figure 1 YLE Photomontage

Picture 1 Warehouse 1 Perspective

Picture 2 Warehouse 3 Perspective

Source: SBA Architect

This EIS has been prepared to support the SSDA and responds to the relevant matters listed within the Secretary's Environmental Assessment Requirements (**SEARs**) issued on 16 November 2020.

Project History

The WSEA has long been recognised as the key focus for Sydney's long term future supply of industrial land. This is further emphasised through the delivery of the Western Sydney Airport and surrounding Aerotropolis.

The site has been designated for future employment land since 2014 when the NSW Government announced a proposal to expand the Western Sydney Employment Area (**WSEA**) to dedicate a further 4,574 hectares (**ha**) of employment land.

The WSEA has since been expanded and precincts rezoned to deliver upon the employment function of the area. The site, located within the MRP was the subject of a 'fast tracked' rezoning in 2020 to expedite the delivery of jobs and support the declining supply of industrial services land.

Since the rezoning, various major landholdings within the MPR, including those directly adjoining the site have become subject to local Development Applications (**DAs**) and SSDAs for industrial redevelopment.

The proposal for the YLE has undergone an iterative design process to achieve a design approach which is both contextually appropriate and suitable for the site. The evolving nature of the Mamre Road Precinct has meant that the design has developed concurrent with recent planning changes, particularly as a result of the exhibited draft Mamre Road Precinct Development Control Plan (**draft MRP DCP**).

Identification of Feasible Alternatives

Various project alternatives were considered in the detailed concept design of the YLE, underpinned by the project vision and objectives. Two main alternatives were identified, those being 'Do Nothing' and 'Alternative Designs and Layouts'.

In considering the two options, it became evident that the 'Do Nothing' alternative would not result in sufficient positive outcomes, rather, as it would create a major misalignment with current and previous statutory and strategic policy directions pertaining to the site.

Each of the 'Alternative Design and Layouts' that were considered had associated pros and cons. Through this process, the final YLE concept was refined to produce a masterplan which maximised the opportunities associated with the site and defined the constraints and impacts would be assessed and mitigated as part of this SSDA.

Strategic Context

The proposal has also been assessed in accordance with its consistency with the key planning objectives, priorities and actions outlined within relevant strategic land use and transport planning policies including:

- Premier's Priorities
- *Greater Sydney Region Plan: A Metropolis of Three Cities*
- Our Greater Sydney 2056: Western City District Plan
- Future Transport Strategy 2056
- Freights and Ports Plan 2018 – 2023
- Mamre Road Precinct Structure Plan and draft Development Control Plan
- Western Sydney Aerotropolis Plan
- Penrith Local Strategic Planning Statement
- Western Sydney Aerotropolis Draft Precincts Plan
- Mamre Road Upgrade Strategic Design Report
- Mamre Road upgrade Strategic Design Plans
- Draft Connecting with Country
- Better Placed
- Draft Greener Places Design Guide

Project Description

It is the intention of GPT to deliver an innovative and sustainable logistics estate for the purpose of other manufacturing industries and/or warehousing and distribution centres. The design imperative underpinning the YLE is to create a masterplan that is flexible, high quality and sustainable that will support the needs of end-user tenants and responds to the vision of the broader MRP and its site-specific and surrounding context.

The key features of the proposal are summarised below:

- A Concept Masterplan comprising five (5) industrial warehouses and ancillary offices, internal road network, 35m environmental corridor, building locations, GFA, setbacks, car parking and built form parameters.
- Stage 1 consent for:
  - Subdivision;
  - Site preparation works including estate-wide clearing of all vegetation and dam-dewatering;
  - Estate-wide bulk earthworks;
  - Construction of retaining walls;
  - Provision of site servicing infrastructure to allow the operation of the industrial unit for warehouse and distribution and/or other manufacturing industries;
  - Construction and use of Warehouse 1 and 3 for the purposes of other manufacturing industries and/or warehouse and distribution centres which will operate 24 hours/day, seven days/week;

- Internal road network (including North-South Collector Road and Temporary Access Road to Mamre Road until the ultimate connection is provided by the adjoining landowner);
- Associated carparking;
- Signage; and
- Landscaping to the site and adjacent E2 Zone.

Stage 2 of the YLE, including construction of warehouse buildings 2, 4 and 5 will be subject to separate development applications.

Statutory Context

This EIS considers the relevant regulatory framework applicable to the site for the proposal and contains an assessment of the proposal against the following statutory controls and regulatory instruments:

- *Environmental Planning and Assessment Act 1979*
- *Environmental Planning and Assessment Regulation 2000*
- *Environmental Planning and Biodiversity Conservation Act 1999*
- *Biodiversity Conservation Act 2016*
- *Heritage Act 1977 (NSW)*
- *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 (Western Sydney Aerotropolis) 2020*
- *State Environmental Planning Policy No.33 – Hazardous and Offensive Development*
- *State Environmental Planning Policy No. 55 – Remediation of Land*
- *State Environmental Planning Policy No. 64 – Advertising and Signage*
- *Draft Cumberland Plain Conservation Plan*
- *Draft Mamre Road Precinct Development Control Plan*

Community and Stakeholder Engagement

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

- Adjoining landowners and occupants undertaken independently and as part of the MRP Land Owner Group (**LOG**).
- Government, agency and utility stakeholders listed within the SEARs.

The outcomes of the community and stakeholder engagement have been incorporated into the Concept Masterplan and are discussed in detail at Section 5 of this EIS.

Environmental Impact Assessment

This EIS assesses the proposed development in relation to relevant planning instruments and policies and considers the likely environmental impacts of the proposal, including:

- Traffic and Transport
- Biodiversity
- Urban Design and Visual Impacts
- Noise and Vibration

- Stormwater and Drainage
- Waterways and Riparian Areas
- Standard Impacts, including:
  - Infrastructure Requirements
  - Soil and Water
  - Bushfire
  - Air Quality
  - Contamination
  - Hazards and Risk
  - Waste Management
  - Greenhouse Gas and Ecologically Sustainable Design (**ESD**)
  - Airport Safeguarding
  - Flooding
  - BCA & Fire Engineering
  - Social and Economic

Each of the environmental impacts have been assessed in regard to the associated mitigation measures and it is considered that they can be incorporated as conditions of consent and implemented during the demolition, construction and operational phases of the development.

Evaluation of Project

The EIS demonstrates the proposal will not result in any significant departures from applicable controls or unreasonable environmental effects. The proposed development is considered appropriate and reasonable based on the following:

- The YLE will respond to the critical shortage of serviced, zoned employment land as evidenced in numerous recent studies and help address previously raised concerns from industry regarding the loss of investment to other states arising from a lack of suitable tenancy options and increasing unaffordability for occupiers.
- The YLE will deliver 1,803 jobs which is the equivalent of 10.6% of the 17,000 jobs intended to be delivered by the MRP. Therefore, the servicing and development of land in the MRP is critical to realising the intended outcome of the Precinct's fast-tracked rezoning and ensuring a reliable pipeline of employment land to meet the expected demand over the next decade.
- The proposed staged development of the YLE as described in the EIS and SSDA is justified on strategic, economic and environmental grounds. Key justification for the proposed development includes:
  - Outcomes that support the strategic role and objectives of the YLE as part of the broader WSEA and Mamre Road Precinct.
  - Outcomes that align with the future context and role of the WSEA and Western Sydney Aerotropolis as an economic hub for Greater Sydney.
  - The delivery of critical infrastructure and services to the WSEA for the benefit of the broader area.
  - Significant private sector investment in the area with direct and indirect benefits for productivity and the local economy.
  - Generation of employment for the Western Sydney region, thus contributing to the 30-minute city vision set in the Region Plan.
- With consideration to the other alternatives that were explored as part of the YLE concept design, it is found that the proposed Concept Masterplan is the most suitable deign for the YLE. The selected design

contributes to the industrial land shortfall, while providing opportunity for embellishment of flora and fauna habitats and provides a flexible design to enable integration with the broader MRP.

- Extensive engagement with relevant community, government and agency stakeholders has been undertaken with respect to the proposed Concept Masterplan, with no major objections or issues having been raised through the consultation processes.

Based upon a balanced review of key issues and in consideration of the benefits and residual impacts of the proposal, the staged development of the YLE as proposed under the SSDA is considered justified and warrants approval subject to the implementation of the management and mitigation measures described in EIS and nominated supporting documents.

1. INTRODUCTION

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

1.1. APPLICANT DETAILS

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

Table 1 Applicant Details

Descriptor	**Proponent Details**
Company Name	The GPT Group
Postal Address	Level 51, MLC Centre, 19 Martin Place, Sydney, NSW 2000 Australia
ABN	27 107 426 504
Nominated Contact	Matt Jordan, Senior Development Manager

1.2. PROJECT DESCRIPTION

This EIS is submitted to the Department of Planning, Industry and Environment (**DPIE**) on behalf of the GPT Group (**GPT**) and in support of a State Significant Development Application (**SSDA**) for SSD-10272349 at 754-770 and 784-786 Mamre Road, Kemps Creek (**site**).

The SSDA seeks consent for:

- A Concept Masterplan comprising five (5) industrial warehouses, internal road network, 35m environmental corridor, building locations, GFA, setbacks, car parking and built form parameters.
- Stage 1 consent for:
  - Subdivision;
  - Site preparation works including estate-wide clearing of all vegetation and dam-dewatering;
  - Estate-wide bulk earthworks;
  - Construction of retaining walls;
  - Provision of site servicing infrastructure to allow the operation of the industrial unit for warehouse and distribution and/or other manufacturing industries;
  - Construction and use of Warehouse 1 and 3 for the purposes of other manufacturing industries and/or warehouse and distribution centres which will operate 24 hours/day, seven days/week;
  - Internal road network (including North-South Collector Road and Temporary Access Road to Mamre Road until the ultimate connection is provided by the adjoining landowner);
  - Associated carparking;
  - Signage; and
  - Landscaping to the site and adjacent E2 Zone.

Stage 2 of the Yiribana Logistics Estate (**YLE**), including construction of warehouse buildings 2, 4 and 5 will be subject to separate development applications.

The key objectives for the proposed development and the way in which these have been achieved are summarised in the following table:

Table 2 Project Objectives

Project Objective	**Proposed Development**
Deliver an innovative logistics estate that is compatible with the 24-hour airport operations at the future Western Sydney (Nancy-Bird Walton) International Airport.	The YLE will support other manufacturing industries and distribution centre functions within close proximity to the future Western Sydney (Nancy-Bird Walton) International Airport. Innovative impact mitigation measures have been incorporated into the design and ongoing management of the estate to ensure that the future development does not impact on the airport operations.
Create a sustainable logistics estate that responds to the changing landscape of industrial services.	The YLE adopts a range of ecologically sustainable design (**ESD**) measures in a built form which will allow for design flexibility to support a range of large format industrial and logistics services. The adopted detailed design concept promotes a contemporary corporate grade development that is consistent with the emerging character of logistics estates in Western Sydney.
Deliver employment opportunities and support the realisation of the Mamre Road Precinct vision.	The YLE will deliver 351 immediate construction jobs in the Stage 1 estate works and approximately 400 full time operational jobs. The future stages of the YLE will produce 352 construction jobs and an additional 700 full time operational jobs. This contributes to the MRP vision which intends to deliver approximately 17,000 jobs in Western Sydney.
Deliver a design which establishes relationships between built form, people and the environment.	The YLE concept seeks to reframe the ‘city edge’ by creating synergies and interconnections between indoor and outdoor spaces, promoting an environment whereby people can interact with nature. The co-location of landscaped breakout spaces within the vicinity of the ancillary offices, promotes opportunity for social interaction for both customers and workers.
Create a logistics estate that responds to the existing environmental conditions.	At an estate-wide level, the YLE is designed to respond to the existing site conditions, particularly the topography, ecology and urban heat effects that characterise the local area. The site topography has informed the estate design and stormwater concept which incorporates a stepped arrangement that relies on gravity to discharge water across the site. The realigned environmental corridor is a spinal node and feature of the estate which has informed the broader landscape masterplan. Finally, the detailed warehouse design incorporates innovative architecture and technology to mitigate the impacts of urban heat.

1.3. PROJECT BACKGROUND

The site has been designated for future employment land since 2014 when the NSW Government announced a proposal to expand the Western Sydney Employment Area (**WSEA**) to dedicate a further 4,574 hectares (**ha**) of employment land. This proposal amended the *State Environmental Planning Policy (Western Sydney Employment Area) 2009 (***WSEA SEPP**) Land Application map to expand the boundary south to Elizabeth Drive and include land west to the planned Western Sydney Airport. The expansion of the employment area was referred to as the Broader WSEA.

In 2018, the NSW Government announced the Western Sydney Aerotropolis, which included parts of the broader WSEA. The release of the Stage 1 Land Use and Infrastructure Implementation Plan (**Stage 1 LUIIP**) provided preliminary guidance on the Aerotropolis, including staging and future land uses.

Following this Aerotropolis announcement, rezoning of the Mamre Road Precinct, including the site, was exhibited from 20 November – 18 December 2019. The exhibition package included the following:

- Mamre Road Precinct Structure Plan;
- Mamre Road Precinct Discussion Paper outlined an explanation of intended effects of the proposed rezoning; and
- Proposed SEPP maps.

Mamre Road Precinct was subsequently rezoned on 11 June 2020.

Through this rezoning, the site's purpose for industrial development was confirmed, with the site being rezoned to IN1 General Industrial with a corridor of E2 Environmental Conservation zoning traversing it.

Numerous DAs and SSDAs are currently underway or have since been determined within the vicinity of the site as indicated in **Figure 13**.

The proposal for the YLE has undergone an iterative design process to development a Concept Masterplan which is both contextually appropriate and suitable for the site. The evolving nature of the Mamre Road Precinct has meant that the design has been developed concurrent with recent planning changes, particularly as a result of the exhibited draft Mamre Road Precinct Development Control Plan (**draft MRP DCP**).

GPT identified 2 project alternatives and 3 alternative design options which were considered in respect to the identified need for the YLE. Each of these options is listed and discussed in the following table.

Table 3 Project Alternatives

Option	**Assessment**	
	Pros	**Cons**
Do Nothing	The 'Do Nothing' alternative would result in the land comprising the YLE remaining unplanned, serviced and undeveloped.	
	<u>Pros:</u> ▪ Development will not occur prior to the finalisation of the Mamre Road Precinct Development Control Plan, allowing time for the resolution of key controls.	<u>Cons:</u> ▪ Outcomes for the site that are contradictory or inconsistent with the strategic objectives, goals and direction of the Greater Sydney Region Plan – '*A Metropolis of Three Cities'*, Western City District Plan, Western Sydney Aerotropolis Plan, and Mamre Road Precinct Structure Plan.

Option	Assessment	
	Pros	**Cons**
		▪ Failure to achieve the underlying objectives of the rezoning or the land as part of the WSEA, in particular the provision of a long term supply of industrial land to serve the needs of the Sydney market. ▪ Potential unplanned, ad-hoc development of the YLE without a guiding Concept Proposal and without due consideration of the various constraints and opportunities of the site and its context. ▪ Failure to develop the YLE in a timely manner to align with market demand, potentially further contributing to a shortfall in the supply of serviced industrial sites in the short to medium term with subsequent impacts on economic productivity and employment in the region. ▪ Impacts upon planned local and regional road infrastructure, including risks to the delivery of important road connections, leading to potential deficiencies in the WSEA road network and/or additional costs for the delivery of required infrastructure. ▪ Loss of potential local and regional contributions to critical infrastructure through the development contributions system. ▪ Loss of significant, direct private investment in new and upgraded public road infrastructure and substantial indirect investment in the local economy to the benefit of residents and businesses in Western Sydney.

Option	Assessment	
	Pros	**Cons**
		▪ Loss of direct employment generating potential of the YLE, providing in the order of 703 new construction jobs and 1,100 operational jobs, and the wider potential of the broader Mamre Road Precinct which would deliver approximately 17,000 jobs for Western Sydney.
Alternative Designs and Layouts	Multiple options were prepared and analysed when considering the YLE Concept Masterplan. The pros and cons associated with each design option is provided below with corresponding figures provide at **Figure** 2.	
▪ Option 1	▪ Creates shorter façades orientated towards the north-south Access Road, presenting smaller scale of built forms and reducing visual bulk. ▪ Built forms are 'stepped' down in both a north-south and east-west direction in response to site falls.	▪ Warehouse 4 closes off the area containing the temporary access road, resulting in a loss of opportunity for expanding the use of that land for the development. ▪ Development will not be able to occur prior to the delivery of the north-south Access Road from the southern site, as there will not be any interim access arrangement from Mamre Road to the site. ▪ Will result in insufficient diversity in scale of warehouses across the site, creating monotonous built forms.
▪ Option 2	▪ Integrates the environmental corridor and E2 zone for conservation of biodiversity and water management. ▪ Produces shorter façades that are orientated towards the north-south Access Road, presenting smaller scale of built forms and reducing visual bulks. ▪ Built forms are 'stepped' down from the north-south and east-west direction in response to site falls.	▪ Warehouse 4 closes off the area containing the temporary access road, resulting in a loss of opportunity for expanding the use of that land for the development. ▪ Development will not be able to occur prior to the delivery of the north-south Access Road from the southern site, as there will not be any interim access arrangement from Mamre Road to the site. ▪ Will result in insufficient diversity in scale of warehouses across the site, creating monotonous built forms.

Option	Assessment	
	Pros	**Cons**
		▪ Produces a poor interface with the environmental corridor as Warehouse 3's active frontage faces north.
▪ Option 3	▪ Integrates the environmental corridor and E2 zone for biodiversity and water management in response to Draft Mamre Precinct DCP. ▪ Produces a better interface with the environmental corridor as Warehouse 3's active frontage faces south. ▪ Built forms are 'stepped' down from north-south and east-west direction in response to site falls. ▪ Creates opportunity for connection from Mamre Road to Access Road via a Temporary Access Road. ▪ Local Industrial Road along the shared southern boundary to adjoining Lot 54-58 reinforces the public domain edge, and create efficient use of space.	▪ Warehouse 1 is oversized, creating visual bulk along the north-south Access Road. ▪ Will result in insufficient diversity in scale of warehouses across the site, creating monotonous built forms.

Figure 2 Project Alternatives – Alternative Designs and Layouts

Picture 3 Masterplan Option 1

Picture 4 Masterplan Option 2

Picture 5 Masterplan Option 3

Source: Urbis

2. STRATEGIC CONTEXT

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

2.1. PROJECT JUSTIFICATION

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

2.1.1. NSW State Priorities

In June 2019, The NSW Premier released a collection of fourteen (14) priorities for NSW. They have set targets and represent commitments by the NSW Government to deliver on key policy priorities. The Premiers Priorities aim to enhance the quality of life for people in NSW and tackle key social issues identified by the NSW Government.

The following priorities are of relevance to State and local strategic planning.

1. A strong economy

2. Well-connected communities with quality local environments

3. Green public space

4. Greening our city

Through the Western Sydney Airport and Aerotropolis, the Western Parkland City will be key to securing a strong economy for NSW and the region. New urban areas in the Western Parkland City such as the South West Growth Area will be central to supporting economic development in the region. Building green public space and cities are a core consideration of development in the region, realised through the planning around the South Creek riparian corridor.

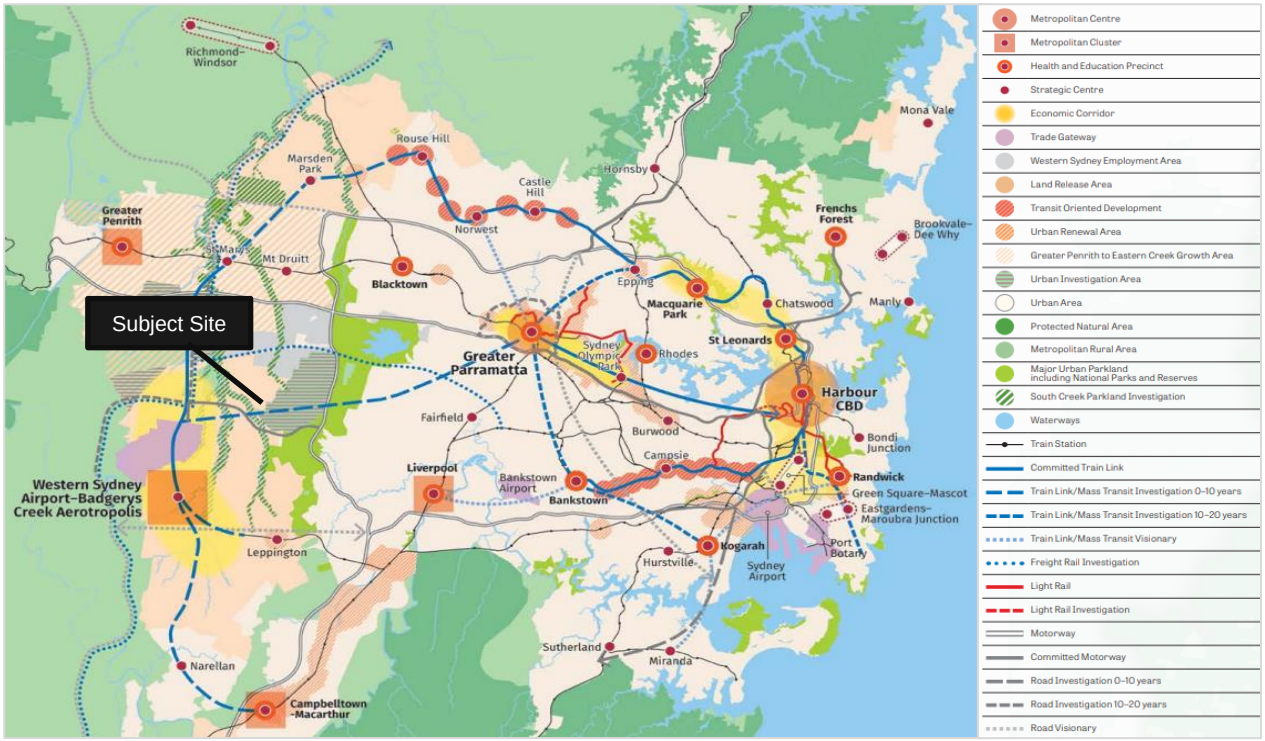
2.1.2. Greater Sydney Region Plan: A Metropolis of Three Cities

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

The Region Plan includes a high-level structure plan identifying key centres, employment areas, and important infrastructure contributions.

Under the Region Plan, YLE is located in the Western City District and lies within the WSEA (refer **Figure 3** below). The WSEA will undergo significant transformation and will play a fundamental role in realising the Western Parkland City Vision. The WSEA is earmarked for the ‘long-term metropolitan land supply for industrial and employment activities’ with the intent to support the investment and business opportunities created by the Western Sydney (Nancy-Bird Walton) International Airport and the potential transport infrastructure identified for the Western Parkland City.

Figure 3 Region Plan's Structure Plan



Source: Greater Sydney Commission

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

- ***A City supported by infrastructure*** sets a direction ensuring growth is supported by essential infrastructure. Through the Western Sydney City Deal, there are significant infrastructure commitments proposed to service the Western Sydney (Nancy-Bird Walton) International Airport and significant road upgrades and public transport projects to support the future employment of the site and surrounding area. The sites location within the WSEA, benefits from future identified mass transit infrastructure. A first stage of a Sydney Metro Greater West from St Marys to the Western Sydney (Nancy-Bird Walton) International Airport and Aerotropolis creates the opportunity for enhanced access to jobs and homes.

  At a local scale, the site is accessible to existing road infrastructure. It fronts Mamre Road which provides direct access to the M4 Motorway, Great Western Highway and Elizabeth Drive. This road is undergoing detailed design for an upgrade by RMS to service the future employment lands. In addition, the proposed development seeks to provide essential infrastructure, including water, electricity, telecommunications and gas to the site. The proposed infrastructure servicing arrangements have been developed in consultation with the relevant service providers as discussed in Section 3.2.5.5 of this EIS.

- ***A well-connected city and jobs and skills for the city*** outlines strategies and actions to rebalance opportunities for all residents to have greater access to jobs, shops and services. To achieve these directions, the Region Plan identifies the need for integrate land use and transport to create 30-minute cities. The proposed YLE will deliver employment lands, creating new job opportunities for the Western Sydney region as intended by the WSEA and in turn, responds to the Greater Sydney Commission's vision to create a 30-minute city leverage off local and regional transport connections offered via the Western City Deal.

  In facilitating jobs and skills for the city, the Region Plan identifies retaining, managing and planning for industrial and urban services land as a key priority. The Western Parkland City will be a resource for Greater Sydney in providing additional land for future industrial activity, particularly in areas recently zoned for industrial uses which will support the logistics and warehousing opportunities created by the Western Sydney (Nancy-Bird Walton) International Airport. The proposed YLE responds to the industrial land shortfall identified in the Region Plan by delivering 58,180m^2 of industrial warehouse facilities in its initial stage and a further 99,680m^2 in its subsequent stages of development. The development and operation of YLE will deliver 351 and 400 immediate construction and operational jobs and 1,052

additional ongoing direct and indirect jobs. The site is well-located to the M4 and M7 Motorways and supports the vision of the Western Sydney Aerotropolis.

- ***A city for people, housing the city,*** *and* ***a city of great places*** direction aims to give people better access to housing, transport and employment. By providing jobs in proximity to nearby residential suburbs and emerging centres, the development directly supports the 30-minute city. The land in which the site is located, is designated for employment uses to ensure improve access to jobs within Western Sydney, and as such, the proposed development aligns with this direction.

2.1.3. Our Greater Sydney: Western City District Plan

The *Western City District Plan* (**District Plan**) was finalised by the Greater Sydney Commission (**GSC**) in conjunction with the Region Plan in March 2018 and builds off the directions and objectives set by the Region Plan tailoring them to the district.

The site is located within the Western City District. The GSC envisaged that residents in the Western City District will have quicker and easier access to a wider range of jobs, housing types and activities.

The District Plan identifies a number of strategic priorities to help deliver the Region Plan's vision of a 30-minute city. The proposal helps to deliver the following priorities of the District Plan:

- Creating a once-in-a-generation economic boom with the Western Sydney Airport and Badgerys Creek Aerotropolis bringing together infrastructure, business and knowledge-intensive jobs; and
- Building on the Western Sydney City Deal to transform the Western City District over the next 20 to 40 years by building on natural and community assets and developing a more contained Western City District with a greater choice of jobs, transport and services aligned with growth.

The WSEA will play a vital role in delivering the District Plan's vision, specifically in providing employment lands and infrastructure to support the Western Sydney (Nancy-Bird Walton) International Airport and Badgerys Creek Aerotropolis in achieving much needed economic stimulus for Greater Sydney. The delivery of employment lands and infrastructure will also provide balance and equal opportunity for residents to access jobs all throughout Greater Sydney.

YLE's location within the WSEA imposes the need for critical strategic consideration, ensuring the timely delivery of employment land that aligns with the District Plan's vision.

The proposed development is consistent with the Western City District Plan, as it:

- Will deliver jobs in a location earmarked for future transport infrastructure investment (Planning Priority W1).
- Is designed in consultation with Aboriginal stakeholders, to support the ongoing connection to the land and its indigenous heritage. Details of engagement with Aboriginal stakeholders and the project response are provided in Section 0 of this EIS (Planning Priority W6).
- Will provide 351 and 400 immediate construction and operational jobs and 1,052 additional ongoing direct and indirect jobs in proximity to future land release areas and growth areas which will enable residents to live within 30-minutes of their jobs (Planning Priority W7).
- Provides industrial warehousing and logistics uses to support the needs of industry within proximity of the Western Sydney (Nancy-Bird Walton) International Airport and Badgerys Creek Aerotropolis (Planning Priority W8 and W10).
- The YLE implements ESD measures aiming to achieve a 5-star green star rating and seeks to achieve a carbon neutral footprint to support the GSC's 2017 *Exploring Net Zero Emissions for Greater Sydney* report (Planning Priority W19).

2.1.4. Future Transport 2056

The Future Transport Strategy 2056 released by Transport for NSW (**TfNSW**) in March 2018 is the NSW Government's transport masterplan. The plan establishes a vision and strategy for managing the growth of transport services and infrastructure in NSW over the next 40 years. Developed alongside the GSC's Greater Sydney Region Plan, it seeks to provide an integrated planning framework for NSW that supports the repositioning of Sydney as a metropolis of three cities.

The Strategy adopts the GSC's vision for a 30-minute city for Greater Sydney, whereby it states that Greater Sydney will be underpinned by an integrated network of city-shaping, city-servicing and centre serving corridors. TfNSW has established 6 outcomes for Greater Sydney which demonstrates its aspirations for transport over the next 40 years which will guide transport services and infrastructure in Greater Sydney to 2056. The outcomes identified in the Strategy include:

1. Successful places
2. A strong economy
3. Safety and performance
4. Accessible services
5. Sustainability

In the Western Parkland City, transport networks will be developed to support sustainability outcomes and jobs growth within the District. The strategic transport corridors identified within the Strategy include city-shaping,

Transport networks in the Western Parkland City will be developed in order to support sustainability and jobs growth in the District. The plan identifies that strategic transport corridors, which comprise integrated city-shaping, city-serving and centre-serving networks that create the 30-minute connections between strategic, centres, metropolitan centres and clusters. The Western Sydney Airport, as an economic catalyst, is also identified as a key node in this network that will be served by north-south rail links and east-west connections.

The site, fronting Mamre Road and forming part of the MRP will support the delivery of a city-shaping and city-serving corridor within a 30-minute catchment of the Aerotropolis.

2.1.5. Freights and Ports Plan 2018 – 2023

The NSW Freight and Ports Plan 2018 – 2023 was released by the TfNSW in September 2018 and is a 'call to action' for government and industry to collaborate on key initiatives and targets to support the NSW freight task in growing Sydney. The Plan is underpinned by the following key objectives:

- Increased economic growth – by providing confidence and certainty that encourages continued investment in the freight industry.
- Increased efficiency, connectivity and access – by improving the efficiency of existing infrastructure and ensuring greater connectivity and access along key freight routes.
- Greater freight capacity – by maximising infrastructure investment and increasing land use capacity to accommodate growth.
- Improved safety – by creating a safer freight supply chain involving safe networks, safe transport, safe speeds and safe people.
- Enhanced sustainability – by developing a sustainable supply chain that delivers benefits to our environment and continued operations into the future.

A fundamental element of the Plan is the need to maintaining a growing economy which provides confidence and certainty that encourages continued investment in the freight industry to support economic growth. YLE, located within the Mamre Road Precinct supports the logistics and warehousing sector whilst leveraging off its proximity to the Western Sydney Airport (**WSA**). By delivering 1,100 ongoing jobs, YLE promotes the sustainable growth of the freight and logistics economy, complementary to the WSA and adjoining urban services land.

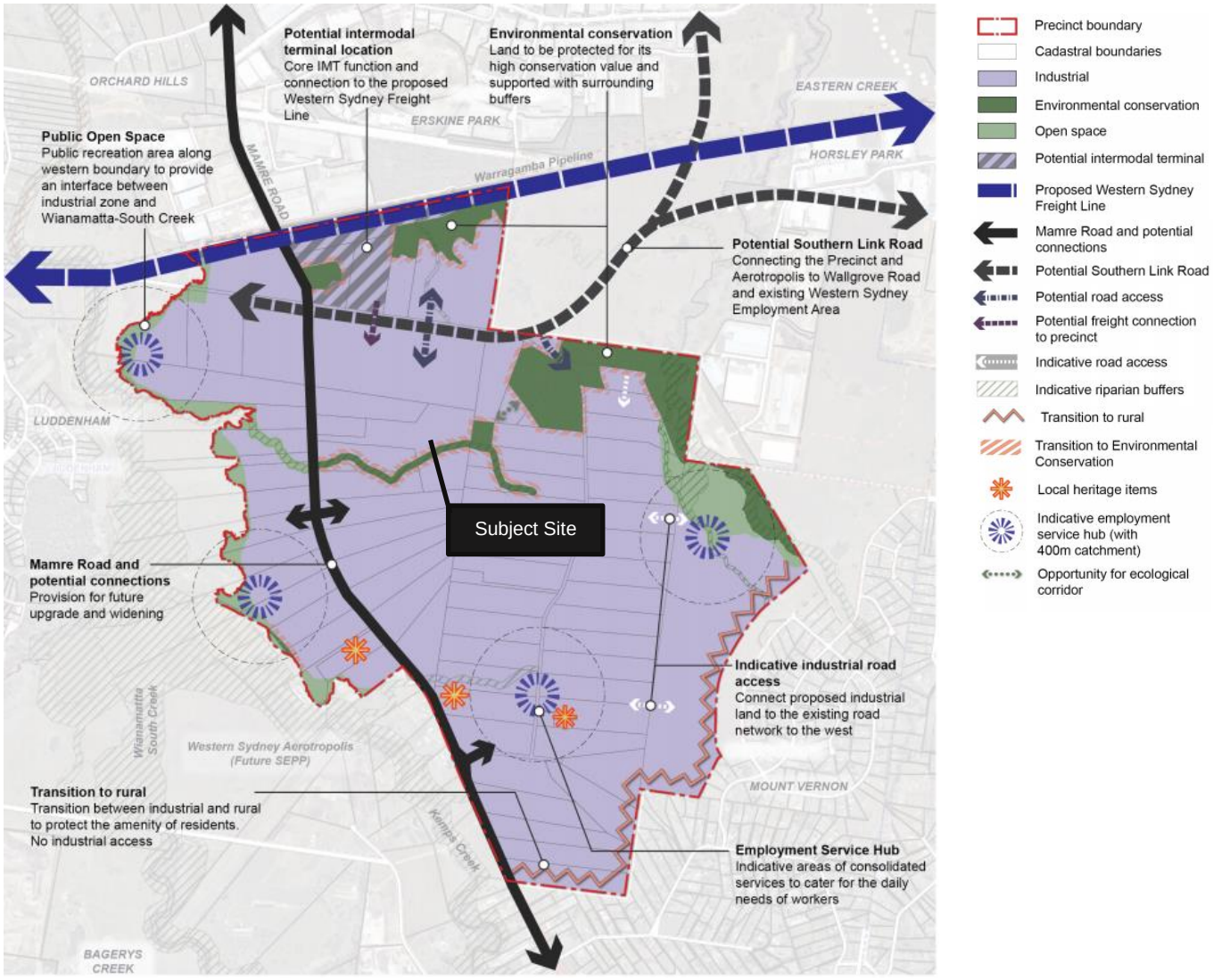
2.1.6. Mamre Road Precinct Structure Plan

The Mamre Road Precinct Structure Plan was updated on 11 June 2020 by the Minister for Planning and Public Spaces and accompanied the exhibition of the proposed WSEA SEPP Amendment in 2019. The structure plan identifies the development intent for the precinct, highlighting future industrial, environment and drainage areas, as well as identifying key infrastructure required to support the precinct.

On 27 May 2020, the DPIE announced the precinct rezoning will be accelerated as a 'fast-tracked project' which will include the rezoning of 850 hectares of industrial land including the protection of a potential intermodal terminal, Southern Link Road corridor, environmental lands and a double playing field.

The site, located within the Mamre Road Precinct will play a key role in delivering on the vision for the Mamre Road Precinct, specifically with the provision of 157,860m^2 of industrial land fronting Mamre Road. The YLE aligns with the MRP Structure Plan as it will provide industrial land uses and an environmental conservation corridor.

Figure 4 Mamre Road Structure Plan



Source: DPIE

2.1.7. Western Sydney Aerotropolis Plan

The *Western Sydney Aerotropolis Plan* (**WSAP**) was finalised in September 2020 and has been development by the Western Sydney Planning Partnership. The WSAP sets the planning framework for the Western Sydney Airport and the ten precincts that comprise the Western Sydney Aerotropolis. The Mamre Road Precinct is an initial precinct which was brought forward to create early employment opportunities and better coordinate infrastructure planning.

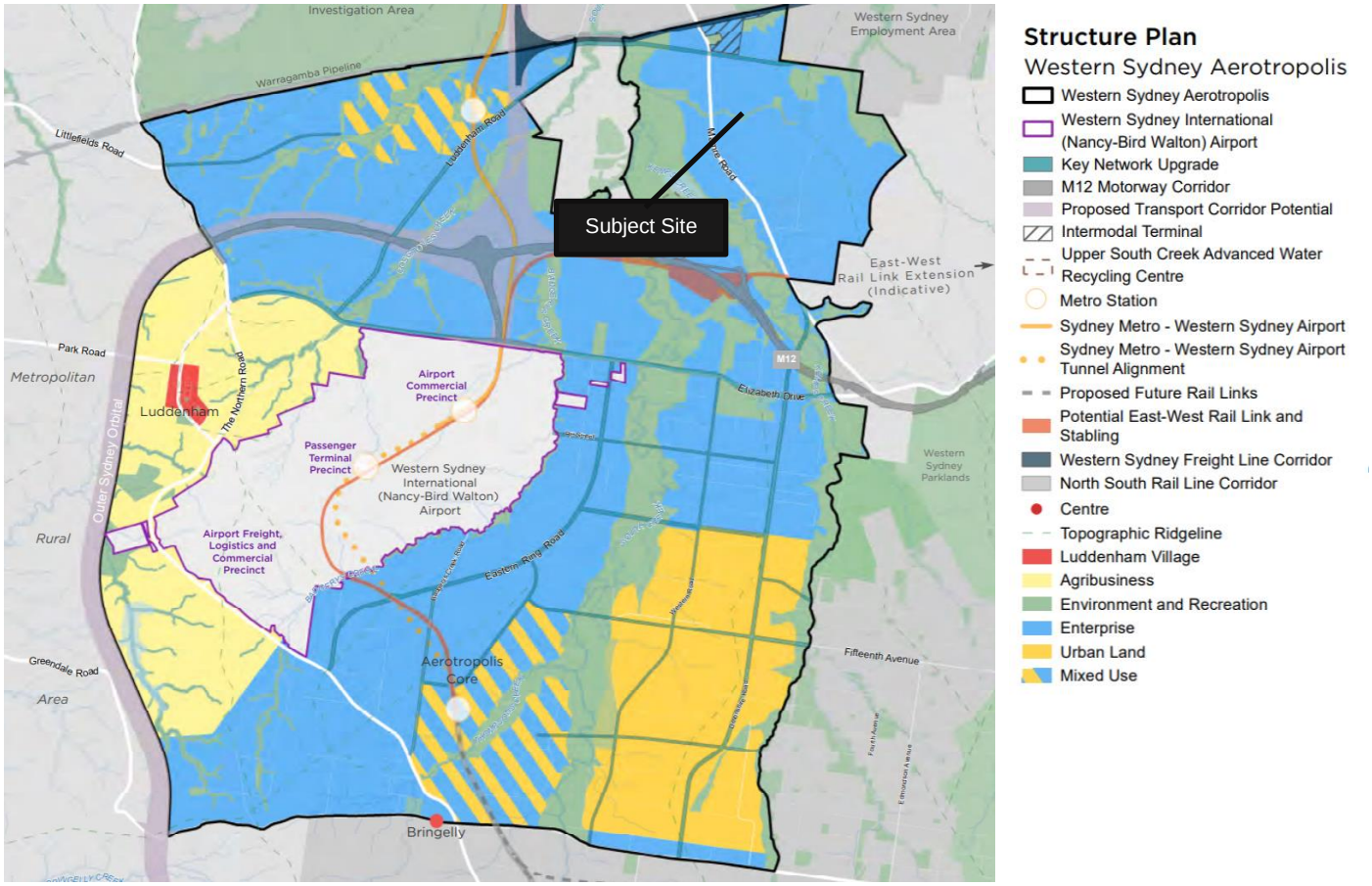
The WSAP identifies the planning pathway for Mamre Road Precinct which was rezoned for industrial employment uses in 2019 under the WSEA SEPP, as the future employment land uses anticipated for the precinct align with the existing objectives of the WSEA. The Structure Plan identifies land within Mamre Road Precinct to be redeveloped for flexible employment (**Figure 5**) with intended land uses being industrial, warehousing and logistics. The statutory planning pathway is separate from the remaining Aerotropolis precincts and the Mamre Road Precinct is subject to its own Development Control Plan (**DCP**).

Part 5 of the WSAP outlines measures to protect the 24-hour operations of the Western Sydney (Nancy-Bird Walton) International Airport. Key initiatives include:

- Preventing the encroachment of noise-sensitive land uses into areas affected by aircraft noise and operational airspace;
- Locating buildings to avoid wind shear and turbulence;
- Managing wildlife attraction;
- Locating wind turbines appropriately;
- Ensuring lighting does not distract/confuse pilots;
- Maintain an obstacle free operational space;
- Ensuring off-airport development does not impact the communication, navigation and surveillance (CNS) equipment; and
- Managing land uses in public safety areas..

The proposed YLE does not impact the future airports operations. Further information on airport safety measures are outlined in Section 6.2.9.

Figure 5 Western Sydney Aerotropolis Structure Plan



Source: DPIE

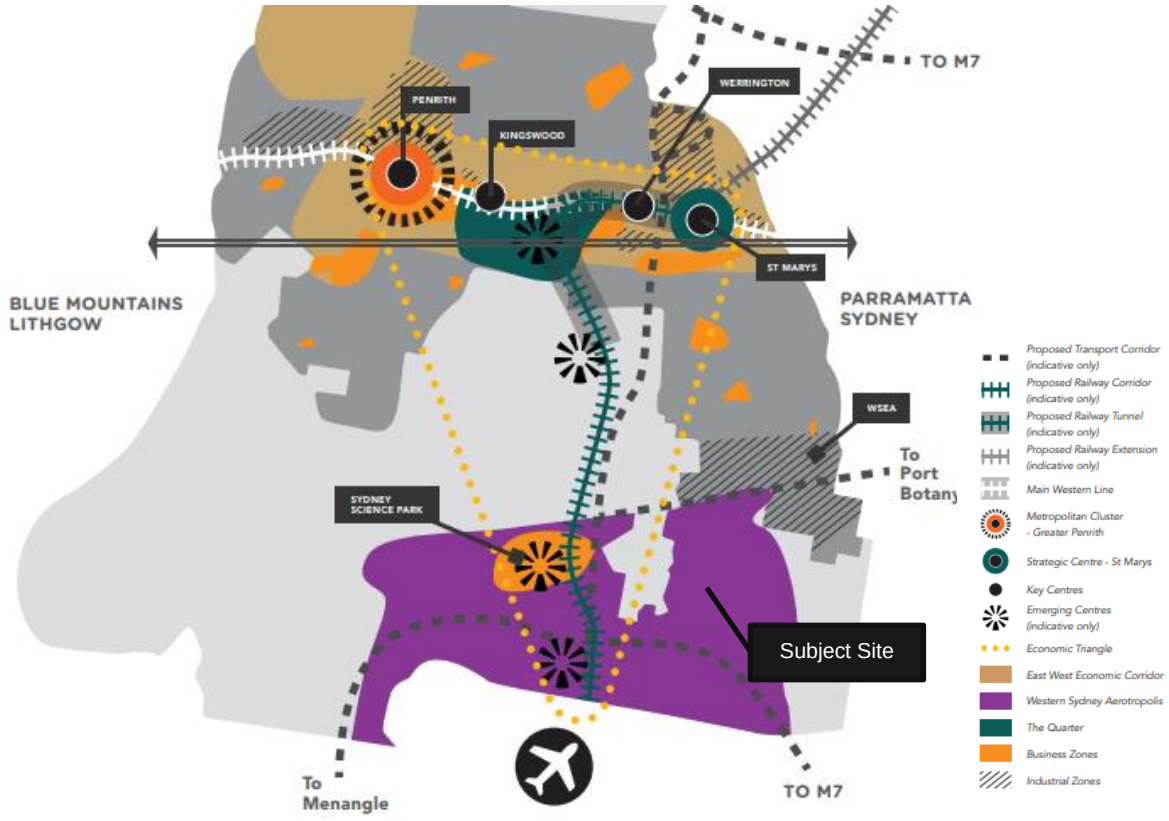
2.1.8. Penrith Local Strategic Planning Statement

The Penrith Local Strategic Planning Statement (**LSPS**) was finalised on 23 March 2020. The LSPS identifies the vision and priorities for land use across the Local Government Area (**LGA**), as well as outline the special character and values of the place and how they will be managed into the future. The Structure Plan identifies land within Mamre Road Precinct within the Western Sydney Aerotropolis.

The LSPS identifies Western Sydney Aerotropolis as a key employment generator for the LGA and seeks to create an economic triangle with Penrith CBD and St Marys as shown in **Figure 6**. The LSPS defers the

details on the types of employment within the Western Sydney Aerotropolis to the Western Sydney Aerotropolis Plan, the main strategic planning document guiding this growth area.

Figure 6 Penrith's Economic Triangle



Source: Penrith City Council

2.1.9. Draft Penrith Employment Lands Strategy

The draft *Employment Lands Strategy* (ELS) exhibited by Penrith City Council in June 2021 supports the Planning Priorities established within the Penrith LSPS and seeks to provide clarity on the development of centres within the LGA and the location of housing, jobs and transport. Importantly, the ELS seeks to realise Penrith's aspirations as a connected, healthy, innovative and balanced city.

The ELS considers employment lands to be land zoned for:

- Industrial and urban services or similar purposes;
- Commercial and business purposes; and
- Land for employment generating special purposes.

The ELS recognises the significant state-wide economic benefits associated with industrial and urban services land and their importance in ensuring the effective functioning of urban area.

With consideration to the economic impacts of the COVID-19 pandemic, Penrith's population is still expected to grow significantly by around 370,000 people over the next 20-years. With this comes the need to provide sufficient jobs across a range of industries and to ensure that future employment lands are serviced and delivered within a timely manner. In light of Penrith's evolving economic profile and growing population, the ELS is intended to:

(a) *Identify and protect strategically important employment lands;*

(b) *Encourage a diverse mix of high-quality employment opportunities that strengthen Penrith's economic triangle;*

(c) *Facilitate renewal and release of employment land precincts to attract business investment to generate economic growth and enhance Penrith's role in the Western Parkland City;*

(d) Identify and create additional industrial and urban services land in land release areas where suitable to service the growing population, to grow jobs closer to home and help achieve a 30-minute city;

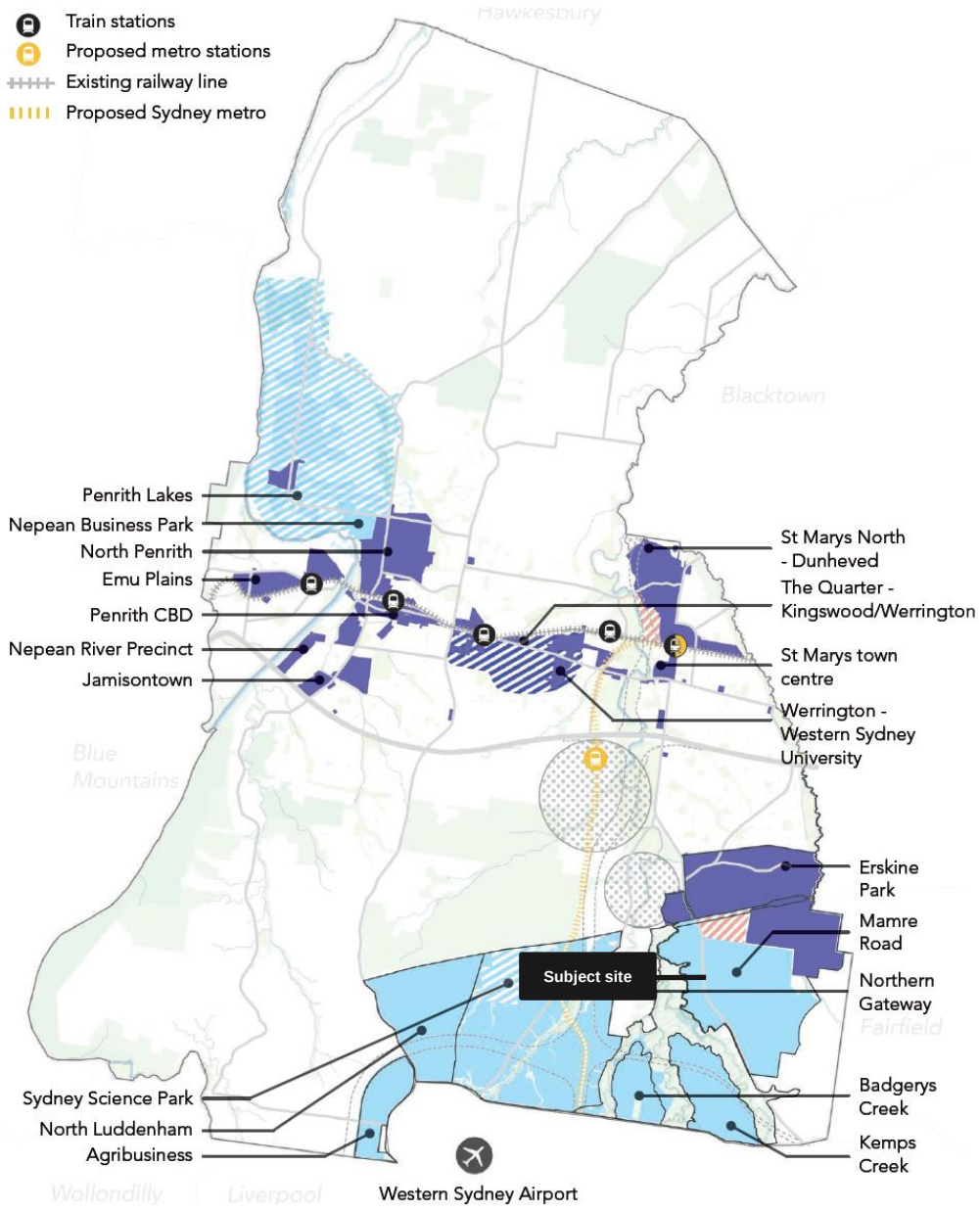
(e) Consider and facilitate contemporary and future industry requirements and market preferences for employment lands, such as, office development in industrial zones where it does not compromise industrial or urban services activities; and adaptation of industrial and warehouse buildings through increased floor to ceiling heights;

(f) Identify suitable locations and encourage opportunities for new smart work hubs that encourage and support local entrepreneurship; and

(g) Inform the review of current planning controls and create capacity to achieve the job targets across industry sectors.

In doing so, the ELS identifies the location of existing and future employment precincts (see **Figure 7**) of which the site is located within the MRP which is considered a future precinct.

Figure 7 Existing and Future Employment Precincts – Draft Penrith ELS



Source: Penrith City Council

The YLE is consistent with the intended vision for the MRP and seeks to ensure the identified need for industrial land is provided through the site's redevelopment.

2.1.10. Western Sydney Aerotropolis Draft Precincts Plan

In November 2020, the NSW Government exhibited the Draft Aerotropolis Precinct Plan (**Precinct Plan**) which was prepared by the Western Sydney Planning Partnership. The Precinct Plan applies to the five initial precincts of the Western Sydney Aerotropolis, that is; the Aerotropolis Core, Badgerys Creek, Wianamatta-South Creek, Northern Gateway and Agribusiness precincts which are identified in the Aerotropolis Plan and *State Environmental Planning Policy (Western Sydney Aerotropolis) 2020* (**Aerotropolis SEPP**).

The Mamre Road Precinct was rezoned under the WSEA SEPP and therefore not included in the Precinct Plan.

2.1.11. Mamre Road Upgrade Strategic Design Report

The NSW Government has started planning for a future upgrade of Mamre Road between Kerrs Road and the M4 Motorway, to support economic and residential growth in this area. The Mamre Road upgrade is part of a plan to progressively upgrade arterial roads in Western Sydney to deliver a more efficient, reliable network that meets the future needs of the community and economy. This includes the need to support Western Sydney (Nancy-Bird Walton) International Airport and the Aerotropolis.

In 2017, TfNSW, formerly known as Roads and Maritime Services, released the *Mamre Road Upgrade Options Report* which explains the option development and evaluation process for the proposed upgrade. The intent of the upgrade to Mamre Road relates to the need to meet future transport demands associated with the Western Sydney Priority Growth Area and the Western Sydney Airport whilst managing road capacity for projected freight and general traffic volumes.

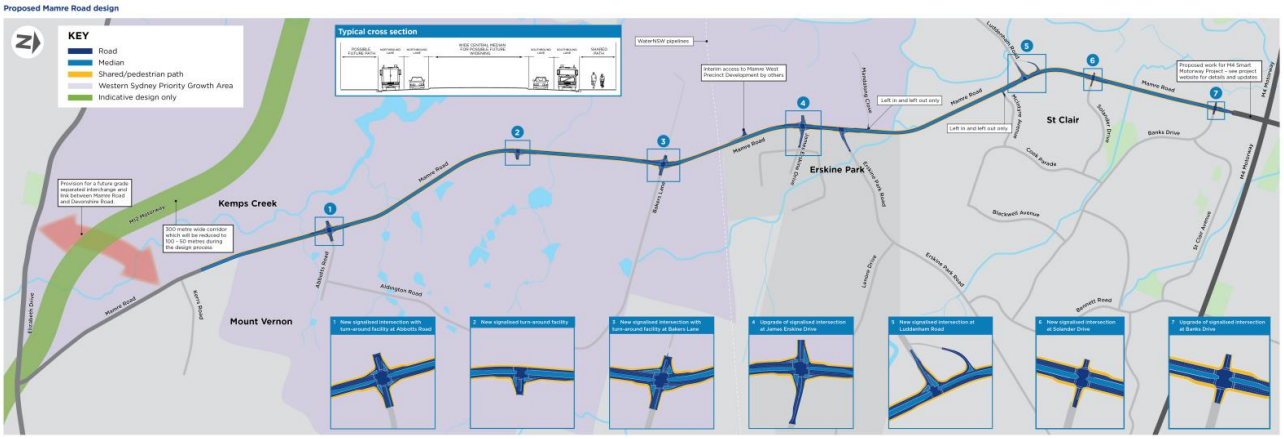
The preferred option identified in the Options Report was the widening of the corridor on the western side of Mamre Road to facilitate a four-lane divided road between Kerrs Road and the M4 Motorway. This option has since been built upon with the subsequent release of Strategic Design Plans as discussed in Section 2.1.12.

2.1.12. Mamre Road Upgrade Strategic Design Plans

In 2019, TfNSW released the Community Consultation Report for the proposed Mamre Road Upgrade. The Report included details of the road design, corridor widths and intersection locations as indicted in **Figure 8** below.

The proposed corridor width for Mamre Road as a Primary Arterial Road is 50 metres. Approximately 500m south of the site along Mamre Road is a proposed signalised intersection with a turn-around facility which will facilitate ultimate access from Mamre Road to nearby sites.

Figure 8 Mamre Road Strategic Design Plan



Source: TfNSW

The proposed development considers the strategic design outcomes and accommodates the future upgrade into the overall design by providing adequate setbacks along the Mamre Road frontage for future acquisition by TfNSW.

2.1.13. Draft Connecting with Country

The draft framework is for developing connections with Country to inform the planning, design, and delivery of built environment projects in NSW. It is intended to help project development teams – advocating ways they can respond to changes and new directions in planning policy relating to Aboriginal culture and heritage, as well as place-led design approaches. It also aims to help project teams gain a better understanding of, and to better support, a strong and vibrant Aboriginal culture in our built environment.

GPT supports and is committed to recognising Country through its ongoing engagement with Aboriginal stakeholders and proposed concept masterplan which has been prepared in accordance with the NSW Government Architect draft Connecting with Country Framework. An outline of how the proposed concept masterplan aligns with the principles and guidelines for recognising Country within the draft Precinct Plan is provided in **Table 4** below:

Table 4 Draft Connecting with Country Framework – Consistency with Objectives

Objective	**Consistency**
Connect with Country by identifying and connecting places of Aboriginal significance.	The site contains one creek line which is identified in the draft MRP DCP to have moderate to high Aboriginal cultural sensitivity. The applicant has undertaken an Aboriginal Cultural Heritage Assessment (**ACHA**) for the site. Engagement undertaken as part of the ACHA has informed the design of the Concept Masterplan, and separate engagement with the local Aboriginal council has supported the estate naming as detailed in **Table 26.**
Reflect the original landscape of the Cumberland Plain through revegetation techniques informed by Aboriginal knowledge of native flora and planting practices, and the preferred species	Whilst the majority of the site has been cleared for agriculture, there is scope for the original landscape to be reflected through rehabilitation of the main environment corridors. Native flora and planting species have been incorporated into the proposed environmental corridor planting to accordingly.
Care for Country by creating opportunities for cultural care and land management.	Opportunities for cultural care and land management will be investigated through further engagement with Local Aboriginal Land Council's and traditional owners.
Integrate places of Aboriginal significance into the urban structure, urban design and landscape.	The YLE layout and design is framed around the realigned environmental corridor to pay tribute to features of natural Aboriginal cultural significance.
Where possible, provide a physical connection between locally and culturally significant places	Connections between the waterway that traverses the site to the north and south have been retained to ensure that physical connections between culturally significant elements remain.
Use cultural naming, language and narratives specific to a precinct or local area.	Cultural naming has been used and appropriate engagement activities have been undertaken with the Darug Custodian Aboriginal Corporation (**DCAC**) for the estate.

Objective	Consistency
Identify and integrate Country through the urban design and development process.	The applicant has engaged with the Local Aboriginal Land Council's and traditional owners as part of this SSDA.
Acknowledge local cultural groups in the design and location of cultural facilities and centres.	The applicant would seek to engage and involve local cultural groups in the design and location of any such facility should it be provided as part of any future development on the site.

A key part of engaging with the commitments of the draft Framework involves undertaking meaningful consultation with Aboriginal peoples in the early, intermediate, later and ongoing stages of the project.

Consultation with local Aboriginal stakeholders has occurred during the conceptual stages of the project and again during the detailed design phase. Initial consultation undertaken as part of the Aboriginal Cultural Heritage Assessment (**ACHA**) involved is discussed in Section 6.1.5 of this EIS. The detailed design of the estate has involved separate engagement undertaken by GPT as detailed in **Appendix C**. It is GPT's intent to deliver an industrial estate which will allow for ongoing connections with country, this is embodied through the estate naming that was undertaken and informed by the DCAC.

Yiribana: The Movement of People and Goods "This Way"

In consultation with a representative body for the Traditional Custodians of the area and the Kemps Creek site, DCAC, GPT has named the logistics estate 'Yiribana'. This name acknowledges the Darug people and simply means 'this way' in Darug language. A record of engagement activities with the DCAC is provided at Section 5.

2.1.14. Better Placed

In August 2017, the Government Architect for NSW (**GANSW**) released *Better Placed*, the integrated design policy for NSW. Better Placed seeks to establish priorities and objectives that shape design to create well-designed built environments.

It presents a collection of priorities and objectives that aspire to shape design that addresses key challenges and directions and creates good design outcomes for NSW. Seven distinct objectives have been identified to create environments that are:

1. Better fit – contextual, local and of its place.
2. Better performance – sustainable, adaptable and durable.
3. Better for community – inclusive, connected and diverse.
4. Better for people – safe comfortable and liveable.
5. Better working – functional, efficient and fit for purpose.
6. Better value – creating and adding value.
7. Better look and feel – engaging, inviting and attractive.

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

2.1.15. Greener Places

In November 2017, the GANSW released the Draft Greener Places Design Guide, the NSW Government's policy for green infrastructure in NSW. The policy presents a collection of priorities and four (4) principles and four (4) outcomes to guide design and planning in the delivery of green infrastructure in NSW, with a focus on open space for recreation, urban tree canopy and bushland and waterways. Fundamentally, the policies seek to respond to the following NSW challenges:

- Health
- Climate resilience
- Rapidly growing population
- Changing lifestyle and demographics
- Infrastructure and urban renewal
- Biodiversity loss

Built upon the principles of integration, connectivity, multifunctionality and participation the draft Guide seeks to achieve the following outcomes:

1. Conservation of the natural environment
2. Increased access to open space
3. Improved connectivity to promote active living
4. Increase urban greening to ameliorate climate extremes

The draft Guide provides recommendations for planning new development in greenfield sites to maximise opportunities for well-located and accessible packs and public open spaces that provide for a diverse range of recreational activities. The desired outcome for greenfield areas is to base public open space around natural systems, which support connectivity, active transport and a diversity of settings which enhance the local character. Additionally, such practice offers opportunities for improved water-sensitive urban design and habitat conservation, ultimately creating a stronger blue and green grid.

Urban tree canopy is a key priority of the draft Guide with three strategies provided along with an indicative target of 40% urban tree canopy cover across the Greater Sydney Region and other urban areas across NSW by 2056. To achieve this target, the following strategies are provided:

1. Protect, maintain and enhance the existing urban tree canopy;
2. Create an interconnected urban tree canopy across NSW; and
3. Build knowledge and awareness of urban tree canopy across State and local government, and the community.

Finally, the draft Guide seeks to enhance bushland and waterways across NSW and adopts five key strategies to connect, protect, restore, enhance and create urban habitat. The strategies apply to remnant, transition and urban environments that provide connections between core habitats.

The YLE seeks to retain environmental values and ecological connections of the site through the realignment of an existing waterway and its enhancement with extensive revegetation. The realigned waterway will retain its north and south connections to ensure that the YLE maintains connections between core habitats.

2.2. KEY FEATURES OF SITE AND SURROUNDS

The site is located at 754-770 and 784-786 Mamre Road, Kemps Creek, within the Penrith LGA. The site is legally described as Lot 59-60 in Deposited Plan 259135 and is owned by GPT.

The following **Table 5** provides an overview of the key site features and characteristics.

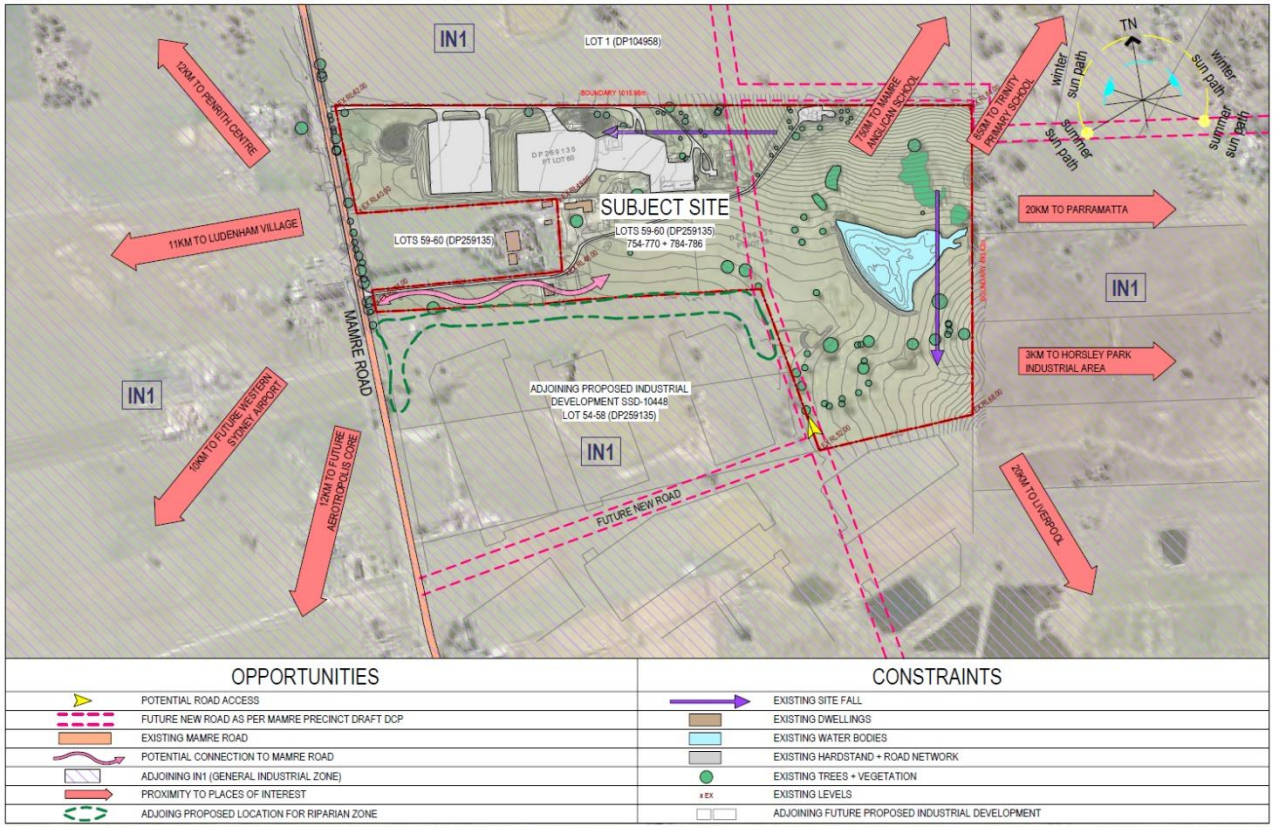
Table 5 Summary of Site Features and Characteristics

Issue	Key features and Characteristics
Existing development	▪ Two larger farm dams and some smaller dams scattered across the site, equating to a total of 1.71 ha.

Issue	Key features and Characteristics
	▪ A residential house, sheds, farmhouses, unsealed and gravel roads and concreate and asphalt hardstand subject to demolition via a separate Complying Development Certificate. ▪ Small clusters of vegetation and trees scattered across the site and along the boundaries. ▪ One 2nd order stream.
Land use and Character	▪ The site has been used for rural residential and agricultural land uses, including farming and grazing. ▪ The site has an existing rural character. ▪ A view corridor traverses the southern part of the site from Wianamatta-South Creek at the west to the ridgeline at the east.
Landform and Topography	▪ The topography of the site rises from Mamre Road to the north-eastern corner of the site. ▪ The western half of the site is relatively flat and has an average elevation of approximately 54m Australian Height Datum (**AHD**). ▪ The eastern half of the site rises from approximately 56 AHD to 74 AHD at an average slope of 3.6% to the eastern boundary.
Geology / Soils	▪ The site is underlain by of Triassic aged Bringelly Shale which consists of shale with some sandstone beds.
Surface Water, Hydrology and Flooding	▪ YLE is located within the South Creek sub-catchment. ▪ The site is located within the Sydney water catchment and Hawkesbury-Nepean sub-catchment and contains one unnamed 2nd order watercourse. The watercourse currently shows no bank structure and consists primarily of a drainage depression with evidence of overland flow from the dam at the eastern side of the site downstream to the adjacent lot. ▪ Majority of the site is unsealed with 2 larger farm dams and some smaller ones scattered across the site, the largest of which is approximately 10,500m^2 located at the eastern section of the site. ▪ The site is affected by 100-year overland flows. It remains unaffected by South Creek 100-year mainstream flooding extent for the tributary to South Creek.
Ground Water	▪ Standing groundwater levels measured at the site are found at 4.95 m and 4.38 m below ground level. It is unlikely that groundwater will be intersected during shallow earthworks programs, however there is a possibility that groundwater may be intersected during the construction of retaining structures and service trenches.
Vegetation	▪ 2.21 ha of native vegetation occupies the site, which comprises of planted and remnant native vegetation. ▪ Remaining land comprises 24.2 ha of exotic vegetation.

Issue	Key features and Characteristics
Bushfire	▪ Site is located within 10m of bush fire prone (hazardous) vegetation.
Heritage	▪ Site is identified to contain areas of moderate to high Aboriginal cultural heritage significance, particularly around the existing E2 zone and ridgeline in the north-east corner of the site.

The location of the site is illustrated in **Figure 9**. Photographs of current site conditions are provided in **Figure 10.**Figure 9 Location Plan and Opportunities / Constraints



Source: SBA Architects

Figure 10 Site Photographs

Picture 6 Site viewed from corner of Mamre Road and Bakers Lane

Picture 7 View to site from southern edge

Picture 8 Rear of site viewed from Bakers Lane near Emmaus Catholic College

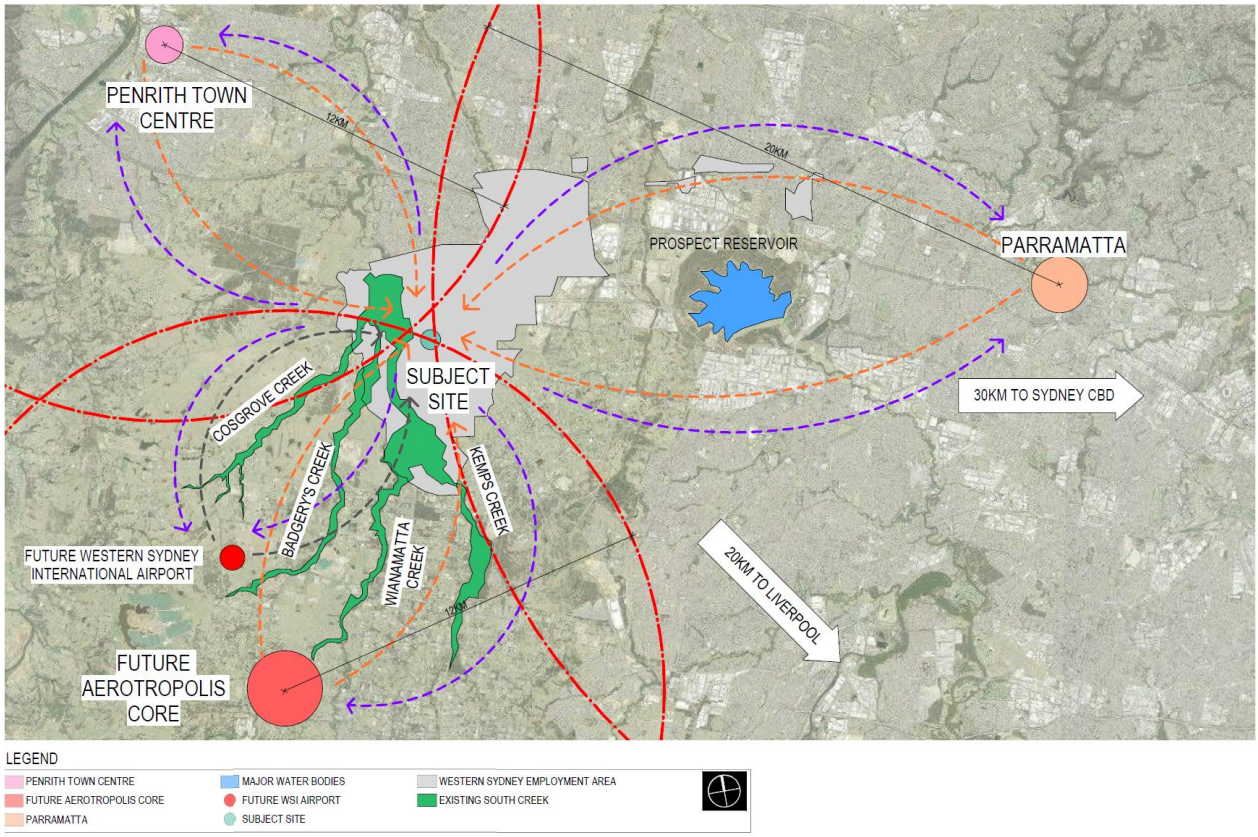
Picture 9 View opposite the southern boundary from North of the site

Source: Urbis

The site is located within Kemps Creek, located approximately 4 kilometres (km) north-east of the future Western Sydney International (Nancy Bird Walton) Airport, 12 km south-east of Penrith CBD and 40 km west of the Sydney CBD. The site is bounded by agricultural uses to the north, south and east and Mamre Road to west providing vehicular access to the M4 Motorway and Great Western Highway to the north and Elizabeth Drive to the south. The nearest long term residential receivers are located in Mount Vernon and Twin Creeks approximately 2 km east and west of the site respectively. Other nearby environmental living areas include Luddenham (approximately 3.5 km east of the site), and Kemps Creek (approximately 4.4 km south of the site). In addition, there is a private education facility and seniors living development approximately 2km north of the site.

The regional context is shown below in **Figure 11.**

Figure 11 Regional Context Plan



Source: SBA Architects

Photographs of the surrounding land uses are provided as **Figure 12** and discussed in detail in the Urban Design and Visual Assessment Report at **Appendix J**. Generally, the site is surrounded by existing rural agricultural land uses which are expected to be redeveloped for industrial uses as the MRP evolves.

Figure 12 Locality Photographs

Picture 10 View of General Industrial zone from north-west of the site

Picture 11 Isolated elevated residence located at 21 Bakers Lane

Picture 12 South-east part of the site past pond along Mamre Road

Picture 13 View south from south-west corner of dwelling fence line on sub-site.

Source: Urbis

2.3. CUMULATIVE IMPACTS WITH FUTURE PROJECTS

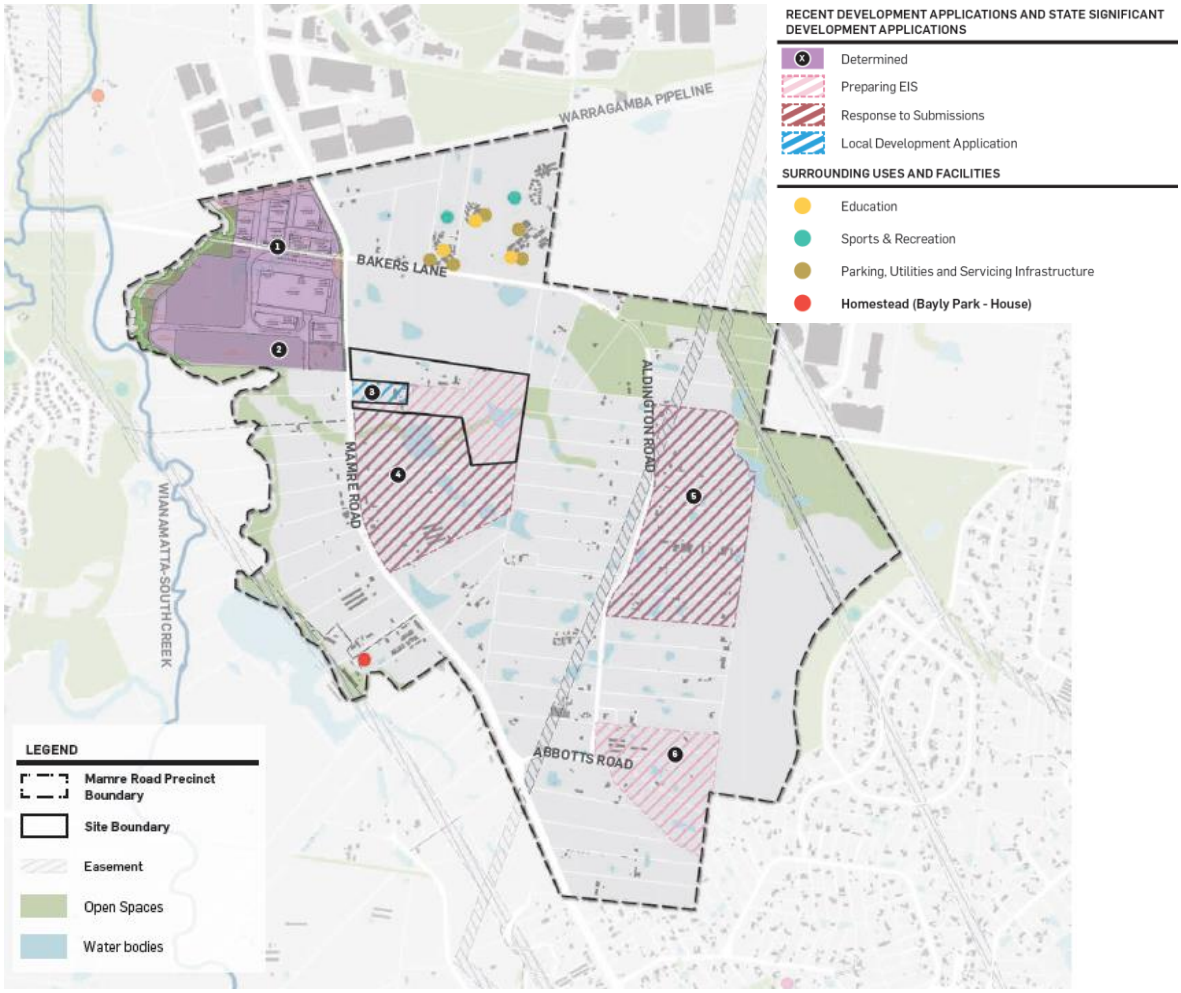
The Mamre Road Precint currently has 7 DAs, with 2 being approved at the north-west of the site. **Table 6** provides an overview of the surrounding developments in reference to the landowners, development status and indicative scale of the of proposed built form. This provides an indication of the emerging building typology within Mamre Road Precinct, which is dominant by logistics, warehouse and/or bulky goods form. The corresponding location of each DA/SSDA is shown in **Figure 13**.

Table 6 Recent DAs and SSDAs

Reference Number	Site	Land Owner	Status	Total Site Area (m^2)	Total GFA (m^2)	Site Coverage
1	Kemps Creek Warehouse, Logistics, and Industrial Facilities Hub	Frasers / Altis JV	Determined	1,171,666	186,123	51%

Reference Number	Site	Land Owner	Status	Total Site Area (m^2)	Total GFA (m^2)	Site Coverage
2	Kemps Creek Data Centre	ARUP	Determined	136,834	68,934	50%
3	772-782 Mamre Road	Altis	Response to Submissions (Local DA)	37,538	16,887	45%
4	Aspect Industrial Estate	Mirvac	Assessment	558,213	251,042	45% - 62%
5	200 Aldington Road	Stockland & Fife Capital	Response to Submissions	720,804	374,630	61%
6	ESR Kemps Creek Logistics Park	ESR	Preparing EIS	302,716	167,028	55%

Figure 13 Recent DAs and SSDAs



Source: Urbis

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

3. PROJECT DESCRIPTION

The following sections of the EIS summarise the key numeric components of the proposed YLE Concept Masterplan and describes the demolition, site preparation, construction and operational phases in further detail.

3.1. PROJECT OVERVIEW

The key components of the proposed development are summarised in the following table. A copy of the architectural concept drawings is attached as **Appendix G**.

Table 7 Project Details

Descriptor	Project Details
Project Area	The site has a total area of 331,433m^2. Majority of the site is expected to be altered by the project
Site Description	Lot 59-60 in Deposited Plan 259135
General	▪ Staged development of a warehouse estate for the purposes of other manufacturing industries and/or warehouse and distribution centres. ▪ State Significant Development pursuant to the SRD SEPP ▪ CIV: $170,880,390 (excl GST) ▪ Approximately 703 new construction jobs and 1,200 new operational jobs.
Proposal	▪ Staged development of a concept masterplan for a manufacturing industries and/or warehouse and logistics estate comprising: ▪ Five warehouses and ancillary office, hardstand area and car parking across four lots. ▪ 24 hours/day, seven day/week operation ▪ Internal road network ▪ 25m E2 Environmental Conservation zone within a 35m corridor. ▪ Indicative lot layout, site levels, concept stormwater drainage, and landscaping concept ▪ Site servicing infrastructure
Concept Masterplan Indicative numerical overview	▪ Total Site Area: 331,433m^2 ▪ Total Developable Area: 290,516m^2 ▪ Non-Developable Area: 40,917m^2 ▪ Road Reserves: 20,594m^2 ▪ Temporary Access Road: 10,626m^2 ▪ Environmental Corridor: 9,679m^2

Descriptor	Project Details
	▪ Total Manufacturing or Warehouse and Logistics Distribution Centre Building Area: 151,125m^2 ▪ Total Office Building Area: 6,735m^2
Maximum Height	▪ 14.6 metres above RL
Parking Spaces	▪ Warehouse 1: 87 car spaces ▪ Warehouse 2: 111 car spaces ▪ Warehouse 3: 167 car spaces ▪ Warehouse 4: 195 car spaces ▪ Warehouse 5: 157 car spaces

3.2. YIRIBANA LOGISTICS ESTATE DETAILED DESCRIPTION

It is the intention of GPT to deliver a state-of-the-art logistics estate for warehousing and/or manufacturing industrial purposes. The design imperative underpinning the YLE is to create a masterplan that is flexible, high quality and sustainable that will support the needs of end-user tenants.

The Concept Masterplan adopts the guiding design directions and as detailed in Section 3.2.2 to ensure it responds to the site constraints and opportunities, whilst maintaining a maximum developable area to allow for a feasible outcome. Key considerations in determining the Concept Masterplan design include:

- Deliver a rational and efficient road and access system that is consistent with the Draft DCP and is integrated with the future regional road network;
- Provide large, regular shaped development 'lots' that will support the staged development of future warehouses which can be flexibly sized to meet the market demand;
- Improve waterway health and enhance the quality of environmental land; and
- Provide landscaping and Water Sensitive Urban Design (**WSUD**) treatments to support stormwater quality and quantity needs for the site.

The YLE will be developed over stages with timing to be informed by market demand. The key elements of the estate are summarised in **Table 8**.

Table 8 Key Elements of Proposed YLE Concept Masterplan

Element	Description	Design Parameters
Site Access	▪ Interim access from Mamre Road via a temporary access road. ▪ Final access from the Access Road (North-South Collector Road) once connection is provided to Mamre Road via the southern property.	▪ Design to relevant AS and RMS standards. ▪ Guided by the Draft DCP.
Estate Roads	▪ One Temporary Access Road from Mamre Road to provide interim access into	▪ Estate road network is designed to match the Draft DCP road network and

Element	Description	Design Parameters
	the site, connects with the Local Industrial Road. ▪ Two estate roads (Access Road and Local Industrial Road) providing access from Mamre Road via the southern property.	precinct wide road network designed by ASON Group. ▪ Road reserves designed in accordance with the Draft DCP specification. ▪ Estate designed to accommodate heavy vehicles. ▪ The design of Concept Masterplan and Stage 1 provides for full integration with the future internal Mamre Road Precinct road network.
Subdivision and Development Lots	▪ 3 development lots where future manufacturing and/or warehouse and logistics development would take place. Entire E2 Environmental Conservation zone forms part of Lot 1. ▪ One remnant lot to provide interim access. ▪ Two estate roads for future dedication to Council. Delivery of roads to be staged.	▪ Development lots to have a minimum area of 1,000m^2 consistent with the draft DCP. ▪ Development lots to provide opportunity for a variety of sizes, layouts and configurations of development.
Utilities and Services	▪ Utility infrastructure requirements accommodated in Concept Masterplan layout.	▪ Essential infrastructure will be delivered on site and connected to the regional network as per Agencies and Authority standards.
Stormwater and Drainage	▪ Estate-wide stormwater system to manage runoff from the future YLE development Lots. ▪ Provision for three onsite detention (**OSD**) basins within the estate.	▪ Stormwater management for the YLE designed in accordance with Penrith City Council requirements and WSUD principles. ▪ Detailed design and capacity of basins included in Civil Report at **Appendix L**.
Environmental Corridor	▪ Realigned and restored E2 Environmental Conservation	▪ Refer to the Riparian Lands Assessment at **Appendix S**.

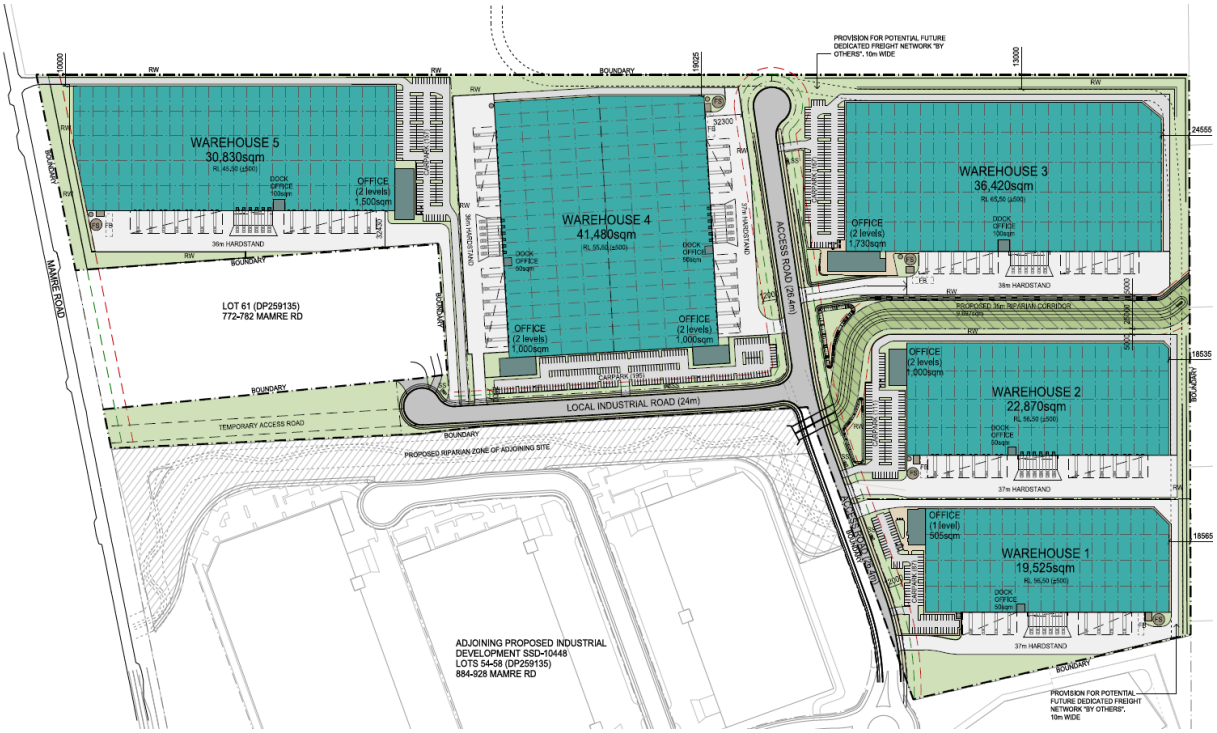
Element	Description	Design Parameters
	corridor with 25m E2 zone and 35m wide corridor including landscaped setbacks. ▪ Improves the biodiversity and ecological values of the existing waterway.	▪ Designed consistent with NRAR's comments regarding curvatures, widths and classification as 'non-waterfront land'. ▪ Meets Draft MRP DCP criteria. ▪ Designed in accordance with the relevant engineering requirements as detailed in the Civil Report at **Appendix L**.

A numerical overview of the YLE Concept Masterplan (shown in **Figure 14**) is provided in **Table 9** below.

Table 9 Summary of Proposed YLE Concept Masterplan

Yiribana Logistics Estate – Concept Masterplan Snapshot	
Total site Area	331,433m^2
Road Reserves	31,220m^2 (including 10,626m^2 Temporary Access Road)
Environmental Corridor	9,697m^2
Developable Area	290,516m^2
Total Warehouse	151,125m^2
Total Office	6,735m^2
Total GFA	157,860m^2
Total Site Coverage	54%

Figure 14 YLE Concept Masterplan



Source: SBA

3.2.1. Project Area

The Concept Masterplan relates to the land identified as Lots 59-60 DP 259135, totalling an area of 331,433m^2. The site currently presents as rural land, the opportunities and constraints which have guided the Concept Masterplan are provided in **Table 10** below and have generally been informed by the Draft DCP. It is noted that some of these components present both opportunities and constraints.

Table 10 Development Opportunities and Constraints

Site Component	Opportunity / Constraint
Site Shape	The site has an irregular shape with a battle-axe configuration and a finger lot further south. As such, parts of the site are not developable for industrial warehouse buildings. However, the finger lot in the south-west of the site presents the opportunity to deliver an interim access arrangement and extensive landscaping, which will contribute to a better planning outcome.
Mamre Road frontage	The site's frontage to Mamre Road means that area needs to be provided along this frontage for future acquisition by TfNSW. Whilst this will result in a reduced developable area, the frontage will enable development to occur within the site independent of the future precinct road network and its delivery.
Site topography	The site has an existing sloped topography with a steep ridgeline in the north-east half of the site, rising from approximately 65 AHD to 74 AHD. Due to its undulated topography, extensive earthworks will be required across the entire site to allow for the development of industrial warehouses, which require large floor plates and flat building pads. Consideration is given to the site's topography in designing the location and layout of warehouse buildings.

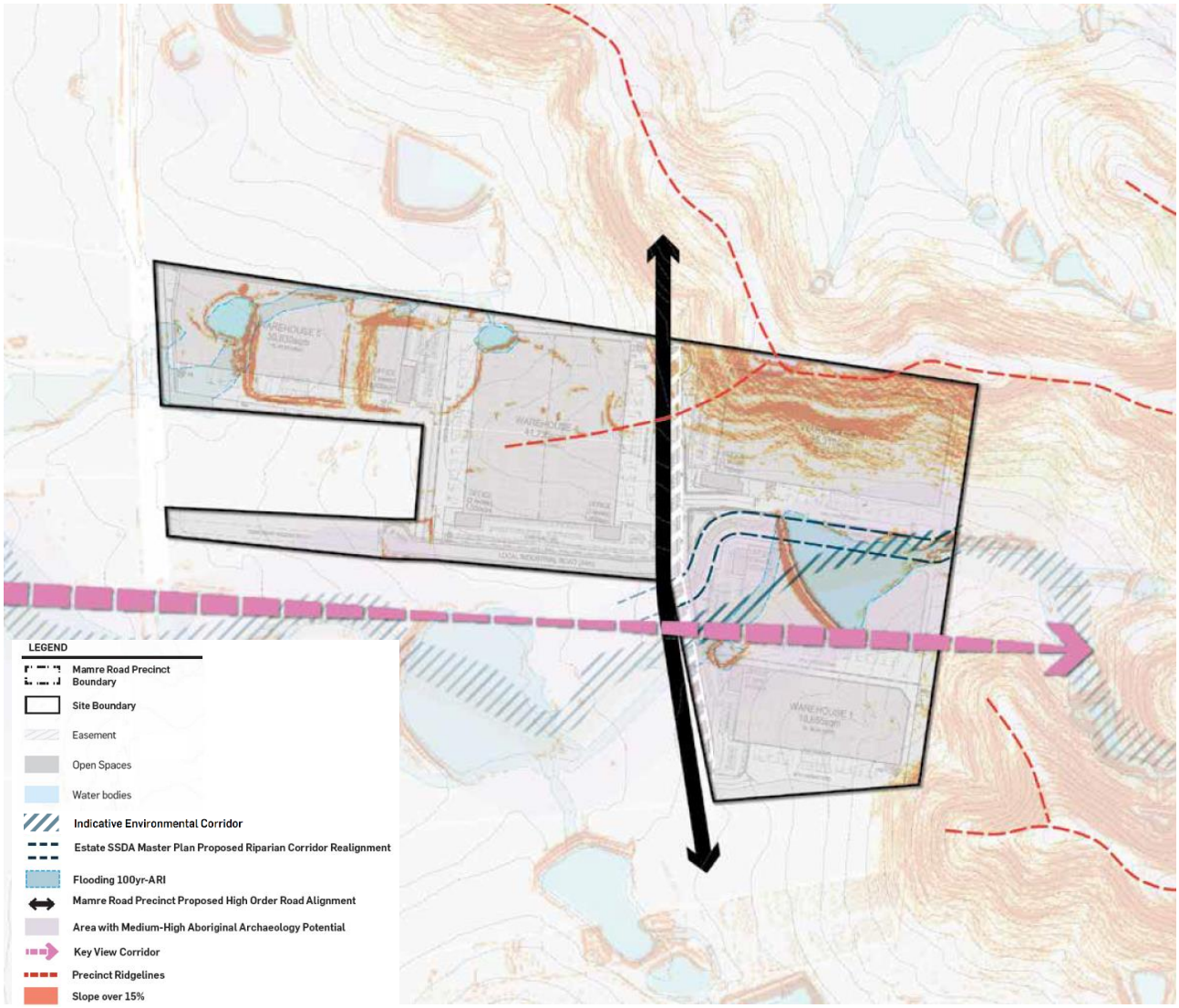
Site Component	Opportunity / Constraint
E2 Environmental Conservation zone	An existing E2 Environmental Conservation zone traverses the eastern part of the site in an east-west direction. The conservation values of the zone are to be considered in its realignment, as well as its extent beyond the site into the adjoining properties. The land to which the zone is proposed to apply has established setback requirements which have been accommodated in the design. The E2 zone also presents opportunities to improve waterway quality and is a key asset in the extensive WSUD approach for the site.
Precinct Road Network	The Mamre Road Precinct road network as stipulated by the Draft DCP includes the North-South Collector Road which transects the site as well as a potential freight route which encroaches into the north-east and eastern boundary of the site. The development is required to deliver the Precinct road network which has implications for the siting of warehouse buildings.
Archaeological values	Parts of the site have been identified to contain areas of moderate to high Aboriginal cultural heritage significance. No registered Aboriginal sites were identified within the Aboriginal Heritage Information Management System (**AHIMS**) database to be located at the site. Due to the known cultural significance of waterways and ridgelines, these elements have been retained in the design through an enhanced realigned environmental corridor and stepped warehouse arrangement.
Flooding	The site has flood prone land at the north-west corner (at the site's lowest point), and along the east-west riparian corridor.

The Concept Masterplan has been guided by the existing site conditions and constraints, including those stipulated within the draft MRP DCP. The following constraints have been identified:

- **E2 Environmental Conservation zone:** A 2nd order watercourse traverses the site in an east-west direction. NRAR has confirmed that this watercourse is not considered 'water front land'.
- **Flooding:** The site is partly affected by 100-year overland flows.
- **Areas with medium-high Aboriginal Archaeology Potential:** No registered Aboriginal sites are located within the subject site. Creek lines and ridgelines are known locations of Aboriginal cultural significance.
- **Key view corridor:** A key view corridor traverses the southern part of the site from Wianamatta-South Creek at the west to the Mamre Road Precinct ridgeline at the east.
- **Ridgelines and steep topography:** The north-east corner of the site has the greatest slope, rising up to 74 AHD (over 15%).

A consolidated constraints map is provided in **Figure 15**, overlayed on the proposed YLE Concept Masterplan.

Figure 15 Site Constraints Map



Source: Urbis

3.2.2. Design Directions

Based on the existing site constraints and opportunities, four design directions and principles have been developed to underpin the overall concept proposal, these are detailed below.

4. Protecting ridgelines and view corridors

The development is to respect the ridgeline at the north-east corner of the site and along the eastern boundary of the site, these ridgelines are considered to have Aboriginal cultural heritage values and significance. The view corridor along the riparian corridor, as stipulated by the Draft DCP is to also be protected.

5. Green and Blue Connections

The development celebrates the existing landscape features on the site, including the high biodiversity area east of the site. Open space provision and active transport connections are to be incorporated to re-establish green and blue grid connections.

Landscape features are to be designed to incorporate existing water run off and mitigate flood impacts through Water Sensitive Urban Design.

6. Access and Movement

The development is to incorporate access and movement by responding to future precinct connections as stipulated by the Draft DCP, those being:

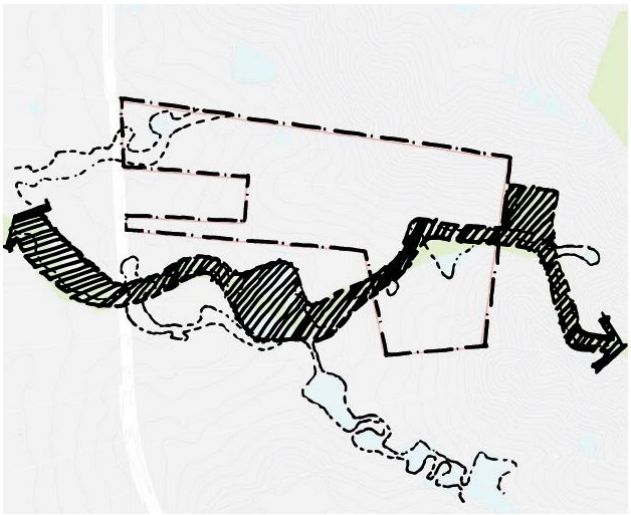
- Leveraging the parallel freight corridor connecting the site to Southern Link Road (Bakers Lane);
- Providing interim east-west connection to Mamre Road through the southern finger of the site.
- Consider and active transport corridor that traverses east-west connecting future open space to South Creek.
- Make provision for a potential integrated freight route along part of the north-east and eastern site boundaries.

7. Servicing and Building Configuration

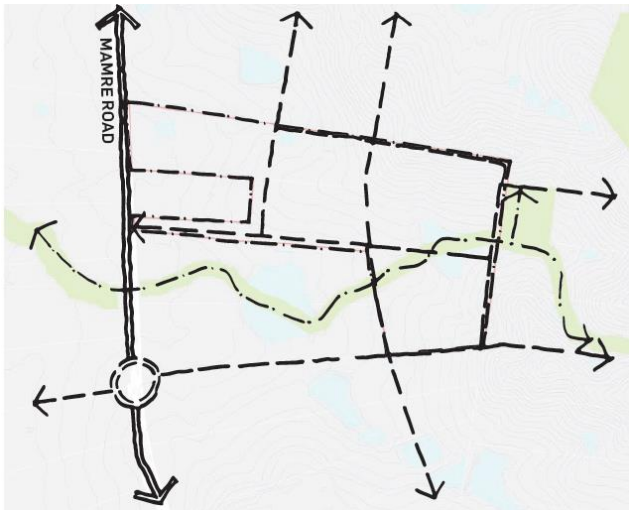
Building siting is to respect the ridgelines and view corridor, whilst also allowing for the orderly development of the site for industrial warehousing and logistics purposes. Buildings are to be places strategically, so to allow access and servicing along internal industrial roads, and loading zones are to consider accessibility and topography.

Figure 16 Development Directions and Principles

Picture 14 Direction 1 – Protecting Ridgelines and View Corridors

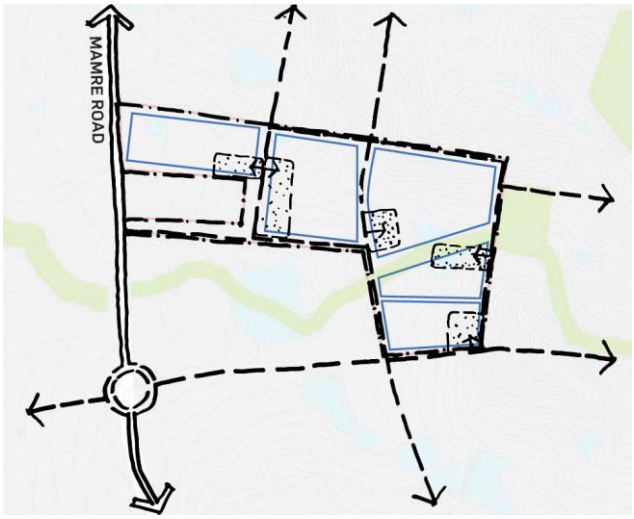


Picture 15 Direction 2 – Green and Blue Connections



Picture 16 Direction 3 – Access and Movement

Source: Urbis

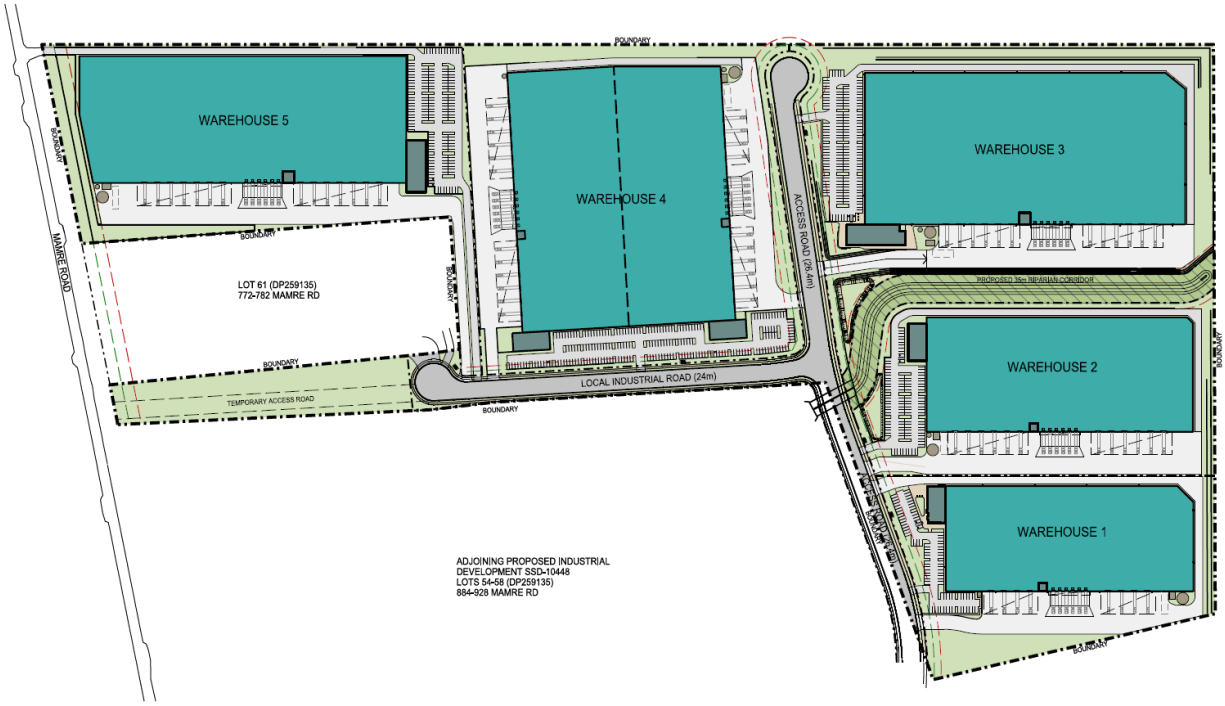


Picture 17 Direction 4 – Servicing and Building Configuration

3.2.3. Physical Layout and Design

The physical layout and design of the YLE responds to the existing site conditions and the broader precinct vision to achieve a positive planning outcome that will meet the needs of end-users.

Figure 17 YLE layout and design



Source: SBA

The YLE comprises five warehouse buildings across three development lots (refer **Figure 17).** Other elements that form the estate Master Plan include the North-South Collector Road which is identified as an 'access road' and the Local Industrial Road that extends off the North-South Collector Road providing access into Warehouse 4 and 5 as well as the isolated site at 772-782 Mamre Road.

The realigned environmental corridor containing a 25m E2 zone and additional landscape setbacks runs between warehouse 2 and 3 in an east-west direction, ultimately connecting with the adjoining proposed realigned corridor south-west of the site. On either side of this corridor as it adjoins Warehouse 2, large detention basins are proposed.

Each warehouse has been sized in accordance with the applicable setbacks, providing irregular shaped buildings with that move away from the standard rectangular development often seen in larger warehouse estates. A breakdown of the proposed GFA for each warehouse building and ancillary office is provided in **Table 11** below, along with the proposed car parking and site coverage. Whilst concept approval is sought for the five warehouse buildings, the detailed design approval only relates to Warehouses 1 and 3.

The remaining Warehouses 2, 4 and 6 will be subject to detailed design as part of future DAs, and as such flexibility is sought to ensure that any design refinements to those warehouses can occur.

Table 11 Estate-wide GFA Breakdown

Development Lot	Warehouse	Warehouse (incl. Dock Office) / Office GFA	Site Area	Site Coverage	Proposed Car Parking
Lot 2A	1	Warehouse: 19,525m^2 Office: 505m^2	40,009m^2	50%	87
Lot 2B	2	Warehouse: 22,870m^2	44,462m^2	53%	111

Development Lot	Warehouse	Warehouse (incl. Dock Office) / Office GFA	Site Area	Site Coverage	Proposed Car Parking
		Office: 1,000m^2			
Lot 1	3	Warehouse: 36,420m^2 Office: 1,730m^2 (across two levels)	80,979m^2	47%	167
Lot 3	4	Warehouse: 41,480m^2 Office: 2,000m^2	75,447m^2	58%	195
	5	Warehouse: 30,830m^2 Office: 1,500m^2	59,316m^2	54%	157
Total:		**Warehouse: 151,125m^2** **Office: 6,735m^2**	**331,433m^2**	**54%**	**717**

3.2.3.1. Development Lots

The YLE Concept Masterplan establishes indicative locations across the site for development, access, environmental protection, drainage and infrastructure and services. The site is divided into four development lots. It is noted that Lot 2 has been further divided into lots 2a and 2b for ease of understanding, consistent with the project staging, however will remain as a single allotment (Lot 2) with regard to subdivision.

Details on each development lot established under the Concept Masterplan are provided in **Table 12**.

Table 12 YLE Development Lots

Lot	Warehouse	Indicative Stage	Site Area	Built Form
1	3	1	80,979m^2	One building pad with opportunity for tenant. Ancillary two storey office, hardstand, and car parking. 25m Environmental Conservation zone within a 35m corridor. One bioretention basin. Serviced by Access Road (North-South Collector Road).
2A	1	1	40,009m^2	One building pad with opportunity for tenant. Ancillary single storey office, hardstand and car parking. Serviced by Access Road (North-South Collector Road).

Lot	Warehouse	Indicative Stage	Site Area	Built Form
2B	2	2	44,462m^2	One building pad with opportunity for tenant. Ancillary two storey office, hardstand, and car parking. One bioretention basin. Serviced by Access Road (North-South Collector Road).
3	4	2	75,447m^2	One building pad with opportunity for two tenants. Two ancillary two storey offices, hardstands and one car parking area. Serviced by Access Road (North-South Collector Road) and Local Industrial Road. One bioretention basin along Mamre Road frontage.
	5	2	59,316m^2	
4	-	1	10,626m^2	One temporary access road providing interim access to the site from Mamre Road.

3.2.3.2. Access

The YLE has been designed to integrate with the MRP road network as shown in **Figure 17**.

Access is proposed across two stages as follows:

Stage 1: Interim Access Arrangement

Interim access is proposed from Mamre Road via a temporary access road to be constructed along Lot 4 and will connect to the proposed Local Industrial Road running east-west through the site. The Temporary Access Road will remain in the ownership of GPT and will be removed at Stage 2.

The temporary access road will be constructed to a road reserve width of 24m, consistent with the Local Industrial Road and will service the construction and operational needs of Warehouse 1 and 3 as required until the North South Collector Road is constructed and operational.

Civil Drawings are submitted at **Appendix K** and show the location and design of acceleration and deceleration lanes to enable safe access from Mamre Road for standard 26m B-Double vehicles. Swept path drawings are submitted with the Civil Package and confirms that the access can service the site in the interim. Access via the Temporary Access Road will be restricted to left-in, left-out and a central median will be constructed at the entrance point.

It is noted that the Subdivision Plan submitted by Mirvac in March 2021 for SSD-10448 incorporates a right of carriageway during stage 1 to provide interim access from Mamre Road to GPT's site. This will ensure that access is available to service Warehouse 1 until the western extent of the North South Collector Road is provided.

Stage 2: Ultimate Access Arrangement

The ultimate access arrangement will be via the Access Road (North-South Collector Road) which will connect to the southern site and proposed Mamre Road signalised intersection to be delivered by Mirvac as

part of SSD-10448. Once access is provided via the southern site to Mamre Road, the Temporary Access Road will be removed.

Details of the proposed internal estate roads are provided in **Table 13** below.

Table 13 Proposed Estate Roads

Estate Road	Proposed Road Reserve Width
Access Road (North-South Collector Road)	26.4m
Local Industrial Road	24m
Temporary Access Road	24m

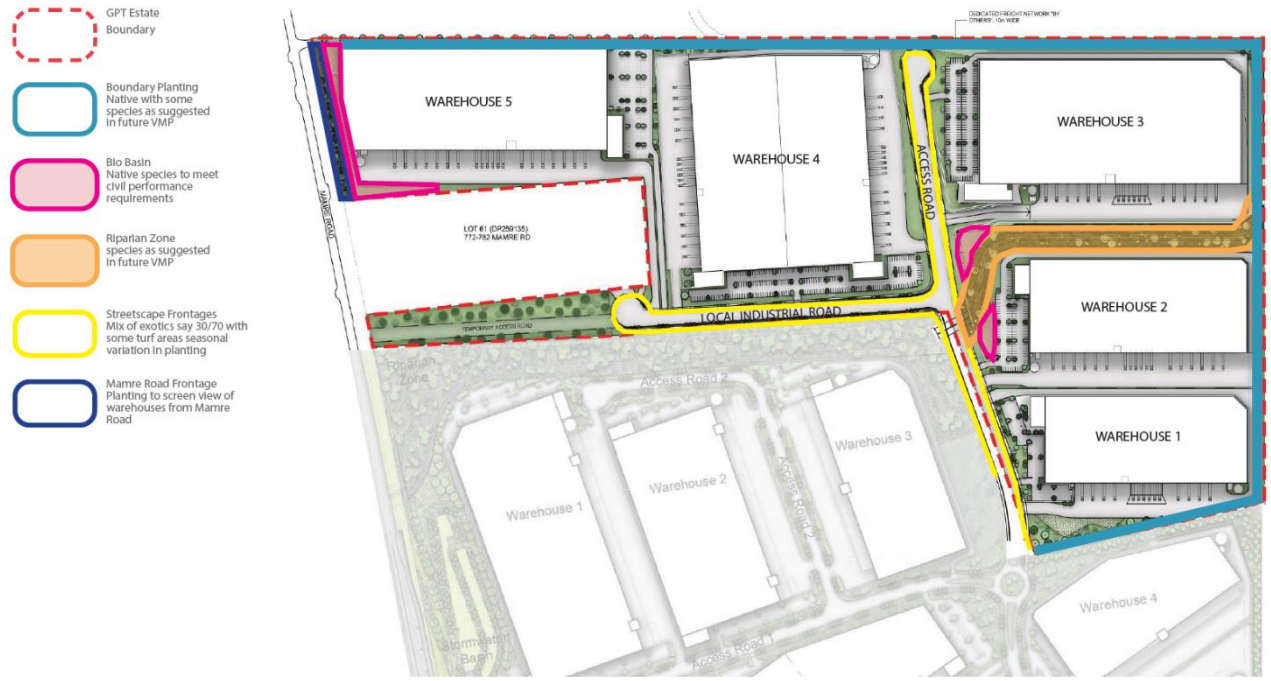
Warehouse Access

All access driveways, parking areas and service areas have been designed with reference to the appropriate Australian Standards. Further detailed description of the road infrastructure proposed as part of the YLE development is provided in Section 6.1.1 and **Appendix L.**

3.2.3.3. Landscaping

Estate wide landscape is proposed and is supported by a Concept Landscape Masterplan (**Appendix I**). The landscaping works proposed as part of the Stage 1 development seek to ameliorate any impact associated with the required earthworks as well as provide detailed landscaping treatments to the public domain and Warehouses 1 and 3. **Figure 18** shows the locations and type of landscape treatments proposed across the estate.

Figure 18 YLE Landscape Masterplan



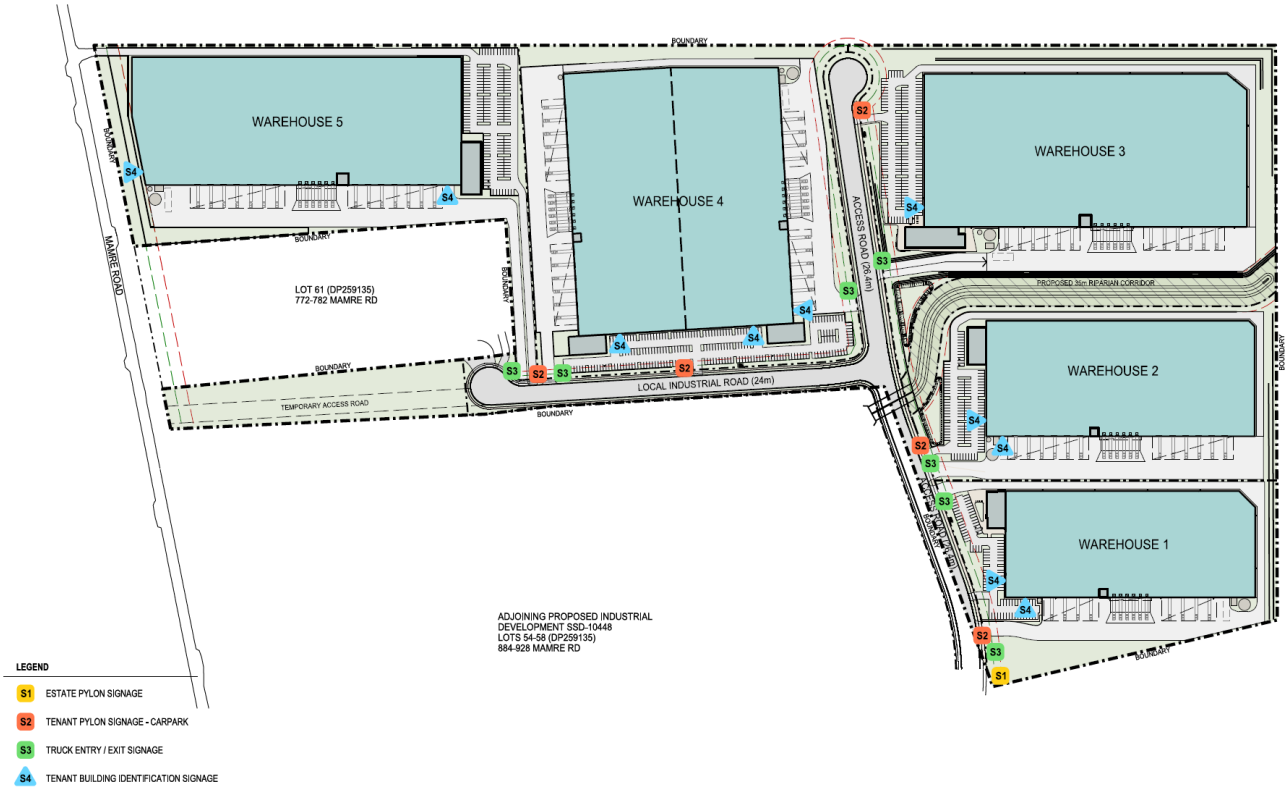
Source: Site Image

3.2.3.4. Signage

A signage strategy is proposed for the YLE which incorporates identification signage and wayfinding / directional signage across the estate (refer **Figure 19** below). The YLE signage would incorporate a combination of typologies ranging from estate pylon signage at the entrance of the estate to wayfinding and

identification signage throughout the estate. The details of the signage to be used within specific areas of the site to be provided in applications for the future staged development of the site.

Figure 19 Concept Masterplan Signage Locations



Source: SBA

Refer to Section 3.2.7.2 and 3.2.7.3 of this report for further details. An assessment against the provisions of *State Environmental Planning Policy No.64 – Advertising and Signage* (**SEPP 64**) is provided at Section 4.2.6.7 of this EIS.

3.2.4. Uses and Activities

3.2.4.1. Proposed Uses

The YLE Concept Masterplan seeks to deliver industrial land uses in the form of other manufacturing industries and/or warehousing and distribution centres. Ancillary offices are proposed to each warehouse building to support the administrative and office needs of future tenants.

3.2.4.2. Staging

The indicative staging of the Concept Masterplan has been developed to provide connectivity to surrounding sites, however the staging of the development will be determined by user demand and will be confirmed when tenants are secured.

3.2.5. YLE Stage 1 Detailed Description

The Stage 1 Development for the YLE comprises both Estate wide and on-lot works as follows:

- Detailed Stage 1 Development of the YLE including:
  - Estate-wide pre-commencement works including:
    - Site remediation works as defined within the Remediation Action Plan (**RAP**).
    - Heritage salvage works (if applicable).
  - Subdivision construction works including:

- Creation of roads and access infrastructure
- Clearing of existing vegetation on the subject site and associated dam dewatering and decommissioning.
- Realignment of existing creek and planting in accordance with a Vegetation Management Plan.
- On-site bulk earthworks including any required ground dewatering.
- Importation, placement and compaction of:
  - Virgin Excavated Natural Material (VENM) within the meaning of the POEO Act, and/or
  - Excavated Natural Material (**ENM**) within the meaning of the NSW Environmental Protection Authority's (**EPA**) Resource Recovery Exemption under Part 9, Clause 91 and 92 of the POEO (Waste) Regulation 2012 – The Excavated Natural Material Order 2014, and/or
  - Materials covered by a specific EPA Resource Recovery Order and Exemption which are suitable for their proposed use.
- Construction of boundary retaining walls.
- Delivery of stormwater infrastructure, trunk service connections, utility infrastructure.
- Boundary stormwater management, fencing and landscaping.
- Construction and dedication of internal road network to Penrith City Council (**PCC**).
- Construction of a Temporary Access Road from Mamre Road to remain in GPT ownership.

- Stage 1 on-lot works including:
  - Warehouse 1 (Lot 2A)
    - Detailed on-lot earthworks to refine final levels and establish final building pads;
    - On-lot stormwater and utility infrastructure and services connection;
    - Construction of warehouse building as shown on the Stage 1 Architectural Plans;
    - Fit out of buildings as shown on Stage 1 Architectural Plans, including standard racking and office fit out; and
    - Landscaping of development sites in accordance with Stage 1 Landscape Plans.
  - Warehouse 3 (Lot 1)
    - Detailed on-lot earthworks to refine final levels and establish final building pads;
    - On-lot stormwater and utility infrastructure and services connection;
    - Construction of warehouse building as shown on the Stage 1 Architectural Plans;
    - Fit out of buildings as shown on Stage 1 Architectural Plans, including standard racking and office fit out;
    - Landscaping of development sites in accordance with Stage 1 Landscape Plans; and
    - Reconstruction of environmental corridor in accordance with the Vegetation Management Plan (**VMP**) (**Appendix T**).
  - Building works including:
    - Construction and fit out of two warehouse and distribution buildings in Stage 1 on Lots 1 and 2A which will operate 24 hours/day, seven days/week.
  - Subdivision of Stage 1.
  - Signage.

3.2.5.1. Estate Works

The extent of the proposed Stage 1 development estate works is shown in **Figure 20** and details are provided in the drawings included at **Appendix G**. A summary of key elements of the proposed Stage 1 estate work is provided in **Table 14**.

Table 14 Stage 1 Estate Works Key Elements

Key Element	**Summary**
Pre-commencement	Remediation works in accordance with the Remediation Action Plan and Heritage Salvage works
Site Preparation	Clearing and grubbing – including slashing, removal of existing trees and vegetation in Concept Masterplan 'developable area' and removal of grass and roots within the top layer of topsoil.
Earthworks	Importation of fill required to achieve site levels. Bulk earthworks across the site, including cut and fill, road grading, benching and stabilisation (batters and/or retaining walls).
Road Infrastructure	Staged construction of internal estate road network and Temporary Access Road in accordance with the Draft MRP DCP.
Stormwater Infrastructure	Staged construction of stormwater infrastructure and bio-retention basins across the site.
Utilities and Services	Construction of lead in services to provide water, sewer, gas, electricity and telecommunication services to the site.
Environmental Protection / Management Works	Installation and maintenance of erosion and sediment control measures, water quality management measures and land stabilisation works across the site. Realignment of environmental corridor in the with restoration of vegetation.

The following sections describe the proposed Stage 1 Development Estate Works in further detail.

Figure 20 Stage 1 Estate Works

Source: SBA

3.2.5.2. Estate Wide Earthworks

The cut and fill requirements within the YLE have been defined by multiple iterations and with careful consideration to the following:

- Undulating topography within the Mamre Road Precinct resulting in the requirement for cut and fill operations in order for the YLE to provide large flat building pads and facilitate site access from Mamre road and proposed estate roads.
- TfNSW proposal for a potential integrated freight network within Mamre Road Precinct therefore driving the requirement to ensure that allotments can facilitate flexibility to cater for current and future connectivity requirements.
- Provisioning for connectivity to adjoining lands and managing existing upstream catchment flows, and to drain the site stormwater via gravity and to keep building levels above the 1 in 100-year flood level with a minimum freeboard of 500m.
- Consideration to the anticipated development levels on the adjacent sites to the south and west, contemplated by Mirvac and 772 Mamre Road, through consultation with the respective developers.
- Mitigating retaining walls fronting Mamre Road and internal public road reservices, stepping retaining walls where possible.
- Mitigating extensive cut in bedrock sub-surface units.
- Implementing circular economy principles of ‘Reduce, Reuse and Recycle’ throughout all lifecycle stages of the development.

It is recommended that the proposed earthworks design contained within the Costin Roe documentation provides the most contextually and economically appropriate design in consideration of the above requirements.

Bulk Earthworks and Benching Levels

The development and proposed benching levels respond to the topography by providing development pads which step from progressively from the existing high point on the east of the development site, to the lowest part of the site on the west adjacent to Mamre Road.

Due to the level differences across the site of approximately 44m and proposed large format industrial warehouses (as zoned), level changes and retaining structures will be required to facilitate large flat building pads and benching suitable for logistics and distribution.

High level earthworks and volume estimates have been completed and are based on a lot layout with flat building pads. The earthworks analysis has been completed to a level of detail to enable general pad levels to be set and to obtain an order of magnitude cut and fill volume estimate. The primary drivers for the proposed earthworks levels are access and draining the site via gravity. This results in large amounts of fill import being required for the site. The adopted civil design for the YLE is detailed in drawings at **Appendix K** and described in the following sections.

The earthwork volume estimates are provided in **Table 15** follows:

Table 15 Earthwork Volume Estimates

Item	**Apparent Volume (m^3)**
Cut	- 447,800
Fill	+ 539,200
Topsoil Strip	- 66,200
Detailed Excavation	- 66,200
Balance	**+ 25,200 Fill Over Cut**

Retaining Walls

A key objective of the YLE design is to minimise retaining walls within the constraints of the masterplan layout, levelling of the site to suit large format industrial buildings, allowable grading to suit industrial use external to the building footprint and batters in landscaped areas where possible. Whilst retaining walls fronting Mamre Road have been minimised, retaining walls will be required throughout the estate at site boundaries and between development lots.

Retaining wall alignments, setbacks and tiering have been designed in accordance with the Draft MRP DCP and include 1.5m tiers for walls greater than 3m fronting public domain and 2m setbacks from public domain. Shallow soil planting is provided between successive tiers of walls to ensure landscaping outcomes are achieved without affecting the structural stability of retaining wall structures.

Level differences along the property frontage and realigned environmental corridor comprise a stepped arrangement.

The location and indicative heights of retaining walls are provided in the Civil Drawings at **Appendix K**.

3.2.5.3. Road Infrastructure

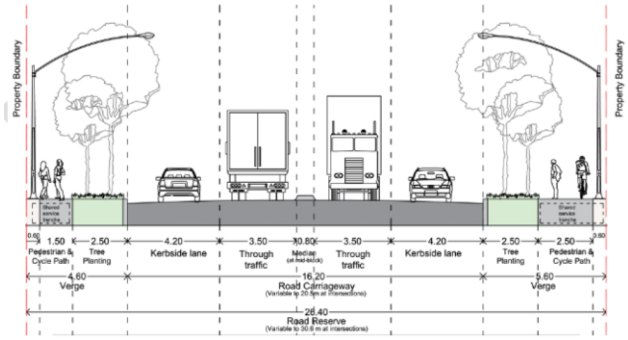
The YLE internal road network will integrate with the broader transport strategy for the MRP, including the Mamre Road upgrade and Draft MRP DCP. The proposed road alignments will incorporate best practice for both vertical and horizontal alignments with consideration of the existing landform.

The proposed estate road cross sections are detailed in **Table 16** below.

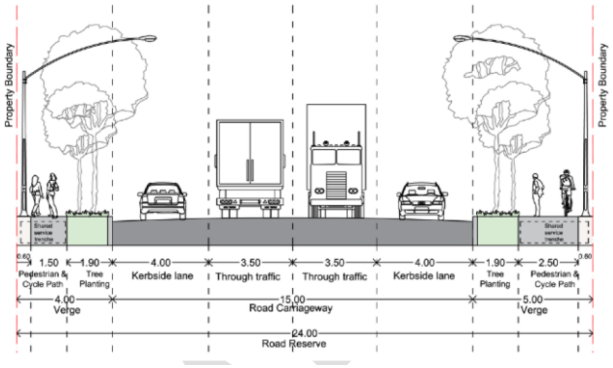
Table 16 Proposed Estate Road Cross Sections

Road Type and Traffic Volume	Parking Lane Provision	Dedicated Travel Lanes	Verge Width (Footpath Pedestrian)	Total Road Reserve	Number of Lanes	1.5m Footpath or 2.5m Shared Path
Access Road (North-Collector Link Road)	8.4m (2 x 4.2m)	7.0m (2 x 3.5m) + 0.8m Median	5.6m & 4.6m	26.4m	2 trave l/ 2 parking lane	2.5m & 1.5m
Local Industrial Road	8.0m (2 x 4.0m)	7.0m (2 x 3.5m)	5.0m & 4.0m	24.0m	2 travel / 2 parking lane	2.5m & 1.5m

Figure 21 Adopted Estate Road Cross Sections



Picture 18 Distributer Road Cross Section (North South Link Road)



Picture 19 Local Industrial Road Cross Section (Temporary Access Road and Access Road)

Source: Draft MRP DCP (DPIE)

The current posted speed limit for Mamre Road is 80kM/hr. Surrounding road networks are expected to be posted at 50kM/hr. The corresponding design speeds for the two roads in the YLE are 50kM/hr. A new unsignalised intersection is proposed for access into the development site as part of this submission.

North-South Collector Road

The proposed North-South Collector Road provides essential access to Warehouse 1 and 3. GPT will construct the northern extent of the road which is located wholly within the subject site. Agreements are currently underway for the southern extent of the road, of which half is located within the subject site, and the other half falls within the Mirvac development site.

GPT and Mirvac will coordinate the design and delivery of the road in line with the Draft MRP DCP, Control 2, (clause 3.2.1) *"provide access to adjoining properties and not limit development on adjoining properties, including demonstration of impact on the development of adjoining lot"*.

It is anticipated that this road will be constructed as part of the Stage 1 works for GPT to ensure the timely delivery of this essential infrastructure.

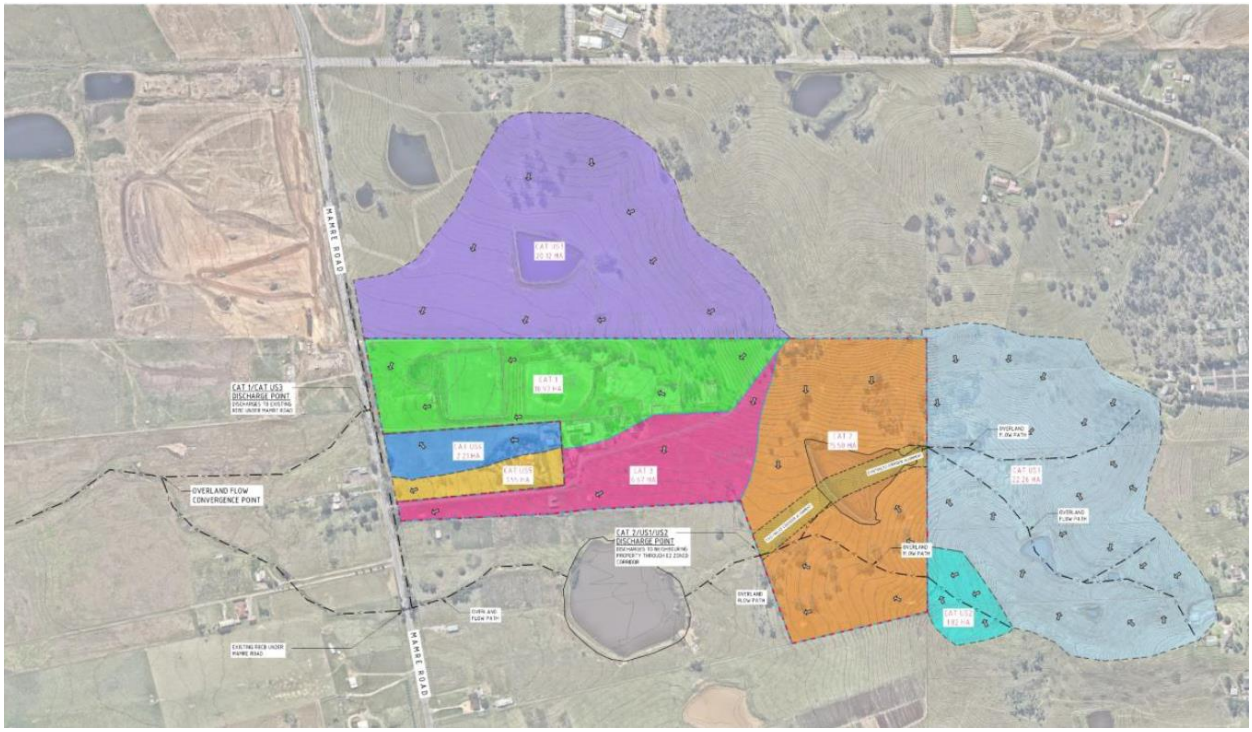
3.2.5.4. Stormwater Infrastructure

The site currently presents as undeveloped rural land with undulating topography. There is no formal drainage currently on the site, however, several local depressions, natural gullies and farm dams are present. There are also several dams which are used for farming operations on the land which lie in relation to the natural gullies.

The site is affected by overland flow from minor upstream catchments to the east of the stie. A catchment of approximately 24ha is conveyed through the site via existing farm dams to Mamre Road. A smaller catchment currently drains through the site from the north.

Existing culverts are located at the low point on Mamre Road and currently drain runoff from the property west toward South Creek through existing gully within rural properties on the western side of Mamre Road as shown in **Figure 22**.

Figure 22 Existing Site Catchments and External Contributing Catchments



Source: Costin Roe

The proposed stormwater drainage system for the estate development will comprise a minor and major system to convey collected stormwater run-off safely and efficiently from the development to the legal point of discharge which are as follows:

- Discharge points for the western portions of the site is via the existing culverts on Mamre Road.
- Discharge points for the eastern portion of the site is via the existing gully and farm dam in the Stage 1 condition. The final drainage discharge will be via the precinct road drainage which will require coordination with adjoining landowners south of the site.

The minor system will consist of a piped drainage system 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 has been designed to cater for storms up to and including the 1 in 100-year ARI storm event (Q100). This major system employs overland flow paths to safely convey excess runoff from the site.

All stormwater on lots and within road reserves for the entire site is proposed to be collected via pits and pipes and connect into one of the three On-Site Detention basin (**OSD**). The OSD basins will help limit post development runoff to pre-development runoff levels whilst the bio-retention system will complete final stormwater polishing. This is in accordance with the PCC Engineering guidelines. Detailed specifications are provided in the Civil drawings at **Appendix K**.

3.2.5.5. Utilities and Services

The servicing of lands within the WSEA has been the subject of extensive planning and consultation with relevant utility providers since 2008. As a result, the works required to service these lands have been considered in the development of forward work programs for State and local authorities and providers including Sydney Water, Endeavour Energy, Transport for New South Wales, Jemena, NBN/Telstra, and Penrith City Council.

Infrastructure and servicing requirements for the YLE are well understood, with infrastructure and services to be provided through connections from either existing infrastructure within Mamre Road to service Stage 1 of the YLE or connections to planned infrastructure upgrades as part of utility Authority servicing plans for the wider WSEA and Aerotropolis.

The delivery of essential infrastructure and services would form part of the proposed Stage 1 development and is described in **Table 17**.

Table 17 Utility Infrastructure Requirements

Utility	**Existing Services**	**Proposed YLE Services**
Potable Water	▪ 100mm diameter DICL potable watermain directly adjacent to the site frontage. ▪ 150mm/200mm watermain on the opposite side of Mamre Road along the site frontage.	▪ Connection to the 100mmm water main which will be relocated and upsized to a 150mm water main within the area of the site subject to the Mamre Road widening.
Non-Potable Water	▪ None	▪ Connection to Sydney Water non-potable network subject to Sydney Water advice
Sewer	▪ None	Various sewer connection options are available and based on Sydney Water advice. An interim procedure and ultimate solution are proposed as follows: ▪ Interim procedure: Sydney Water proposed an Interim Operating Procedure (**IOP**) which involves a wet well and tinkering procedure to be operational for a limited timeframe, expected to be between the end of 2021 to early/mid 2023. The wet well is proposed to be located within the north west corner of the southern site, with frontage to Mamre Road. Sydney Water's concept is provided in **Appendix X**. A gravity reticulation system (225mm reticulation main) will be required to service the site. ▪ Ultimate solution: The ultimate solution will occur across two phases. ▪ Phase 1: Sydney Water to decommission the IOP wet well in 2023 and a permanent Sewer Pump Station (**SPS**) will be established to collect waste water from the northern catchment of the MRP. By 2024, waste water will be collected from the southern catchment area. ▪ Phase 2: Discharge from the SPS will be re-directed to a new Upper South Creek treatment

Utility	Existing Services	Proposed YLE Services
		facility which will be constructed and operational by 2025-2026.
Electrical	▪ Existing overhead electrical supply and zone substation at Kemps Creek and Mamre Road.	▪ Endeavour Energy has advised the following indicative servicing strategy for Mamre Road Precinct: ▪ 22kV feeder at the front of the site from the new South Erskine Park Zone Substation currently under construction and due to be commissioned by Q3 2022. ▪ Temporary connection arrangements may be provided from the existing network along Mamre Road from the Mamre Zone Substation depending on feeder loads at the time.
Gas	▪ None.	▪ Currently being investigated subject to occupant demand.
Telecommunications	▪ Existing telecommunication network in Mamre Road.	▪ Connection to the existing telecommunications network.

3.2.5.6. Environmental Protection and Management Work

Environmental protection and management measures will be adopted as part of the estate wide civil works including an Erosion and Sediment Control Plan (**ESCP**), water quality management measures and land stabilisation works which are discussed in Section 6 of this EIS. The following section discusses the proposed creek realignment and construction.

Creek Realignment and Construction

An E2 Environmental Conservation zone bisects the eastern portion of the site, consistent with an existing 2nd order watercourse (see existing corridor and proposed realignment in **Figure 23** below). The existing watercourse is located within land currently used for rural purposes and is clear of trees, with several farm dams and little to no ecological value.

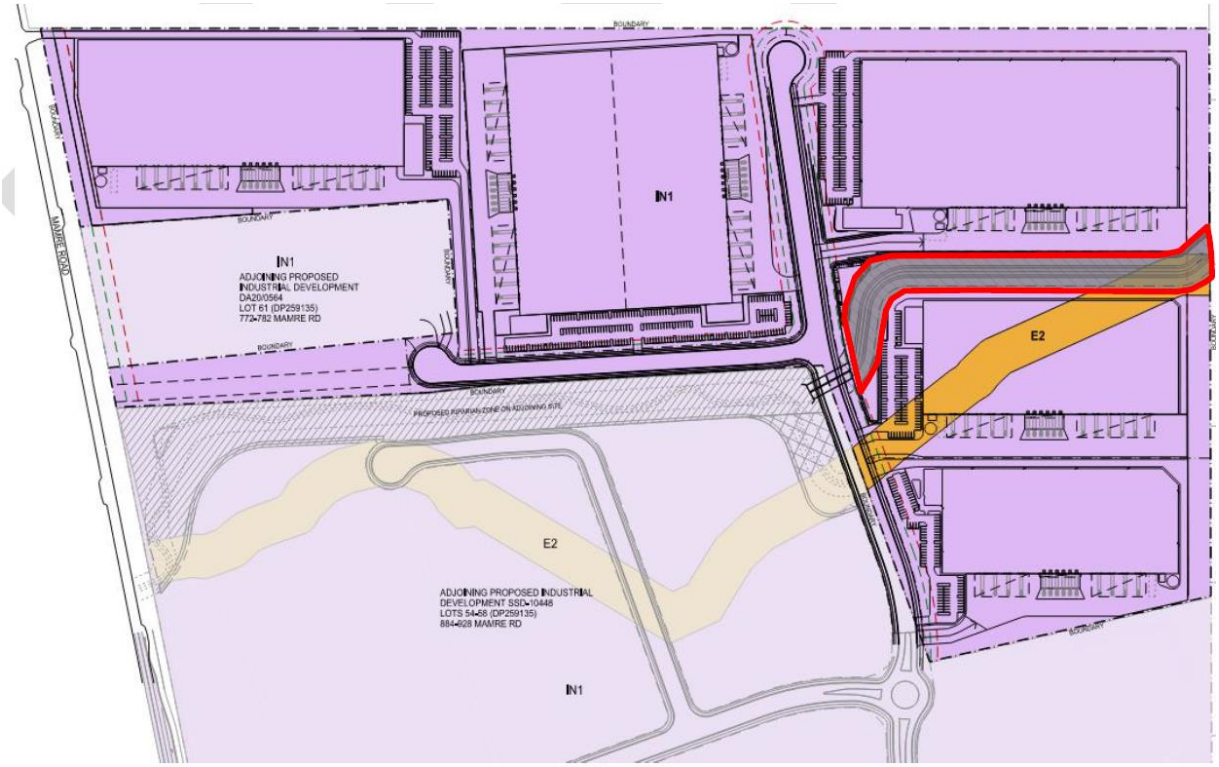
Civil works across the site will construct a new creekline that runs east-west between warehouse 2 and 3 within Lot 1. The realigned corridor will connect with the proposed realigned creek in the west that forms part of SSD-10448. An overall 25m E2 Environmental Conservation zone with a 35m corridor is proposed and comprises:

- 5m wide channel, with a 3.8m base and natural rock line channel banks.
- 10m core riparian zone (**CRZ**) that consists of a battered vegetated slope.

The above channel widths have been designed with respect to NRAR's advice and the stream's identification, being a 2nd order course and non 'waterfront land'. Further discussion regarding the corridor's condition and proposed enhanced environmental outcome is provided at Section 6.1.7.

The proposed channel concept and a typical cross section is shown in **Figure 25** and is contained within the Civil Drawings at **Appendix K**.

Figure 23 Existing E2 Environment Conservation Zone and Proposed Realignment

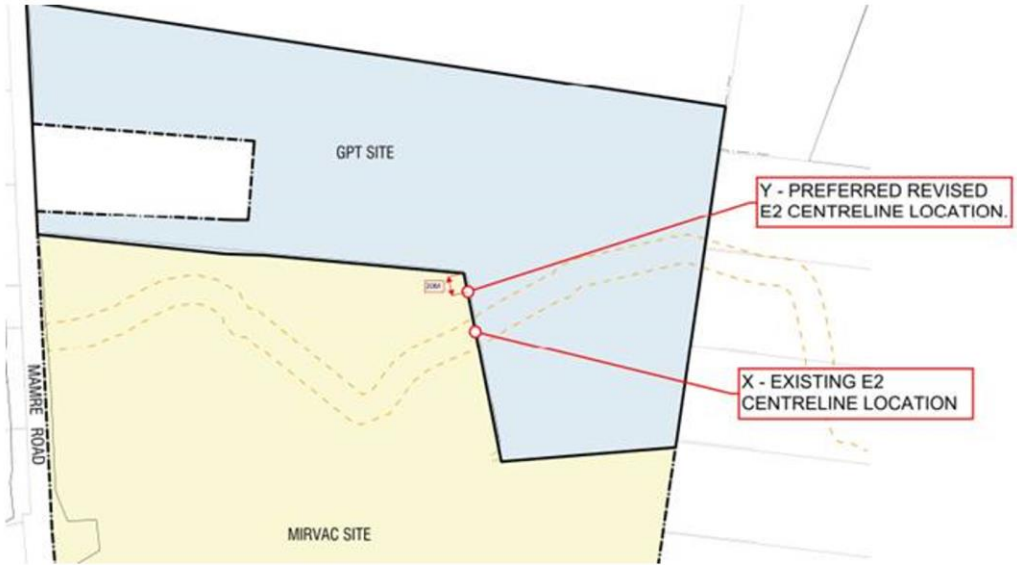


Source: Costin Roe

Environmental Corridor

A new environmental corridor with a total width of 35m containing a 25m E2 Environmental Conservation zone will be constructed. This corridor is designed to align with the proposed corridor under SSD-10448. GPT will work with the adjoining landowner to ensure that the identified centreline location for the corridor as indicated in **Figure 24** below is delivered, with landowners seeking approvals for the corridor realignment separately.

Figure 24 Realigned Environmental Corridor Centreline



Source: GPT

A new riparian area will be constructed comprising a channel that is approximately 5m wide, an inner vegetated Riparian Zone of approximately 10m width on either side, and an outer Vegetated Landscape Zone of approximately 5m width on either side.

The riparian zone will be demarcated with fencing – security fencing where adjoining lots and post and rail as a boundary marker style. A typical environmental corridor cross section is shown below.

Figure 25 Typical Environmental Corridor Cross Section

Source: Site Image

The following plant species are to be included in the riparian zone:

- Cabbage Gum *(Eucalyptus amplifolia)*
- Narrow-leaved Ironbark *(Eucalyptus crebra)*
- Thin-leaved Stringybark *(Eucalyptus eugenioides)*
- Grey Box *(Eucalyptus moluccana)*
- Forest Red Gum + *(Eucalyptus tereticornis)*
- Sydney Green Wattle *(Acacia decurrens)*
- *(Acacia falcata)*
- Hickory Wattle *(Acacia implexa)*
- Parramatta Wattle *(Acacia parramattensis)*
- Blackthorn *(Bursaria spinosa)*
- Gorse Bitter Pea *(Daviesia ulicifolia)*
- *(Dillwynia sieberi)*
- Wedge-leaf Hop-bush *(Dodonaea viscosa subsp. Cuneata)*
- Native Cherry *(Exocarpos cupressiformis)*
- Australian Indigo *(Indigofera australis)*
- Purple Wiregrass *(Aristida ramose)*
- Threeawn Speargrass *(Aristida vagans)*
- Red Grass *(Bothriochloa macra)*
- *(Carex inversa)*
- Windmill Grass *(Chloris truncate)*
- Shorthair Plumegrass *(Dichelachne micrantha)*
- Tufted Hedgehog Grass *(Echinopogon caespitosus var. caespitosus)*
- Forest Hedgehog Grass *(Echinopogon ovatus)*
- Bordered Panic *(Entolasia marginate)*
- Common Fringe-sedge *(Fimbristylis dichotoma)*
- Blady Grass *(Imperata cylindrica var. major)*
- Common Rush *(Juncus usitatus)*
- *(Lomandra filiformis)*
- *(Lomandra multiflora subsp. Multiflora)*
- Weeping Meadow Grass *(Microlaena stipoides var. stipoides)*
- *(Paspalidium distans)*
- Tussock Grass *(Poa labillardieri)*
- Whitetop *(Rytidosperma caespitosum)*

- Wallaby Grass *(Rytidosperma racemosa var. racemosum)*
- *(Rytidosperma tenuior)*
- Kangaroo Grass *(Themeda australis)*
- *(Asperula conferta)*
- Blue Trumpet *(Brunoniella australis)*
- Indian Pennywort *(Centella asiatica)*
- Poison Rock Fern *(Cheilanthes sieberi subsp. Sieberi)*
- Old Man's Beard *(Clematis glycinoides)*
- Creepinng Christian *(Commelina cyanea)*
- Slender Tick-trefoil *(Desmodium varians)*
- Blueberry Lily *(Dianella longifolia)*
- Kidney Weed *(Dichondra repens)*
- Native Geranium *(Geranium solanderi)*
- Twining Glycine *(Glycine clandestine)*
- Small-leaf Glycine *(Glycine microphylla)*
- *(Glycine tabacina)*
- Purple Coral Pea *(Hardenbergia violacea)*
- Cockspur Flower *(Plectranthus parviflorus)*
- *(Pultenaea microphylla)*
- Forest Nightshade *(Solanum prinophyllum)*
- *(Paspalidium distans)*
- Tussock Grass *(Poa labillardieri)*
- Whitetop *(Rytidosperma caespitosum)*

3.2.5.7. Landscaping

Estate wide landscaping is proposed as part of Stage 1 development and the extent of works is described in **Table 18** and detailed in drawings at **Appendix I**.

The staging of these works would align with the proposed construction staging for the Estate Works. On-lot landscaping would be completed as part of the staged development of each lot, with only the areas forming part of the Stage 1 development (shown in **Figure 26**) to be constructed initially.

Figure 26 Stage 1 Landscape Masterplan

Source: Site Image

Table 18 YLE Stage 1 Proposed Landscaping

Landscape Zones	Landscape Character
Streetscape Frontage	Street tree planting and ground covers to both sides of the road. Street frontages will consist of a variety of native ad exotic shrubs, ground covers, and small-medium trees. Security fencing will be position amongst the landscape to recede into the planting.
Mamre Road Frontage	A 20m building setback is established along the boundary of Mamre Road with a minimum 10m landscaping comprising trees to provide visual screening.
Estate Boundaries	Boundary treatments will feature planting of native shrub grass and groundcovers. In locations where there is a retaining wall below, cascading plants will be provided to break up the mass of the wall.
Bio Basins	The Stormwater basin will feature planting to compliment the water retention and treatment processes proposed as part of the WSUD strategy. A Grass-Cel maintenance pathway will provide access around the perimeter of the basin at the top of the embankment. Appropriate safety fencing shall be provided in accordance with the Fencing Strategy at **Appendix G**.
Riparian Zone	Refer to Section 3.2.5.6 for description.

The proposed species to be included in the above landscape zones is as follows:

- Streetscape Frontage:
  - Spotted Gum *(Corymbia maculate)*
  - Narrow Leaved Iron Bark *(Eucalyptus crebra)*
  - Lilly Pilly *(Acmena smithii var. minor)*
  - Bottlebrush *(Callistemon 'Endeavour')*
  - *(Loropetalum ' Purple Pixie')*
  - Coastal Roasemary *(Westringia fruticose)*
  - Pigface *(Carpobrotus glaucescens)*
  - Purple Coral Pea *(Hardenbergia violacea)*
  - Silver Gazania *(Gazania tomentosa)*
  - Creeping Boobialla *(Myoporum parvifolium)*
  - Star Jasmine *(Trachelospermum jasminoides)*
- Mamre Road Frontage:
  - Spotted Gum *(Corymbia maculate)*
  - Thin leaved stringybark *(Eucalyptus eugenioides)*
  - Prickly Leaved Paperbark *(Melaleuca styphelioides)*
  - Lilly Pilly *(Acmena smithii var. minor)*
  - Bottlebrush *(Callistemon 'Endeavour')*
  - Dwarf Bottle Brush *(Callistemon 'Little John')*
  - Wedge-leaf Hop-bush *(Dodonaea viscosa subsp. Cuneata)*
  - Honey Myrtle *(Melaleuca linariifolia 'Claret Tops')*
  - Bronze Flax *(Phormium tenax 'Purpureum')*
  - Coastal Roasemary *(Westringia fruticose)*
  - Pigface *(Carpobrotus glaucescens)*
  - Silver Gazania *(Gazania tomentosa)*
  - Purple Coral Pea *(Hardenbergia violacea)*
  - Matt Rush *(Lomandra longifolia)*
  - Creeping Boobialla *(Myoporum parvifolium)*
  - Tussock Grass *(Poa 'Kingsdale')*
  - Swamp Foxtail Grass *(Pennisetum 'Nafray')*
  - Star Jasmine *(Trachelospermum jasminoides)*
- Estate Boundary:
  - Spotted Gum *(Corymbia maculate)*
  - Narrow-leaved Ironbark *(Eucalyptus crebra)*
  - Thin-leaved Stringybark *(Eucalyptus eugenioides)*
  - Grey Box *(Eucalyptus moluccana)*
  - Lilly Pilly *(Acmena smithii var. minor)*
  - Bottlebrush *(Callistemon 'Endeavour')*
  - Wedge-leaf Hop-bush *(Dodonaea viscosa subsp. Cuneata)*
  - Pigface *(Carpobrotus glaucescens)*
  - *(Carex inversa)*
  - Purple Coral Pea *(Hardenbergia violacea)*
  - Silver Gazania *(Gazania tomentosa)*
  - Creeping Boobialla *(Myoporum parvifolium)*
  - Tussock Grass *(Poa 'Kingsdale')*
  - Swamp Foxtail Grass *(Pennisetum 'Nafray')*
- Bio Basin:
  - *(Carex inversa)*
  - Matt Rush *(Lomandra longifolia)*
  - Blady Grass *(Imperata cylindrica var. major)*
  - Common Rush *(Juncus usitatus)*
  - Tussock Grass *(Poa labillardieri)*
  - Kangaroo Grass *(Themeda australis)*

3.2.6. Subdivision

The subdivision of the YLE would be based around the following:

- 4 development lots to remain under the ownership of GPT (Lots 1 - 4); and
- One Road Lot incorporating internal access roads to be dedicated to Penrith City Council.

The proposed draft subdivision layout for the YLE is shown at **Figure 27** below.

It is noted that Lot 2 has been further split into Lot 2A and Lot 2B for the purpose of staging, whereby Warehouse 1 at Lot 2A will be constructed as part of the Stage 1 works.

The formal subdivision layout seeks to retain Lot 2A and Lot 2B as a single allotment (Lot 2).

Figure 27 Proposed Draft Plan of Subdivision

Source: SBA Architects

3.2.7. Proposed Warehouse Developments on Lot 1 and Lot 2

3.2.7.1. Overview

This SSDA seeks to undertake the construction and 24 hour/day, 7 days/week operation of Warehouse 1 and Warehouse 3 and associated on-lot works within Lots 1 and 2 as part of the Stage 1 Development. Lots 1 and 2 extend across the eastern part of the YLE. It is noted that Lot 1 also contains Warehouse 2 which will not be delivered as part of the Stage 1 works.

Both Warehouse 1 and 3 will accommodate a large format warehouse and distribution building, with an ancillary office, hardstand areas and car parking. Both Warehouses are accessed from the Access Road (North-South Collector Road).

The design of both lots aims to maximise flexibility in site layout and building floor plates to accommodate a range of potential end users. The proposal on both lots includes:

- Detailed on-lot earthworks to refine final levels and establish final building pads;
- On-lot stormwater and utility infrastructure and service connection;
- Construction of warehouse buildings 1 and 3 on the two development lots in the configuration shown on the Architectural Plans at Appendix G;

- Construction of ancillary offices;
- Construction of site access, hardstand, car parking and loading areas;
- Landscaping of development sites in accordance with landscape plans for stage 1.

Figure 28 Perspectives of Warehouse 1 and 3

Picture 20 Warehouse 1

Picture 21 Warehouse 3

Source: SBA Architects

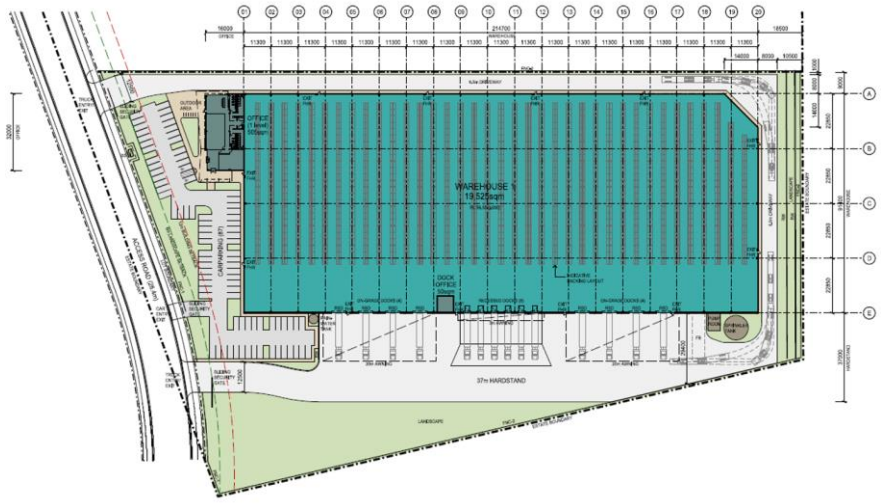
3.2.7.2. Warehouse 1 Development

The SSDA includes the construction and 24 hour/day, 7days/week operation of the warehouse building and ancillary office. Associated on-lot works on Lot 2 form part of the Stage 1 development. Warehouse 1 is located in the most south-east part of the YLE, representing the gateway to the estate.

Access to Warehouse 1 is from the Access Road (North-South Collector Road) with separate access points for the hardstand area and car park. The design of the warehouse aims to promote flexibility by providing a large building floor plate to accommodate a range of potential end users. The proposed works associated with the construction of Warehouse 1 includes the following;

- Detailed on-lot earthworks to refine levels and establish building pads;
- On-lot stormwater and utility infrastructure and services connections;
- Construction and 24 hour/day, 7 day/week operation of the single warehouse building and ancillary one-storey office;
- Landscaping to the development site in accordance with the Stage 1 Landscape Plans.

Figure 29 Proposed Warehouse 1



Source: SBA Architects

Development Site

The total warehouse floorplate is 19,525m^2 (including the dock office) with an additional 505m^2 allocated to ancillary office. The floorplate seeks to enable flexibility in the ultimate configuration of space. The warehouse building is serviced by a central hardstand area for loading and manoeuvring, carparking and landscaped perimeters.

Building heights respond to the needs of modern warehousing operations in terms of clearance with a maximum height of 14.6m from RL. The building is designed to address future street frontages with the office area, break out spaces and primary entrance oriented toward the future access road.

A summary of Warehouse 1 is provided in **Table 19** with detailed plans provided in the Stage 1 Architectural Drawings at **Appendix G**.

Table 19 Summary of Proposed YLE Warehouse 1 Development

Warehouse 1 Element	**Amount**
Site Area	40,009m^2
Warehouse (incl. dock office)	19,525m^2
Office	505m^2
Total Building Area	20,030m^2
Site Coverage	50%
Car Parking	87 spaces
Hardstand	9,702m^2
Light Duty Pavement	2,355m^2

Materials and Finishes

Building materials have been carefully considered to deliver a corporate-grade warehouse development and present aesthetically to street frontages and neighbouring properties.

SBA Architects have prepared elevations that reflect the conceptual design of the future Warehouse 1 and office (refer **Appendix G**). The proposed materials and finishes are detailed in **Table 20** and shown **in Figure 30** below.

Table 20 Materials and Finishes - Warehouse 1 and 3 and Ancillary Offices

Component	**Material**
Warehouse 1 and 3 Facade	▪ Profiled metal wall cladding ▪ Precast concrete panel ▪ Aluminium framed glazing system ▪ Metal roof sheeting ▪ Translucent roof sheeting ▪ Colorbond eave gutter, downpipes and roller shutter doors ▪ Barge capping in powdercoat finish

Component	Material
Ancillary Offices	▪ Precast concrete panel ▪ Aluminium framed glazing system ▪ Glazing ▪ Barge capping in powdercoat finish ▪ Compressed fibre cement cemintel ▪ Aluminium blades ▪ Feature screen ▪ Steel columns

Ancillary Office Building

The proposed ancillary single-storey office is sited at the north-west corner of the development site, adjoining Warehouse 1. The ancillary office incorporates a lobby, open office area, lunchroom and female and male wash closets.

Glazed and translucent materiality has been incorporated where possible to create an attractive entry point with a feature screen comprising geometric aluminium mesh panels to further articulate this entry point.

Figure 30 Warehouse 1 Office Perspectives

Picture 22 Western View of Warehouse 1 Office

Picture 23 South-western View of Warehouse 1 Office

Source: SBA Architects

Access and Loading

Separate access points are provided for heavy and light vehicles, and cars. The heavy and light vehicle entry/exit is provided from the Access Road with direct entry to the hardstand loading dock. The car park entry is located further north from the Access Road with a direct connection to the warehouse office. Both entry points consist of a sliding security gate.

All access points and internal driveways, service and circulation areas are designed to be compliant with AS 2890.1 and 2890.2 and accommodate the turning paths of B-Double vehicles (the largest proposed vehicle to access YLE) in accordance with Australian Standards. Access and loading arrangements are outlined below.

- Service and loading access from the Access Road;
- Separate car parking access from the Access Road;
- Internal hardstand designed for two-way circulation with ingress and egress available via the same access point;
- Six recessed and eight on-grade loading docks.

The Fire Brigade access driveway is provided around the northern and eastern perimeters of the Warehouse building 1.

Car Parking

Parking rates for the proposed Warehouse 1 are provided in accordance with the Draft MRP DCP provisions, outlined in **Table 21** below.

Table 21 Warehouse 1 Car Parking Provision

Land use	**GFA (m^2)**	**Required provision (per Draft MRP DCP)**	**Proposed provision**
Warehouse	19,525	65	87 spaces
Office	505	13	
Total	**20,030**	**78**	

Two percent of on-site parking spaces would be provided as accessible parking spaces, designed in accordance with AS 2890 Part 6: Off-street parking for people with disabilities.

Landscaping

The lot frontage presents to the main YLE Access Road (North-South Collector Road). Planting to the frontage will consist of a variety of native and exotic shrubs, groundcovers, and small-medium trees. Security fencing is to be positioned amongst the landscape to receded into the planting.

Boundary treatments will feature planting of native shrub grass and groundcovers. For a list of species to be including in the lot frontages and boundaries, refer to Section 3.2.5.7 above.

Landscaping proposed as part of the Warehouse 1 development lot includes on-lot landscaping as described in plans at **Appendix I**. **Figure 31** illustrates the proposed planting types for streetscape frontages and lot boundaries.

Figure 31 Proposed Planting Types – Streetscape Frontages and Lot Boundaries

Picture 24 Streetscape Frontage Planting

Picture 25 Boundary Planting

Source: Site Image

Services and Utilities

Utility connections will be made to the lot from the estate utility service connections in the road reserve. Electricity feeder connections may be required to the existing Mamre or Kemps Creek zone substation subject to future occupant capacity requirements.

Stormwater will be piped from the roof and hardstand into the Estate stormwater system and discharged into the on-site detention basins sited between Lots 1 and 2.

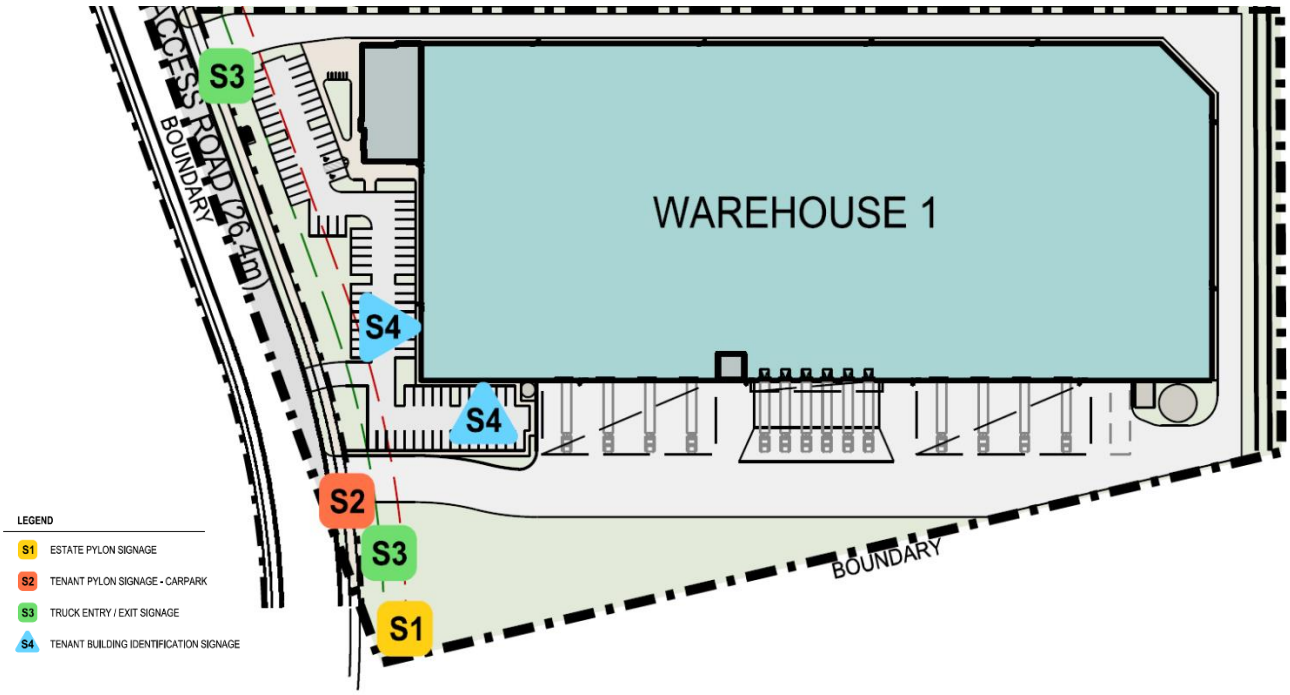
Signage

Site signage will be provided in accordance with the estate-wide signage strategy at **Appendix G**.

Signage locations are shown on the Warehouse 1 elevation plans at **Appendix G** and **Figure 32**. Signage is proposed as follows:

- One tenant building identification sign on the western elevation;
- One tenant building identification sign on the northern elevation;
- One estate pylon sign at the south-west corner of the development lot;
- One tenant pylon sign at the loading dock entry; and
- One truck entry/exit sign located at the loading dock entry and Fire Brigade access driveway.

Figure 32 Warehouse 1 Signage Strategy



Source: SBA Architects

Use

It is proposed that Warehouse 1 be used as either 'other manufacturing industries' or 'warehouse and/or distribution centres' as defined under the WSEA SEPP, including ancillary office space with operations 24 hours a day, seven days a week.

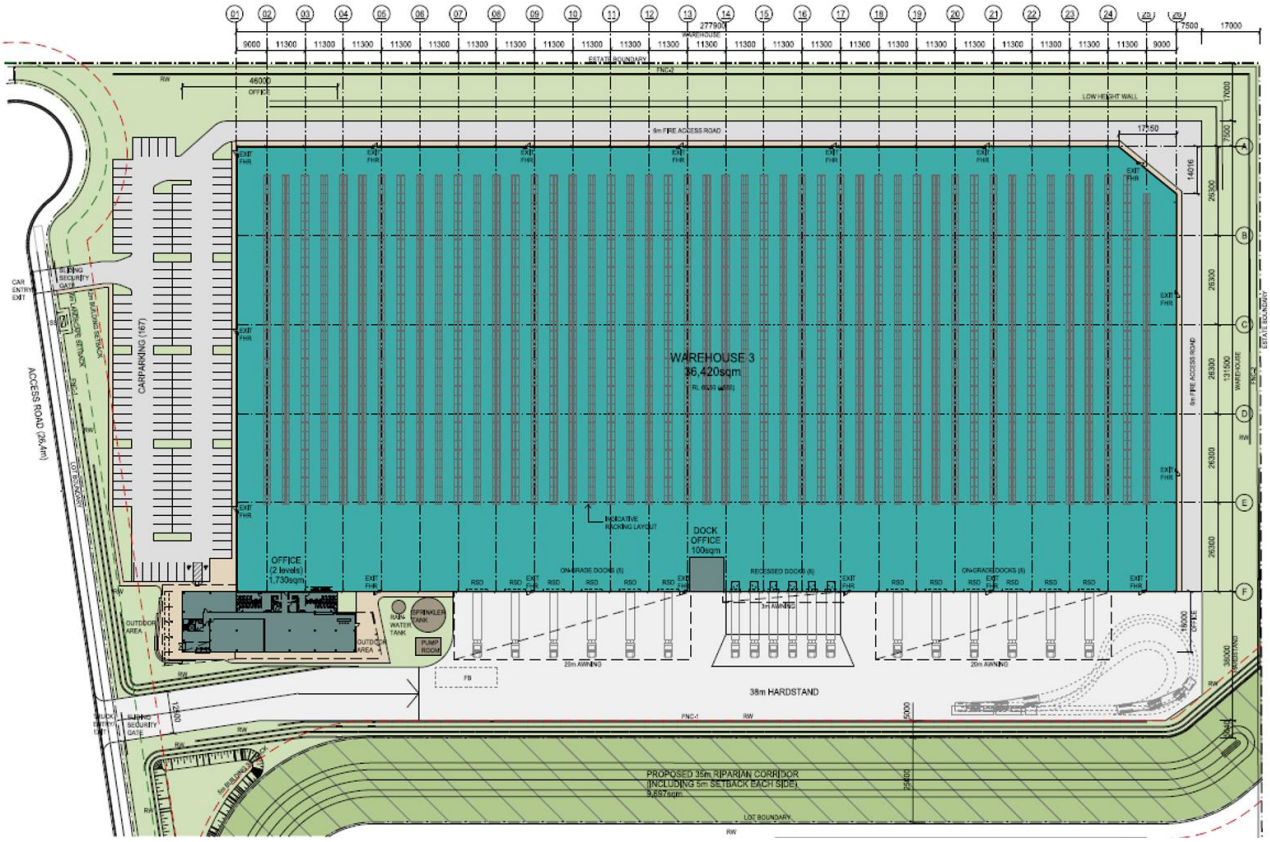
3.2.7.3. Warehouse 3 Development

The SSDA includes the construction and 24 hour/day, 7days/week operation of the warehouse building and an ancillary two-storey office. Associated on-lot works on Lot 1 form part of the Stage 1 development. Warehouse 3 is located in the most north-east part of the YLE.

Access to Warehouse 3 is from the Access Road (North-South Collector Road) with separate access points for the hardstand area and car park. The design of the warehouse aims to promote flexibility by providing a large building floor plate to accommodate a range of potential end users. The proposed works associated with the construction of Warehouse 3 includes the following;

- Detailed on-lot earthworks to refine levels and establish building pads;
- On-lot stormwater and utility infrastructure and services connections;
- Construction and 24 hour/day, 7 day/week operation of the single warehouse building and ancillary two-storey office;
- Construction of a 35m environmental corridor comprising a 25m E2 Environmental Conservation zone;
- Construction of a bio-retention basin; and
- Landscaping to the development site in accordance with the Stage 1 Landscape Plans.

Figure 33 Proposed Warehouse 3 Development



Source: SBA Architects

Development Site

The total warehouse floorplate is 36,420m^2 (including the dock office) with an additional 1,730m^2 allocated to ancillary office across two levels. The floorplate seeks to enable flexibility in the ultimate configuration of space. The warehouse building is serviced by a central hardstand area for loading and manoeuvring, carparking and landscaped perimeters.

Building heights respond to the needs of modern warehousing operations in terms of clearance with a maximum height of 14.6m from RL. The building is designed to address future street frontages with the office area, break out spaces and primary entrance oriented toward the future access road.

A summary of Warehouse 3 is provided in **Table 22** with detailed plans provided in the Stage 1 Architectural Drawings at **Appendix G**.

Table 22 Summary of Proposed YLE Warehouse 3 Development

Warehouse 1 Element	**Amount**
Site Area	80,979m^2
Warehouse (incl. dock office)	36,420m^2
Office	1,730m^2 across two levels: – Ground floor: 885m^2 – Level 1: 845m^2
Total Building Area	38,150m^2
Site Coverage	47%

Warehouse 1 Element	Amount
Car Parking	167 spaces
Hardstand	9,865m^2
Light Duty Pavement	6,945m^2

Materials and Finishes

Building materials have been carefully considered to deliver a corporate-grade warehouse development and present aesthetically to street frontages and neighbouring properties.

SBA Architects have prepared elevations that reflect the conceptual design of the future Warehouse 3 and two-storey office (refer **Appendix G**). The proposed materials and finishes are detailed in **Table 20** and shown in **Appendix G**.

Ancillary Office Building

The proposed ancillary two-storey office is sited at the south-west corner of the development site, north of the environmental corridor. The ancillary office incorporates a lobby, open office area, lunchroom and female and male wash closets on the ground floor and a separate office space, kitchenette and restrooms on the second level.

Glazed and translucent materiality has been incorporated where possible to soften the scale of this focal point which stands at a higher gradient than the adjoining access road and riparian corridor. Feature screens comprising geometric aluminium mesh panels provide distinguish the office from the adjoining warehouse building for easy wayfinding.

Access and Loading

Lot 1 provides separate access for heavy and light vehicles with car parking also separated from loading docks and manoeuvring areas for each warehouse. All access points and internal driveways, service and circulation areas are designed to be compliant with AS 2890.1 and 2890.2 and accommodate the turning paths of B-Double vehicles (the largest proposed vehicle to access YLE). Access and loading arrangements are outlined below.

- Service and loading access from the Access Road;
- Separate car parking access from the Access Road;
- Internal hardstand designed for two-way circulation with ingress and egress available via the same access point;
- Six recessed and eleven on-grade loading docks.

The Fire Brigade access driveway is provided around the northern and eastern perimeters of the Warehouse building 3.

Car Parking

Parking rates for the proposed Warehouse 3 are provided in accordance with the Draft MRP DCP provisions, outlined in **Table 23** below.

Table 23 Warehouse 3 Car Parking Provision

Land use	GFA (m^2)	Required provision (per Draft MRP DCP)	Proposed provision
Warehouse	36,420	121	**167 spaces**
Office	1,730	43	
Total	**38,150**	**165**	

Two percent of on-site parking spaces would be provided as accessible parking spaces, designed in accordance with AS 2890 Part 6: Off-street parking for people with disabilities.

Landscaping

Landscaping proposed to Lot 1 is indicated in plans at **Appendix I** and **Figure 31** above.

The lot frontage presents to the main YLE Access Road (North-South Collector Road). Planting to the frontage will consist of a variety of native and exotic shrubs, groundcovers, and small-medium trees. Security fencing is to be positioned amongst the landscape to receded into the planting.

Boundary treatments will feature planting of native shrub grass and groundcovers. For a list of species to be including in the lot frontages and boundaries, refer to Section 3.2.5.7 above.

A new environmental corridor is proposed to be constructed within Lot 1 and will comprise a rich planting scheme within the two 5m landscape setbacks proposed on either side of the new 2nd order stream. Refer to Section 3.2.3.3 for details of the proposed plant species.

A 650m^2 bioretention basin is proposed within Lot 1 north of the environmental corridor and is proposed to be landscaped with feature planting to compliment the water retention and stormwater treatment processes established by for the site. A Grass-Cel maintenance pathway will provide access around the perimeter of the basin at the top of the embankment. Appropriate safety fencing shall be included where necessary. The proposed planting scheme for both the environmental corridor and bioretention basin is shown in **Figure 34** below.

Figure 34 Proposed Planting Types – Environmental Corridor and Bioretention Basin

Picture 26 Environmental Corridor Indicative Species

Picture 27 Bioretention Basin Indicative Species

Source: Site Image

Services and Utilities

Utility connections will be made to the lot from the estate utility service connections in the road reserve. Electricity feeder connections may be required to the existing Mamre or Kemps Creek zone substation subject to future occupant capacity requirements.

Stormwater will be piped from the roof and hardstand into the Estate stormwater system and discharged into the on-site detention basins at the south-west corner of Lot 1.

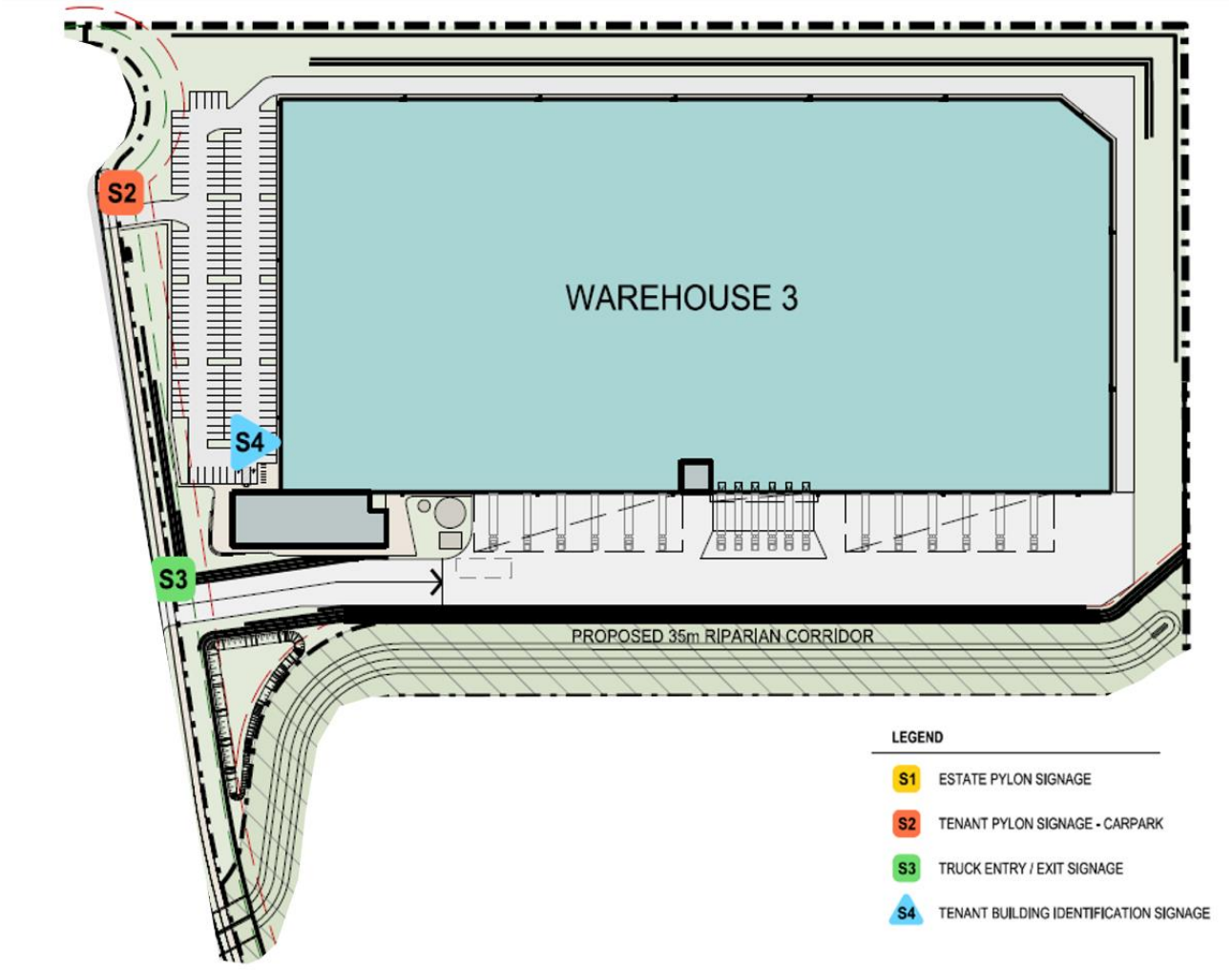
Signage

Site signage will be provided in accordance with the estate-wide signage strategy at **Appendix G**.

Signage locations are shown on the Warehouse 3 elevation plans at **Appendix G** and **Figure 35**. Signage is proposed as follows:

- One tenant building identification signs on the western elevation
- One tenant pylon sign at the carpark entry; and
- One truck entry/exit sign located at the loading dock entry.

Figure 35 Warehouse 3 Signage Strategy



Source: SBA Architects

Use

It is proposed that Warehouse 1 be used as either ‘other manufacturing industries’ or ‘warehouse and/or distribution centres’ as defined under the WSEA SEPP, including ancillary office space with operations 24 hours a day, seven days a week.

4. STATUTORY CONTEXT

This section of the report provides an overview of the key statutory requirements relevant to the site and the project. It identifies the key statutory matters which are addressed in detail within the EIS, including the power to grant consent, permissibility, other approvals, pre-conditions and mandatory considerations.

4.1. STATUTORY OVERVIEW

An overview of the relevant statutory planning requirements is outlined in **Table 24** and discussed in the following subsections.

Table 24 Statutory Requirements

Category	Action
Power to grant approval	The EP&A Act establishes the framework for the assessment and approval of development and activities in NSW. The EP&A Act also facilities the making of environmental planning instruments which guide the way in which development should occur across the State, this is inclusive of State environmental planning policies and local environmental plans. Section 4.36 of the EP&A Act provides for a process where development can be declared SSD either by a SEPP or Ministerial order published in the Government Gazette. Section 4.37 of the EP&A Act provides that the Minister is the consent authority for SSD. Part 4, Division 4.7 of the EP&A Act sets out the provisions which apply to the assessment and determination of development applications for SSD. The proposal is subject to section 4.38 Consent for State Significant Development.
Permissibility	The site is zoned IN1 General Industrial in the WSEA SEPP and industrial uses and warehouse or distribution centres are be permitted with consent. The WSEA SEPP zoning maps identify a portion of E2 Environmental Conservation land that transverses the eastern part of the subject site. Clause 4.38(3) of the EP&A Act allows for development consent to be granted despite the development being a partly prohibited by an Environmental Planning Instrument (**EPI**). Clause 33A *Development near zone boundaries* which allows a 20-metre flexibility for land zoned adjacent to E2 Environmental Conservation zone, was specifically included in the Mamre Road rezoning package to provide flexibility in the location of the E2 zone across the precinct. It is GPT's intention to: ▪ Rely on clause 4.38(3) of the EP&A Act to seek consent for industrial purposes across the majority of the E2 Environmental Conservation zoned land on its site, being a corridor 40m wide running east-west. ▪ Rely on Clause 33A of the WSEA SEPP to allow for the removal of the 40m E2 Environmental Conservation zone (i.e. applying the 20m distance from both the eastern and western sides of the E2 Environmental Conservation zone), and simultaneously;

Category	Action
	▪ Seek consent to construct a new, realigned, corridor connecting the 'ground-truthed' 25m wide ecological corridor which will connect with the wider E2 Environmental zone corridor. It is recognised that, in addressing clause 33A, the application must demonstrate compliance with the objectives of each zone and result in a better outcome than what current exists on site. This is demonstrated in the Mandatory Considerations Table at **Appendix B**.
Other approvals	**NSW National Parks & Wildlife Act 1974 (NPW Act)** The **NPW Act** aims to prevent the unnecessary or unwarranted destruction of relics and the active protection and conservation of relics of high cultural significance. The provisions of the Act apply to both indigenous and non-indigenous relics. Section 4.41 of the EP&A Act provides that SSD is exempt from the need for a section 90 permit for the removal of items of Aboriginal heritage. An ACHA has been undertaken as part of the EIS to identify and minimise potential heritage impacts in relation to the Proposal. The findings and recommendations of the ACHA are provided in Section 6.1.5 and **Appendix U**.
	NSW Heritage Act 1977 (Heritage Act) The Heritage Act protects heritage items, sites and relics in NSW older than 50 years regardless of cultural heritage significance. Section 4.41 of the EP&A Act, provides that SSD is exempt from the application of Division 8 of Part 6 of the Heritage Act.
	NSW Roads Act 1973 (Roads Act) Section 138 of the Roads Act requires the consent of the relevant roads authority Penrith City Council or NSW Roads and Maritime Services (**RMS**) for work in, on, under or over a public road. Any works proposed to a public road as part of the proposal would require the consent of the relevant road authority, in this instance being TfNSW. Consultation has been undertaken with TfNSW as part of the EIS process to ensure that any impacts on Mamre Road are adequately considered. The SSD will need to be given concurrence from TfNSW prior to being granted consent.
	NSW Water Management Act 2000 (WM Act) Under the WM Act, a licence would be required if water was to be extracted from a creek or if any waterways were to be realigned during construction. Under section 4.41J of the EP&A Act approvals under sections 89, 90 or 91 of the WM Act are not required.
	NSW Protection of the Environment Operations Act 1997 (POEO Act) The POEO Act enforces licences and approvals formerly required under separate Acts relating to air, water and noise pollution, and waste management with a

Category	Action
	single integrated licence. Under Section 48 of the POEO Act, premise-based scheduled activities (as defined in Schedule 1 of the EP&A Act) require an Environment Protection Licence (**EPL**). The supporting technical investigations undertaken as part of this SSD have not identified the need for an EPL. The general provisions of the POEO Act in relation to the control of pollution of the environment will apply throughout the development. During the construction phase of the project, appropriate management measures be adopted in relation to the control of noise, dust, erosion and sedimentation, and stormwater discharge to ensure that the pollution control provisions of the POEO Act are satisfied. The proposed management measures are discussed in Section 6.1.6 of this EIS.
Pre-condition to exercising the power to grant approval	An assessment of the mandatory pre-conditions that must be satisfied before the Minister may grant approval to the project are outlined Section 4.2 - 4.2.9.
Mandatory matters for consideration	An identification of the matters for consideration is outlined in the Mandatory Considerations Table at **Appendix B**. The proposal demonstrates a high level of compliance with the applicable statutory requirements.

4.2. IDENTIFICATION OF APPLICABLE STATUTORY REQUIREMENTS

The EPIs and planning controls relevant to the site and the proposed development include:

- *Environmental Planning and Assessment Act 1979*
- *Environmental Planning and Assessment Regulation 2000*
- *Environmental Planning and Biodiversity Conservation Act 1999*
- *Biodiversity Conservation Act 2016*
- *Heritage Act 1977 (NSW)*
- *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 (Western Sydney Aerotropolis) 2020*
- *State Environmental Planning Policy No.33 – Hazardous and Offensive Development*
- *State Environmental Planning Policy No. 55 – Remediation of Land*
- *State Environmental Planning Policy No. 64 – Advertising and Signage*
- *Penrith Local Environmental Plan 2010*
- *Draft Cumberland Plain Conservation Plan*
- *Draft Mamre Road Precinct Development Control Plan*

4.2.1. Environmental Planning and Assessment Act 1979

The EP&A Act provides the principal legislative framework for environmental planning in NSW and include provisions to ensure that proposals that have the potential to impact the environment are subject to detailed assessment and provide opportunity for public involvement.

The proposed development has been assessed in accordance with the matters of consideration listed in Section 4.15 of the EP&A Act as outlined in the Mandatory Considerations Table provided at **Appendix B**.

4.2.2. Environmental Planning and Assessment Regulation 2000

Section 4.12(8) of the Act requires that all development applications for SSD be accompanied by an EIS prepared by or on behalf of the applicant in the form prescribed by the *Environmental Planning and Assessment Regulation 2000* (**the EP&A Reg**).

Schedule 2 of the EP&A Reg provides that environmental assessment requirements will be issued by the Secretary with respect to the proposed EIS. This EIS has been prepared to address the requirements of Schedule 2 of the EP&A Reg and the SEARs.

4.2.3. Environmental Protection and Biodiversity Conservation Act 1999

The Commonwealth's Environmental Protection and Biodiversity Conservation Act 1999 (**EPBC Act**) aims to protect the environment and matters of national environmental significance, including flora, fauna, ecological communities and heritage. An assessment against the relevant considerations of the EPBC Act are provided in Section 6 and consistency with the aims and requirements of the EPBC Act is demonstrated in the Mandatory Considerations Table at **Appendix B**.

4.2.4. Biodiversity Conservation Act 2016

The *Biodiversity Conservation Act 2016* (**BC Act**) aims to maintain a healthy, productive and resilient environment in accordance with ESD principles, including an assessment framework for determining the likely impacts of development on biodiversity and threatened species and a consistent methodology for calculating measure to off-set those impacts.

Consistency with the aims and requirements of the BC Act is demonstrated in the Mandatory Considerations Table at **Appendix B**.

4.2.5. Heritage Act 1977 (NSW)

This SSDA does not constitute Integrated Development pursuant to Section 4.46 of the EP&A Act as the site does not contain any state heritage listed item(s).

4.2.6. State Environmental Planning Policies

Identification of the applicable State Environmental Planning Policies (**SEPPs**) are outlined below and discussed further in the Mandatory Considerations Table at **Appendix B** and Section 6.

4.2.6.1. State Environmental Planning Policy (State and Regional Development) 2011

The SRD SEPP identifies certain types of development as SSD under Clause 8 of the SEPP.

Specifically, Clause 8(1b) of SRD SEPP relevantly states that:

> *(1) Development is declared to be State significant development for the purposes of the Act if—*
>
> *(b) the development is specified in Schedule 1 or 2.*

The proposed development for the site is specified under Part 11 and 12 of Schedule 1 of the SRD SEPP as follows:

> *(11) Other manufacturing industries*
>
> *Development that has a capital investment value of more than $30 million for any of the following purposes—*

(a) laboratory, research or development facilities,

(b) medical products manufacturing,

(c) printing or publishing,

(d) textile, clothing, footwear or leather manufacturing,

(e) furniture manufacturing,

(f) machinery or equipment manufacturing,

(g) the vehicle, defence or aerospace industry,

(h) vessel or boat building and repair facilities (not including marinas).

(12) Warehouse or distribution centres

(1) Development that has a capital investment value of more than $50 million for the purpose of warehouses or distribution centres (including container storage facilities) at one location and related to the same operation.

The proposed development satisfies the provisions of Clause 8 and Schedule 1, Part 11 and Part 12 of the SRD SEPP, as the development for Warehouse 1 and 3 will have a combined CIV greater than $50 million for the purpose for other manufacturing industries and/or warehouse and distribution centres at one location and related to the same operation. Specifically, and as demonstrated in the CIV Report (**Appendix F**), the construction of Warehouse 1 and 3 together with site access roads, bulk and detailed earthworks, internal development access roads including infrastructure services and allowances for Authority Infrastructure Services required to support the development warehouse and distribution centre use will have total CIV of $78,179,280 (excl. GST).

4.2.6.2. State Environmental Planning Policy (Infrastructure) 2007

State Environmental Planning Policy (Infrastructure) 2007 (**ISEPP**) applies to the whole State and seeks to facilitate the delivery of infrastructure across the State by improving regulatory certainty and efficiency.

Schedule 3 of the ISEPP deals with traffic generating developing and requires referral and concurrence of the NSW RMS, now part of Transport for NSW, for certain development which is expected to generate significant traffic. Schedule 3 of the ISEPP identifies 'traffic generating development' which must be referred to the Transport for NSW for concurrence. The schedule includes development for the purposes of industry with a site area of 5,000m^2 or more and frontage to a classified road.

The development fronts Mamre Road which is a classified road and has a site area greater than 5,000m^2, therefore requiring referral to Transport for NSW as part of the consultation process. Engagement undertaken with TfNSW as part of the EIS process is discussed in Section 5.

4.2.6.3. State Environmental Planning Policy (Western Sydney Employment Area) 2009

The WSEA SEPP is the principle environmental planning instrument applying to the site. The relevant WSEA SEPP provisions applicable to the SSD are reviewed in the Mandatory Considerations Table provided at **Appendix B**. The proposal is consistent with the relevant objectives and provision of WSEA SEPP.

4.2.6.4. State Environmental Planning Policy (Western Sydney Aerotropolis) 2020

The Aerotropolis SEPP is the new planning framework to achieve the State planning objectives for the Aerotropolis. The Aerotropolis SEPP applies to the whole growth area and:

- Implements the Western Sydney Aerotropolis Plan
- Sets the boundary for the Aerotropolis and the area to which the SEPP applies;
- Defines the precincts within the Aerotropolis;
- Applies land use zones throughout the Aerotropolis, with the airport site remaining subject to the Airports Act 1996 (Cth);

- Sets strategic objectives for future planning within the area;
- Outlines planning controls including mapping (Mamre Road Precinct is excluded from this as it has been rezoned under the WSEA SEPP);
- Identifies transport corridors and utility sites required to service the Aerotropolis; and
- Outlines relevant approval pathways.

The Aerotropolis SEPP applies to the site for the purpose of aligning the strategic objectives and Western Sydney Aerotropolis Plan to the site, however it does not inform the land zoning and associated development controls related to the site. All planning controls related to future development are outlined in the Aerotropolis SEPP. Controls contained within the Aerotropolis SEPP with which the proposed development must demonstrate compliance are as follows:

- adoption of the National Airports Safeguarding Framework.
- protection of airport operation through ensuring sensitive land uses will not be affected by aircraft noise. This is monitored through the Australian Noise Exposure Concept (ANEC) and Australian Noise Exposure Forecast (ANEF) maps.
- protection of airspace through ensuring appropriate heights for buildings and temporary structures do not affect airport operations. An Obstacle Limitation Surface (OLS) map will be incorporated within the draft SEPP WSA.
- wildlife management around airports to minimise wildlife strikes which cause major damage to aircraft and/or compromises aircraft safety.

The assessment of aeronautical impacts at Section 6.2.9 confirms that the site is compatible with future Airport operations.

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

State Environmental Planning Policy No. 33 – Hazardous and Offensive Development (**SEPP 33**) requires the consent authority to consider whether an industrial proposal is a potentially hazardous or a potentially offensive industry. In doing so, the consent authority must consider the specific characteristics and circumstances of the development, its location and the way in which the proposed activity is to be carried out. Any application to carry out potentially hazardous development must be supported by a preliminary hazard analysis (**PHA**).

The proposal is for a warehouse and distribution centre which is intended for freight and logistics. For this reason, the proposed development and use is not deemed as potentially hazardous or potentially offensive development. Should an operator seek to occupy the premises within the YLE for purposes that would be classified as potentially offensive or hazardous, a PHA would be required to be prepared and submitted with a further application for assessment and approval.

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

State Environmental Planning Policy No.55 (**SEPP 55**) states that land must not be rezoned or developed unless contamination has been considered and, where relevant, land has been appropriately remediated.

An assessment against the relevant provisions of SEPP 55 is provided in the Mandatory Considerations Table at **Appendix B** and Section 6 of this EIS.

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

The SEAR's identifies the requirement for assessment of *State Environmental Planning Policy No.64 – Advertising and Signage* (**SEPP 64**). An estate wide signage strategy is proposed for the YLE, therefore an assessment against the relevant provisions of SEPP 64 is provided in **Table 25** below and the mandatory considerations are provided at **Appendix B**.

Table 25 SEPP 64 Schedule 1 Assessment

SEPP 64 Provision	Comment	Compliance
Character of the area		
Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located?	The proposed signage is consistent with the proposed development. It will serve as building identification signage for Warehouse 1 and 3, and wayfinding signage across the site.	Yes
Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?	The proposed signage is consistent with concepts utilised in the WSEA.	Yes
Special areas		
Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?	The proposal will not detract from the amenity or visual quality of the surrounding area. Further, it will serve to identify the location of businesses.	Yes
Views and vistas		
Does the proposal obscure or compromise important views?	The proposed signage is appropriate for the industrial setting. The building signage will be within the building footprint. The wayfinding signage will be located at ground level.	Yes
Does the proposal dominate the skyline and reduce the quality of vistas?	The signage will not dominate important view or vistas nor does it dominate the skyline.	Yes
Does the proposal respect the viewing rights of other advertisers?	The proposed signage will not impact the visibility of other buildings or the viewing rights of other advertisers.	Yes
Streetscape, setting or landscape		
Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?	The proposed signage is appropriate for an industrial setting.	Yes
Does the proposal contribute to the visual interest of the streetscape, setting or landscape?	Detailed design of the proposed building identification signage will occur once tenants are secured. Wayfinding and estate signage is designed to a high standard, in order to complement the streetscape and provide good legibility.	Yes

SEPP 64 Provision	Comment	Compliance
Does the proposal reduce clutter by rationalising and simplifying existing advertising?	There is no exiting advertising on the site.	N/A
Does the proposal screen unsightliness?	Not relevant.	N/A
Does the proposal protrude above buildings, structures or tree canopies in the area or locality?	The proposed signage is compatible with the scale and proportion of the building size given the dimensions of the signage as shown on the signage plans.	Yes
Does the proposal require ongoing vegetation management?	No.	Yes
Site and building		
Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located?	The proposed signage will not detract from any important building features and has been positioned and scaled by the project architects	Yes
Does the proposal respect important features of the site or building, or both?	The signage has been designed to enhance the aesthetic quality of the building by integrating to the building facades at suitable locations.	Yes
Does the proposal show innovation and imagination in its relationship to the site or building, or both?	The location of building identification signage gives careful consideration to the required sightlines and provides cohesive integration with the more articulated elements of the associated warehouse or office building.	Yes
Associated devices and logos with advertisements and advertising structures		
Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed?	The proposed signage zones are integrated with the industrial building and offices.	Yes
Illumination		
Would illumination result in unacceptable glare?	The proposed signage will not result in unacceptable glare.	Yes
Would illumination affect safety for pedestrians, vehicles or aircraft?	The proposed signage will not affect safety for pedestrians, vehicles or aircraft. They will be designed to promote	Yes

SEPP 64 Provision	Comment	Compliance
	wayfinding/identification during day and night time.	
Would illumination detract from the amenity of any residence or other form of accommodation?	The proposed signage will not detract from residential areas, as it is within a zoned industrial precinct.	Yes
Can the intensity of the illumination be adjusted, if necessary?	The proposal relates to signage zones. Detailed signage design will form part of separate application and illumination will be assessed at that point in time.	N/A
Is the illumination subject to a curfew?	Illumination is not proposed.	N/A
Safety		
Would the proposal reduce the safety for any public road?	The proposed signage is for building identification and wayfinding. It is located at a height that will not impact the safety of public roads.	Yes
Would the proposal reduce the safety for pedestrians or bicyclists?	Signage will not be located at a height that will impact the safety of pedestrians or cyclists.	Yes
Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?	The signage will not obtrude into any public area and will not be at a height that will impact the safety of pedestrians or children.	Yes

4.2.7. Penrith Local Environmental Plan 2010

The SEARs require consideration to be given to the Penrith Local Environmental Plan 2010 (**PLEP**). It is noted that since the gazettal of the WSEA SEPP Amendment in 2020, the PLEP no longer applies to the site and no further assessment is required.

4.2.8. Draft Cumberland Plain Conservation Plan

The Draft Cumberland Plain Conservation Plan (**Draft CPCP**) seeks to biodiversity certified land across Western Sydney to offset the impacts of urban development. It is noted that majority of the site has been identified as biodiversity certified land that is capable of urban development, with the exception of the E2 zone that transverses the site.

As a part of the SEAR's, GPT were required to consult with the DPIE CPCP Team. A record of the engagement activities and outcomes are provided in Section 5, and an assessment against the requirements of the Draft CPCP is provided in the Mandatory Considerations Table at **Appendix B**.

4.2.9. Draft Mamre Road Precinct Development Control Plan

The Draft MRP DCP was exhibited by the DPIE from 10 November to 17 December 2020. Once finalised, the draft DCP will apply to the site and the broader MRP.

Clause 11 of the SRD SEPP 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, or

(b) development for which a relevant council is the consent authority under section 89D (2) of the Act.

As such, there is no requirement for assessment of the Draft MRP DCP for this SSDA under the SRD SEPP. However, Clause 18 of the WSEA SEPP sets the requirements for DCPs, specifically clause 18(1) states the following:

18 Requirement for development control plans

(1) Except in such cases as the Secretary may determine by notice in writing to the consent authority or as provided by clause 19, the consent authority must not grant consent to development on any land to which this Policy applies unless a development control plan has been prepared for that land.

The MRP DCP Compliance Table provided at **Appendix E** provides an assessment of the proposal against the relevant controls of the MRP DCP and demonstrates that the proposal is generally consistent with the objectives of the DCP, where there are non-compliances with the DCP controls, these have been justified in **Appendix E**.

5. COMMUNITY AND STAKEHOLDER ENGAGEMENT

The following section of the report describes the consultation that has been undertaken by the project team in response to the SEARs issued by DPIE on 16 November 2020.

5.1. IDENTIFICATION OF KEY STAKEHOLDERS

The SEARs identified that consultation must be undertaken with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners. **Table 26** identifies the various stakeholders that have been consulted during the preparation of this SSDA, any issues raised and details the way in which these issues have been addressed in the proposal.

Table 26 Stakeholder Identification, Consultation and Project Response

Stakeholders	How this group was consulted	Feedback	Project response
Government authorities			
Penrith City Council (**PCC**)	Virtual meeting on 6 May 2021 with the various departments at PCC including: ▪ Planning; ▪ Development engineering; ▪ Traffic engineering; and ▪ Environment.	PCC provided comments on the YLE Concept Masterplan as submitted. A high-level overview of the comments is provided below: <u>Planning, landscaping and orderly development</u> ▪ Recommend that Lot 61 form part of the development scheme. ▪ Classification of E2 corridor to be confirmed and designed accordingly. Raised concern regarding alignment of proposed corridor with southern property. ▪ Raised concern regarding proliferation of driveway crossings at cul-de-sac head at Lot 61.	▪ Lot 61 is subject to a separate DA with PCC. Consideration has been given to the proposal's impact on the site to ensure no undue impacts result from the construction of the YLE and adequate access is provided to Lot 61 to ensure it is not isolated. ▪ A Biodiversity Development Assessment Report (**BDAR**) has been prepared which confirms that the corridor does not have riparian values beyond a 2nd order stream. The corridor is therefore addressed as an 'environmental corridor' as part of the EIS and is being treated accordingly. Refer to the EIS for details on the proposed width and design of the environmental corridor. ▪ The cul-de-sac head has been designed in accordance with the current DA for Lot 61 to ensure that the lot can be accessed from the proposed estate

Stakeholders	How this group was consulted	Feedback	Project response
		▪ Recommend layering of street trees if landscape setbacks are not increased. ▪ Notes that proposal must fully comply with draft DCP or alternatively be assessed on merit and use draft DCP as a guide, meaning that a better planning outcome must prevail. ▪ Recommend Warehouse 1 car park and heavy vehicle driveway be located further north to avoid vehicle conflict at the roundabout.	road. The concept landscape masterplan provides landscape treatments to the driveway crossings to ensure that a positive landscape outcome is achieved within this site interface. Detailed landscape plans will form part of a future DAs for Lot 3. ▪ A detailed landscape design is proposed for all public domain areas which maximise street tree planting within landscape setbacks. ▪ The design of the YLE has been guided by the draft DCP. It is intended that the SSD is assessed on merit, with improved planning outcomes being achieved where there are non-compliances. ▪ The Warehouse 1 carpark and heavy vehicle driveway location has been assessed as part of the Transport Assessment, no issues or concerns have been raised from a traffic engineer perspective.
		<u>Water quality management</u> PCC WSUD Policy targets must be achieved. Requests that a WSUD/Water Quality Management Strategy be submitted.	A WSUD/Water Quality Management Strategy has been prepared for the YLE in accordance with the Penrith City Council DCP 2014. Refer to the detail responses provided in **Appendix L** of this EIS.
		<u>Engineering Design and Stormwater Management</u> Provided details on the Engineering and Stormwater documentation to be submitted	The SSDA is supported by all the required Civil documentation as requested by PCC, refer to the Civil Drawings and Civil Report contained within **Appendix L**.

Stakeholders	How this group was consulted	Feedback	Project response
		with the SSDA, includes stormwater, flooding, earthworks and subdivision details.	
		Traffic Management and Road Design Comments regarding the required documentation and compliance against the Draft DCP. Recommends provision for kerbside road shoulders, verge widths for pathways and pedestrian gaps in central median. Does not support construction of half roads. Requests information regarding Temporary Access Road and proposed intersection works on Mamre Road.	The proposed internal road network has been designed in accordance with the draft DCP. The Access Road will be constructed in full, refer to the EIS for discuss on the anticipated delivery arrangement. Design details of the proposed Temporary Access Road and intersection works are provided within **Appendix L**.
		Waste Management Provided details of the relevant waste management controls outlined within Part D-Land Use Controls of the Penrith DCP 2014.	Waste management arrangements have been provided in accordance with the relevant provisions of the draft Mamre Road DCP. Refer to the DCP Compliance Table provided at **Appendix E**.
Environment Protection Authority	An email was sent on 16 April 2021 requesting a meeting or email comments based on the project	No response.	No response.

Stakeholders	How this group was consulted	Feedback	Project response
	overview and concept masterplan.		
Western Sydney Planning Partnership	An email was sent on 16 April 2021 requesting a meeting or email comments based on the project overview and concept masterplan.	No response.	No response.
Department of Planning, Industry and Environment specifically the:	GPT, as part of the MRP LOG have been involved in ongoing discussions with the DPIE in respect to the planning and development of the MRP. Ongoing discussions with the DPIE have informed early concept planning for the YLE and anticipated planning outcomes for the MPR, particularly with regard to the precinct transport network and draft DCP.		
Central (Western) team, Place Design and Public Spaces Group	Virtual meeting on 23 March 2021 representatives from the Central (Western) team and a representative from the DPIE Major Projects team.	General feedback on the status of the draft Mamre Road DCP. Only feedback provided relating to the SSD is the need for the SSD to address the draft Mamre Road DCP Water Sensitive Urban Design controls.	The YLE Concept Masterplan has been designed to achieve compliance with the draft Mamre Road DCP. Where non-compliances occur, alternative measures have been adopted to facilitate a better planning outcome. Refer to the Draft MRP DCP Compliance Table at **Appendix E** for further detail.
Cumberland Plain Conservation Plan, Resilience Planning	Virtual meeting in November 2020 involving the DPIE	Provided feedback on the proposed relocation of the E2 corridor, including commentary on curvature and widths and	The proposed corridor alignment has been designed in accordance with the advice provided by the Cumberland Plain Conservation Plan (**CPCP**) team and overshadowing has been avoided where possible. A BDAR has been prepared by Cumberland Ecology to

Stakeholders	How this group was consulted	Feedback	Project response
	Mamre Road Team and CPCP Team. Subsequent virtual meeting on 19 May 2021 involving three representatives from the CPCP team, and other DPIE representatives from the Central (Western) team and Major projects team.	ensuring overshadowing of the corridor is avoided. Advised that the CPCP is in a post-exhibition phase and that they may not be able to realign the biocertified area with the realigned corridor. This may mean an individual ecological assessment is required for the non-biocertified area.	assess the ecological conditions of the non-bio certified area. A separate Vegetation Management Plan has been prepared for the proposed relocated E2 corridor. Refer to the Section 6.1.2 for further discussion.
Environment, Energy and Science Group	An email was sent on 16 April 2021 requesting a meeting or email comments based on the project overview and concept masterplan.	No response.	No response.
Water Group (including the Natural Resources Access Regulator)	Comments were provided in email on 4.8.2020 following a virtual meeting held on 3.8.20.	▪ Existing watercourse within the E2 zone is not identified as 'waterfront land' as defined by the WM Act. ▪ The proposed realignment is accepted by Natural Resources Access Regulator (**NRAR**). NRAR note that the realignment should not include 90-degree sharp meanders and should mimic a natural stream design.	▪ The proposed realigned corridor does not include 90-degree sharp meanders and does mimic a natural stream design as detailed in the Civil Drawings submitted with **Appendix K**. ▪ A VMP is submitted with the SSDA to ensure that remnant vegetation areas are not impacted by the proposed realignment.

Stakeholders	How this group was consulted	Feedback	Project response
		▪ Realignment is to minimise impacts to remnant vegetation areas upstream of the site. ▪ NRAR does not support the reduction in corridor width from 40m to 20m. ▪ Recommend that flood detention requirements be considered and suitable locations for basins be allocated early in the planning process.	▪ The corridor width has been increased to a 35m corridor containing a 25m E2 Environmental Conservation zone. ▪ Flood detention basins have been sited on either side of the corridor and one on the Mamre Road frontage as indicated in the Concept Masterplan.
Service providers			
Endeavour Energy	Email as part of the Service Infrastructure Assessment	Provided letter advice regarding the proposed electrical infrastructure, staging and location. Advised that the proposed new South Erskine Park Zone Substation expected to be commissioned in Q3 2022 will have sufficient capacity to support the YLE.	Electrical Infrastructure connections have been designed to consider the future South Erskine Park Zone Substation. Temporary connections will be delivered in the interim from the existing network along Mamre Road. Refer to the Section 6.2.1 for further discussion.
Fire and Rescue NSW	An email was sent on 10 May 2021 requesting a meeting or email comments based on the project overview and concept masterplan.	No response.	No response.
NSW Rural Fire Service	Comments provided via email on 3 June 2021.	Letter advice identifying regarding the matters to be addressed as part of the SSD, specifically:	A Bushfire Assessment Report has been prepared for the SSD, refer **Appendix KK**.

Stakeholders	How this group was consulted	Feedback	Project response
		▪ Compliance with AS 3959 and the NASH Standard must be considered when meeting the aim and objective of *Planning for Bush Fire Protection 2019*. ▪ Potential hazards on the adjoining E2 Environmental Conservation Zone east of Warehouse 2 and 3 need to be properly addressed. This includes the potential for the area to regenerate or rehabilitate to a natural state (e.g. Grassy Woodland). ▪ Potential hazards within the proposed 35 metre wide riparian corridor are to be properly addressed.	The general fire safety construction provisions of the NCC are taken as acceptable solutions, and AS 3959 and the NASH Standard are not considered as a set of Deemed to Satisfy provisions for the non-residential development. Potential hazards on the adjoining E2 zone east of Warehouse 2 and 3 have been considered, as well as those associated with the proposed 35m wide environmental corridor.
Sydney Water	Email as part of the Service Infrastructure Assessment	Provided letter advice regarding the trunk drinking water being delivered, recycled water servicing strategy and expected delivery of waste water infrastructure, of which is currently in the concept design phase.	The potable, non-potable and waste water infrastructure services at the site have been designed in regard to the advice provided by Sydney Water, including interim and ultimate scenarios. Refer to the Section 6.2.1 for further discussion.
Transport for NSW	Virtual meeting on 23 April 2021.	TfNSW did not raise any initial concerns regarding the proposed concept masterplan, proposed interim access from Mamre Road or integrated freight network alignment. TfNSW have engagement WSP to undertake a comprehensive review of the SSD. Formal	None.

Stakeholders	How this group was consulted	Feedback	Project response
		comments will be provided as part of the post-lodgement referral process.	
Western Sydney Airport Corporation	Virtual meeting on 4 May 2021.	Request information be provided in the SSDA relating to: ▪ Proposed landscape species ▪ Proposed land uses and ▪ Details of the development staging and how excavated land will be managed after Stage 1.	Information regarding proposed landscape species, proposed land uses and intended development staging is provided in the Section 3 of this EIS.
Community			
Surrounding local landowners and stakeholders including ▪ Mamre Road Precinct Land Owner Group (**LOG**), including: - Mirvac - Altis Property Partners - Frasers Property Australia - Fife Capital - Stockland	Ongoing LOG meetings regarding the broader Mamre Road Precinct.	Discussions regarding the delivery of infrastructure in the MRP and the LOG position on the draft MRP DCP. No feedback provided in relation to the project.	Project has been designed to align with the road infrastructure to be delivered by Mirvac and alignment of the proposed E2 corridors.

Stakeholders	How this group was consulted	Feedback	Project response
- ESR ▪ Emmaus Retirement Village ▪ Emmaus Catholic College ▪ Trinity Primary School ▪ Little Smarties Early Learning Centre ▪ Mamre Anglican School ▪ Properties located in Kemps Creek: ▪ 799-803 Mamre Road ▪ 783a Mamre Road ▪ 819-831 Mamre Road ▪ 833-843 Mamre Road ▪ 833b Mamre Road ▪ 833a Mamre Road ▪ 845-857 Mamre Road ▪ 845a Mamre Road ▪ 859-869 Mamre Road	Fact sheet Enquiry line and phone number	No feedback was received from the surrounding local landowners or stakeholders in relation to the SSD.	GPT welcomes feedback on the proposal during all stages of the approval process.

Stakeholders	How this group was consulted	Feedback	Project response
▪ 805-817 Mamre Road ▪ 884-902 Mamre Road ▪ 904-928 Mamre Road ▪ 930-966 Mamre Road ▪ 930a Mamre Road ▪ 930b Mamre Road.			
Local Aboriginal Stakeholders			
Darug Custodian Aboriginal Corporation (DCAC)	Virtual meetings on the following dates: ▪ 11.08.20 ▪ 18.09.20 ▪ 02.10.20	In response to GPT's desire to collaborate and use an indigenous name for the estate, the DCAC recommended various names for the proposed estate, including 'Yiribana'.	The estate has been named 'Yiribana Logistics Estate'. This name acknowledges the Darug people and simply means 'this way' in Darug language.

5.2. ENGAGEMENT NEXT STEPS

As demonstrated in **Table 26** above, the local community was consulted in accordance with the Community and Stakeholder Participation Strategy (**Appendix N**). GPT welcomes feedback on the proposal during all stages of the approval process and will consider all comments received from the general public and stakeholders during future engagement forming part of the SSD exhibition stage.

6. ENVIRONMENTAL IMPACT ASSESSMENT

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

- SEARs compliance table identifying where the SEARs have been addressed in the EIS (**Appendix A**).
- Statutory compliance table identifying where the relevant statutory requirements have been addressed (**Appendix B**).
- Community engagement table identifying where the issues raised by the community during engagement have been addressed (Section 5).
- Proposed mitigation measures for the project which are additional to the measures built into the physical layout and design of the project (**Appendix D**).

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

6.1. DETAILED IMPACT ASSESSMENT

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

6.1.1. Traffic and Transport

6.1.1.1. Overview

A Traffic Impact Assessment (**TIA**) (**Appendix V**) has been prepared by Ason Group in response to the YLE proposal. Key objectives of the TIA are as follows:

- To establish that the development of the Site further to the Proposal is compliant and consistent with the relevant access, traffic and parking requirements.
- To establish that the trip generation for the early stages of the Estate is consistent with the assumptions within the MRP modelling assessment so that it can be appropriately accommodated by proposed interim upgrades to the local road network.
- To establish that the trip generation of the Estate is consistent with the assumptions within the MRP modelling assessment so that it can be appropriately accommodated by the future road network.
- To demonstrate that there is an appropriate and sustainable provision of car parking across the Site.
- To demonstrate that the proposed access driveways, internal roads, car parks and service facilities can provide a design compliant with the relevant Australian Standards.

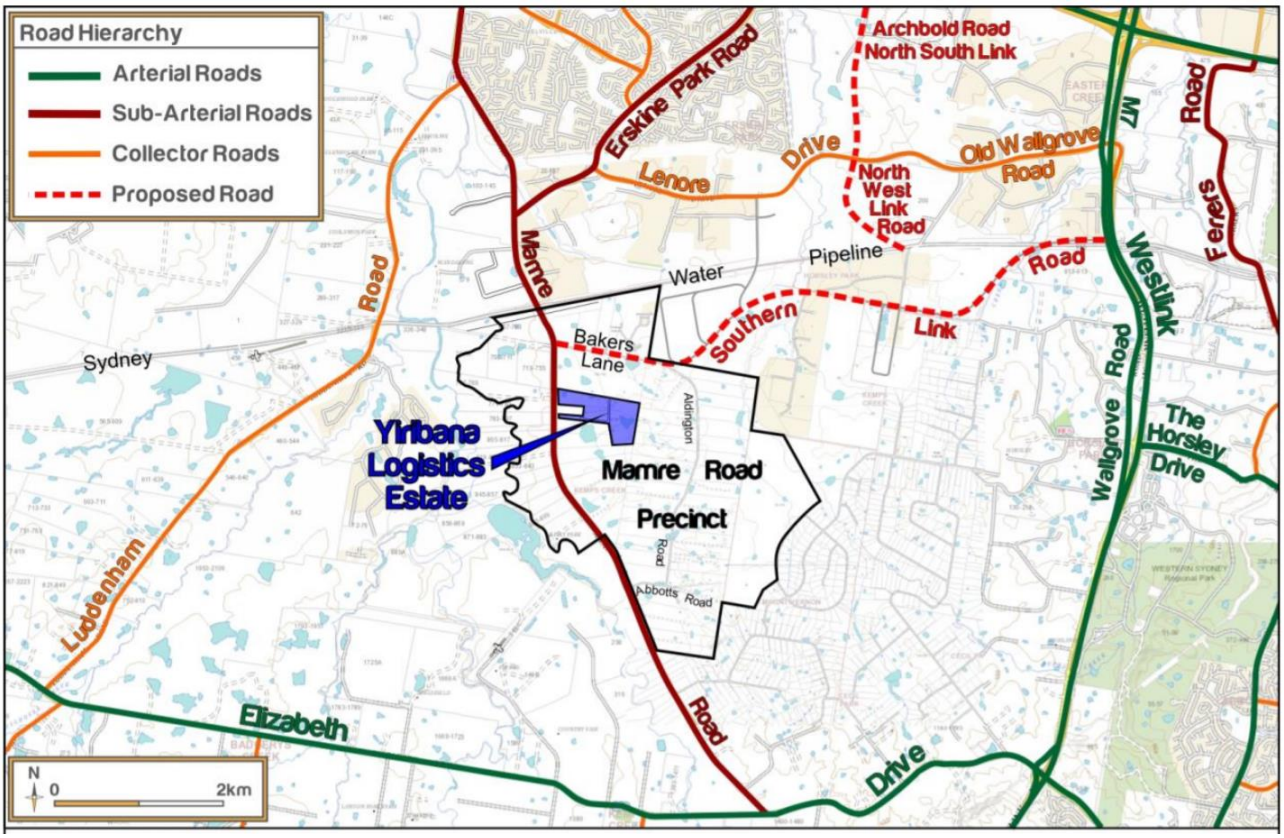
Existing Road Network

The existing and proposed road network surrounding the YLE is detailed below and visible within **Figure 36**:

- Mamre Road is an arterial road which runs north-south between the Great Western Highway and M4, and Elizabeth Drive respectively. In the vicinity of the Site, Mamre Road provides 1 traffic lane in each direction, and has a posted speed limit of 80km/h.
- Bakers Lane is a local access that runs east-west (to the east of Mamre Road) and currently provides access for a number of rural residential, educational and retirement sites. Bakers Lane provides 1 traffic lane in each direction and has a posted speed limit of 60km/h, with School Zone restrictions (40km/h during school peaks) adjacent to the Trinity Primary School and Emmaus College.

- Elizabeth Drive is a sub-arterial road that runs east-west between Hume Highway and M7, and Mamre Road and The Northern Road respectively. In the vicinity of Mamre Road, Elizabeth Drive provides 1 - 2 traffic lanes in each direction, and has a posted speed limit of 80km/h.

Figure 36 Local Road Network



Source: Ason Group

Mamre Road Upgrade

Stage 1 of the Mamre Road Upgrade between the M4 and James Erskine Drive is currently funded and forecast for completion in 2024. Stage 2 of the Mamre Road Upgrade between James Erskine Drive and Kerrs Road is not currently funded and timing is not yet confirmed. The Mamre Road upgrade will comprise the following key infrastructure:

- A typical cross section that includes:
  - 2 traffic lanes in each direction with a wide central median between the M4 Motorway and Kerrs Road;
  - Provisions for the central median to provide third traffic lane in each direction to meet growing demand; and
  - Shared bicycle and pedestrian paths to promote active transport.
- New or upgraded intersections including:
  - Signalised U-turn facilities at key intersections in the short term pending full development of the area
  - A new signalised intersection with turn-around facility at Abbotts Road;
  - A new signalised intersection between Abbotts Road and Bakers Lane;
  - An upgrade of the signalised intersection at Bakers land with provisions for U-turn and local access;

– An upgrade of the signalised intersection at Erskine Park Road;

– An upgrade of the signalised intersection at James Erskine Drive, with provision for future access to development on the western side of Mamre Road;

– Left in/ left out access at Mandalong Close;

– Left in/ left out access at McIntyre Avenue;

– A new signalised intersection at Luddenham Road;

– A new signalised intersection at Solander Drive; and

– An upgrade of the signalised intersection at Banks Drive.

The MR Upgrade Report indicates a future signalised intersection at the development site adjacent to the southern boundary of the Estate. This site is being considered under SSD-10448 and is currently known as the Aspect Industrial Estate. The intersection forms a key connection with Mamre Road for the sites along its eastern boundary and will be a key long-term connection from Mamre Road to the internal MRP road network, which requires access via the Aspect Industrial Estate. A temporary access to Mamre Road will be required, should the connection to the signalised intersection not be provided in the same timeframe as development of the Estate.

6.1.1.2. Method

Full details of the traffic and parking assessment for the YLE can be found in the TIA prepared by Ason Group submitted as **Appendix V**. The report outlines the following considerations:

- Addresses the SEARs requirements and agency comments.
- Describes the existing local traffic and transport conditions.
- Describes the parking requirements for the proposed development and assesses the proposed parking provision.
- Assesses the traffic impacts of the development, including the projected trip generation and forecasted network performance.
- Reviews the design of the internal access driveways, parking, and service areas.

It is to be noted that when undertaking an assessment of industrial development within Western Sydney, generally it has been procedure to use the RMS Guide Update for trip generation and referencing similar development types and scale. However, the trip rates for this assessment have been adopted for the Mamre Road Plan modelling assessment process with TfNSW, these rates are identified below:

Table 27 TfNSW Agreed Trip Rates

Time Period	Rate per 100m^2
Daily Trips	2.91
Local Road AM Peak (7am – 8am)	0.23
Local Road PM Peak (4pm – 5pm)	0.24
Site Maximum Generation Rate (All Vehicles)	0.26
Site Maximum Generation Rate (Heavy Vehicles)	0.07

6.1.1.3. Assessment

Construction Traffic

Light vehicle traffic generation would generally be associated with construction staff movements to and from the site. Vehicle trips are expected to arrive in the morning and depart in the evening. Parking for construction related vehicles will be provided on site.

The construction traffic volumes are expected to be lower than the volumes anticipated for the Proposal at operation. Therefore, recognising that key intersections are anticipated to perform satisfactorily once the Proposal is completed, it concluded that the intersections will perform satisfactorily accommodating the lower volume of construction traffic.

A Construction Traffic Management Plan (**CTMP**) has been prepared to manage the movements to and from the site during construction and to ensure minimal impact to the surrounding road network as a result of construction works. The CTMP is attached as **Appendix V**.

Operational Traffic

YLE Traffic Impact

The sites long term access is to be via a new signalised intersection to the upgraded Mamre Road, accessed via the warehouse and logistics development to the sites south – Mirvac's Aspect Industrial Estate (SSD-10448). Any long-term access to the site will be dependent on the proposed connection being made available to the neighbouring site.

Given the requirement to connect to Mamre Road via another developments internal road network, to assess the acceptability of the traffic impacts of the YLE proposal, traffic modelling has been undertaken on the basis of being consistent with the rates adopted for the Mamre Road Precinct background modelling (**Table 27** above). The developments traffic generation is provided below:

Table 28 Proposal Traffic Generation

SSDA Proposal	GFA(m^2)	Rate per 100m^2	Trips
Daily Trips	157,860	2.91	4,594
Local Road AM Peak (7am-8am)		0.23	363
Local Road PM Peak (4pm-5pm)		0.24	379
Site Maximum Generation Rate (All Vehicles)		0.26	410
Site Maximum Generation Rate (Heavy Vehicles)		0.07	111

When assessing the arrival and departure distribution of trips in the AM and PM periods, the agreed TfNSW Mamre Road Program modelling assessment has been utilised, based on the surveys of local industrial sites presented in **Appendix A** of **Appendix V**, and the 2019 Land Use Strategic Traffic Forecasting Model (**STFM**). Noting this, the following arrival and departure rates have been adopted:

- AM Peak Hour
  - 70% arrival
  - 30% departure
- PM Peak Hour
  - 30% arrival
  - 70% departure

In addition to the above data, Ason have considered the proposals impact on the wider Mamre Road Precinct. This is particularly important given site access is proposed to be achieved via the intersection proposed under SSD-10448. Given the level of development and the extensive use of Mamre Road by operational traffic from a number of developments, it becomes important to consider the wider cumulative impact on the local road network. Thereby, the below assessment considers the findings of the 2026 interim modelling assessment undertaken on behalf of Mamre Road Landowners Group with 75% of the relevant surrounding sites:

Table 29 Cumulative Sites GFA

Site Address	SSD Number	GFA (m^2) by 2026
657-769 Mamre Road	SSD-9522	242,488
754-770, 772-782 & 784-786 Mamre Road	SSD-10272349 + 772-782 Mamre Road	131,460
788-804, 806-824, 826-842, 844-862, & 864-882 Mamre Road	SSD-10448 (Aspect Industrial Estate)	186,684
884-902 & 904-928 Mamre Road	SSD-17647189	61,158
Total	-	**621,790**

This assessment of a total GFA of 621,790m2 to be complete by 2026. On the basis of the trips rates agreed with TfNSW for the purposes of the Precinct modelling assessment this equates to the following:

- 1,430 AM peak hour trips; and
- 1,492 PM peak hour trips.

Utilising the above figures, as well as SIDRA modelling on the proposed signalised intersection with Mamre Road and that proposed under SSD-10448, the key intersection operation by 2026 is summarised below in **Table 30**.

Table 30 Key Intersection Operation

Intersection	Scenario	Period	Intersection Delay	Level of Service
Mamre Road / New Road	Signals (Interim Upgrade)	AM	10.9	A
		PM	29.1	C

The above analysis indicates that the proposed intersection is able to operate at a Level of Service A in the AM Peak and Level of Service C in the PM Peak. The intersection can accommodate the traffic generation associated with 75% of the initial development of the relevant Landowners Group sites. Until such time when TfNSW has completed a wider Mamre Road Precinct modelling assessment, further assessment of the network will not provide meaningful results until the background traffic flows and distribution is understood.

Noting the above, the development has been able to demonstrate that the proposed interim arrangements, namely the Temporary Access Road as well as the main Access Road (north-south collector road) and Local Industrial Road are sufficient to accommodate the proposed development whilst the wider upgrades are being finalised and undertaken.

Details of the proposed Temporary Access Road are provided below. Further, discussion regarding the provision of an Integrated Freight Network corridor is also provided.

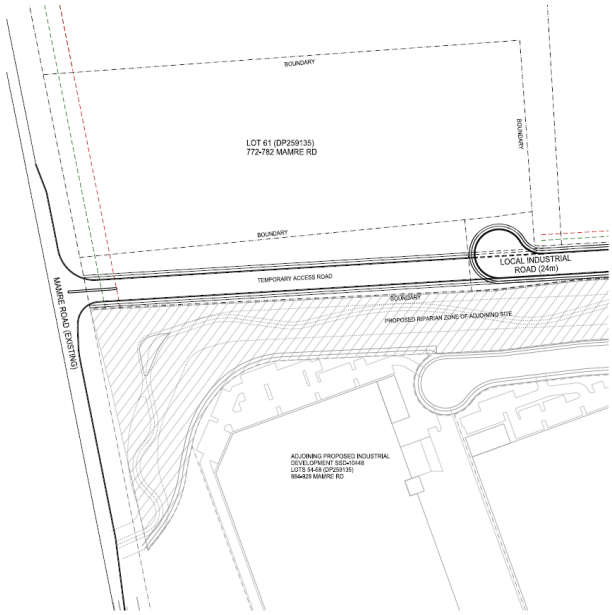
Temporary Access Road

Stage 1 of the YLE involves the delivery of a Temporary Access Road from Mamre Road which will connect with the proposed Local Industrial Road (see **Figure 37** below).

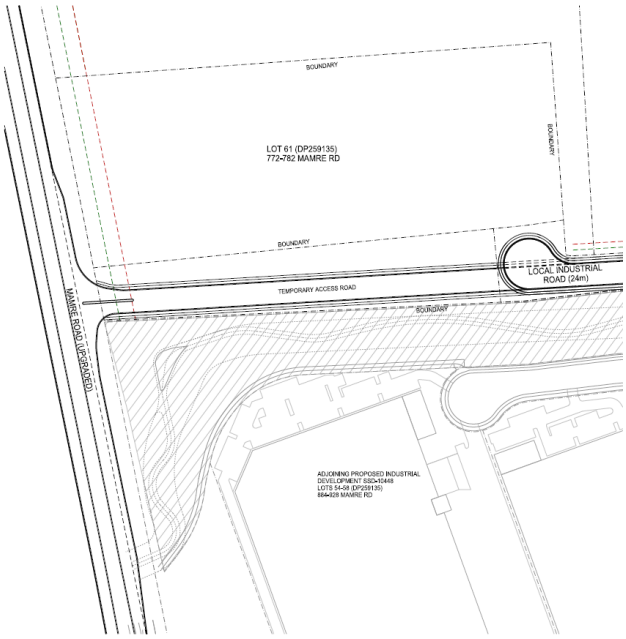
The Temporary Access Road is required to provide access to the site in the interim stages whilst the north-south Access Road is being constructed from the southern property (SSD-10448). At the point in time whereby connections to Mamre Road are made available via the future signalised intersection south of the site, the Temporary Access Road will be made redundant and will be removed. The finger block whereby the Temporary Access Road is sited will then be considered for redevelopment as part of a future DA.

Detailed Civil Drawings (**Appendix K**) have been prepared for the temporary access arrangement, indicating the interim and ultimate scenarios. It should be noted that the 'Ultimate Arrangement' is only relevant to the temporary arrangements and shows the post Mamre Road widening.

Figure 37 Temporary Access Road – Interim and Ultimate Arrangements



Picture 28 Interim Arrangement



Picture 29 Ultimate Arrangement

Source: SBA Architects

Integrated Freight Network

The draft MRP DCP Precinct Road Network Map identifies the location of an Integrated Freight Network which runs along the north and eastern site boundaries. Associated DCP provisions require the need for a developer to accommodate the Integrated Freight Network within the identified locations. As such, a 10m-wide corridor has been provided for the future delivery of the freight network by a future Intermodal Operator. This corridor is sited consistent with the MRP Road Network Map. Compliance against the relevant draft MRP DCP controls is demonstrated in **Appendix E**.

Parking Requirements

Whilst the site is currently subject to the parking rates as specified in Part C10, Table C10.2 Car Parking Rates of the Penrith DCP 2014, when considering the car parking requirements for the site the draft Mamre Road DCP rate has been applied given it will supersede the Penrith DCP once finalised. The draft Mamre Road DCP rate is provided below in **Table 31**.

Table 31 Draft DCP Parking Rates

Land Use	Minimum Parking Rate
Warehouse	1 space per 300m^2 or 1 space per 4 employees, whichever is greater
Factory	1 space per 200m^2 of gross floor area or 1 space per 2 employees, whichever is greater
Office	1 space per 40m^2

Utilising the above rate, **Table 32** below identifies the minimum parking rate required for the site. As per **Table 32**, the proposal requires 675 parking spaces, with 717 being provided as part of the application. As such, the proposal remains fully compliant with the adopted parking rates and is able to be supported from a parking perspective.

Table 32 Carparking Requirements & Proposed Provision

Lot	Land Use	GFA (m^2)	Requirement (spaces)	Currently Proposed
1	Warehouse Office **Sub Total**	19,525 505 **20,030**	65 13 **78**	87
2	Warehouse Office **Sub Total**	22,870 1,000 **23,870**	76 25 **102**	111
3	Warehouse Office **Sub Total**	36,420 1,730 **38,150**	121 43 **165**	167
4	Warehouse Office **Sub Total**	41,480 2,000 **43,480**	138 50 **189**	195
5	Warehouse Office **Sub Total**	30,830 1,500 **32,330**	103 38 **141**	157
Total	-	**157,860**	**675**	**717**

Table 12 of the draft Mamre road DCP further notes that Accessible car spaces should be in accordance with the *Access to Premises Standards, Building Code of Australia and AS2890*. As such, a further two accessible parking spaces are to be provided per every 100 spaces. Given the number of parking spaces proposed with the development, compliance with this control is able to be met.

The Draft DCP refers to the document '*Planning Guidelines for Walking and Cycling*' (NSW Government 2004) for the bicycle parking requirements. This requires bicycle parking for industrial uses to be provided for

3-5% of the staff population. Whilst no provision for bicycle parking has bene provided, this is something that is able to be accommodated at a later date should the need arise.

6.1.1.4. Mitigation Measures

Assessment of the key issues with regard to access and road infrastructure indicates that there would be no need for external road upgrades as a result of the proposed YLE development outside of those already planned and committed. Further, the access arrangements proposed under the proposal integrate with the external road network. However, it is recommended that:

- A Sustainable Travel Plan is to be developed for the site to complement the intent of the draft DCP for the precinct, by outlining the overarching requirements for a future Sustainable/Green Travel Plan.
- Traffic control would be required to manage and regulate construction vehicle traffic movements to and from the Site during construction.
- All vehicles transporting loose materials will have the load covered and/or secured to prevent any items depositing onto the roadway during travel to and from the Site.
- All vehicles are to enter and depart the Site in a forward direction, with reverse movements to occur only within the Site boundary.
- All contractor parking is to be wholly contained within the site; and Pedestrian and cycle traffic along the site frontage will be managed appropriately at all times.

6.1.1.5. Summary

Strategic and detailed traffic analysis undertaken in respect of the YLE proposal has considered the broader traffic environment in the vicinity of the estate, the road infrastructure upgrades planned within the wider WSEA network, the traffic likely to be generated by YLE development and the access, design and parking rates adopted under the YLE proposal.

The analysis has shown that the proposed YLE Concept Masterplan and Stage 1 development are supportable with respect to access, transport and traffic, and temporary access from Mamre Road will not result in any undue impacts.

6.1.2. Biodiversity

6.1.2.1. Overview

The YLE is largely cleared of native vegetation with approximately 2.21-ha, which represents 7% of the subject site being covered in native vegetation. The remaining land comprises exotic vegetation (24.48-ha), farm dams (1.71-ha), and cleared land (4.97-ha), including building pads, existing dwellings and access tracks totalling an area of approximately 30.95-ha. Two plant community types were identified as occurring within the development type:

- PCT 850 – Grey Box – Forest Red Gum grassy woodland on shale of the southern Cumberland Plain
- PCT – 1800 – Swamp Oak open forest on reiver flats on the Cumberland Plain & Hunter Valley

The condition of vegetation across the YLE is degraded due to persistent impacts from agricultural uses. Some of the remaining native vegetation on the site has been assessed as being associated with two Threatened Ecological Communities (**TEC's**) listed under the BC Act. These being Cumberland Plain Woodland CEEC and Swamp Oak Floodplain Forest EEC. There is no Critically Endangered Ecological Communities (**CEEC**) as listed under the EPBC Act. **Figure 38** below highlights the location of TEC's on site, whilst **Table 33** provides further detail of each TEC on site.

Figure 38 TEC's on Site

Source: Cumberland Ecology

Table 33 TEC's on Site

TEC	BC Act Status	EPBC Act Status	Associated PCT	Area on Site
Cumberland Plain Woodland	CEEC	CEEC	PCT 850 (moderate condition): Grey Box - Forest Red Gum grassy woodland on shale of the southern Cumberland Plain, Sydney Basin Bioregion.	0.97
	CEEC	Not Listed	PCT 850 (low condition): Grey Box - Forest Red Gum grassy woodland on shale of the southern Cumberland Plain, Sydney Basin Bioregion.	0.19
Swamp Oak Floodplain Forest	EEC	EEC	PCT 1800 (moderate condition): Swamp oak open forest on riverflats of the Cumberland Plain and Hunter valley.	0.31
	Not Listed	Not Listed	PCT 1800 (low condition): Swamp oak open forest on riverflats of the Cumberland Plain and Hunter valley.	0.68

The proposed development would result in the clearing of a total of 2.21-ha of native vegetation.

In addition, Southern Myotis (*Myotis Macropus*), listed as vulnerable under the BC Act, was recorded within the subject land and therefore, the removal of habitat within the subject land requires a total of 39 species credits. The Southern Myotis habitat on site is shown in **Figure 39** below.

Figure 39 Southern Myotis Location on Site

Source: Cumberland Ecology

6.1.2.2. Method

Cumberland Ecology was commissioned by GPT Group Pty Ltd to prepare a BDAR for the proposed YLE. Given the proposal involves the demolition of existing structures and removal of vegetation to allow for the construction of the proposal, and in accordance with Section 7.9 of the BC Act, the following methodology was undertaken to ensure the proposal is in accordance with Stage 1 (Biodiversity Assessment) and Stage 2 (Impact Assessment) of the BAM:

- Vegetation mapping;
- Vegetation integrity assessment;
- Threatened flora species survey; and
- Threatened fauna species survey.

Full detail of the processes that were undertaken for each of the above procedures that make up the methodology are available within Section 2 of **Appendix R**.

6.1.2.3. Assessment

In order to assess the impact of the application on the sites overall biodiversity, Cumberland Ecology within Section 8 of **Appendix R** have identified the relevant direct and indirect impacts of the proposal. These are detailed below in **Table 34** with considerations and the impact/potential impact provided.

Table 34 Direct & Indirect Impacts on Biodiversity

Issue	Considerations	Impact
Vegetation	Cumberland Plain Woodland Swamp Oak Floodplain Forest	Direct impact Removal of 2.21-ha of native vegetation
Threated Fauna	Southern Myotis habitat	Direct impact Loss of 2.15-ha of habitat
Inadvertent impacts on adjacent habitat or vegetation	Construction activities may result in inadvertent impacts on retained vegetation on adjacent lots.	Indirect impact Short term (during construction) Possible reduced condition of the TEC occurring within lots adjacent to the site
Reduced viability of adjacent habitat due to edge effects	Modification of vegetation extent within the subject land may increase edge effects to retained vegetation on adjacent lots.	Indirect impact Potential long-term Reduced condition of the TEC occurring within Lots adjacent to the subject land.
Reduced viability of adjacent habitat due to noise, dust or light spill	The construction activities associated with the project are likely to increase the noise, dust and light above current levels within the subject land.	Indirect impact Short term (during construction) Short term disruption of fauna habitat during construction
Transport of weeds and pathogens from the site to adjacent vegetation	A number of high threat exotic weeds are known to occur within the subject land and may be inadvertently spread to vegetation adjacent to the subject land.	Indirect impact Potential long-term Reduced condition of the TEC occurring within Lots adjacent to the subject land.
Loss of breeding habitats	Hollow-bearing trees will be removed within the Vegetation Zone 1 during construction.	Indirect impact Long-term impact Reduction in available breeding habitat of hollow-dependent fauna and increased competition for hollows within vegetation on Lots adjacent to the subject land.

In addition to the above identified direct and indirect issues that have been identified as a result of the proposal, the assessment undertaken by Cumberland has considered the impact of the proposal and its risk of a serious and irreversible impact on the local environment. One such serious and irreversible impact that has been identified is the removal of Cumberland Plain Woodland CEEC. Approximately 1.16 ha of Cumberland Plain Woodland will be removed within the subject land. Section 9.1 of the BAM requires the provision of additional information regarding serious and irreversible impact entities that are TECs. The

additional information is required to assist the consent authority to evaluate the nature of an impact on a potential entity at risk of a serious and irreversible impact. An assessment against each of the relevant requirements is undertaken below in **Table 35**.

Table 35 Impact on TEC's for Serious & Irreversible Impact

BAM Section 9.1.1.1 Criteria	**Response**
1. The action and measures taken to avoid the direct and indirect impact on the TEC at risk of an Serious and Irreversible Impact (**SAII**) (or reference to where these have been addressed in the relevant section of the BDAR)	Avoidance of impacts to biodiversity values is addressed in detail in Chapter 7 of **Appendix R**. When considering the requirements associated with the IN1 zoning and the extent of earthworks required for the site to be compatible with an industrial development, in combination with the scattered nature of the native vegetation within the subject land, opportunities to avoid impacts to biodiversity values are limited. As a result, all areas of Cumberland Plain Woodland CEEC in the site are proposed to be removed as part of the project.
2. The assessor must consult the TBDC and/or other sources to report on the current status of the TEC including: a. Evidence of reduction in geographic distribution (Principle 1, clause 6.7(2)(a) BC Regulation) as the current total geographic extent of the TEC in NSW AND the estimated reduction in geographic extent of the TEC since 1970 (not including impacts of the proposal)	The current total geographic extent of Cumberland Plain Woodland varies depending on the source interrogated. The current extent of Cumberland Plain Woodland in the TBDC is described as only less than 9% of the original extent remaining and does not include a conclusive total area for the community. BioNet Classification System (EES 2021b) estimates the current area of occupancy of the community based on the two PCTs (849 and 850) conforming to CPW with available data as approximately 11,200 ha of the original 'Pre-European Extent' published on the website of 71,200-ha. The information on the website varies slightly in percent cleared estimates as the average cleared amount of PCTs 849 and 850 published is listed as 90.5%. This differs with the percent cleared when calculated using the current extent versus the Pre-European Extent which would suggest that over 15% of the community still remains – a difference of over 3,500-ha. it is noted however, that BioNet documents two further PCTs as potentially conforming to the BC Act listing of Cumberland Plain Woodland. These PCTs however, do not contain published total areas for the communities. Therefore, the BioNet total current and Pre-European Extent areas of the community cannot be accurately estimated and is likely a vast under-estimation. Cumberland Plain Woodland is also associated with a targeted recovery plan for the Cumberland Plain that was prepared by the Department of Environment, Climate Change and Water (**DECCW** – now **DPIE**) (2011). This document is the currently accepted standard for the retention and recovery of TECs in the Cumberland Plain. Table 2 of the recovery plan displays an estimated current total of Cumberland Plain Woodland of 24,530 ha however, it is reported that a small portion of this total does not meet the listing criteria for the CEEC under the BC Act. The same table also estimates the 'Pre-1750 (ha)' total of the community at

BAM Section 9.1.1.1 Criteria	Response
	125,449-ha being a reduction in area to current levels of approximately 20%. Of the current total area, the recovery plan reports approximately 967-ha identified as occurring within reserves. The Final Determination for Cumberland Plain Woodland (NSW Scientific Committee 2011) identifies that the TEC is restricted in geographic distribution to the Sydney Basin Bioregion and was estimated to have an extant area of approximately 11,054 ha (±1,564 ha) according to mapping by Tozer (2003), which covered the Cumberland Plain. This is reported by the final determination as being a reduction from the 'Pre-European distribution' by 8.8% (±1.2%) suggesting the Pre-European distribution of the community to cover approximately 125,613-ha. According to the Map of Critically Endangered Ecological Communities NSW Version 6 dated 25/02/2020 (Department of Planning 2020) the extant of Cumberland Plain Woodland in NSW is approximately 23,021 ha. This mapping dataset has been derived from the extraction of relevant vegetation map units contained in a variety of existing vegetation mapping projects held by DPIE. Following a review of the above information for the extent of Cumberland Plain Woodland, both current and prior to European settlement, it is clear there is some variation in area calculations. Therefore, the total current area of the community is likely to be an in the middle of these areas. It is noted however, that it is unanimously accepted by all sources that the community has suffered extensive clearing to a level that the community requires significant external intervention to maintain and recover the community within the Sydney Basin Bioregion. The estimated reduction in the geographic extent of Cumberland Plain Woodland since 1970 is not available in the TBDC, BioNet, the final determination or the recovery plan, and was not identified from a search of available literature. Nonetheless, the pre-European extent of Cumberland Plain Woodland is listed as approximately 125,449 ha within the Cumberland Plain Recovery Plan as previously mentioned. No published data was found in the literature on the 1970 extent of Cumberland Plain Woodland and an accurate estimate of the reduction in distribution between the current extent and the 1970 geographic extent cannot be provided.
b. The extent of reduction in ecological function for the TEC using evidence hat describes the degree of environmental degradation or disruption to biotic processes (Principle 2, clause	According to the final determination for Cumberland Plain woodland CEEC (NSW Scientific Committee 2011), the ecological community has undergone, is observed, estimated, inferred or reasonably suspected to have undergone or is likely

BAM Section 9.1.1.1 Criteria	Response
6.7(2)(b) BC Regulation) indicated by: i. Change in community structure ii. Change in species composition iii. Disruption of ecological processes iv. Invasion and establishment of exotic species v. Degradation of habitat; and vi. Fragmentation of habitat	to undergo a very large reduction in the ecological function of the community through processes such as: ▪ Extensive removal of large old trees; ▪ Tree-felling for crops and pastures; ▪ Fragmentation of habitat; ▪ Grazing by livestock and rabbits; ▪ Modification of understory, to be dominated by woody exotic species; ▪ Soil chemical and structural modification associated with agricultural uses; ▪ Changes in frequency of fire regimes; ▪ Prevention of recruitment of species, through continued underscrubbing and mowing; and ▪ Reduction of understorey complexity, through the reduction of native shrub cover, resulting in degradation of habitat.
c. Evidence of restricted geographic distribution (Principle 3, clause 6.7(2)(c) BC Regulation), based on the TEC's geographic range in NSW according to the: i. Extent of occurrence ii. Area of occupancy; and iii. Number of threat defined locations	Paragraph 11 of the NSW Scientific Final Determination for Cumberland Plain Woodland notes that the TEC is restricted to the Sydney Basin Bioregion. Based on map data from Tozer (2003), the TEC was estimated to occur within an extent of occurrence of 2,810km2 and an area of occupancy of just under 2,100 m^2. As previously discussed in this assessment, based on current available information from various mapping projects it is estimated that the current area of occupancy is approximately 23,021 ha, as shown in Figure 14 of **Appendix R**. No threat defined location are specifically identified in the TBDC, however the ecological community is critically endangered across its range. According to the final determination, small, protected areas of the community exist in reserves such as Kemps Creek, Mulgoa and Windsor Downs, Scheyville NP, and Leacock, Rouse Hill and Western Sydney Regional Parks.
d. Evidence that the TEC is unlikely to respond to management (Principle 4, clause 6.7(2)(d) BC Regulation).	This principle is not identified as applicable to Cumberland Plain Woodland. The TEC does respond to management, with several successful management measures outlined in the Best Practice Guidelines for Cumberland Plain Woodland (DEC (NSW) 2005).
3. Where the TBDC indicates that data is 'unknown' or 'data deficient' for a TEC for a criterion listed in Section 9.1.1(2), the assessor must record this in the BDAR.	Not applicable.

BAM Section 9.1.1.1 Criteria	Response
4. (a) The impact on the geographic extent of the TEC (Principles 1 and 3) by estimating the total area of the TEC to be impacted by the proposal: i. In hectares; and ii. As percentage of the current geographic extent of the TEC in NSW.	The proposal will remove approximately 1.16 ha of Cumberland Plain Woodland in the subject land. The extent of the TEC in NSW differs depending on the information source. Based on a review of vegetation mapping layers, the estimated geographic extent in NSW is between approximately 11,000-ha and 25,000-ha according to resources reviewed for *BAM Section Criteria 2. a)*. However, based on the existing literature, the lowest number quoted for the estimated geographic extent of Cumberland Plain Woodland is 11,054-ha (NSW Scientific Committee 2011). Based on the two numbers outlined above, the extent of Cumberland Plain Woodland to be impacted by the proposal is approximately 0.01% of the current geographic extent of the TEC in NSW.
(b) The extent that the proposed impacts are likely to contribute to further environmental degradation or the disruption of biotic processes (Principle 2) of the TEC by:	
Estimating the size of any remaining, but now isolated, areas of the TEC; including areas of the TEC within 500m of the development footprint or equivalent area for other types of proposals	The proposal requires the removal of 1.16 ha of CPW within the subject land and will result in further isolation of CPW from larger areas within the assessment area. The isolated area of CPW remaining within the patch land consists of scattered paddock trees that form steppingstone habitat. The proposed development will result in the formation of two isolated areas adjacent to the subject land, however, it is noted that future development of the adjacent land as part of the Mamre Road Precinct is likely to result in the removal of the remaining areas of CPW. Based on the OEH's (2016a) mapping of the Sydney Metropolitan Area, there is approximately 12.28 ha of Cumberland Plain Woodland within 500m of the development footprint (subject land). Hence, the removal of 1.16 ha of Cumberland Plain Woodland in the subject land represents ~9% of the occurrence of the TEC within 500m of the development footprint.
Describing the impacts on connectivity and fragmentation of the remaining areas of the TEC measures by: Distance between isolated areas of the TEC, presented as the average distance if the remnant is retained AND the average distance if the	Approximately 1.16 ha of Cumberland Plain Woodland occurs within the subject land. The closest area of CPW to the subject land is approximately 86m to the north east. The removal of Cumberland Plain Woodland within the subject land will result in further separation of these two area, which will end up being approximately 350m apart. These isolated areas of CPW consist of scattered paddock trees that form steppingstone habitat.

BAM Section 9.1.1.1 Criteria	Response
remnant is removed as proposed, and	The proposed development includes the establishment of a biodiversity corridor across the subject land. The creation of a biodiversity corridor will provide improved connectivity of areas of the TEC across the subject land.
Estimated maximum dispersal distance for native flora species characteristic of the TEC, and	The main dispersal mechanisms for flora species associated with Cumberland Plain Woodland include one or a combination of the following: ▪ Animals, ▪ Wind, ▪ Water runoff, and ▪ Gravity. Eucalypts within the community are likely to rely on animal assisted dispersal by highly mobile vertebrate pollinators (birds and bats) which disperse pollen over large areas when foraging (Southerton S.G. 2003). The maximum dispersal distance for native flora species characteristic of the community is estimated to be at least 1000 m and potentially much further. The proposed development includes the establishment of a biodiversity corridor across the subject land. Although scattered paddock trees will be further isolated by the proposed development, the creation of a biodiversity corridor will provide connectivity across the subject land and minimise dispersal distances for native flora species.
Other information relevant to describing the impact on connectivity and fragmentation, such as the area to perimeter ratio for remaining areas of the TEC as a result of the development	The area of CPW within the subject land is part of a remnant patch native vegetation which currently has an area to perimeter ratio of approximately 9:1. Following clearing for the project the area perimeter ratio of the remnant will be approximately 13:1. As previously described, the project is not considered to significantly affect the connectivity of the TEC, as the vegetation proposed for removal consists of a small remnant patch within a highly degraded landscape. Furthermore, the establishment of a biodiversity corridor within the re-aligned E2 zone will continue to facilitate and contribute to the connectivity of the TEC.
Describing the condition of the TEC according to the vegetation integrity score for the relevant vegetation zone (s) (Section 4.3). The assessor must also include the relevant composition, structure and function condition scores for each vegetation zone.	Within the site Cumberland Plain Woodland corresponds to PCT 850 and two vegetation zones. The occurrence of the TEC in the subject land is mainly limited to canopy trees with a degraded understory. Zone 1 850 Moderate: ▪ The vegetation integrity score is: 34.3 ▪ The composition score is: 22.6 ▪ The structure score is: 49.0 ▪ The function score is: 36.7

BAM Section 9.1.1.1 Criteria	Response
	Zone 2 850 Low: ▪ The vegetation integrity score is: 12.3 ▪ The composition score is: 8.2 ▪ The structure score is: 22.0 ▪ The function score is: 10.3
5. The assessor may also provide new information that demonstrates that the principle identifying that the TEC is at risk of an SAII is not accurate.	The area of CPW within the subject land is part of a remnant patch of native vegetation which currently has an area to perimeter ratio of approximately 9:1. Following clearing for the project the area perimeter ratio of the remnant will be approximately 13:1. As previously described, the project is not considered to significantly affect the connectivity of the TEC, as only a relatively small are of CPW will be removed. As part of the project, a biodiversity corridor will be established which will continue to facilitate and contribute to the connectivity of the TEC across the wider assessment area. Furthermore, the patch of CPW within the subject land has been identified as Certified land under the Draft CPCP and is likely to be biocertified in future years. As such, it is considered likely that this small area of CPW would be cleared in future years without the requirement for further assessment.

6.1.2.4. Mitigation Measures

Section 9 of **Appendix D** includes a number of mitigation measures that have been nominated by Cumberland Ecology to minimise any potential threat to the biodiversity on site as a result of the proposal. These mitigation measures have been summarised below in **Table 36**.

Table 36 Summary of Mitigation Measures

Measure	Action	Timing	Frequency	Responsibility
Delineation of clearing limits	Clearing limits marked either by high visibility tape on trees of metal/wooden pickets, fencing or an equivalent boundary marker. Disturbance, including stockpiling, restricted to cleaning limits.	Construction	Once	Contractor
Erosion, sediment & pollution control	Construction activities will be undertaken in accordance with “The Blue Book” (Landcom 2004). These include implementation of the following measures:	Construction	Throughout construction	Contractor

Measure	Action	Timing	Frequency	Responsibility
	- Installation of sediment control fences; - Covering soil stockpiles; and - Avoiding soil disturbance prior to heavy rainfall			
Vegetation Clearance Timing	The clearance of trees and vegetation would only occur outside of winter (June, July and August).	Construction	Prior to clearing	Contractor
Pre-clearance survey	Pre-clearance surveys will be conducted in all areas of vegetation that are required to be cleared. Pre-clearing surveys will be undertaken within one week of clearing. Habitat features will be marked during the pre-clearing survey.	Construction	Once	Contractor
Staging of clearing	Vegetation clearing will be conducted as a single stage process. Animals disturbed or dislodged during the clearance but not injured will be assisted to move to adjacent bushland or other specified locations If animals are injured during the vegetation clearance, appropriate steps will be taken to humanely treat the animal	Construction	Once	Contractor
Weed management	Appropriate weed control activities will be undertaken in accordance with the Greater Sydney Regional Strategic Weed Management Plan 2017 – 2022 (LLS: Greater Sydney 2017).	Construction	Prior to construction	Contractor
Dam Dewatering Plan	Prior to dam dewatering activities a Dam Dewatering Plan prepared that includes a strategy for dewatering of the three dams within the subject land and a relocation site for any fauna captured	Construction	Once	Contractor

Measure	Action	Timing	Frequency	Responsibility
Vegetation Management Plan	A VMP is to be prepared prior to the commencement of construction which will provide guidelines for the revegetation, regeneration, and management of vegetation within the subject land.	Pre/post Construction	Pre/post construction	Contractor

6.1.2.5. Summary

The proposed YLE development requires the removal of all native vegetation within the subject land. As the project includes the removal of native vegetation, a number of offsets are required in the form of ecosystem credits. This assessment indicates that the removal of the native vegetation within the subject land requires a total of 21 ecosystem credits of the Forest Red Gum woodland on shale of the southern Cumberland Plain (PCT 850), and 19 ecosystem credits for the Swamp Oak open forest (PCT 1800). Furthermore, one threatened species, Southern Myotis, was recorded within the subject land and therefore, the removal of habitat within the subject site requires a total of 39 species credits. Subject to the implementation of the mitigation and management measures detailed above, the impacts of the proposal on the sites biodiversity would be maintained at acceptable levels.

6.1.3. Urban Design and Visual Impacts

6.1.3.1. Overview

A Visual Impact Assessment (**VIA**) has been prepared by Urbis and is included in **Appendix J**. The purpose of the VIA is to assess the potential visual impacts of the proposed YLE on surrounding private and public receivers and outline appropriate strategies for mitigation. After undertaking a visual catchment assessment of the wider context of the site, eight suitable viewpoints were selected to analysis for visual impact. An outline of the assessment methodology and overall impact is provided below.

The YLE is located within a rural context where land use is characterised by low intensity agricultural and rural residential land uses.

The overall visual impacts of the site have been assessed in terms of the Mamre Road Precinct Structure Plan which identifies the area as industrial land. Similarly, as a result of Ministerial Local Planning Direction 3.5, future residential development of the site is not possible as it is contained within the Western Sydney Airport ANEF 20 noise contour, resulting in any future land use being limited to employment generating purposes.

The proposed development consists of five industrial or warehouse and distribution centre buildings with varying floor plate sizes and up to approximately 14.6 metres in height from RL with associated service areas, public domain and landscape.

6.1.3.2. Method

There is no established method specified or typically required to be used in NSW when undertaking a VIA. Whilst there are a variety of methods able to be used, Urbis has elected to follow guidance provided in:

- Guidelines for Landscape and Visual Impacts Assessment 3rd edition, published by the Landscape Institute and Institute of Environmental Management and Assessment (GLVIA)
- Guideline for landscape character and visual impact assessment, Environmental Impact Assessment practice note EIA -NO4 prepared by the Roads and Maritime Services December 2018 (RMS LCIA)

When selecting viewpoints to undertake the VIA, a rigorous approach to the analysis was undertaken, informed by ground truthing on site. Views were selected on the basis of a series of criteria including:

- Views where the development would be most prominent such as high points, places where the proposed development addresses public roads or zones with clear lines of sight to the proposed development;
- Views from important public domain elements such as open space or landscape corridors; and
- Consideration of the location of surrounding industrial development surrounding the site.

The assessment categorised the value of views and ultimately, the extent of visual impact in consideration of the presence and prominence of the following features in the foreground, middle-ground and far distance:

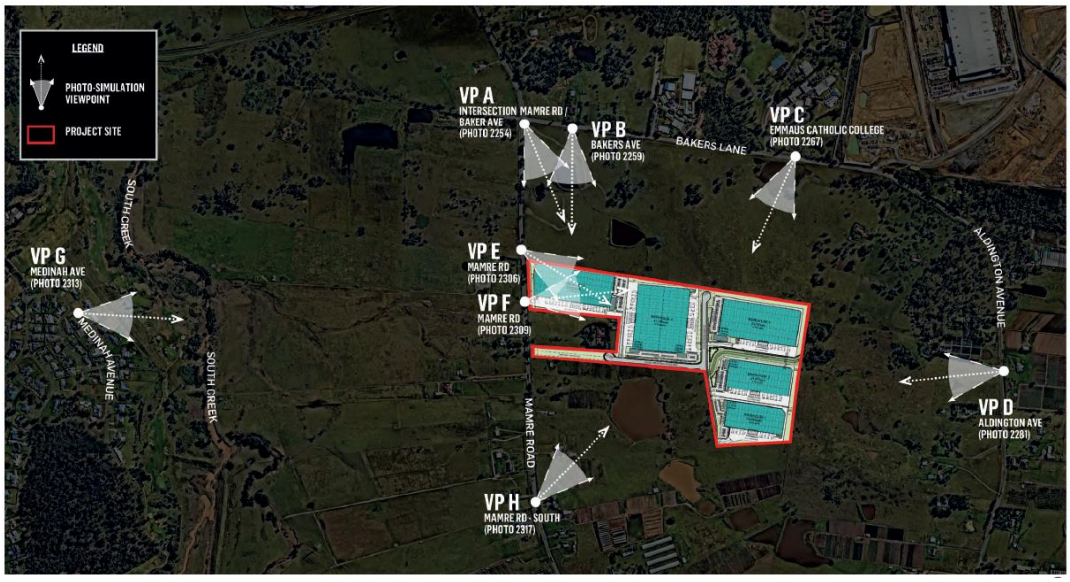
- Expanse and openness;
- The nature and extent of the horizon;
- The natural landform;
- The presence of natural environmental features such as trees, water features;
- The degree to which the landscape has been modified by human interactions such as land clearance and construction;
- The presence of buildings and structures and their relative architectural quality; and
- The relative uniqueness.

The viewpoints identified for analysis are displayed in **Figure 40** and the assessed value and potential impacts on these views is summarised in the below subsection.

6.1.3.3. Assessment

Figure 40 below indicates the locations of the eight viewpoints selected for the VIA to assess the likely visual impact associated with the proposal. **Table 37** details the assessment undertaken by Urbis, identifying the features of each viewpoint, and an assessment of the likely impacts of the proposal to each view.

Figure 40 View Location Map



Source: Urbis

Table 37 Potential Impacts of the Proposal on Views

View	Features	Impacts
A. Intersection of Mamre Road & Bakers Lane	The foreground of this view is predominantly characterised by pastoral grazing land of rural appearance. The foreground composition includes limited development and is relatively open in nature. The background horizon is formed by low undulating topography, of rural character and includes isolated vegetation and areas of open sky. Parts of two low built forms are visible below the ridgeline. The view includes a short section of Mamre Road. From this view place there is no access to views of high scenic quality, unique items or icons or heritage items.	Low Impact In the short term this view will largely remain unchanged. The foreground composition and rural visual character will remain during Stage 1. In time following establishment of Stage 1, a proposed long-low built form will occupy a narrow horizontal section of the mid-ground view. Part of the built form proposed that is visible beyond intervening landform will block a short section of a background view of vernacular topography, isolated vegetation, other built forms and a minor amount of open sky. The proposed development will not block access to areas of high scenic quality or particular icons or items.
B. Bakers Avenue	This is an expansive view looking towards the south west edge of the site. The foreground is characterised by relatively open pastoral land, scattered vegetation and further afield part of a water body. The distant composition includes topography which falls in elevation to low lying flatter land which is characterised isolated built forms for example some residential development and agri-business metal shed structures. Powerlines and stanchions which support these area visible feature above the line of vegetation. The distant background composition includes a long horizontal mountain ridgeline.	Low Impact Stage 1 built forms including Warehouses 1 and 3, entry roads etc are not visible in this view. Future stages of the development including parts of Warehouse 5 are visible beyond the water body and foreground pastoral landscape. The future built form is substantially set back from this view location and as such the visual character of the foreground will remain unaffected. The future built form will block a minor amount of background vegetation and buildings, with a roof height that sits below the height of the distant background ridgeline-horizon.
C. Emmaus Catholic College	The view from Bakers Lane to the subject site is constrained by topography, with views to the site blocked by a ridgeline. The predominant visual character is defined by open space of rural small holdings and pastoral landscapes. The view includes isolated residences and vegetation. An expanse of blue sky is	Nil Impact None of the built forms proposed within any stages of the proposed development will be visible from this location. There will be no visual effects or potential impacts on views from Bakers Lane from this vicinity.

View	Features	Impacts
	visible above the top of the ridgeline, making up a large portion of the view.	
D. Aldington Avenue	The existing view is characterised by an open pastoral landscape and vegetation.	Nil Impact The view is orientated towards the proposed location of Warehouses 1,2, 3 and 4. However all potential views to the built forms proposed are blocked by intervening topgraphy. This view remains the same with no change.
E. 754-770 Mamre Road	This view includes relatively open and undulating topography of rural character which rises in elevation to the east. The foreground predominantly includes pastoral land, an isolated dwelling, rural sheds and structures and groups of trees. The background horizon is formed by a low local ridgeline. Notwithstanding the view is of topographical variety, it is typical of the wider visual context and vernacular visual rural character. From this view place there is no access to views of high scenic quality, unqiue items or heritage items .	Medium-High Impact The majority of stage 1 built forms will be blocked in time by future buildings warehouse 1, 2 and 4 will be blocked by Warehouse 5 which is set close to Mamre Road. Warehouse 3 at the north-east corner of the site sits low in the landscape with a short section at its southern end rising above the local ridgeline to form a new horizon. This part of the site will be blocked in views from Mamre Road following construction of Warehouse 5. Retaining walls and internal roads will be visible post construction, where visibility will decrease over time given their relative elevation. The visual effects of this and the west elevation for warehouse 5 will be partially mitigated following the installation of the proposed landscape planting.
F. Mamre Road	This view includes the Mamre Road site frontage with an existing foreground characterised by rural-pastoral open space. The midground presents a rise in elevation due to the local spur which constrains the visual catchment from Mamre Road to the east. A line of vegetation sits between the open grass and the rise in elevation.	Medium-High Impact The proposed retaining wall associated with future warehouse slab levels introduces a new continuous low horizontal form into the foreground view composition. This continuous built form will block views to Stage 1 buildings in the east of the site and is partly blocked by the raised turfed berm. The bern will be planted with a range of understory and canopy species so that in time, the visual effects of the wall and potential future warehouse buildings will be partially screened in views from Mamre Road. The built form proposed will

View	Features	Impacts
		block part of the local spur, ridgeline and vegetation.
G. Mendinah Avenue	The foreground is characterised by low density residential development, wide side setbacks and long-distance views to rural landscapes. Mid-ground vegetation blocks direct access to Mamre Road, but the distant background includes elevated parts of the subject site and local spur and ridgeline.	Low Impact The built forms proposed are of low visibility in this view, where Stage 1 buildings are screened by intervening vegetation. The visual effects of the proposed development are therefore limited.
H. Mamre Road - South	This view is predominately characterised by open, flat pastoral grazing land enclosed by a local ridgeline with scattered clumps of vegetation and an isolated single-storey dwelling. This is a representative view of the kind available from Mamre Road approaching the site from the south and could be described as typical or vernacular in relation to the local visual context. Elevated topography along the eastern margins of the site from the local visual horizon.	Medium Impact In the short term, this foreground of this view will remain largely unchanged in terms of composition and rural visual character. The buildings proposed in Stage 1 introduce long, low built forms which will occupy a narrow horizontal section of the mid-ground view but sit below the ridgeline/vegetation horizon. The proposed development will not block access to areas of high scenic quality or the existing natural horizon.

6.1.3.4. Mitigation Measures

As noted above within **Table 37**, Urbis have assessed the visual impact form the proposal at the selected viewpoints to range from Nil to Medium-High. This impact is generally considered to be suitable as the mitigative effects of the proposed planting and the strategic context of the site within a future industrial precinct will overtime result in an acceptable visual bearing.

Whilst proposed mitigation measures are generally limited to the proposed planting of vegetation and selected colours and design finishes, consideration of the five specific approaches to mitigating visual impact has been undertaken as part of the assessment within this EIS. These considerations include Avoidance, Reduction, Alleviation, Off-site Compensation, and Management. Relevant responses to each of the considerations is provided below:

- Avoidance: The proposed development is located within the Mamre Road Precinct of the WSEA, which has been established to address Sydney's shortfall of employment lands by providing opportunity for investment, business, and job growth through the rezoning of strategically significant land in Western Sydney. Given the objectives of the WSEA, as outlined within the WSEA SEPP, avoidance of the proposal altogether or relocating the proposal elsewhere is not considered a suitable mitigation option.
- Reduction: Scale, earthworks and access of the proposal are all linked to anticipated operational requirements for the proposed warehouse and logistics development. The scope for reduction as a primary mitigation measure is limited given the likely operational constraints, and therefore is not considered to be an effective mitigation measure.
- Alleviation: A detailed landscape design has been proposed that considers the need to minimise built form impact. The proposed planting will ultimately filter views of the proposed warehouses and mitigate

the required removal of any native vegetation on site. The effectiveness of the proposed landscaping will increase over time as the plantings mature.

- Off-site Compensation: The number of visual receivers to the proposed development is limited and as a result the use of off-site compensation through the use of planting is limited but could provide filtered views of the proposed development for a limited number of receivers if they felt the visual impacts were too intrusive.
- Management: A Construction Environmental Management Plan (**CEMP**) is to be prepared prior to application for a CC which will outline the management measures for environmental impacts including those on sensitive receivers.

6.1.3.5. Summary

The areas with the greatest potential for visual impact as a result of the proposal are located on the west of the site. The analysis of views E and F addresses these potential impacts. However, the mitigation proposed will reduce the impacts to a moderate to low range, by filtering views to the proposed building.

All other viewpoints were assessed to have a minor or negligible impact. Careful selection of building finishes and colours combined with proposed landscape planting at the development site, effectively filters and blends the development into its surrounding context. This in turn will help to reduce visual impacts for any sensitive receivers and locations in close proximity to the Proposal.

6.1.4. Noise and Vibration

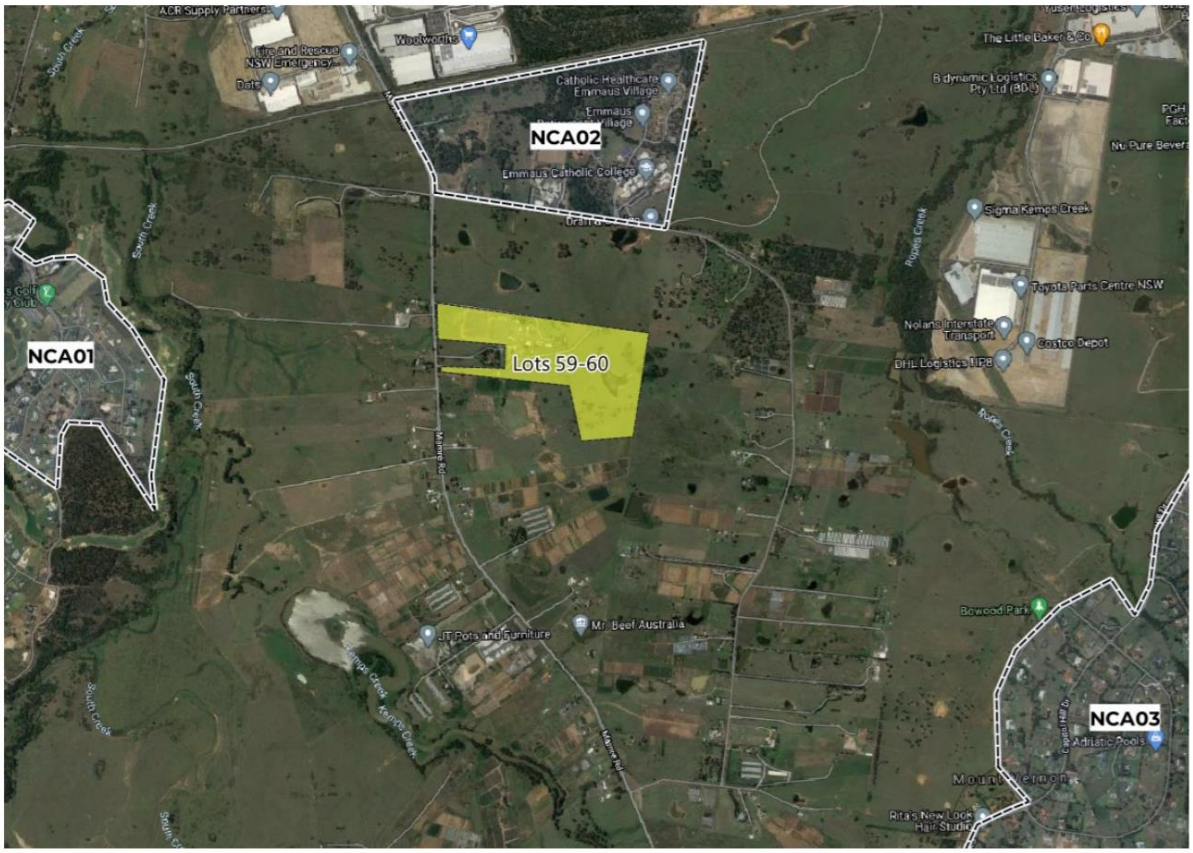
6.1.4.1. Overview

A Noise & Vibration Assessment has been complete by RWDI Australia Pty Ltd (**RWDI**) and is included as **Appendix II**. The assessment found that the existing ambient noise environment surrounding the development was typical of a rural environment, with the natural environment dominating the background noise. The area surrounding the development has been divided into three Noise Catchment Areas (**NCA**) by RWDI. The NCAs group together sensitive receivers with similar existing noise environments. The NCAs and sensitive receivers in the area around the development are detailed in **Table 38** and are shown in **Figure 41**.

Table 38 Noise Catchment Areas

NCA	Direction of Development	Description
NCA01	West	▪ Noise environment is currently influenced by road traffic from Luddenham & Mamre Roads. ▪ Closest residential receivers are 1.4km from the site.
NCA02	North	▪ Noise environment is currently influenced by road traffic on Mamre Road. ▪ Notable sensitive receivers include Mamre Anglican School & Emmaus Catholic College, Emmaus Retirement Village, and Little Smarties Early Learning Centre. The closest receivers being 550m from the site.
NCA03	East	▪ Noise environment is currently influenced by road traffic on Mamre Road and distant industrial activity. ▪ The closest residential receiver is 2.9-km from the site.

Figure 41 Noise Catchment Area Locations



Source: RWDI

The results of the unattended ambient noise surveys are presented below in **Table 39** as rating Background Level (**RBL**) for the daytime, evening, and night-time periods.

Table 39 Measured Noise Levels

Noise Logger	Applicable Noise Logging Location	RBL (dBA)[1]		
		Daytime	Evening	Night-time
L01[3]	NCA01	36	33	30 (actual 28)[2]
L02[4]	NCA02	35	34	32
L03[5]	NCA03	39	46[6]	47[6]

Note 1: Daytime (6am-7pm), Evening (7pm-10pm), and Night-time (10pm-6am)

Note 2: Minimum RBL for 'Night-time' used for assessment

Note 3: Logger location 7 Medinah Avenue, Twin Peaks as part of 1018022 *R01AB Mamre Road Kemps Creek ENV (Acoustic Works, 2020)*

Note 4: Logger location Emmaus Retirement Village as part of 610.15617-R2 Oakdale West Estate DA Noise Impact Assessment, (SLR, 2017)

Note 5: Logger location Lot, 5a/25 Ottelia Rd, Kemps Creek as part of 630.11166 Oakdale South Estate DA Noise Impact Assessment, (SLR, 2015)

Note 6: Daytime RBL used for Evening and Night-time used as per NPfI methodology for high Evening and Night-time levels.

6.1.4.2. Method

The principal sources of noise generated by the proposed development include both heavy and light vehicles on site access roads, hard stands and parking areas, truck unloading operations including forklift use and mechanical plant. The predicted noise from construction activities were also analysed, as were the road traffic noise impacts of the site on nearby receivers.

The potential noise impacts of the construction and operation of the proposed development on nearby receptors was predicted using noise modelling software SoundPlan in accordance with the following guidelines:

- *NSW Noise Policy for Industry 2017*
- *NSW Road Noise Policy 2011*
- *NSW Interim Construction Noise Guideline 2009*

The noise model was constructed from a combination of aerial photography, existing ground topography, and design ground topography for the development. The local terrain, design of the development, receiver buildings and structures have been digitised in the noise model to develop a three-dimensional representation of the operations of the development and surrounding environment.

Noise modelling was conducted for day, evening and night time as the warehouses would be operating 24 hours per day. No shielding provided by future buildings surrounding the site have been included within the model.

6.1.4.3. Assessment

Construction Noise & Vibration

The following proposed construction activities have been considered and modelled to determine the noise generated ruing the construction phase:

- Site clearance and enabling works
- Excavation and construction of retaining walls
- Construction of internal north-south road network
- Building construction
- Carpark construction

The modelling considered a 'worst case scenario' where it is noisiest over a 15-minute period. It also assumes that all activities are undertaken during the standard construction hours of Monday to Friday 7.00am to 6.00pm and Saturday 8.00am to 1.00pm. The results of the modelling are shown below in **Table 40**. The results demonstrate that the highest construction noise impacts are predicted to be up to 44dBA during the road construction phase when construction equipment is located in the northern portion of the site, closet to sensitive receiver NCA02. As noted below, there are no exceedances of the NMLs predicted at any residential receivers during the construction period. Industrial receivers to be located in the adjoining lots will not be subject to noise impacts greater than the external Construction Noise Management level of 75dB L_{Aeq}.

Table 40 Predicted Construction Noise Impacts

Works	Stage	NCA	Noise Level – $L_{Aeq, 15min}$					
			Noise Management Levels (NMLs)				Worst-case Predicted	Exceedance during Standard Hours
			Day Standard	Day OOH	Eve OOH	Night OOH		
Stage 1 (Warehouse 1 & 3)	Site Establishing and clearing	NCA01	46	41	38	35	30	-
		NCA02	45	40	39	37	36	-
		NCA03	49	44	34	34	26	-
		Industrial	75				50	-

Works	Stage	NCA	Noise Level – $L_{Aeq, 15min}$					
			Noise Management Levels (NMLs)				Worst-case Predicted	Exceedance during Standard Hours
			Day Standard	Day OOH	Eve OOH	Night OOH		
	Bulk excavation and retaining walls	NCA01	46	41	38	35	35	-
		NCA02	45	40	39	37	41	-
		NCA03	49	44	34	34	31	-
		Industrial	75				55	-
	Building Construction	NCA01	46	41	38	35	30	-
		NCA02	45	40	39	37	37	-
		NCA03	49	44	34	34	27	-
		Industrial	75				49	-
Stage 1 (Internal Road)	Site Establishing and clearing	NCA01	46	41	38	35	31	-
		NCA02	45	40	39	37	36	-
		NCA03	49	44	34	34	26	-
		Industrial	75				57	-
	Road Construction	NCA01	46	41	38	35	39	-
		NCA02	45	40	39	37	44	-
		NCA03	49	44	34	34	34	-
		Industrial	75				65	-

Operational Noise

Noise modelling was conducted for day, evening and night-time as the warehouses would be operational 24 hours a day. The noises sources detailed below have been modelled throughout the development. As details of specific items and exact usage of warehouse facilities are not yet known, a conservative approach to modelling has been applied. The following noise sources were modelled:

- External Forklift operations with a reference sound power level of 93(SWL)
- Noise emissions associated with internal warehouse activity with a total reverberant sound pressure level of 75 dBA (LAeq,15min) for each warehouse
- Worst case peak light and heavy vehicle movements

The following traffic movements were modelled:

Table 41 Onsite Vehicle Movements

	Assessment Period	Light Vehicles Per 15min	Heavy Vehicles Per 15min
All Warehouses (1-5)	Day	10	11
	Eve	22	5
	Night	17	3

Whilst **Table 42** below highlights the predicted operational noise levels for the proposal:

Table 42 Predicted Operational Noise Levels

Receiver Location	Time of Day	Predicted Noise Level $L_{Aeq,15min}$	Criteria PTNLs $L_{Aeq,15min}$	Exceedance
NCA01	Day	<30	41	-
	Evening	<30	38	-
	Night	<30	35	-
NCA02	Day	32	44	-
	Evening	32	42	-
	Night	32	37	-
NCA03	Day	<30	37	-
	Evening	<30	37	-
	Night	<30	37	-
Industrial	When in use	57	70	-

Note 1: Results represent future industrial receivers located at a minimum of 300m distance from project boundary.

Overall, the operation of the proposed development is predicted to comply with the proposed development specific criteria under natural weather conditions at all receivers.

6.1.4.4. Mitigation Measures

The following mitigation measures have been recommended to mitigate noise and vibration levels for all surrounding receptors.

Construction Noise & Vibration

- Avoiding the coincidence of noisy plant working simultaneously close together would result in reduced noise emissions.
- Equipment which is used intermittently is to be shut down when not in use.
- Where possible, equipment with directional noise emissions should be oriented away from sensitive receivers.
- Regular compliance checks on the noise emissions of all plant and machinery used for the proposal would indicate whether noise emissions from plant items were higher than predicted.
- Where possible, heavy vehicle movements should be limited to standard construction hours; and

- Non-tonal reversing alarms should be used on all items of plants and heavy vehicles used for construction.

Operational Noise

- Relocating heavy vehicle access routes away from the site boundary, taking advantage of screening afforded by the building envelope.
- Reducing peak 15-minute heavy vehicle movements across the development by staggering delivery/pickup times.
- Reducing peak 15-minute light vehicle movements across the development by staggering shift change times for employees.
- Minimising the concurrent use of forklifts and other mobile plant outside the warehouses (ie in the hardstand areas) and/or limiting their use to the less sensitive daytime and evening periods.
- The use of quieter mobile plant options, such as electric forklifts instead of gas-powered forklifts.
- Locating fixed mechanical plant away from the most-affected sensitive receivers, such as ground level locations instead of rooftop locations, and/or shielded behind the warehouse/office structures.
- The use of quieter fixed mechanical plant options, noting that this assessment assumes an indicative noise level for modelled mechanical plant.
- Acoustic screening, no less than 500 mm higher than the top of the plant, located as close as practicable to the plant.
- Best management practice – such as switching vehicles and plant off when not in use, education of staff and drivers regarding noise impacts, regular maintenance of plant and equipment to minimise noise emissions, use of silent or non-tonal reverse alarms instead of tonal alarms, minimising use of reverse alarms by providing forward manoeuvring where practicable.

6.1.4.5. Summary

When evaluating the noise impact associated with the proposed development it is important to consider the changing land use of the surrounding area. The development site and nearby sensitive receivers are part of the Broader WSEA which will be impacted by the following current and future major developments:

- Western Sydney Airport;
- Western Sydney Aerotropolis;
- Mamre Road upgrade; and
- The potential Southern Link Road.

The intent of the Mamre Road Precinct is for the site and surrounding landholdings to be redeveloped for a range of industrial purposes. The closest sensitive receivers to the development are located on land which has been rezoned to IN1 General Industrial, which would likely result in the eventual redevelopment of these properties for industrial-related employment uses.

Additionally, the Aeronautical Impact Assessment lodged as **Appendix GG** notes that the YLE is located just outside of the ANEF 20 contour for the future Western Sydney Airport contours that indicate impact by aircraft noise. However, a number of nearby receivers are impacted by the maximum noise levels associated with aircraft flyovers from the operational future airport. In addition, the NSW Government has enacted Ministerial 9.1 Directions to prevent additional sensitive receivers from locating within the ANEF 20 contour. Thereby the likeliness of sensitive receivers intensifying around the development is unlikely.

Development of the Western Sydney Aerotropolis would likely result in significant changes to the acoustic environment of the area as the existing rural agriculture uses will transition into major employment hubs for the region.

Finally, the Mamre Road Upgrade will increase background noise in the vicinity of the development with an increase in traffic movements across the Precinct.

While operational noise mitigation and management measures are recommended to be investigated further for the development, it is recommended that the changing land use and associated acoustic environment be considered when evaluating the reasonableness and feasibleness of any such measures. The combination of mitigation measures outlined above will minimise the impact of acoustic pollution to neighbouring sites. Given the strategic context of surrounding lands and mitigation measures, it is concluded the proposed development can be supported on the site.

6.1.5. Indigenous Heritage

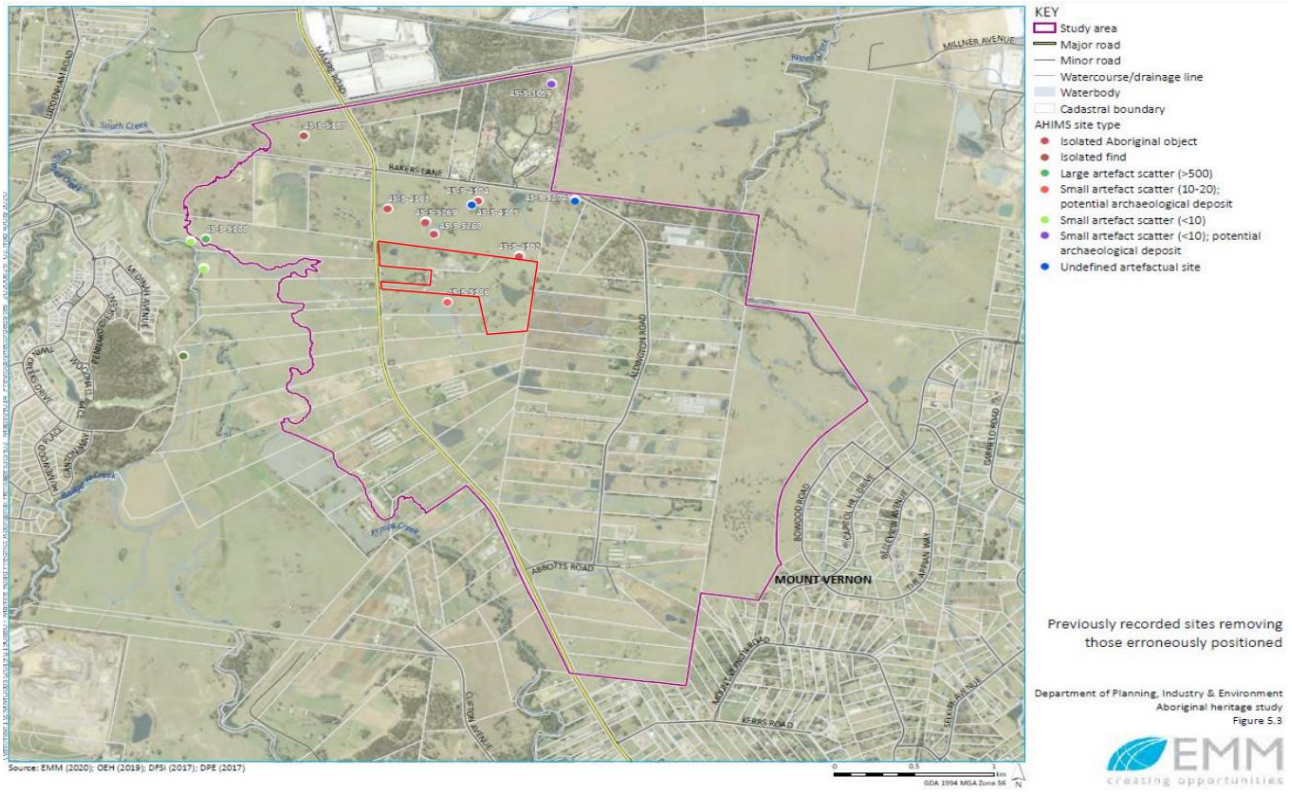
6.1.5.1. Overview

An Aboriginal Cultural Heritage Assessment Report (**ACHAR**) has been undertaken for the proposed YLE SSDA and is included in **Appendix U**. The objectives of theACHAR are the followingL

- Investigate the presence, or absence, of Aboriginal objects and/or places within and in close proximity to the subject area, and whether those objects and/or places would be impacted by the proposed development.
- Investigate the presence, or absence, of any landscape features that may have the potential to contain Aboriginal objects and/or sites and whether those objects and/or sites would be impacted by the proposed development.
- Document the nature, extent and significance of any Aboriginal objects and/or place and sites that may located within the subject area.
- Document consultation with the Registered Aboriginal Parties (RAPs) with the aim to identify any spiritual, traditional, historical or contemporary associations or attachments to the subject area and any Aboriginal objects and/or places that might be identified within the subject area.
- Provide management strategies for any identified Aboriginal objects and/or places or cultural heritage values.
- Provide recommendations for the implementation of the identified management strategies.
- Prepare a final ACHAR to be accompany SSD-10272349.

The ACHA for the proposal was undertaken following the completion of the Mamre Road Precinct Aboriginal Heritage Study (**AHS**), undertaken by EMM in 2020 on behalf of the DPIE. The AHS was undertaken to inform planning for the development of the Mamre Road Precinct based on the final structure plan and provide inputs to the DCP being prepared for the whole precinct. The AHS identified several Aboriginal objects and sites that are erroneously positioned within the Mamre Road Precinct in the DPIE AHIMS database. These are identified below in **Figure 42**.

Figure 42 AHIMS Site Locations



Source: EMM

The conclusions drawn from the EMM report and its potential impact on the future development include:

- There are four Aboriginal sites registered within the subject area and a further four registered as being located in close proximity to the subject area.
- Each of the four sites within the recorded in the AHIMS register as being within the subject area and two of those recorded as being in close proximity to the subject area have incorrect GPS coordinates and, according to the details of the sites, are located approximately 1 km to north, well outside of the subject area.
- There are two correctly registered Aboriginal sites in the immediate vicinity of the subject area: an isolated find (AHIMS ID# 45-5-4102) and an artefact scatter with an associated PAD (AHIMS ID# 45-5-5186).
- The subject area should be considered archaeologically sensitive as a result of registered Aboriginal sites and the landform within (ridge line, number of low rises adjacent to open depressions) and the registered sites in the vicinity.
- Previous archaeological investigation within the subject area was insufficient in identifying the significance/extent as well as the appropriate management approach to both identified and potential archaeological sites.

As part of the ACHA process, additional on-site test excavation and consultation with relevant Aboriginal parties was undertaken to ensure the development could proceed without harm to any potential Aboriginal items or sites of significance.

6.1.5.2. Method

Test Excavation

All excavation works were undertaken in line with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010) in order to understand the nature, extent, integrity and research significance of the Aboriginal archaeological resource. The test excavation process included:

- The Stage 1 and Stage 2 test excavation undertaken in the subject area (Lot 59 and 60 DP 259135) recovered 370 Aboriginal objects, all stone artefacts, from a total of 344 excavated test units (TUs) and expansion units (EUs).
- The highest densities of artefacts were located in Areas B and E (Lot 59 DP 259135).
- Area B contained 138 artefacts out of 129 excavated test pits and accounted for 37 % of the total subsurface assemblage.
- Area E contained 219 artefacts out of 91 excavated test pits and accounted for 59 % of the total subsurface assemblage.
- The remaining Areas A, C, D, F and G contained very low artefact densities
- All excavated material was wet sieved through a 5mm metal sieve station.

For full detail on the staged methodology approach, please refer to the ACHAR lodged as **Appendix U**.

Consultation Process

In administering its statutory functions under Part 6 of the *NSW National Parks and Wildlife Act 1974*, the Department of Premier and Cabinet (**DPC**) requires that Proponent consult with Aboriginal people about the Aboriginal cultural heritage values (cultural significance) of Aboriginal objects and/or places within any given development area in accordance with Clause 80c of the *NSW National Parks and Wildlife Regulation 2009*.

Consultation in line with the Consultation Requirements (DECCW 2010) is a formal requirement where a Proponent is aware that their development activity has the potential to harm Aboriginal objects or places. The DPC also recommends that these requirements be used when the certainty of harm is not yet established but a proponent has, through some formal development mechanism, been required to undertake a cultural heritage assessment to establish the potential harm their proposal may have on Aboriginal objects and places.

As such, when undertaking the relevant consultation for the YLE, Urbis have adopted the following four stage process, adopted in line with the relevant Consultation Requirements as per the DECCW:

- Stage 1 – Notification of project proposal and registration of land.
- Stage 2 – Presentation of information about the proposed project.
- Stage 3 – Gathering information about the cultural significance.
- Stage 4 – Review of draft cultural heritage assessment report.

For full detail on the consultation methodology approach, please refer to the ACHAR lodged as **Appendix U**.

6.1.5.3. Assessment

Archaeological Survey and Excavation

A field survey of the subject area was undertaken on 19th October 2020 by Urbis Senior Archaeologists with three RAP site officers in attendance. No new Aboriginal sites were identified during the survey.

The archaeological test excavation of the site is took place over multiple dates. The investigation includes:

- Lot 60 DP 259135 – Stage 1 Test Excavations occurred on 24th-26th November 2020; and
- Lot 59 DP 259135 – Stage 1 Test Excavations occurred on 17th-23rd May 24th-28th May & 31st May to 4th June 2021. Stage 2 Text Excavations occurred on 7th-9th June 2021.

The results of the test excavations are provided in **Figure 43** below with further details contained in the ACHAR.

Figure 43 Test Excavation Transects & Test Units

Source: Urbis

Consultation

To satisfy the Consultation Requirements, letters were sent to the 59 Aboriginal groups and individuals via email on 29th July 2020, or by post on 5th August 2020 (depending on the method identified by each group), to notify them of the proposed project. A total of 52 were sent via email, with 8 sent by registered post. The letters afforded a response time of greater than 14 days, being 26th August 2020 in accordance with the 14-day minimum requirement.

A total of 17 groups registered interest in the project as a result of this phase within the nominated timeframe and a further 3 groups registered after the deadline. Please refer to Table 14 of **Appendix U** for the full list of registered groups.

An advertisement was placed in the Koori Mail on the 12 August 2020. The advertisement invited all Aboriginal persons and organisations who hold cultural knowledge relevant to determining the significance of Aboriginal objects and places in the study area to register their interest by 26 August 2020.

Feedback received as part of the consultation process has been positive and in support of the proposed methodology. The final ACHAR was circulated to RAPs for final comment for 28 days.

6.1.5.4. Mitigation Measures

Based on the findings of the ACHAR it is concluded that the project can proceed in accordance with the following recommendations:

- Further archaeological salvage excavation work be conducted for Open Area B, Open Area E and Test Unit E66 as a part of SSD approval. It is recommended that this be undertaken as a condition of the SSD approval.
- Following SSDA approval and prior to construction surface collection of the isolated surface artefact IF1 must be undertaken in accordance with the Code of Practice and with the involvement of the Registered Aboriginal Parties.
  - Isolated Find 01 (IF-1) – GPS coordinates 0295424E, 6253350N

- Through consultation with the RAPs a decision will be made as to the destination for the artefacts recovered during both the test excavation and surface collection programs. All project artefacts will be sorted and packaged in accordance with Australian Museum Standards.
- Materials be prepared for inclusion in site inductions for any contractors working at the subject area. The induction material should include an overview of the types of sites to be aware of (i.e. artefact scatters or concentrations of shells that could be middens), obligations under the NPW Act, and the requirements of an archaeological finds' procedure (refer below). This process should be included in the CEMP and any site management plans.
- Although considered highly unlikely, should any archaeological deposits be uncovered during any site works, a procedure must be implemented. Steps to be carried out are outlined in the ACHAR.
- A Human Remains Procedure is to be adopted in the unlikely event that human remains are uncovered during any site works.
- A copy of the final ACHAR must be provided to all Project RAPs. Ongoing consultation with RAPs should occur as the project progresses, to ensure ongoing communication about the project and key milestones, and to ensure the consultation process does not lapse, particularly with regard to consultation should the CFP be enacted.

6.1.5.5. Summary

The ACHAR attached as **Appendix U** has provided a number of recommendations at the conclusion of the document. Subject to these recommendations, the proposal is able to proceed in line with the vision of the WSEA and zoning of the site.

6.1.6. Stormwater and Drainage

6.1.6.1. Overview

Costin Roe have prepared a comprehensive Civil Engineering Report and Water Cycle Management Strategy (**WCMS**) (**Appendix L**) to support the proposed SSD and assess the civil engineering characteristics of the site and technical considerations of the WCMS. Costin Roe have developed a comprehensive stormwater and drainage system to support the YLE, with detailed civil drawings contained at **Appendix K**.

The WCMS comprises several key areas of stormwater and water management which are provided below. These key areas have been established with the aim to reduce impacts from the YLE development on the surrounding environment and neighbouring properties. The WCMS identifies the management measures to meet the adopted targets for:

- Stormwater quantity;
- Stormwater quality;
- Water Supply and reuse;
- Flooding (addressed separately in Section 6.2.10 of this EIS); and
- Erosion and sediment control.

Key Areas and WCMS Objectives

The WCMS has been prepared with consideration to the overarching purpose of water cycle management (WCM), that is, a holistic approach that addresses the competing demands placed on a region's water resources whilst optimising the social and economic benefits of development in addition to enhancing and protecting the environmental values of receiving waters.

The WCMS has been prepared to demonstrate that the development is able to provide and integrate Water Cycle Management (**WCM**) measures into the stormwater management strategy for the YLE and for future development sites in the estate.

The WCMS presents guiding principles for WCM across the MRP which includes establishing water management targets and identifying management measures required for future building developments to meet these targets.

Several WCM measures have been included in the WCMS and engineering design, which are set out in **Appendix L** and Civil Drawings at Appendix **K**. The key WCM elements and targets which have been adopted in the design are included in **Table 43**.

Table 43 Water cycle Management Targets

Element	Target	Reference
Water Quantity	Maintaining or improving the volume of stormwater and peak flows from this site. "*demonstrate that there will be no increase in runoff from the site as a result of the development for all storms up to and including the 100-year Average Recurrence Interval (ARI) event for all storm durations*".	Penrith Council - *Stormwater Management Policy, Section 3.3.3*
Water Quality	Load-based pollution reduction targets based on an untreated urbanised catchment: Gross Pollutants 90% Total Suspended Solids 85% Total Phosphorus 60% Total Nitrogen 45% Total Hydrocarbons 90%	Penrith Council DCP – Part C3
	Pollution Concentration Targets Total Nitrogen (TN) 1.67mg/L Ammonium (NH4) 0.09mg/L Total Phosphorous (TP) 0.14mg/L Turbidity 29NTU Conductivity 1081 uS/cm pH 7.27-7.69	DRAFT Mamre Road Precinct DCP 2020
Water Supply	Reduce Demand on non-potable water uses. Provide minimum 80% reduction of non-potable uses.	Penrith Council DCP Part C3.
Erosion and Sediment Control	Appropriate erosion and sedimentation control measures must be described in the environmental assessment for all stages of construction to mitigate potential impacts to surrounding properties.	Landcom Blue Book Penrith City Council DPI
Waterway and Stream Health	Confirmation of pre and post stream forming flows and Stream Erosion Index (SEI) no greater than 2.0.	Western Sydney Engineering Design Manual, Western Sydney Planning Partnership (2020)

A summary of how each of the WCM objectives will be achieved is provided in **Table 44** below.

Table 44 Summary of proposed WCM strategy

Element	Purpose of the measure	Proposed strategy
Stormwater Quantity Management	The stormwater quantity management target is established with the aim to reduce the impact of urban development on existing drainage systems by limiting post-development discharge within the receiving waters to the pre-development peak, and to ensure no affectation of upstream, downstream, or adjacent properties.	Attenuation of stormwater runoff from the development proposed to be managed via three estate level basins. Sizing of the OSD systems has been completed using DRAINS modelling software for the 50% to 1% AEP storm for various durations. The modelling also accounts for the drainage system provided for adjacent sites and conveyance of upstream catchments.
Stormwater Quality management	The stormwater quality management target aims to capture and treat pollutants that are present in stormwater runoff to minimise the adverse impact these pollutants could have on downstream receiving waters.	A series of Stormwater quality improvement devises (**SQID**'s) have been incorporated in the design of the estate. The proposed management strategy will include the following measures: Primary treatment of the whole of the development catchment (including roads and development sites) will be made via one of two gross pollutant traps (**GPTs**). GPTs will be located upstream of each of the stormwater management basins. Primary treatment of the whole of the development catchment (including roads and development sites) will be made via one of two GPTs. GPTs will be located upstream of each of the stormwater management basins. Primary treatment of the whole of the development catchment (including roads and development sites) will be made via one of two GPTs. GPTs will be located upstream of each of the stormwater management basins. Development sites will not require any lot specific treatment systems due to the estate wide management systems proposed.
Water Demand Reduction / Rainwater Reuse		Rainwater reuse measures will be provided as part of future building development designs. Rainwater reuse will be required to reduce demand on non-potable uses by at 80%. The reduction in demand will target non-potable uses such as toilet flushing and irrigation.

Element	Purpose of the measure	Proposed strategy
Waterway Health (Stream Erosion Index (**SEI**))	An SEI assessment for discharge from the development to South Creek has been completed based on industry accepted modelling technique for stream health to manage stormwater discharge.	A SEI metric for stream health, over a mean annual runoff volume (**MARV**) has been adopted. The SEI focuses on channel form with a critical flow threshold which is estimate for the stream whereby excess flow is summed over time to produce a measure of the erosion potential in the stream.

6.1.6.2. Method

Hydrologic Modelling and Analysis

General Design Principles

The design of the stormwater system for the site is based on relevant national design guidelines, Australian Standard Codes of Practice, Penrith City Council and accepted engineering practice.

Rainfall Data

Rainfall intensity Frequency Duration (IFD) data used as a basis for DRAINS modelling for the 2 to 100 Year ARI events, was taken from The Bureau of Meteorology Online IFD Tool.

Runoff Models

The calculation of the runoff from storms of the design ARI has been calculated with the catchment modelling software DRAINS for internal drainage only.

DRAINS Model Design Parameters

The design parameters for the DRAINS model are to be based on the recommendations as defined by council and parameters for the area and are contained in **Table 45**.

Table 45 DRAINS Parameters

Model for design and analysis run	Rational method
Rational Method Procedure	ARR87
Soil Type-Normal	3.0
Paved (Impervious) Area Depression Storage	1mm
Supplementary Area Depression Storage	1mm
Grassed (Pervious) Area Depression Storage	5mm
Antecedent Moisture Condition (ARI=1-5 years)	2.5
Antecedent Moisture Condition (ARI=10-20 years)	3.0
Antecedent Moisture Condition (ARI=50-100 years)	3.5
Sag Pit Blocking Factor (Minor Systems)	0
On Grade Pit Blocking Factor (Minor Systems)	0

Model for design and analysis run	Rational method
Sag Pit Blocking Factor (Major Systems)	0.5
On Grade Pit Blocking Factor (Major Systems)	0.2

Water Quantity Management

A hydrological analysis was undertaken to estimate the impact of the development of the site on peak flows at the downstream extent of the site. Modelling of stormwater runoff quantity was considered for the pre-existing case and for the operational phase of the development.

In order to assess the existing and operational phase peak discharges from the development site, a DRAINS hydrological model was used to estimate peak flows from catchments on the site for various storm durations for Q2 year ARI to Q100 year ARI events.

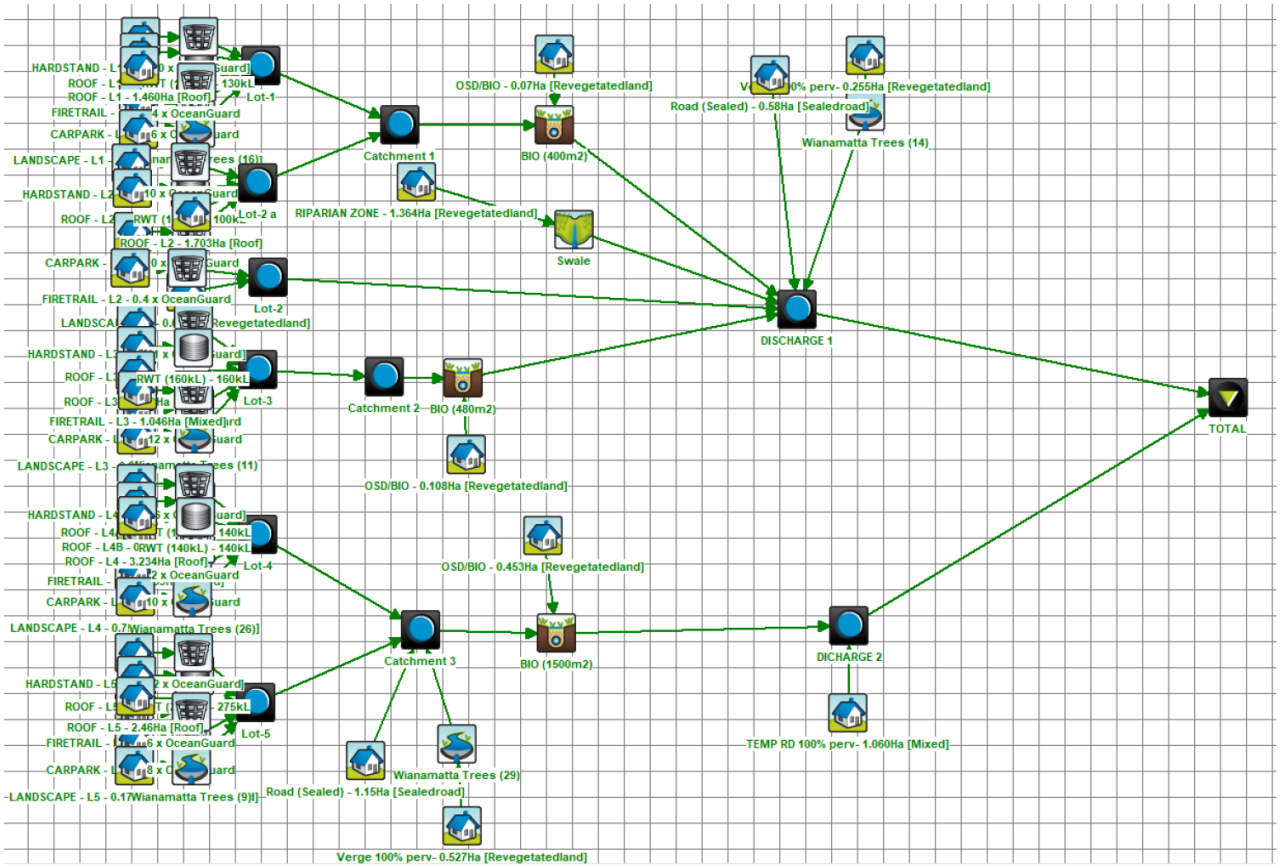
Stormwater Quality, Reuse and Maintenance

MUSIC modelling was used to model water quality. By simulating the performance of stormwater management systems, MUSIC can be used to predict if the proposed systems and changes to land use are appropriate for their catchments and capable of meeting specified water quality objectives. The water quality constituents modelled in MUSIC include:

- Total Suspended Solids
- Total Phosphorus
- Total Nitrogen

The pollutant retention criteria set out in **Table 43** were used as a basis for assessing the effectiveness of selected treatment trains. **Figure 44** shows the MUSIC model layout.

Figure 44 MUSIC Model Layout



Source: Costin Roe

Stream Health / Stormwater Discharge

It is proposed that SEI metric is adopted for stream health for this development. A baseline SEI of 2.0 has been adopted for the YLE.

The SEI assessment adopted for the YLE has been calculated for the site area relating to the new development of 20.25 ha and is described below.

Steps used to estimate the SEI:

8. Estimate the critical flow for the receiving waterway above which mobilisation of bed material or shear erosion of bank material commences.
9. Develop and run a calibrated MUSIC model of the area of interest for predevelopment conditions to estimate the mean annual runoff volume above the critical flow.
10. Develop and run a MUSIC model for the post developed scenario to estimate the mean annual runoff volume above the critical flow.

The outputs from steps 3 and 4 were used to calculate the SEI for the proposed scenario.

The critical flow for the receiving water (25% of the 2-year ARI) has been estimated at 0.15m3/s.

A pre-developed model was set up based on the site being modelled as 100% pervious agriculture land. The pre-development runoff volume, above the critical flow, based on the calibrated MUSIC model was calculated at 17.28 ML/yr.

The post-development runoff volume, above the critical flow, based on the post-developed MUSIC model was calculated at 2938 ML/yr. The post development model is based on the MUSIC model submitted and approved as part of this SSDA.

6.1.6.3. Assessment

Stormwater Quality

MUSIC modelling was used to assess stormwater quality for the YLE. Shows the results of the MUSIC model analysis. The reduction rate is expressed as a percentage and compares the post-development pollutant loads without treatment versus post-development loads with treatment.

Table 46 MUSIC Analysis Results -% Reductions

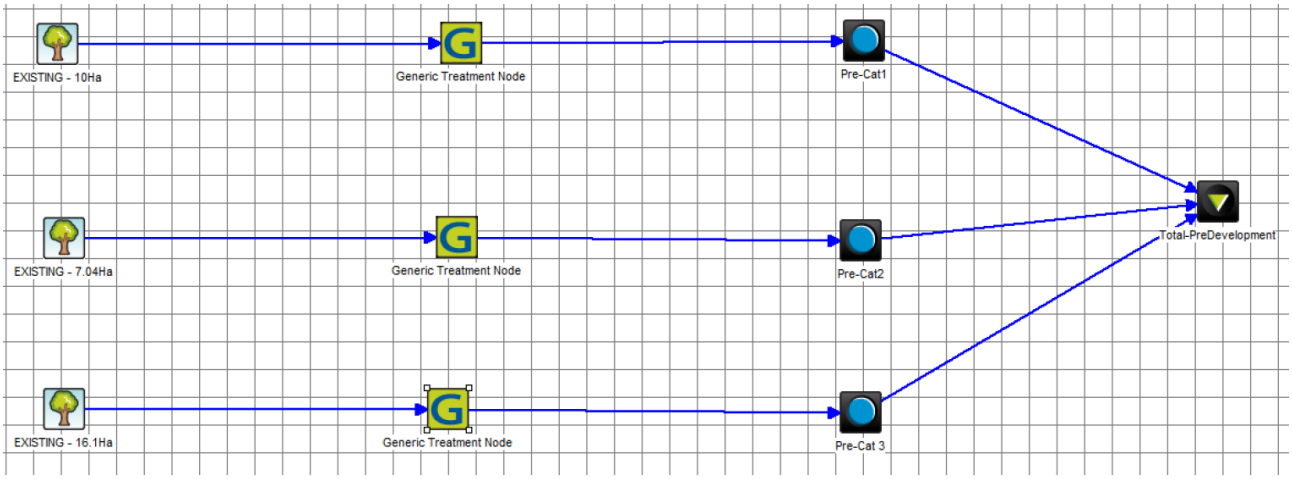
	Source	Residual Load	% Reduction
Total Suspended Solids (kg/yr)	22800	3390	85.2
Total Posphorus (kg/yr)	48.2	18.1	62.5
Total Nitrogen (kg/yr)	369	182	50.7
Gross Pollutants (kg/yr)	4530	96.1	97.9

The MUSIC modelling has shown that the proposed treatment train of STM will provide stormwater treatment which will meet Council's and typical growth centre water quality reduction objective requirements in an effective and economical manner.

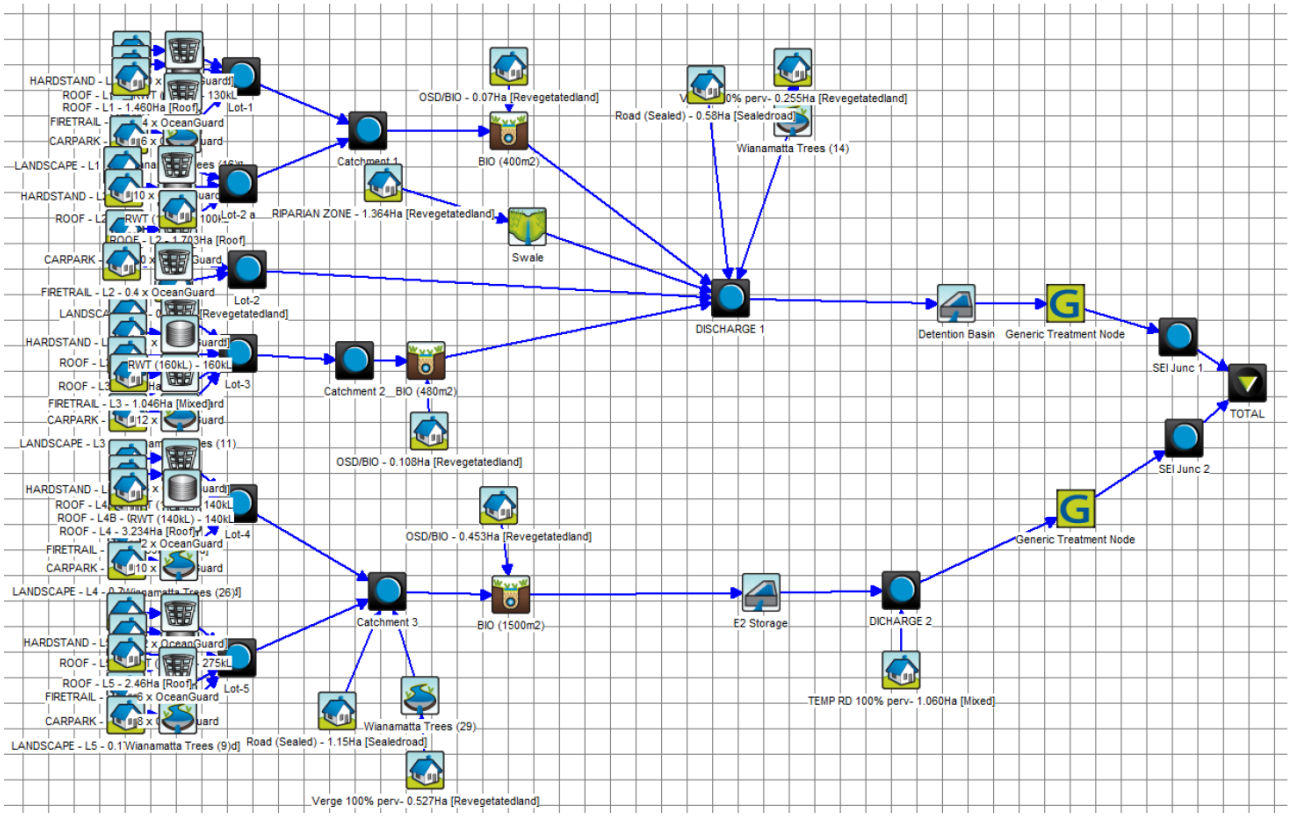
Stream Health / Stormwater Discharge

The SEI for the development has been calculated at 1.7. This can be seen to be below the maximum proposed target of 2.0, hence the requirements of the SEI assessment have been met.

Figure 45 MUSIC Model Configuration – SEI Pre and Post-development



Picture 30 Pre-development model



Picture 31 Post-development model

Source: Costin Roe

6.1.6.4. Mitigation Measures

Water Quantity Management

Detention storage on the development site is required to reduce local outflows. The proposed site layout allows for provision of a combined OSD/Bio-Retention basin. The ultimate discharge location will be to the existing table drains along the Mamre Road frontage.

The adopted arrangement models the basin configuration shown in **Table 47**. The proposed layout and detailed drawings provided at **Appendix K**.

Table 47 OSD Detention Characteristics (Post Developed)

ARI	Duration (mins)	Peak Flow (m^3/s)					Depth (mm)	Storage (m^3)
		Discharge Location	No Atten.	With attenuation				
				Low	High	Total		
2	120	North-East	3.439	0.563	0	0.563	1560	1,975
		South-West	3.852	1.45	0	1.450	1610	2,025
20	60	North-East	7.901	0.579	1.62	2.16	1960	3,090
		South-West	8.460	1.28	4.95	6.23	2000	3,950
100	60	North-East	8.37	0.543	3.10	3.64	2080	3,420

ARI	Duration (mins)	Peak Flow (m^3/s)					Depth (mm)	Storage (m^3)
		Discharge Location	No Atten.	With attenuation				
				Low	High	Total		
		South-West	10.70	1.308	8.309	9.62	2210	4,890

The hydrologic analysis shows that, with the provision of the on-site detention systems detailed above, the post development peak flows from the site will be attenuated to less than pre-development, therefore meeting the requirements of Penrith City Council and broader MRP.

Stormwater Quality, Reuse and Maintenance

Developed impervious areas including roof, hardstand, car parking, roads and other extensive impervious areas are required to be treated by the Stormwater Treatment Measures (**STM**'s). STM's will be sized according to the whole catchment area of the YLE and will be based on a treatment train approach to ensure that all of the adopted targets are met.

Components of the treatment train for the YLE are as follows:

- Primary treatment to development lots and proposed roads are via a vortech type GPT (Rocla CDS, OceanSave or similar approved). Pre-treatment of the stormwater will assist in mitigating the potential for early onset sedimentation of the bio-retention systems;
- Tertiary treatment to the catchment will be provided by bio-retention system within each of the three proposed estate detention systems.

MUSIC modelling has been performed to assess the effectiveness of the selected treatment trains and to ensure that the adopted pollutant retention targets are met. The MUSIC modelling has shown that the proposed treatment train of STM will provide stormwater treatment which will meet the retention target and typical growth centre water quality reduction objectives in an effective and economical manner.

Stormwater Harvesting

Rainwater harvesting is not proposed for the estate development, however future individual development lots will require 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 achieve a minimum demand reduction of 80%.

Generally, 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.

Stream Health / Stormwater Discharge

The adopted 2.0 SEI target can adequately be met with the proposed stormwater system and is considered a good balance between the desire of the DPIE to achieve acceptable waterway impact to South Creek whilst being able to provide practical and economic measure to achieve similar waterway health outcomes. This same approach has been adopted by the Western Sydney Planning Partnership (including Penrith City Council, DPIE and surrounding Councils in the Growth Centres) and is considered the most suitable stream health / stormwater discharge impact mitigation measure for the YLE.

Maintenance and Monitoring

A maintenance schedule has been prepared and is included at **Appendix D** of the Civil Report and WCMP (**Appendix L**) to ensure that each component of the stormwater system and water quality treatment is properly operated and maintained.

6.1.6.5. Summary

The civil engineering strategy for the site has been developed and provides a best practice solution within the constraints of the existing landform and proposed YLE layout. Within this strategy a stormwater quantity and quality management strategy has been developed to reduce both peak flows and pollutant loads in stormwater leaving this site. The stormwater management for the development has been designed in accordance with Penrith City Council and with consideration to the draft MRP DCP 2020.

The hydrological assessment proves local post development flows from the site will be less than pre-development flows and demonstrates that the site discharge will not adversely affect any land, drainage system or watercourse as a result of the development.

During the construction phase, a ESCP will be in place to ensure 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 a proprietary filtration system is proposed to mitigate any increase in stormwater pollutant load generated by the development. MUSIC modelling results indicate that the proposed STM are effective in reducing pollutant loads in stormwater discharging from the site and meet the requirements of Council's pollution reduction targets. Best management practices have been applied to the development to ensure that the quality of stormwater runoff is not detrimental to the receiving environment.

It is proposed that a SEI of 2.0 be adopted for stormwater discharge from the development and stream health metric. The adoption of the SEI is considered a good balance between the desire from the DPIE to achieve acceptable waterway impact to South Creek with the ability to provide practical and economic measures to achieve good waterway health outcomes.

6.1.7. Waterways and Riparian Areas

6.1.7.1. Overview

Cumberland Ecology were commissioned by GPT to prepare a Riparian Lands Assessment (**Appendix S**) for the subject site and the proposed removal of vegetation, watercourse realignment and modification, and removal of farm dams. At the time of the assessment, there were three farm dams present on the site, one of which have since been drained. The purpose of the assessment is to assess the riparian ecology within the existing E2 corridor, as well as other riparian habitats within the site including the three farm dams. The assessment also considers the three proposed water detention basins which will be created to support the stormwater and WSUD strategy.

Existing vegetation at the site is assessed at Section 6.1.2 of this EIS.

The assessment identifies one unnamed 2nd order watercourse (as per the Strahler System of ordering watercourses) within the E2 zone in the eastern portion of the site. The watercourse is a tributary of South Creek within the Hawkesbury-Nepean catchment. The watercourse shows no bank structure and consists primarily of a drainage depression with evidence of overland flow from the dam at the eastern side of the land, downstream to the damn on the adjacent lot to the west. The remaining larger farm dam is located within the E2 zone is filled from the watercourse, and the overflow runs to the smaller farm dam to the west. The location of the farm dams (including those which have since been de-watered) and the watercourse is shown in **Figure 46**.

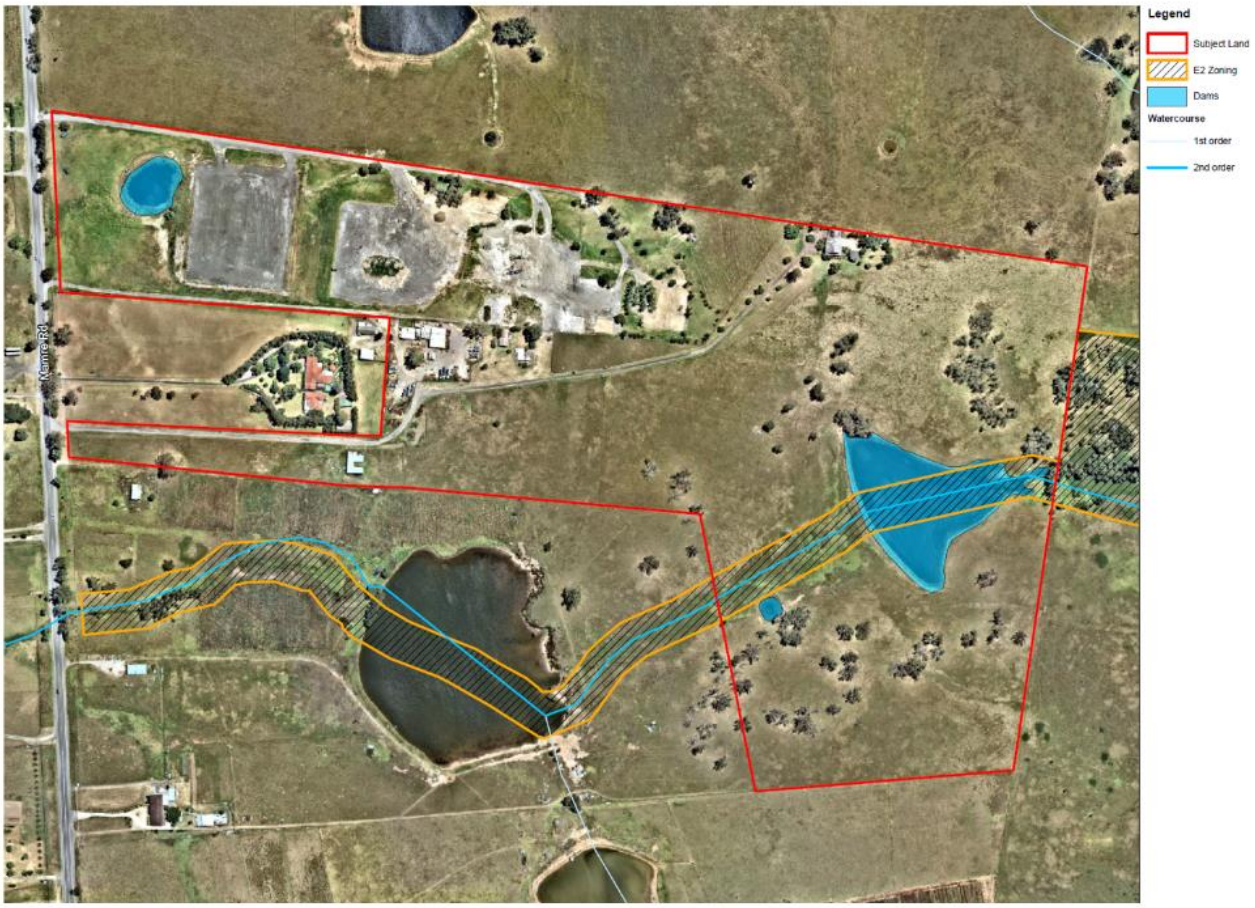
The assessment has been undertaken in accordance with the following legislation:

- *Environmental Planning and Assessment Act 1979* (**EP&A Act**)*;*
- *Fisheries Management Act 1994;*
- *Water Management Act 2000* (**WM Act**)*;*
- *State Environmental Planning Policy (Western Sydney Employment Area) 2009* (**WSEA SEPP**); *and*
- *Cumberland Plain Conservation Plan* (**CPCP**).

Consultation has been undertaken with the NRAR in regard to the existing watercourse. NRAR have confirmed that the watercourse is not considered to be 'waterfront land' as defined by the WM Act. As such, a 40m riparian buffer is not required under the WM Act. The reconstruction of a post development channel and establishment of a riparian corridor is supported by NRAR. NRAR has also confirmed that the

development is to be assessed through the SSD process and it is therefore exempt from the need to obtain a Controlled Activity Approval from NRAR.

Figure 46 Existing Watercourse and Farm Dams



Source: Cumberland Ecology

The assessment drew the following conclusions and identified the following potential impacts resulting from the proposed E2 corridor realignment, dam de-watering and proposed YLE development:

- The 2nd order watercourse is highly degraded, presents no riparian vegetation and provides minimal aquatic habitat value. Further, it lacks a defined bed and bank structure and does not meet the definition of waterfront land under the WM Act.
- The proposed realignment of the E2 zone is not considered to increase the impacts on biodiversity and has been designed in accordance with the recommendations from NRAR, creating a naturalised, meandering environment which avoids sharp turns.
- The proposed replanting of native vegetation along the reconstructed watercourse in the realigned E2 zone will provide floristic and habitat connectivity across the site.
- The proposed realignment and reconstruction of the watercourse will significantly improve the quality and function of the watercourse in the long term relative to the current conditions.
- The YLE development, particularly warehouse building, and greater impervious surfaces may have potential impact on the realigned watercourse, including:
  - The construction of roads and hardstand areas may alter the surface hydrological conditions and potentially increase the volume and velocity of flows as well as impact water quality.
  - The proposed estate-wide vegetation removal will result in alterations to drainage pathways and alter flows.
  - Erosion and sedimentation of the watercourse due to construction activities and vegetation removal is also a potential impact.

– Placement of drainage outlets have potential to change flows and create scour risk in high-flow areas at discharge points.

These potential impacts have been addressed and mitigated in the engineering design, particularly the Water Sensitive Urban design and water management systems.

- The de-watering and de-commissioning of the farm dams will result in the reduction of aquatic habitats available for aquatic species commonly associated with farm dams, such as waterbirds, fish, amphibians and crustaceans. This may also include some marginal habitat for the Southern Myotis (*Myotis Macropus*) although it is unlikely as the farm dams are ephemeral and wouldn't offer consistent foraging habitat for the species.
- The farm dams that occur in the surrounding area contain a very large area of much higher quality habitat, particularly around Prospect Reservoir, approximately 8km north-east of the site. The large water detention basins proposed for the YLE will create new habitats and enhancement of the watercourse and associated riparian vegetation on the site.

6.1.7.2. Method

Desktop Assessment

Cumberland Ecology undertook a review of the NSW Government Spatial Information Exchange Maps (NSW Government Spatial Services 2019) and DPIE's Environmental Planning layers to determine the vegetation communities mapped within the site as well as the location of the watercourse and its stream order.

The following documents were also reviewed to inform the assessment:

- Riparian corridors (NRAR 2018)
- GPT Industrial Estate Concept Plan (GPT Group);
- Mamre Road Precinct Planning Waterway Assessment (CT ENVIRONMENTAL 2020); and
- Planning Secretary's Environmental Assessment Requirements (SEARs) for GPT Industrial Estate.

Site Inspection

Site inspections were undertaken on 25 June 2020 and 9 March 2021 by a botanist and ecologist. The site inspections involved a random meander survey within the site to identify mapped vegetation communities and assess the condition of the mapped E2 zone. Records of the inspection are contained in **Appendix S**.

An assessment of riparian vegetation was conducted for the watercourse. The assessment considered native vegetation cover, connectivity and quality, bed and bank stability and habitat diversity. It also included an assessment of the aquatic habitat within the watercourse, including its quality, vegetation structure and regeneration, weed infestation, woody debris, fish habitat, patch size and connectivity potential.

6.1.7.3. Assessment

Un-named Watercourse

The site contains one unnamed 2nd order watercourse flowing from west to east in the eastern part of the site. The watercourse conditions have been assessed as follows:

- The watercourse is an ephemeral stream that is mostly dry, but contains water following rainfall events and serves as a flow path into the largest dam in the site.
- The watercourse is highly degraded and now consists primarily of exotic grassland and lacks a defined bed and bank structure (refer **Figure 47**).
- There is no riparian vegetation along the watercourse and as a result, it contains low biodiversity value and does not serve as a suitable biodiversity corridor in its current form.
- Whilst there is potential for some aquatic species to utilise the stream periodically during periods of flows, it is unlikely due to the absence of riparian vegetation or fringing vegetation such as reeds and rushes.

Figure 47 Existing un-named 2nd order watercourse

Picture 32 View of watercourse looking downstream from larger dam.

Picture 33 View of watercourse looking upstream from smaller farm dam in southern portion of the site.

Source: Cumberland Ecology

Impacts of proposed watercourse realignment

The proposed realignment and re-establishment of a 25m wide E2 corridor is not considered likely to result in any additional impacts to the biodiversity values of the site.

Farm Dams

At the time of the assessment, three farm dams were present on the site. The assessed conditions of the farm dams are described as follows:

- The largest dam is located in the southern part of the site and contains little to no fringing or emergent aquatic/semi-aquatic vegetation and is predominantly surrounded by exotic grassland vegetation. The watercourse flows into his dam from the east and continues to the west.
- The two smaller farm dams contain some fringing and emergent vegetation including *Typha orintalis* (Broadleaf Cumbungi) and *Cycnogeton microtuberosum* (refer to **Figure 48**). It is noted that only one of the smaller dams remain on the site at present.
- The smaller dams are likely to provide habitat for aquatic species including waterbirds, fish, amphibians and crustaceans. They may also provide foraging habitate for the Southern Myotis (*Myotis Macropus*), a microchiropteran bat species listed as Vulnerable under the BC Act.
- The larger dam, due to the lack if fringing vegetation is unlikely to provide substantial habitat for native species.

Figure 48 Existing Farm Dams

Picture 34 Larger farm dam

Source: Cumberland Ecology

Picture 35 Smaller remaining farm dam in the southern-eastern corner of the site.

Impacts to proposed de-watering and de-commissioning of farm dams

The environmental impacts associated with the proposed de-watering and de-commissioning of the two remaining farm dams are limited to the reduction in aquatic habitat available for aquatic species associated with farm dams.

6.1.7.4. Mitigation Measures

The following mitigation measures have been adopted as part of the Stage 1 SSD and will adequately manage the impacts associated with riparian lands at the site:

- A VMP has been prepared for the realigned E2 zone, which outlines how the creek systems and patches of native vegetation within the E2 zone are to be revegetated and managed in perpetuity. The VMP (**Appendix T**) will be implemented accordingly.
- The realigned watercourse will be recreated, with the banks and the stream channel stabilised with rock to form a gently sloping bank profile. Rocks will be placed to recreate the natural appearance of a creek-bed with sufficient space between rocks for planting with riparian/aquatic plant species. The watercourse channel will also incorporate instream woody debris to create instream aquatic habitat, have a range of different surfaces along the bed and banks of the channel to create different geomorphic features such as pools and riffles during high flow events. The design of the proposed E2 zone and adjoining landscaped setback is provided within the Civil Drawings at **Appendix K**.
- Revegetation will be conducted with species of locally occurring vegetation communities along the watercourse to establish a suitable environmental corridor that will improve habitat connectivity across the site. Refer to **Appendix I** for details of the proposed plant species.
- A Dam Dewatering Plan will be prepared as specified in the VMP which will include provision for staged dewatering under ecologist supervision to enable relocation of aquatic species recorded from the dams.
- New, large OSD basins will compensate for the loss of aquatic habitat.
- WSUD has been incorporated into the design of the YLE to maintain quality of discharge into creeks and drainage lines. Details of the proposed WSUD strategy are provided in **Appendix L**.
- Erosion and sediment control measures will be implemented throughout the construction periods in order to minimise potential impacts to the existing hydrological processes of the site. A Sediment and Erosion Control Plan is provided at **Appendix L.**
- Impacts from alterations to the drainage pathways and increased flows resulting from the reduction in pervious surfaces will be mitigated through the implementation of new stormwater management measures. Proposed stormwater management measures include directing flows towards OSD basins for treatment of water prior to further discharge into the watercourse.

- The realigned watercourse and proposed drainage outlets are designed with adequate scour protection measures to slow the flow and provide erosion and scour protection as detailed in **Appendix K.**
- The realigned watercourse does not include 90-degree sharp meanders and mimics natural stream design in accordance with NRAR's advice.

6.1.7.5. Summary

The Riparian Lands Assessment has provided an assessment of the impact of proposed removal of vegetation, watercourse realignment and modification, and removal of farm dams. The assessment has guided the design of the proposed watercourse realignment and all impact mitigation measures provided by Cumberland Ecology have been adopted as part of the YLE. Accordingly, the impacts to riparian lands within the site and not considered significant, and subject to the ongoing management measures recommended being employed, it is likely that biodiversity and hydrological outcomes associated with the riparian lands will improve in the long term.

6.2. STANDARD ASSESSMENT IMPACTS

This section of the report addresses the matters which require a standard assessment. It outlines the findings of the assessment and the key mitigation measures used to ensure compliance with the relevant standards or performance measures.

6.2.1. Infrastructure Requirements

A Services Infrastructure Report has been completed by Land Partners Surveyors and Planners and is included in **Appendix X**. The report identifies the existing infrastructure assets that are able to service the subject site and as well as any existing strategies or planned works that can support the site. This includes a review of the portable water, recycled water, waste water, electricity, gas and telecommunications infrastructure. This informs how the planned infrastructure works will satisfy the requirements of the site and identifies how these requirements will be delivered.

Findings

The report identifies the following in relation to the relevant infrastructure services:

Potable Water

It is identified that the demand for potable water will sequentially increase from 2022 to 2025 and beyond as demonstrated in the following:

Stage	Timeframe	Average Day Demand Cumulative	Max Day Demand Cumulative
1	Occupation by Dec 2022	5kl/day	8kl/day
2	Occupation by Dec 2023	18kl/day	30kl/day
3	Occupation by 2025 & Beyond (based on expected market demand)	55kl/day	90kl/day
	Total post 2025	**55kl/day**	**90kl/day**

The site is located within the Cecil Park supply zone which currently does not have the capacity to serve the Mamre Road precinct developments. The system is tracking to be rezoned as to increase capacity in addition to seeing amplification works that are to be operational in 2022. Water supply to the site is to be initially provided by the Erskine Park Elevated reservoir system via the system area rezoning process. A new developer funded 300mm water main has been designed from the current Sydney Water reticulation system in James Erskine Drive, along Mamre Road to the intersection of Mamre Road and Bakers Lane (to service the Sydney Science Park development) and is intended to be developed in 2021.

Recycled Water

The Upper South Creek Advanced Water Recycling facility (delivered by 2026) will support Sydney Waters development a recycled water reticulation system.

Waste Water

The site is located within the northern catchment of the Mamre Road precinct and there is currently no Waste Water (W.W) reticulation system service.

Electricity

It is identified that the demand for electricity will sequentially increase from 2022 to 2025 and beyond as demonstrated in the following:

Stage	Timeframe	Cumulative Demand
1	Dec 2022 Occupancy	0.4MVa
2	Dec 2023 Occupancy	1.2MVa
3	2025 Build out	3.1MVa
	Total	**4.7MVa**

Gas

Jemena are the gas supply utility providers for this area. Jemena has no reticulation assets with frontage to the subject site.

Telco

The area is located within the NBN area of operations and is serviced by copper pair telco cables established by Telstra. Significant upgrades will be undertaken by extension of optic fibre systems driven by the requirements of the nearby Fraser/Altis joint venture.

Impacts on Adjacent Infrastructure

- A 100mm water main exists in Mamre Road immediately adjacent to the frontage of the site. A 150mm/200mm water main exists on the opposite of Mamre Road along the frontage of the site.
- The existing electrical infrastructure consists of overhead electrical supply
- The existing telco services are located on the opposite side of Mamre Road of the subject site

Mitigation Measures

Potable Water

Following discussions with Sydney Water, 150/200mm water main can be extended to the planned 300mm water main, servicing the subject site with potable water from the Erskine Park Elevated reservoir system. The reservoir system will readily provide 55kl/day which will sufficiently supply the subject site.

Recycled Water

A recycled water reticulation pipe will be installed across the frontage of the site which will facilitate future supply for the intended recycled water system.

Waste Water

As there is currently no W.W reticulation system service, Sydney water will provide a wet well Interim Operating Procedure (I.O.P) from 2021 to early mid-2023 which will provide the required waste water collection. The ultimate waste water solution will see two phases, phase 1 will have Sydney Water establish sewer pump stations by 2023 to collect waste water from the northern catchment of the Mamre Road precinct and by 2024 to collect waste water from the southern catchment area. This will transfer waste to the St Marys Waste Water Treatment Plant.

Phase 2 will see Sydney Water will construct and have operational by 2025 – 2026 a major WWTP known as the Upper South Creek Advanced Water Recycling Centre and Discharge from the SPS established within Phase 1 will be directed to this new treatment facility. As such, the waste water discharge from the proposed development will be appropriately managed by the interim and final solutions provided by Sydney Water from the end of 2021.

Electricity

Electricity supply to the subject site will be provided from the new South Erskine Park Zone Substation being constructed in the Oakdale West Precinct (to be delivered by quarter 3 of 2022). Significant electrical capacity will be provided for development within the subject site by 2022 from the supply from either Mamre

Zone Substation or the South Erskine Park Zone Substation. A 22kV feeder to be provided at the front of the site. The one, high voltage feeder will provide sufficient electricity supply to the proposed development.

Gas

Jemena will extend its system following firm commitments from end-users for the quantity of gas to be supplied to end-users before. Locations of secondary gas mains and associated infrastructure such as pressure reduction facilities will be considered on a precinct wide basis when Jemena receives and processes a customer initiated request. As such, following confirmation of the development delivery, Jemena will be able to provide the required gas infrastructure services.

Telco

Minor fibre optic systems exist adjacent to the Mamre Road-Bakers Lane intersection. These fibre optic systems will be augmented as a result of developer initiated application to NBN Co which will adequately provide service to the subject site.

Impacts on Adjacent Infrastructure

The existing potable water mains and the electrical infrastructure will be appropriately relocated. The existing Telco services will be appropriately adjusted by the Frasers/Altis joint venture, opposite the GPT site.

Accordingly, the proposed development will be appropriately serviced by the essential infrastructure utilities and no adverse impacts will be experienced by the existing infrastructure networks.

6.2.2. Soil and Water

A number of investigations and studies have been conducted to assess the soil and groundwater characteristics at the subject site and subsequently, the appropriate management strategies to ensure no adverse impacts resultant of the proposed development. This includes a Geotechnical Investigation provided by PSM Consult Pty Ltd (**Appendix Y**), an Acid Sulfate Soil Advice and Desktop Investigation prepared by JBS&G Australia Pty Ltd (**Appendix DD**), a Preliminary Site Investigation prepared by KGMP (**Appendix BB**) and a Groundwater Management Plan provided by Arcadis (**Appendix AA**).

The Geotechnical Investigation identifies the geological conditions and the presence of groundwater and the environmental characteristics of the site's soil. The Acid Sulfate Soil Advice identifies the presence of any risk of Acid Sulfate at the subject site. The Preliminary Site Investigation provides a detailed analysis of the of the soil and groundwater qualities following further investigations. The findings of these reports inform the Groundwater Management Plan and the Remedial Action Plan (detailed in Section 6.2.5 of this report).

Findings

Geotechnical Investigation

The geotechnical undertook test pit field works at the site to assess the quality of the soil and it was identified that the sub-surface conditions were identified as follows:

Table 48 Geotechnical sub-surface conditions

Inferred Unit	Inferred Top of unit depth below ground surface (m)	Description
Topsoil	0.0	Silty clay: dark brown, medium to high plasticity, soil to firm consistency, moist. Rootlets and grasses observed throughout.
Fill	0.0	Sandy gravel with some clay: pale grey, fine to medium grained, medium to high strength, gravels, cobbles up to 300mm, moist, with clay, reddish0brown and medium plasticity, Crushed sandstone.

Inferred Unit	Inferred Top of unit depth below ground surface (m)	Description
		Clay, brown with mottled red, high plasticity, stiff to hard consistency, moist, trace fine black gravels.
Natural Soil	0.1 to 2.1	Clay: medium to high plasticity, generally stiff to very stiff consistency, moist.
Bedrock	0.9 to 3.1	Shale: extremely weathered to fresh weathered, very low to high strength, iron stained red, brown and grey. Laminations and rock fabric visible in some sections. Sandstone: extremely weathered to fresh, low to high strength, fine to medium grained, black grey and pale grey. Decreasing weathering and increasing strength generally observed as depth increases.

The soil was found to be mostly classified as non-saline to moderately saline. Otherwise, the soils were found to have non-aggressive to mild corrosivity / aggressivity and has sodic to highly sodic exchangeable sodium percentages.

Groundwater was also observed at the 3m depth at some of the testing location in vicinity of the dam.

Acid Sulfate Soils

The Acid Sulfate Soil Advice and Desktop Investigation identifies that there are no known occurrences of potential acid sulfate soils P/ASS at the subject site. Further, with consideration of the site's geological setting, it is not expected that there will be P/ASS at the site. As such, consideration of the site's geological characteristics does not need to consider the management of potential ASS.

Preliminary Site Investigation

The preliminary site investigation (**PSI**) provides an in depth analysis of the soil and groundwater characteristics across the site. Soil sampling analysis was undertaken as part of this PSI from previous fieldwork. The PSI identifies the following in relation to the on-site soil and water conditions:

- The site soils' concentrations of chemicals of concern (**COC**s) were below the laboratory limit of detection and the relevant commercial/industrial guidelines
- Hydrocarbon staining on the surface was identified, although it is identified that the surficial hydrocarbon impacts would have been removed with following earthworks.
- There were as well as concentrations of heavy metals and BaP within the soil samples above the guideline for protection of ecological receptors
- Elevated concentrations of TRH were also identified although they were below the adopted guideline levels
- There may be minor TRH impacts on the groundwater at the site
- No significant COC impacts to groundwater or surface water were identified.

The PSI concludes that the site is generally suitable for commercial and industrial land use following the preparation and execution of a Remedial Action Plan (**RAP**).

Ground Water Management Plan

The GMP acknowledges the site's geology, hydrogeology, acid sulfate soil and salinity of the site as identified in prior investigations. The GMP identifies the potential sources of contamination and notes that there is moderate capacity for contamination at the site which can be exposed to and affect potential receptors (e.g. demolition, construction workers and future site users).

The GMP identifies that groundwater volumes intercepted at cutting locations is expected to be low and any flows are to be temporary in nature.

Mitigation Measures

The Groundwater Management Plan (**GMP**) identifies the management requirements for the site as to ensure that any groundwater dewatering is undertaken in accordance with the relevant policy, legislation and will not result in any adverse environmental impacts. The GMP identifies the following management measures in the instance that groundwater is intersected during redevelopment works:

- Pump groundwater from the excavated area
- Monitor volume of extracted groundwater (should not exceed 3ML/year)
- Monitor groundwater quality of the extracted groundwater (monitoring pH, Salinity, Metals and Hydrocarbons)
- Monitor groundwater in the existing groundwater wells around the site
- Groundwater can be re-used certain tasks (e.g. dust suppression, on-site irrigation)
- Groundwater is otherwise be treated (if excess turbine, acidic pH value or saline) or disposed of if it can't be treated

Otherwise, it is noted that while there is the assumption that the site is generally composed of low hydraulic conductivity material and groundwater will be intercepted, this is not proven locally and further groundwater information is to be acquired prior to construction by a suitably qualified hydrogeologist.

As such, the impacts of groundwater on the proposed development can be appropriately managed in accordance with the GMP. The minimization of soil contamination impacts is detailed in Section 6.2.5 of this report. The development is acceptable with consideration of the soil and groundwater contamination.

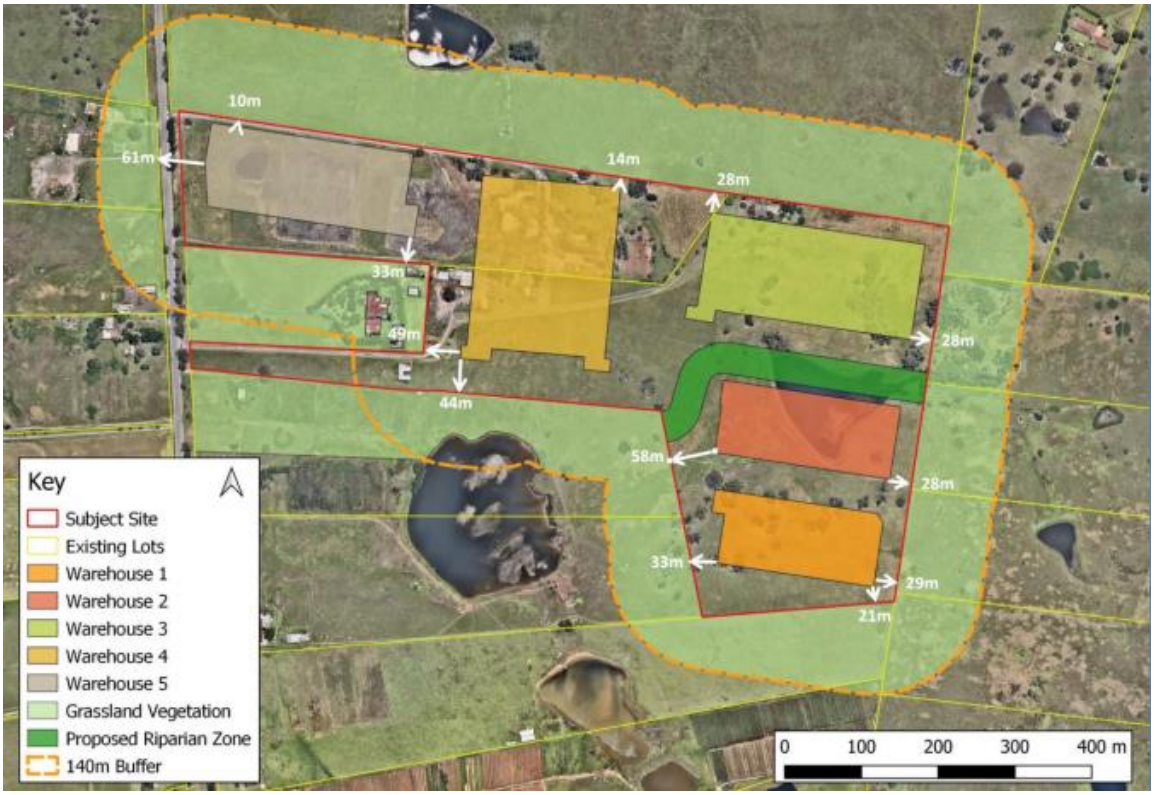
6.2.3. Bushfire

A Bushfire Assessment Report has been completed by Bushfire Consulting Services Pty Ltd (Northstar) and is included in **Appendix KK**. This report assesses the proposal with consideration of the site's location within 10m of bush fire prone (hazardous) vegetation and provides recommendations in accordance with Chapter 1 and 8 of the NSW RFS document '*Planning for Bush Fire Protection' (PBP) (NSWRFS 2019)*. The report identifies that the proposed development will be sufficiently protected from the likely bushfire threat with consideration of the vegetation type, slope and other environmental factors. This assessment was conducted with the appropriate site inspection and desktop analysis from the NSW Spatial Services mapping website.

Bushfire Consulting Services identified the following which informed the proposal site's compliance with the relevant bushfire protection requirements:

- The hazardous vegetation surrounding the site is identified as grasslands.

Figure 49 Hazardous Vegetation



- The ground slope across the site sees 0-10° upslopes, downslopes and flat lands surrounding the building footprint
- The Penrith Council Area has a fire danger index of 100

Findings

With consideration of the local environment and the proposed development works, the report finds that the proposal will satisfy the objectives in PBP Chapter 1 and 2.

- The proposal can provide safe access for firefighters through Mamre Road and internal roads. The appropriate site ingress/egress and swept paths can be provided.
- A defendable space / separation distance of 10m is provided between the proposed buildings and the bushfire hazard. This is considered adequate given the fire danger index, slope and vegetation formation.
- Normal maintenance can appropriately ensure that the BPMs are maintained.

The report concludes that the proposal satisfies or can satisfy the legislative requirements for development in bushfire prone land with consideration of the mitigation measures listed below.

Mitigation Measures

The bushfire assessment report identifies a number of recommendations to ensure that the development appropriately mitigates any bushfire hazard risk:

- An emergency evacuation plan is to be prepared for the site.
- The development can provide the appropriate rainwater tanks and hydrants to provide the required firefighting water supply
- All electricity transmission lines should be underground where practicable.

- All hazardous materials and gas infrastructure is to be appropriately located from fire hazard

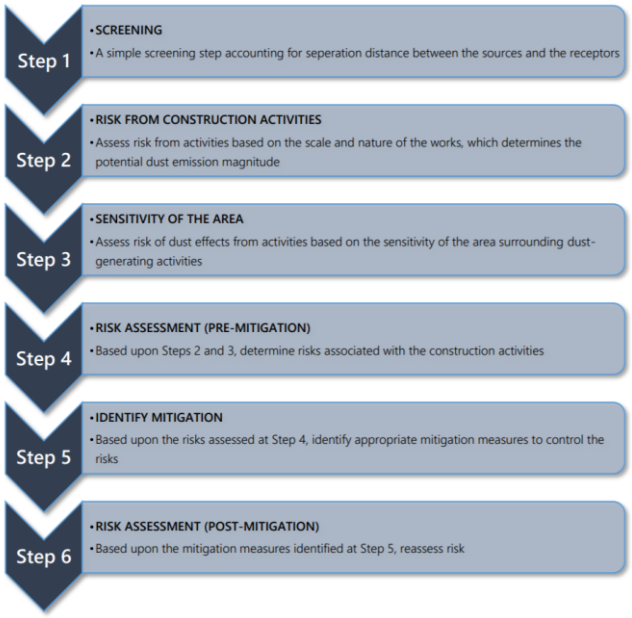
The proposal can action these recommendations and subsequently comply with the relevant PBP objectives. Otherwise, no specific NCC building requirements are required for the proposed, non-residential buildings.

6.2.4. Air Quality

An Air Quality Impact Assessment has been completed by Northstar Air Quality Pty Ltd (Northstar) and is included in **Appendix JJ**. The report assesses the risks to local air quality as a result of the proposed construction works as well as the operations of the proposed industrial estate, internal road network and parking/loading areas.

In order to assess the construction impacts, the report utilized a modified 6 step impact risk assessment method in accordance with the IAQM Guidance on the Assessment of Dust from Demolition and Construction developed in the United Kingdom by the Institute of Air Quality Management. This method appropriately identifies the risks of activities, the dust effects and accordingly the appropriate mitigation measures to be implemented.

Figure 50 – Construction Impact Risk Assessment Method

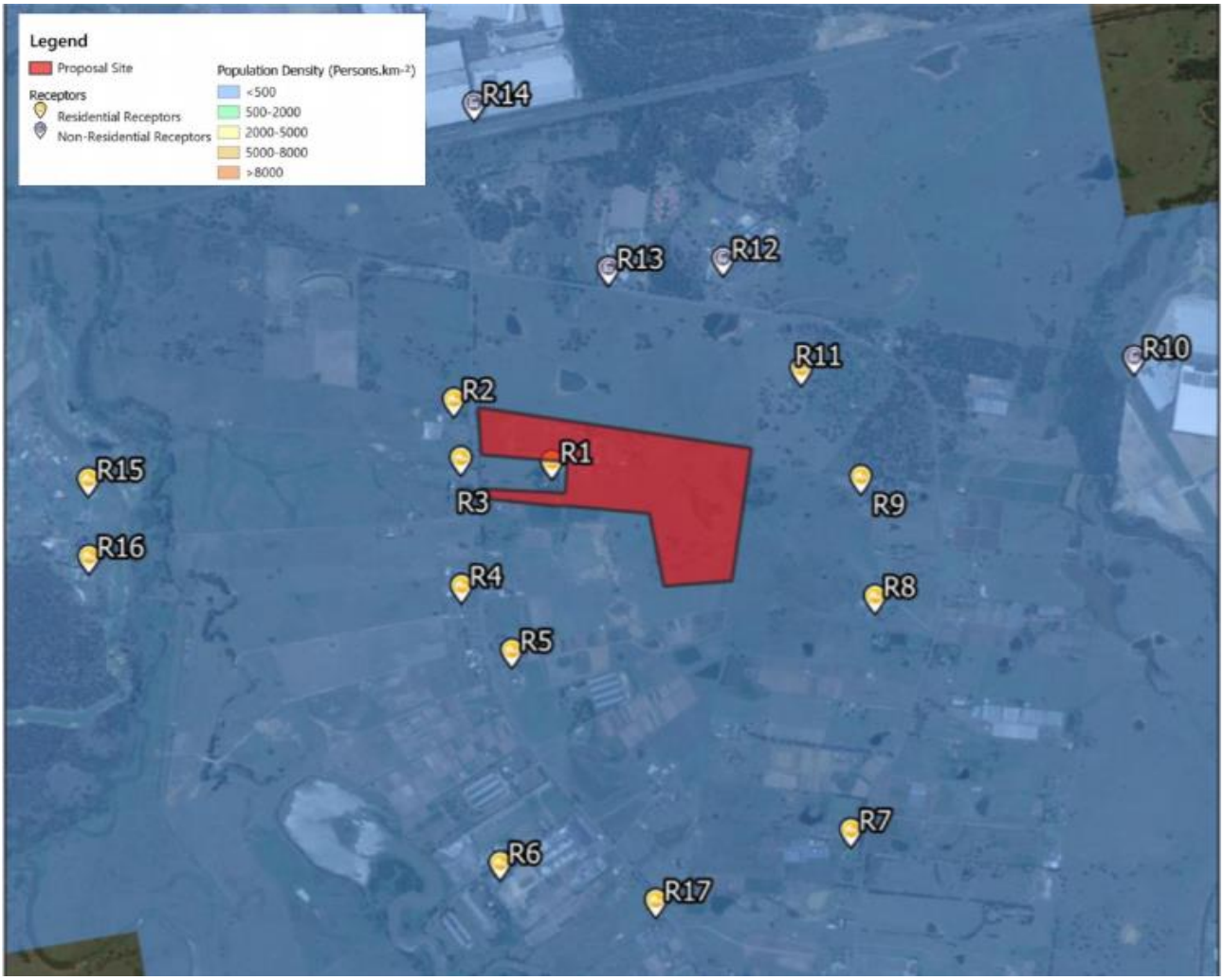


Dispersion modelling performed using the NSW EPA approved CALPUFF Atmospheric Dispersion Model and emission estimations with consideration of the gaseous emissions generated by idling trucks at the 106 loading bays were used to inform the operational air quality impacts.

Findings

The assessment identifies the construction and operational works that will impact the local air quality in relation to consideration of the closest sensitive receivers. The surrounding area is zoned as IN1 and E2, with the nearest residential zoned area being 3km to the north. Otherwise, the assessment identified 17 sensitive receptors (places with high presence of people) in the nearby area consisted predominantly of rural residential dwellings as well as a couple of education and industrial land uses.

Figure 51 Identified Sensitive Receptors



Source: Northstar Air Quality

Construction Phase

In relation to the proposed construction works, the assessment identifies that there will be the use of excavators, heavy vehicles and other construction machinery. These can generate short term emission particles, the dust emission magnitude from the excavation, demolition and construction works to result in large to medium impacts.

Otherwise, the dust soiling sensitivity of the locality is identified as 'low' with consideration of the neighbouring land uses and nearby sensitive receptors. With the appropriate consideration of both the dust emission magnitude and the local dust sensitivity, it was found that the proposed construction works would result in a low risk of dust soiling and human health impacts without mitigation measures.

With the appropriate contamination investigation and management practices, it is also unlikely that there will be any odour impacts generated by the construction works.

Operational Phase

The assessment report identifies that the potential source of air quality impacts during operations are from vehicle movements, notably diesel emissions, wheel emissions and truck idling. The assessment report identifies both the incremental impacts (impacts as a result of the proposal in isolation) as well as the cumulative impacts (proposal impacts in addition to the background air quality). The assessment identifies that the proposed operations will not exceed any of the relevant air quality criteria:

- The average annual concentrations of particulate matter as a result of the proposed operations are low and will not exceed the relevant criterion.

- The predicted annual dust deposition rates will meet the relevant criteria at all the receptors surrounding the proposal site.
- The concentrations of 24-hour average particulate matter (PM10 and PM2.5) were found to be not exceed the relevant criteria at any receptor.
- The proposal will not result in any exceedances in combustion related pollutants (nitrogen dioxide).

The level of activity at the proposal site will result in minor impacts at all surrounding receptor locations.

Mitigation Measures

Construction Phase

While the assessment report found that the proposed construction works would result in low risk of dust soiling, human health and odour impacts, a number of standard mitigation measures are identified in accordance with IAQM. This includes the following practices:

- Communication management
- Record or all complaints and incidents
- Regular site inspections
- Management of machinery and barrier locations and construction techniques / methods
- Management of vehicle idling and usage

These mitigation techniques will ensure that the low risk of dust emissions are minimised.

Operational Phase

As to mitigate the impacts generated during the operational phase of the development, and engine idling time can be reduced through operational efficiencies, idle-off devices and Auxiliary power units. Otherwise, standard site management practices, operations monitoring, speed limit observation and vehicle use minimisation is sufficient to ensure that no off-site impacts are experienced. No specific mitigation measures are considered to be required. The proposed operations will not cause any exceedances of the air quality criteria.

6.2.5. Contamination

A RAP was prepared by KPMG and is included in **Appendix CC**. The RAP assesses the presence of COCs, notably heavy metals and hydrocarbons. With consideration of the identified COCs, the required remediation of the site as to make it suitable for commercial/land use is assessed in the RAP.

Findings

It was found that the site has been used for agricultural, rural residential, horticultural, and industrial style uses. Consequently it was identified that the site contains hazardous chemicals including the following:

- 4,000L Petrol UST
- 20,000L Diesel UST
- Three (3) ASTs
- Several drums

Other unsealed chemicals include oils, lubricants, degreasers and solvents and minor COC impacts to surface soils were identified at 754-770 Mamre Road, although surficial hydrocarbon impacts will be removed during earthworks and consequently, do not require remediation. Otherwise, the COCs requiring remediation are identified as total recoverable hydrocarbons and to a lesser extent, heavy metals. As the site is expected to be underlain by clay and shale, COC migration within this geological system is expected to be low to moderate (further detail on the characteristics of the soil and groundwater at the site is provided in Section 6.2.2 of this report).

Further investigations and assessment may be undertaken with the appropriate soil sampling, groundwater sampling and laboratory analysis.

Mitigation Measures

Further to the consideration of four different remediation options, it is identified that the preferred option for site remediation is to remove the site of any contaminated material above the commercial/industrial land use criteria to an appropriately NSW EPA licensed landfill. The scope of work for the identified remediation option is as follows:

1. Obtain necessary approval from development approval authority
2. Complete the additional investigations
3. Organise a surveyor to mark out the remediation areas
4. Organise an appropriate contractor to undertake the remediation work
5. Remove the UPSS in accordance with the UPSS Regulation 2019
6. Controlled excavation and removal of the contamination
7. Validation sampling and analysis
8. Waste classification sampling and analysis of unsuitable material requiring off-site disposal
9. Preparation of a validation report
10. Submit validation report to council within 60 days after the remediation is complete

The remediation works identified will be in accordance with the statutory requirements under State Environmental Planning Policy 55 Remediation of Land (SEPP 55). Should the remediation works be excluded from the overall development consent under Part 5 of the EP&A Act, the works will be considered Category 2 works under the SEPP 55. The proposed remediation will satisfy the requirements of SEPP 55 as it is ancillary to the proposed development, is unlikely to be carried out or have impact on critical habitat, threatened species or other environmental protection lands (e.g. heritage conservation, habitat area, nature reserve). The appropriate notifications will be provided, and remediation works will be in compliance with the relevant guidelines. An unexpected finds protocol will be enacted if additional potential contamination is encountered during remediation or general site works.

Details of the validation assessment, interim site management plan, site management plan guidance, work health and safety guidance are provided in the attached RAP (**Appendix CC**).

As such, the recommended remediation plan will appropriately remove and manage any contamination on the site in accordance with the requirements of SEPP 55.

6.2.6. Hazards and Risk

A SEPP 33 Hazard Analysis has been prepared by Riskon Engineering and is included in **Appendix EE**. The report provides an analysis of the proposed warehouses against the provisions of SEPP 33 and whether a further preliminary hazard analysis is needed.

The analysis includes a review of the proposed quantity and type of Dangerous Goods (**DGs**) stored at the site as well as the amount of vehicle movements against the threshold quantities identified in Applying SEPP 33.

Findings

The storage of DG commodities at the operational Warehouse 1-5 were assessed against the SEPP 33 thresholds as follows:

Class	Description	Proposed Maximum Quantity	Threshold	Does SEPP 33 Apply?
2.1	Flammable gases (aerosols)[3]	8,750 - 9,125kg	10,000kg	N

Class	Description	Proposed Maximum Quantity	Threshold	Does SEPP 33 Apply?
2.2	Non-flammable, non-toxic gases	25,000kg	n/a	N
3	Flammable liquids (i.e hand sanitizers)	5,000 - 70,000kg / 9m – 26.5m minimum separation from site boundary	8.5 - 20m required separation from site boundary	N
4.1	Flammable solids	4,000	5,000	N
5.1	Oxidising substances	2,5000	5,000	N
8	Corrosive substances	15,000	25,000	N
8(II)	Corrosive substances	20,000	25,000	N
8(III)	Corrosive substances	30,000 - 45,000kg	50,000	N

Of note, Class 3 – Flammable liquids (i.e hand sanitizers) requires a minimum separation distance between the storage of the hazardous liquid and the site boundary. All the warehouses comply with the required separation distance as follows:

- Warehouse 1: Required 8.5m / Proposed 9m to closest site boundary
- Warehouse 2: Required 9.5m / Proposed 9.5m to closest site boundary
- Warehouse 3: Required 20m / Proposed 26.5m to closest site boundary
- Warehouse 5: Required 8.5m / Proposed 9m to closest site boundary

Additionally, the expected transport movements of DGs would not be considered toe exceed the transport thresholds.

As such, the identified proposed quantities for DGs did not exceed the SEPP 33 thresholds and the required separation distance from the site boundaries are satisfied. Subsequently, SEPP 33 does not apply to the project and a Preliminary Hazard Analysis does not need to be prepared.

Mitigation Measures

The following recommendations were made in regard to storing DGs as to minimize any hazard and risk:

- The DGs shall be stored in a manner which complies with the applicable storage standards (i.e. AS/NZS 3833:2007 or class specific standards such as AS 1940-2017).
- The documentation required by the Work Health and Safety (WHS) Regulation 2017shall be prepared to demonstrate the risks have been assessed and minimised So Far As Is Reasonably Practicable (SFARP) as required by the WHS Regulations.
- Where flammable gases or liquids are stored, a hazardous area classification in accordance with AS/NZS 60079.10.1:2009 shall be prepared to ensure that an ignition source does not enter a hazardous atmosphere as required by the WHS Regulations.

6.2.7. Waste Management

A Waste Management Plan (**WMP**) has been prepared by Land & Groundwater Consulting Pty Ltd and is included in **Appendix FF**. The Waste management strategy aims to provide the appropriate support for the building operations and construction.

It is noted that the proposal will generate significant waste during the demolition, construction and operational phases. Consequently, the WMP identifies a number of actions and strategies that are in accordance with the following waste regulatory framework:

- Protection of the Environment Operations Act 1997
- Waste Avoidance and Resource Recovery Act 2001
- Protection of the Environment Operations (Waste) Regulation 2014
- Better Practice Guidelines 2012
- Waste Avoidance and Resource Recovery Strategy 2014 – 2021
- Waste Classification Guidelines 2014
- Mamre Road Precinct Development Control Plan 2020

Findings

The following table shows the estimated volume of garbage and recycling generated by the proposed demolition, construction works and subsequent operation.

Waste Source	Reuse	Recycling	Disposal
Demolition	420,600m³	12,500m³	770m³
Construction	66,200m³	<135m³	<135m³
Operation	0	<25m³	<5m³

The resultant demolition and construction waste will be reused, recycled or used in the appropriate waste management centre, recycling management centre or recycling outlet dependant on the type of waste in question.

Mitigation Measures

Standard waste reduction measures are recommended to be conducted during the demolition, construction and operational phases. These recommended procedures include the following:

- Practical building design and construction techniques, including construction staging and ordering pre-cut materials at the required sizes
- Appropriate collection and subsequent reuse, recycling or treatment offsite for items such as batteries, cardboard, timber, plastic, glass etc. during construction, demolition and operational phases
- Careful on-site storage, sorting and separation of different waste products, especially for waste appropriate for recycling and reuse
- Returning certain waste products (e.g. packaging) to the suppliers where possible
- Acquiring materials and goods from waste reducing sources (e.g., recycled materials, fit for purpose packaging, leased equipment and machinery)

- Other operational, waste reduction and management practices (e.g., provision of take back services to clients, flattening cardboard waste, recycle collection in offices and tearooms)
- Hiring of qualified contractors for handling waste removal properly informing sub-contractors of waste management procedures

Otherwise, waste storage during the demolition and construction phases should be in accessible locations with the appropriate use of dedicated stockpile areas, skip bins and waste and recycling bins, (demolition up to approximately 18 x 1,000 L bins) and (construction up to approximately 24 x 1,000 L bins) that are well maintained. All waste during construction works will be appropriately classified, with samples taken by appropriately trained and experienced personnel, the appropriate soil analysis to be undertaken is required.

During operations, waste storage will be located at the loading dock areas at Warehouses 1 to 5 with the appropriate clearance, BCA compliance, size (especially for waste segregation) and identification signage. Waste storage and management facilities will comprise colour coded recycling bins, which will be utilised to dispose of any packaging waste. The operational waste will collected by a regulated waste contractor.

All waste transportation will be conducted by the appropriately licensed contractor.

6.2.8. Greenhouse Gas and Ecologically Sustainable Design

An ESD and Greenhouse Gas (**GHG**) assessment has been completed by Northstar Air Quality Pty Ltd (Northstar) and is included in **Appendix HH**. The report identifies the GHG emissions and water usage as a result of the proposed development as provides recommendations as improve efficiency. This energy and water efficiency strategies identified for the proposal was informed by the National Greenhouse and Energy Reporting (**NGER**) scheme and NSW Ecologically Sustainable Development Legislation.

Findings

Greenhouse Gas

The report identifies two types of GHG emissions: direct (produced by on-site proposal operations) and indirect (generated by wider activity generated by the proposal). The report assesses the ongoing energy efficiency of the proposal's operations as the proposal's construction and associated mobile plant/equipment emissions are not currently quantifiable.

The report identifies that the proposal will generate GHG emissions through the consumption of purchase electricity (indirect emission). It is identified that the proposal will generate approximately 18,725t CO2-e per annum of GHG emissions from the electricity supporting the proposed warehouses and the supporting offices. This is found to contribute 0.014% of the NSW total GHG emissions (based on 2018 total emissions) and is considered a small contribution.

Water Demand

It is identified that the proposed five warehouses and associated offices will require 55 kilolitres of water per day.

Mitigation Measures

As to reduce the level of GHG emissions and water consumption, the following energy efficiency strategies are identified to be appropriate for the proposal:

- Use natural ventilation to reduce mechanical ventilation costs
- Incorporate standard solar design principles to maximise natural heating and cooling (e.g., managing levels of glazing, wall insulation, use of louvres and curtains)
- Investigate the viability of sustainable energy sources for operations (e.g., solar panels)
- Adopt air conditioning design features that improve efficiency (e.g., window sensors, sub-metering, temperature sensors)
- Utilize light saving technologies and principles (e.g., LED lighting, light sensors, natural lighting)

- Use energy efficient appliances

The report also identifies a number of water saving strategies such as the use of harvested rainwater, landscaping with drought resistant plants and ensuring a minimum WLS star rating for water device fittings.

In addition to the standard efficiency strategies listed above, the report identifies that the proposal should seek to achieve a Green Star Design benchmark for the building and operational practices. Otherwise, with the implementation of these measure, the proposal will appropriately address the relevant ESD requirements.

6.2.9. Airport Safeguarding

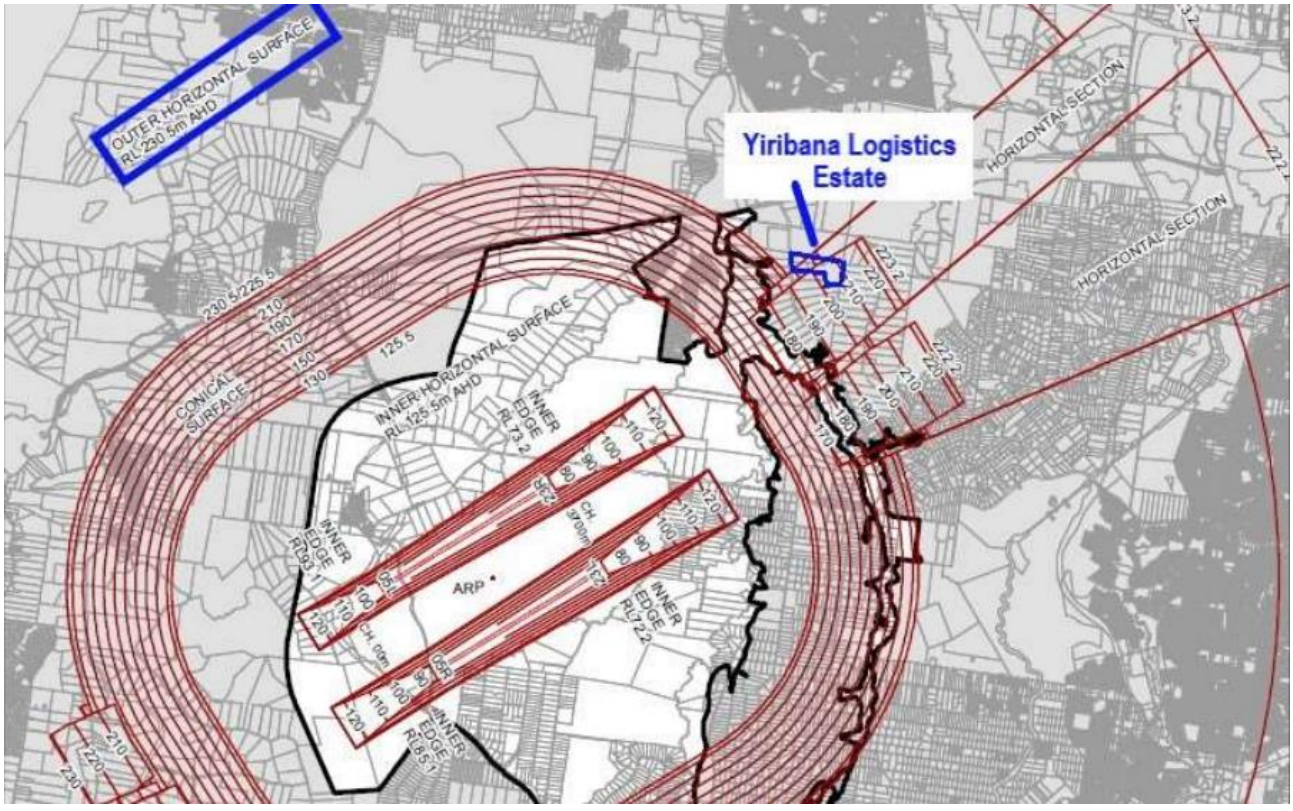
An Aeronautical Impact Assessment has been completed by Landrum & Brown Worldwide (Australia) Pty Ltd and is included in **Appendix GG**. The report provides an assessment of the potential impacts of the proposed development on the Obstacle Limitation Surfaces (**OLS**), Draft PANS OPS Surfaces – Basic ILS and Possible impact upon air traffic control (**ATC**) communications facilities, navigation aids and surveillance system coverage.

This will ensure that the development will not impact the safety of flight operations, does not infringe the Prescribed Airspace and is within the criteria for noise exposure.

Findings

The report identifies the OLS at the WSA in relation to the subject site as identified in **Figure 52** below. The proposed developments and lighting poles are to be beneath 100m AHD and consequently will not infringe the lowers OLS or PANS OPS surfaces of 208m AHD. There is sufficient clearance for the proposed development and the typical construction cranes anticipated to be used.

Figure 52 WSA OLS and Site Location



Source: Landrum and Brown

Further to being within the OLS or PANS OPS surfaces, the proposed development and construction cranes will not have an impact on the following:

- ATC surveillance system which require a clearance of 251.8m AHD.

- The building restricted area for the Instrument Landing System (ILS), Distance Measuring Equipment (DME) and Ground Based Augmentation System (GBAS) have a building restricted area of 1km, 3km and 1.5km respectively. The proposed development site is 6.1km away.
- The area of interest for the ATC communications is within 100m and 2000m. The proposed development site is 7.5km away from the likely ATC Communication facilities.
- The potential exhaust plumes generated by the proposal is unlikely to reach the height of the lowest PANS OPS or OLS
- The guideline for managing risks generated from lighting affects the area within 6km of the centre of each runway. The proposed development site is 7.5km from the centre of the closest runway. Similarly, it is unlikely that there will be any glint or glare generated by the proposed development considering its separation distance. The site is also outside the light control zones.
- The proposed development is outside the designated public safety areas
- The proposal will be developed on existing farm-land and open vegetation paddocks. As such, this will reduce the amount of wildlife present in the area that could cause a hazard to overflying aircraft.
- The proposed development is outside the windshear assessment trigger area and will not impact the turbulence at WSA
- The proposed development will not result in any wildlife hazards nor does it include any wind turbines and wind monitoring towers

Additionally, the proposed land use is an acceptable activity with consideration of the anticipated aircraft noise intrusion under AS 2021-2015. As such, the proposed development will not have any adverse impacts onto the operation of the WSA and is an acceptable use with consideration of the noise intrusion levels.

Mitigation Measures

As the proposed development is will not result in any impacts onto the WSA with consideration of its separation distance and type/scale of development, no mitigation measures are required.

6.2.10. Flooding

A Civil Engineering Report Incorporating WCMS has been completed by Costin Roe Consulting and is included in **Appendix L.** It provides an assessment of the overland flow and flood impacts and management measures to be implemented at the subject site. This was conducted using the relevant TUFLOW modelling.

The assessment included a pre and post development overflow conditions in the 1% AEP storm event.

Findings

The overland flow present across the site was found to be limited to the gully and dams only. Otherwise, the proposed development will result in compliance with the following, relevant criteria in regards to pre/post development overland flow:

- The Flood level increase criteria will be met as the development conveyance will appropriately limit ff-site affectation
- The velocity change criteria will be met as the drainage infrastructure and inlets will limit velocity change
- The flow distribution criteria will be met as there will be no redistribution of flow as a result of development
- The cumulative effect criteria will be met as there will be no offsite impacts or cumulative impacts
- The flood storage criteria will be met as the appropriate storage will be provided in tandem with the conveyancing
- Limited or no adverse impacts to local development potential

- No impacts to flood liability of surrounding developments
- No local drainage flow/runoff will be caused by the proposed filling
- There is no floodway corridor defined within the existing gully
- Filling is proposed within the development land that is consistent with the nature of the site and any existing trees

The assessment of the 1% AEP event pre and post development found that there is negligible effect on the flood water of local development and there are no affectations of upstream, downstream or adjoining properties.

Mitigation Measures

The TUFLOW assessment found that the overland flow can be managed by conveying through the realigned E2 corridor while also draining portions via an inter-allotment pipe. The final conveyance arrangement will be subject to the precinct layout and trunk drainage strategy for the precinct.

Further, it is understood that Penrith Council advises that the minimum floor level be 0.5m above the 1% AEP flood level. As such, the development adopts a minimum flood planning level of RL 56.50m AHD, based on a 1% AEP event of 56.00m adjacent to the existing upstream catchment inflow point to the property east of the site.

6.2.11. BCA & Fire Engineering

A BCA Assessment Report has been completed by Blackett Maguire+ Goldsmith and a Fire Safety Strategy has been completed by Core Engineering Group. These reports are included in **Appendix LL** and **Appendix MM** respectively. The BCA Assessment report conduct a Deemed-to-Satisfy (**DtS**) approach and the Fire Safety Statement utilizes Performance Solutions to satisfy the requirements of the BCA.

The BCA report aims to assess the proposed Industrial Estate against the DtS provisions of the BCA 2019 Amendment 1 and identify any compliance requirements and/or works. The Fire Safety Strategy provides a holistic summary of the Performance Solutions in response to the identified BCA DtS non-compliances. The performance solutions demonstrate that the development is either compliant with the relevant performance requirement or the solution is at least the equivalent to the DtS provision. Otherwise, in addition to the BCA, the Fire Safety Statement was informed by the International Fire Engineering Guidelines

Findings

<u>BCA Assessment Report</u>

The BCA Assessment Report identifies that the following key findings:

- The bulk of building elements can achieve compliance in accordance with the relevant BCA clause. Further design verification is to be provided during the Construction Certificate (**CC**) stage for most items in relation to fire resistance, access and egress, firefighting equipment, health and amenity as well as energy efficiency
- Some of the proposed design elements do not strictly comply with the DtS BCA provisions and subsequently, are to be addressed as fire safety engineered performance solutions. This includes the following:
  - The perimeter vehicular access is greater than 18m
  - The distance between exits and alternative exits exceeds the maximum travel distances.
  - The location of hydrants outside the building are not open to the sky and the location of hydrant boosters.
  - The location of the sprinkler booster assembly.
  - The smoke hazard management requirements are to be rationalized.

All other BCA clauses are either un-applicable or satisfied by the proposed development design. Otherwise, it is considered that the proposed development can readily achieve compliance with the relevant provisions

of the BCA and any performance requirements will be addressed in a Performance Solution Report prior to the issue of the CC.

Mitigation Measures

BCA Assessment Report

Further to the compliance and non-compliance of particular elements of the proposed development, the BCA Assessment Report identifies that the following matters are to be resolved:

- The population of the warehouse and office buildings are to be confirmed to ensure compliance with the sanitary facilities and egress dimensions
- The enclosure under the stairs serving the Level 1 Office in Warehouse 3 will need to achieve an FRL of -/60/60 and the doorways will need to be fitted with self-closing -/60/30 fire doors
- Details of any proposed Clause D3.4 (access and egress) exemptions to be provided.
- A Performance Solution report is to be provided by the Architect / Façade Engineer to demonstrate how the external walls & roof are designed to prevent the penetration of water into the buildings
- The accessible compartment in the Ground Floor Office of Warehouse 3 is not located adjacent to the bank of toilets contrary to F2.4(c).
- A Section J Compliance Report or JV3 Report will be required at CC application stage for each building.

Fire Safety Statement

The Fire Safety Strategy identifies the non-compliances in the DtS BCA provisions and establishes the relevant Performance Solutions. The Fire Safety Statement assumes that the proposal will have an occupation rate of 30sqm per person (warehouse) and 10sqm per person (office) and the occupants are to be familiar with escape procedures through fire drills, fire wardens and clear escape routes. Otherwise, the Fire Safety Statement identifies the following in response to the non-compliance in the DtS BCA provisions:

- The development's fire brigade access, fire hydrant boosters, sprinkler booster, sprinkler tanks, pump rooms are identified in the following **Figure 53** below:

Figure 53 Location of fire safety equipment

Source: Core Engineering Group

- The development is currently found to have no fire hazards including combustible external cladding, dangerous goods, insulated sandwich panels or automatic storage and retrieval systems. If these elements are included in future, the appropriate review and risk assessment will be made.
- 6 sub-systems of fire preventative and protective measures are proposed in response to differing levels of fire hazard.
- Passive fire protection practices include the use of non-combustible external walls, providing the appropriate site security that is accessible by fire authorities
- In response to the DtS non-compliances, the following performance solutions are proposed:
  - **Perimeter Vehicular Access:** the staging of brigade appliances is available at all points of the vehicular access path and brigade personnel can approach the building on foot. Carparks also form an alternative access pathway for personnel and smaller vehicles.
  - **Travel Distance between Exits**: considering the large volume of the proposed warehouse enclosures, there is a large smoke reservoir and consequently, a longer time for occupant egress before the smoke layer descends. Otherwise, considering that travel distances are generally not subject to flexibility, the fit out of the warehouses may be limited or fire-isolated tunnels may be used.
  - **Location of Hydrants**: The buildings, including the awnings are fully sprinkler protected and fall-back hydrants are to be provided on the hardstand.
  - **Sprinkler Boosters**: The location of the sprinkler boosters are identified on the above plan.
  - **Smoke Hazard Management**: The smoke hazard system may need to offset the increased travel distances across the proposed development with the appropriate smoke clearance system.
- Otherwise, all other fire safety and evacuation elements are to be designed to the appropriate standards and requirements. An emergency evacuation plan will be prepared in accordance with AS3745:2010

As such, with consideration of the management measures identified in the Fire Safety Statement, the proposed development is compliant or can readily achieve compliance with the relevant BCA provisions.

6.2.12. Social and Economic

A Social Impact Assessment (**SIA**) has been undertaken by Urbis to assess the potential social impacts arising from the proposed Concept Masterplan and Stage 1 development. It is included at **Appendix G**.

Social impacts are those that impact on people's way of life, their culture, community, environment, health and wellbeing, personal and property rights, and their fears and aspirations.
Based on the local context the following individuals and communities are likely to be impacted by the proposed development:

- Local Aboriginal Groups
- Households on Mamre Road;
- Schools and retirement village on Bakers Lane;
- Kemps Creek and Mount Vernon residents; and
- Penrith LGA residents and workers.

These stakeholders have been consulted. The outcomes of these discussions are outlined in Section 5 of this EIS.

A range of impacts were assessed against the Social Impact Assessment criteria without considering management measures. These included

- Noise impacts from the construction and operation of the proposal;
- Impacts on air quality during the construction and operation of the proposal;
- Potential impacts on Aboriginal cultural heritage;

- Provision of facilities to meet employee needs;
- Increased employment opportunities and industrial land;
- Change to visual character; and
- Increased local traffic;

The three latter social impacts identified above are considered to result in moderate to high impacts and have therefore been assessed further without regard to mitigation measures.

Findings

Table 49 provides a summary of the potential social impacts associated with the YLE.

Table 49 Summary of Potential Social Impacts

Description of impact & recommended mitigation measures	Impacted groups	Overall impact rating and mitigation measures
Increased employment opportunities and industrial land The Mamre Road Precinct Structure Plan (2020) indicates that Western Sydney is facing a growing shortage of industrial land which is likely to impact on employment opportunities for the region. The proposal will increase the supply of industrial land and generate new jobs for the area. This is likely to have a high, positive social impact on the community.	▪ Penrith LGA residents ▪ Workers in Greater Sydney	High impact
Change to visual character The proposal will introduce a new industrial estate in an area of relatively undeveloped rural land. While the proposed use is aligned with the strategic directions and rezoning objectives of the Mamre Road Precinct, it will represent a visual change to the Kemps Creek area.	▪ Kemps Creek and Mount Vernon residents	High impact
Increased local traffic The proposal will generate an increase in traffic movements during the AM and PM peak periods. Consultation with Council indicates that the community is concerned about the capacity of existing services and infrastructure (including roads) within the LGA to accommodate the projected development and growth for the area.	▪ Kemps Creek and Mount Vernon residents ▪ Penrith LGA residents	High impact

Based on the assessment, the proposal will result in some short term negative impacts associated with increased traffic. These impacts are likely to reduce over the longer term as Mamre Road upgrade is delivered and the road network adapts to the additional trip demand.

There will also be significant visual changes to the site, as well as the broader area. These impacts are likely to be higher in the short term and are expected to reduce over time as the community adapts to the presence of the new industrial area.

Overall, the negative impacts will be significantly outweighed by the long term positive impacts resulting from the creation of increased industrial land and employment opportunities for Western Sydney residents.

Mitigation Measures

The following mitigation measures were recommended to reduce the negative impacts and maximise the positive impacts associated with the proposal:

- Consider developing an employment strategy to target local recruitment. The plan may include initiatives to partner with local businesses or incorporate inclusion/diversity targets.
- Ensure all external lighting on site complies with Australian Standards to manage and reduce potential obtrusive effects of outdoor lighting.
- Prepare a maintenance schedule for the site to ensure the grounds and landscaped areas are regularly cared for and maintained.
- Continue to consult with TfNSW and Council as the Mamre Road Precinct develops to monitor road performance and make future modelling adjustments as required.

Based on the SIA, the proposal is expected to have an overall positive impact by creating new, local employment opportunities and supporting the strategic objectives for increased freight and logistics support across Greater Sydney. The potential change to traffic conditions and visual impacts have been assessed by relevant technical specialists and are sufficiently managed by the proposal.

6.2.13. Non-Indigenous Heritage

Urbis prepared a Heritage Impact Statement (**HIS**) for the YLE which is provided at **Appendix W**. The HIS has been prepared with respect to the local heritage items located within the vicinity of the site and mapped on the WSEA SEPP maps, and includes the following:

- Bayley Park – House (I2)
- Gateposts to Colesbrook (I3)
- Brick Farmhouse (I4).

Findings

The HIS assessed the impact of the proposed development on the local heritage items and provided the following findings:

- There are no heritage listed items or potential heritage items within the subject site. All extant buildings located within the subject site are dated to the mid- to late-20th century or early 21st century and have not been identified as potential heritage items.
- The proposal is located approximately 1kilometre to the north of the afore mentioned heritage items. Furthermore, there are no direct views between the three heritage items and subject site on account of the existing sloping topography, extant structures, and the distance between the subject site and heritage items. Therefore, there would be no adverse visual impacts to the heritage significance of these items that would arise as a result of the proposal.
- The proposed development features considerable setbacks from the lot boundaries and from Mamre Road, which would be further buffered by landscaping. Furthermore, the proposed warehouses would feature low heights of a maximum two storeys, and would be recessive in design by utilising neutral colour schemes and matte finishes.

- There is nil archaeological potential associated with the subject site. An Unexpected Finds Policy is recommended and works should cease immediately in the event that previously unidentified archaeological remains are located during construction works.

Mitigation Measures

The proposed development was found to not result in any impacts on local heritage items and for the reasons stated above, the proposed works are recommended for approval from a heritage perspective.

7. EVALUATION OF PROJECT

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

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

7.1. PROJECT DESIGN

This SSDA seeks consent for the staged development of the YLE for other manufacturing industries and/or warehouse or distribution centre uses as part of the broader WSEA and MRP. The SSDA includes a Concept Masterplan to guide the future estate and Stage 1 development proposal which includes the delivery of essential infrastructure, services, estate wide preparation works and the construction and use of buildings in certain lots.

The development of the YLE would create:

- 157,860m^2 of industrial or warehouse or distribution floorspace to meet latent and projected market demand;
- 703 new construction jobs and 1,100 new operational jobs; and
- Over a million of direct investment in core infrastructure and services.

The YLE has been designed with a genuine consideration of the existing site conditions and emerging character of the Mamre Road Precinct to create a state-of-the-art logistics estate that epitomises the high-quality development that GPT is committed to delivering in NSW.

Project Objectives

As described in **Table 2**, the objectives of the YLE is to:

- Deliver an innovative logistics estate that is compatible with the 24-hour airport operations at the future Western Sydney (Nancy-Bird Walton) International Airport;
- Create a sustainable logistics estate that responds to the changing landscape of industrial services;
- Deliver employment opportunities and support the realisation of the Mamre Road Precinct vision;
- Deliver a design which establishes relationships between built form, people and the environment; and
- Create a logistics estate that responds to the existing environmental conditions.

Table 2 provides an assessment against the objectives listed above. The assessment demonstrates that the proposed Concept Masterplan maximises the site opportunities and has the best outcomes which meet the overarching objectives and provide for efficient layout to optimise the land for future tenant use.

Alternatives Considered

Based on the above objectives, various project alternatives were considered in the detailed concept design. Two main options were identified, those being ‘Do Nothing’ and ‘Alternative Designs and Layouts’.

In considering the two options, it was clear that the ‘Do Nothing’ alternative was flawed and did not result in any positive outcomes, rather, as it would create a major misalignment with current and previous statutory and strategic policy directions pertaining to the site.

Each of the ‘Alternative Design and Layouts’ that were considered had associated pros and cons. Through this process, the final YLE concept was refined to produce a masterplan which maximised the opportunities associated with the site and defined the constraints and impacts would be assessed and mitigated as part of this SSDA.

Staging

As described in Section 3, the staged development of the YLE involves one defined Stage 1 which will allow for estate wide site preparation, infrastructure and servicing works and construction of two warehouses.

Future stages of the YLE have been accounted for in the impact assessment although detailed design of warehouses 2, 4 and 5 will form separate DAs. It is noted that within Stage 1, both warehouses 1 and 3 are capable of being constructed and operated independent of one another subject to the required earthworks, civil and servicing infrastructure and roads being delivered.

Mitigation Measures

As demonstrated in Section 6 of this EIS, the YLE is capable of being constructed and delivered subject to the impact mitigation measures defined within **Appendix D**. Generally, key mitigation measures relate to the following impacts:

- Visual Impact;
- Water Sensitive Urban Design;
- Biodiversity;
- Contamination;
- Indigenous Heritage; and
- Waste Management.

Stage 1 impact mitigation will be managed through a CEMP to be prepared and capture standard and specific management and mitigation measures as described in the SSDA, EIS and supporting technical documents.

Where impact mitigation cannot be incorporated into the Stage 1 development, ongoing management practices are captured in an Operational Environmental Management Plan (**OEMP**) which will also be prepared for the SSDA to guide the ongoing operations of the site once development is completed. This document would capture standard and specific operational management measures addressing issues such as:

- Control of noise and air emissions;
- Biodiversity and vegetation management;
- Management of water and waste;
- Emergency procedures and protocols;
- Engagement with adjoining landowners;
- Sustainability and energy efficiency;
- Compliance and approvals; and
- Environmental management and reporting.

The OEMP would be prepared prior to the commencement of operations on the site.

Subject to adherence with the CEMP and OEMP, it is considered that the YLE can be constructed and operated without any undue environmental impact.

7.2. STRATEGIC CONTEXT

The proposal aligns with the strategic direction and objectives established for the site and surrounding lands under the WSEA SEPP and Mamre Road Structure Plan. Furthermore, the YLE aligns with the broader strategic context established by the Region Plan and District Plan as demonstrated in Section 2. The development presents a design solution that respects the important role of the site in providing a secure and reliable supply of employment land in the WSEA to meet project future demand over the next decade.

Adequate consideration has been given to the relevant strategic policies as required by the SEARs and provided in Section 2 of this EIS and finds the site to be suitable for the proposed YLE from a strategic point of view.

7.3. STATUTORY CONTEXT

The proposed development has been assessed in accordance with the relevant matters for consideration listed in Section 4.15 of the EP&A Act.

7.3.1. Environmental Planning Instruments

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

- The proposed development has been assessed and designed in respect to the relevant objects of the EP&A Act as defined in Section 1.3 the Act.
- This EIS has been prepared in accordance with the SEARs as required by Schedule 2 of the EP&A Regs.
- Consideration is given to the relevant matters for consideration as required under the Heritage Act, EPBC Act and BC Act. The SSD is supported by an ACHAR and BDAR accordingly.
- This SSDA pathway has been undertaken in accordance with the SRD SEPP as the proposed development is classified as SSD.
- Concurrence from TfNSW will be required as per the ISEPP for 'traffic generating development'.
- The YLE complies with all of the relevant provisions under the WSEA SEPP as detailed in **Appendix B**. The proposed development is consistent with the objectives of the IN1 General Industrial zone and E2 Environmental Conservation zone, whilst relying on Clause 33A for the proposed zone realignment.
- The proposed development aligns with the strategic objectives of the Aerotropolis SEPP.
- The proposed development has been assessed in accordance with SEPP No. 33, SEPP No. 55 and SEPP No. 64. The proposed development complies with the relevant clauses of these SEPPs.
- Consideration is given to the draft CPCP and is considered to align with the overarching objectives.

As demonstrated above and in detail in **Appendix B,** the proposed development has been assessed against, and complies with the relevant statutory framework.

7.3.2. Draft Environmental Planning Instruments

No draft environmental planning instruments are relevant to this proposal.

7.3.3. Development Control Plan

The Draft Mamre Road Precinct Development Control Plan (Draft MRP DCP) (Exhibited in 2020) provides detailed planning controls which are relevant to the site and surrounding locality. However, clause 11 of the SRD SEPP states that DCPs do not apply to State significant development.

Nonetheless, a detailed assessment of the YLE against the relevant controls has been provided at **Appendix E** and have been addressed on a merits basis, so that the proposed development is compatible and consistent with the existing, approved and likely future development in the locality.

7.3.4. Planning Agreement

A Voluntary Planning Agreement (VPA) for the Draft SIC will be required, with preparation in progress. A letter of offer has been prepared and submitted to DPIE for processing of the draft Voluntary Planning Agreement. The VPA recognises the proposed road widening to Mamre Road.

7.3.5. Regulations

This application has been prepared in accordance with the relevant provisions of the EP&A Regulation.

7.3.6. Likely Impacts of the Proposal

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

- **Natural Environment**: the proposal addresses the principles of ecologically sustainable development (ESD) in accordance with the requirements of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation) and as outlined below:
  - Precautionary principle: the precautionary principle relates to uncertainty around potential environmental impacts and where a threat of serious or irreversible environmental damage exists, lack of scientific certainty should not be a reason for preventing measures to prevent environmental degradation. The site is identified as bio-certified urban capable land under the draft CPCP which seeks to retain and offset the impacts of urban development on the natural environment within Western Sydney. The environmental impacts associated with the removal of vegetation across the site have therefore already been offset.
  - Intergenerational equity: the needs of future generations are considered in decision making and that environmental values are maintained or improved for the benefit of future generations. The proposed development seeks to balance the needs of the future generation by introducing WSUD treatments which will adequately manage water quantity and quality across the site to ensure that no undue impacts are experienced elsewhere.
  - Conservation of biological diversity and ecological integrity: The YLE seeks to enhance and celebrate the existing 2nd order stream that traverses the site by realigning and revegetating it with a range of native plant species to further improve waterway health.
  - Improved valuation, pricing and incentive mechanisms: this requires the holistic consideration of environmental resources that may be affected as a result of the development including air, water and the biological realm. It places a high importance on the economic cost to environmental impacts and places a value on waste generation and environmental degradation. The YLE adopts a range of management practices that relate to ESD and greenhouse gas emission, waste minimisation and management, acoustic and odour impacts and stormwater drainage to mitigate the environmental impact of the proposal. All of the proposed mitigation measures will be at the cost of the developer and results in the balanced development of the site and associated feasibility.
- **Built Environment**: The YLE has been designed in respect to the precinct wide road network and adjoining landowners to ensure that the proposal is consistent with the overarching precinct structure plan and can be developed with respect to access and staging of adjoining development. It is considered that the proposed development is consistent with the vision of the MRP and provides for the orderly development of adjoining sites within the Precinct.
- **Social**: The YLE seeks to deliver employment uses to support the lifestyle of future residents and current residents within Western Sydney, by providing jobs closer to home as envisaged by the Region Plan. The design of the YLE is centred around 'reframing the city edge', creating a space where people can work, interact with one another and natural environment. The YLE will not result in any undue social impacts and will provide an improved outcome.
- **Economic**: The YLE will contribute to 351 immediate construction jobs and 400 immediate operational jobs. Future stages of the YLE will deliver 352 construction and 700 operational jobs, resulting in an overall delivery of 1,803 jobs within the MRP. This is the equivalent of 10.6% of the 17,000 jobs intended to be delivered by the MRP. Furthermore, the YLE will provide over $1 million in infrastructure servicing for the site.

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

7.3.7. Suitability of the Site

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

- The proposed land uses are permissible in the IN1 General Industrial and the development is consistent with the zone objectives as established in the WSEA SEPP.
- The YLE is consistent with the relevant State and Local strategic and statutory policy.

- The YLE aligns and has been designed in respect to the emerging local character of the MRP and adequate consideration is given to the site-specific constraint and opportunities.
- Stage 1 of the YLE will deliver the required infrastructure services to ensure that the development can operate from both a utility and traffic point of view.
- The detailed impact assessment undertaken for the YLE demonstrates that the proposed development can occur without any unacceptable environmental impact, subject to the implementation of the CEMP and OEMP.

7.3.8. Submissions

It is acknowledged that submissions arising from the public notification of this application will need to be assessed.

7.3.9. Public Interest

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

- The proposal is consistent with relevant State and local strategic plans and substantially complies with the relevant State and local planning controls.
- No adverse environmental, social or economic impacts will result from the proposal.
- The proposal will provide 1,803 jobs within a land identified for industrial employment uses.
- The issues identified during the stakeholder engagement have been addressed in the design of the YLE.

7.4. SUMMARY AND CONCLUSION

This EIS has assessed the environmental, social and economic impacts of YLE, located at 754-770 and 784-786 Mamre Road, Kemps Creek. It has addressed the issues identified in the SEARs and prepared in accordance with the EP&A Regulation.

Having regard for the biophysical, economic and social considerations, including the principles of ecologically sustainable development, the proposed development is justified for the following reasons:

- The YLE will respond to the critical shortage of serviced, zoned employment land as evidenced in numerous recent studies and help address previously raised concerns from industry regarding the loss of investment to other state arising from a lack of suitable tenancy options and increasing unaffordability for occupiers.
- The YLE will deliver 1,803 jobs which is the equivalent of 10.6% of the 17,000 jobs intended to be delivered by the MRP. Therefore, the servicing and development of land in the MRP is critical to realising the intended outcome of the Precinct's fast-tracked rezoning and ensuring a reliable pipeline of employment land to meet the expected demand over the next decade.
- The proposed staged development of the YLE as described in the EIS and SSDA is justified on strategic, economic and environmental grounds. Key justification for the proposed development includes:
  - Outcomes that support the strategic role and objectives of the YLE as part of the broader WSEA and Mamre Road Precinct.
  - Outcomes that align with the future context and role of the WSEA and Western Sydney Aerotropolis as an economic hub for Greater Sydney.
  - The delivery of critical infrastructure and services to the WSEA for the benefit of the broader area.
  - Significant private sector investment in the area with direct and indirect benefits for productivity and the local economy.
  - Generation of employment for the Western Sydney region, thus contributing to the 30-minute city vision set in the Region Plan.
- With consideration to the other alternatives that were explored as part of the YLE concept design, it is found that the proposed Concept Masterplan is the most suitable deign for the YLE. The selected design

contributes to the industrial land shortfall, while providing opportunity for embellishment of flora and fauna habitats and provides a flexible design to enable integration with the broader MRP.

- Extensive engagement with relevant community, government and agency stakeholders has been undertaken with respect to the proposed Concept Masterplan, with no major objections or issues having been raised through the consultation processes.

Based upon a balanced review of key issues and in consideration of the benefits and residual impacts of the proposal, the staged development of the YLE as proposed under the SSDA is considered justified and warrants approval subject to the implementation of the management and mitigation measures described in EIS and nominated supporting documents.

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