



253-267 Aldington Road,
Kemps Creek Industrial Estate

WESTGATE DESIGN REPORT

December 2023

ISSUED FOR DA (Revision 5)

Acknowledgment of Country

We acknowledge the enduring spirit of Country and the stories, songlines, languages, land, skies and waters that have nurtured the local people here since the beginning of time. We pay our respects to the local peoples of the Wianamatta-South Creek area, including but not limited to the Deerubbin, Dharug, D'harawal and Gundangurra as the traditional and continuing custodians of what we now call Western Sydney, who have cared for their Country for thousands of generations.

We also acknowledge the peoples of the Eora, Darkinjung, Wiradjuri and Yuin nations who hold trade and care responsibilities to the Country upon which the Northern Gateway will be developed.

We pay respect to their elders past, present and emerging and recognise their continuing, living practices, acknowledging the intricate knowledges and kinship relationships they each hold to this Country. They are, and forever will be, embedded within this space.

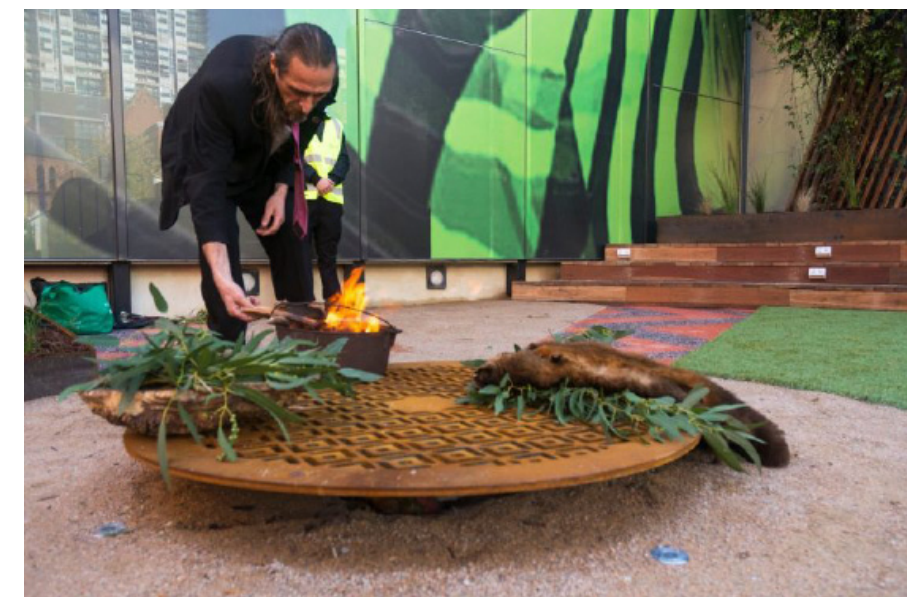
We also acknowledge the many First Nations people who now know this Country as their home and mother and recognise the care-taking relationships they hold here.



Aboriginal Plant Use Trail Walk
Teaching & Learning with Country



Badu Mangroves Boardwalk, Lorna Munro & Bangawarra.
Songlines, Storytelling & Poetry

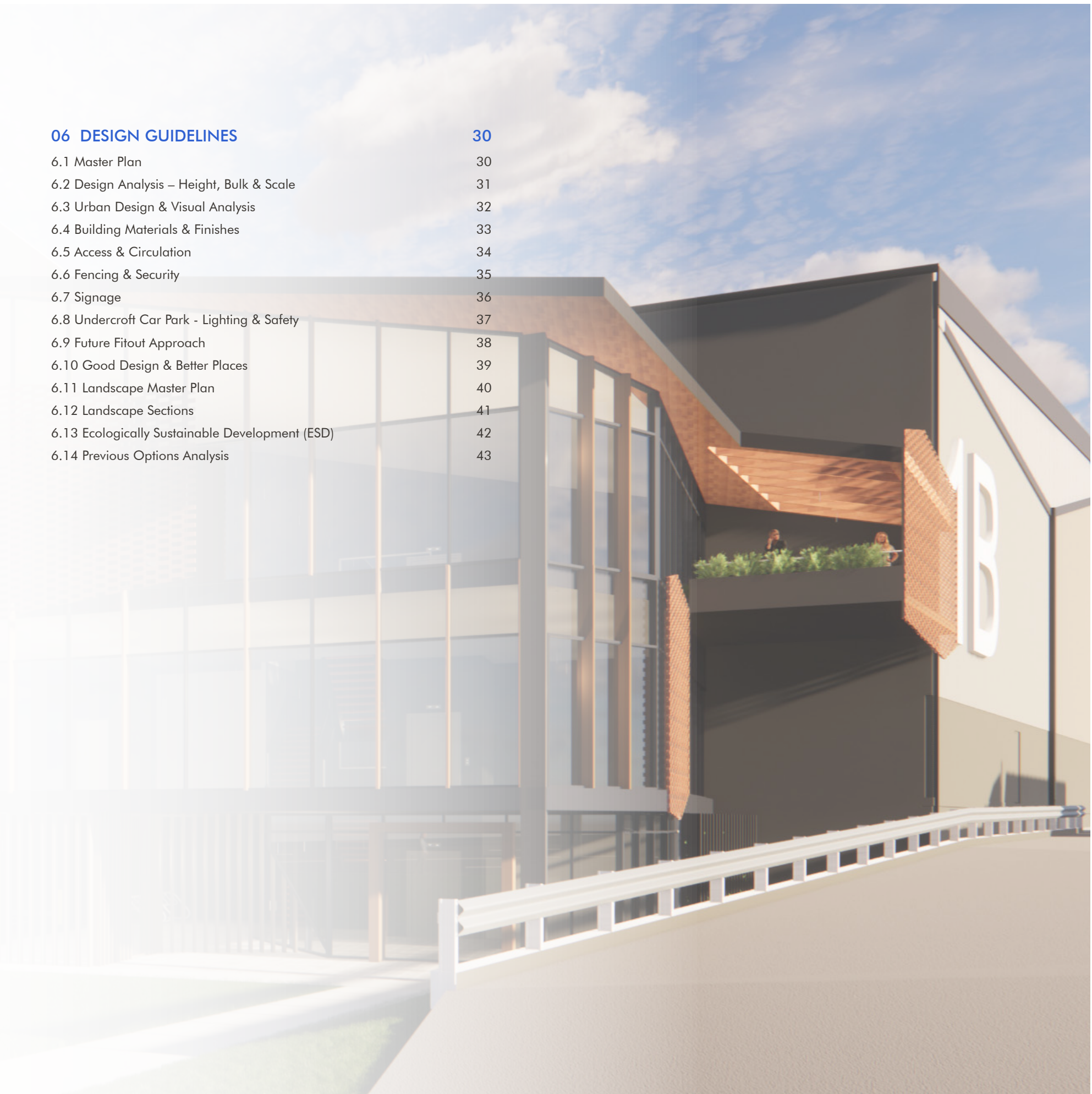


Nagara Place
Spatially Enacted Culture

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Executive Summary & Introduction

Executive Summary

This Design Report has been prepared by nettletontribe Architects to accompany a State Significant Development Application (SSDA) for the staged construction and operation of an industrial estate comprising four warehouse buildings at 253-267 Aldington Road, Kemps Creek, NSW 2178 in the Penrith City Council Local Government Area (LGA). The site is legally described as Lot 9 in Deposited Plan 253503.

This report has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued for the project (SSD-23480429) dated 30 July 2021 and additional SEARs issued on 25 March 2022.

This report has been prepared to demonstrate the consistency with the Mamre Road Structure Plan and Western Sydney Employment area strategic planning documents.

This report concludes that the proposed industrial estate is suitable and warrants approval subject to the implementation of the following mitigation measures:

- Ecologically sustainable development (ESD) strategies
- High quality building façade
- Sustainable landscape

Introduction

This report has been prepared to accompany an SSDA for the construction and operation of an industrial estate comprising four warehouse buildings at 253-267 Aldington Road, Kemps Creek, NSW 2178 (SSD-23480429).

The application seeks consent for:

- Site Establishment:
 - Demolition and removal of existing rural residential structures including removal of farm dams.
 - Remediation as required
 - Bulk earthworks (127,250m³ of fill) and retaining walls
- Staged construction and operation of an industrial estate with a total gross floor area of 45,530m², maximum FSR of 0.45:1, maximum height of 17.2m, split over four warehouses contained within three buildings with ancillary hardstand and office spaces:
 - Stage 1
 - Warehouse 1A: 8,700m² with 660m² office space (total GFA – 9,360m²)
 - Warehouse 1B: 9,130m² with 750m² office space (total GFA - 9,880m²)
 - Warehouse 1C: 8,405m² with 655m² office space (total GFA - 9,060m²)
 - Stage 2
 - Warehouse 2 (temperature controlled): 16,930m² with total 840m² office space (total GFA - 17,230m²)
- Use of the buildings for warehouse and distribution purposes 24 hours per day 7 days per week.
- Ancillary development including:
 - Signage (A pylon estate sign approximately 5m high and individual tenant signage adjacent to each office)
 - Car parking (261 vehicular spaces)
 - Warehouse 1A: 65 spaces
 - Warehouse 1B/1C: 117 spaces
 - Warehouse 2: 79 spaces
 - Landscaping
 - Retaining walls
 - Utility infrastructure and services connection; and
 - Stormwater management including naturalised open channel drainage as well as below ground on-site detention of stormwater.
- Construction and dedication of new local roads and an interim intersection with Aldington Road.
- Subdivision of the site into two Torrens title allotments along with a road reserve lot for the widening of Aldington Road.

SEAR’s Compliance Table

This report has been prepared to address the Secretary’s Environmental Assessment Requirements (SEARs) issued for the project (SSD-23480429) dated 30 July 2021 and additional SEARs issued on 25 March 2022.

Specifically, this report has been prepared to respond to the SEARs requirement issued below.

Item	Description of Requirement	Section reference (this report)
Urban Design and Visual	- a detailed design and options analysis of the development including diagrams, illustrations and drawings with reference to the built form, height, setbacks, bulk and scale in the context of the immediate locality, the wider area and the desired future character of the area, including views, vistas, open space and the public domain with consideration of Clause 31 of State Environmental Planning Policy (Western Sydney Employment Area) 2009	Sections 6.1, 6.2, 6.4 & 6.13
	- details of staging, site coverage, setbacks, open space, landscaping, height, colour, scale, building materials and finishes, façade design, retaining walls, signage and lighting, particularly in terms of potential impacts on: o nearby public and private receivers. o significant vantage points in the broader public domain.	Sections 6.1, 6.2, 6.4, 6.5, 6.6 & 6.7
	- consideration of the layout and design of the development having regard to the surrounding vehicular, pedestrian and cycling networks	Section 6.3
	detailed plans showing suitable landscaping which incorporates endemic species	Sections 6.10 & 6.11
	- Attachment 1 - Better Placed (Government Architect NSW, 2017)	Section 6.9
Infrastructure Requirements	- identification of any existing infrastructure or easements on or off the site which may be impacted by construction or operation of the development and details of measures to be implemented to address any impacts	Section 1.1
Ecologically Sustainable Development	- a description of how the proposal will incorporate the principles of ecologically sustainable development in the design, construction and ongoing operation of the development	Sections 4.1, 6.4 & 6.12
	- consideration of the use of green walls, green roofs and/or cool roofs in the design of the development	
	- a description of the measures to be implemented to minimise consumption of resources, especially energy and water	

1.1 Development Site

Westgate is a 10.14ha industrial estate which comprises of two new subdivided lots. Westgate is located east of Mamre Road, Kemps Creek within the Penrith City Council Local Government Area (LGA).

Westgate has approximately 162m of direct frontage to Aldington Road with a proposed round-a-bout intersection providing vehicular access via Abbots Road to the south that connects to Mamre Road onto the M4 Motorway and the Great Western Highway to the north and Elizabeth Drive to the south.

Westgate is located approximately 4km north-west from the future Western Sydney Nancy- Bird Walton Airport, 13km south-east of the Penrith CBD and 40km west of the Sydney CBD.

Westgate is burdened by an existing 60.96m wide Transgrid easement which runs north-south through the site. The easement is known as 'Dapto – Sydney West 330kV Easement' and there is presently no high voltage transmission line infrastructure present.

Westgate is located along the proposed conceptual Naturalised Channel Alignment as shown on the updated Mamre Road Precinct Stormwater Scheme Plan (Figure 12a). This proposed development includes new 20m wide Trunk Drainage Corridor easements as shown in Figure 1.

Figure 1 shows new lots which comprise the Westgate.

Table 1 below provides the existing lot title and area of each lot within Westgate.

Lot	DP	Area (ha)
9	253503	10.14

Note: Areas taken from detailed survey provided by Beveridge Williams Surveyors.

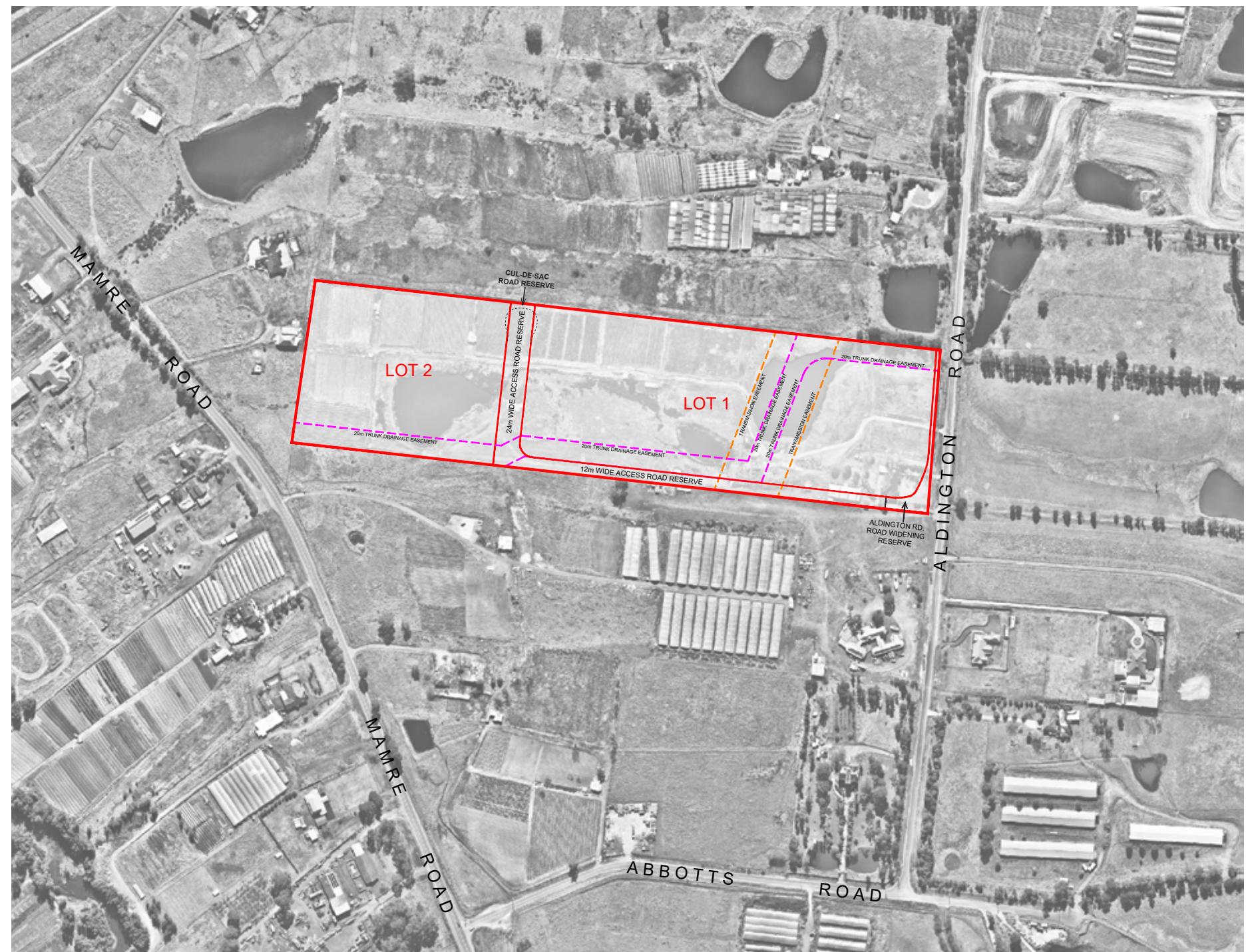


Figure 1: Westgate Industrial Estate

1.2 Subregion Location

Westgate is located in the Penrith City Council Local Government Area (LGA) within the suburb of Kemps Creek. The site is approximately 4km from the currently under construction Western Sydney Airport.

The predominant existing surrounding land use is small- and large-scale agricultural land and grazing pasture and Rural Residential of Mount Vernon at the South East Corner. Further north of the precinct on Mamre Road is industrial zoned land and warehousing.

Westgate is fronted by Aldington Road and Abbots Road to the South. Abbots Road has a direct connection to Mamre Road and is a key sub-regional road which connects to the M4 Motorway to the North. The M4 also provides access to the M7. Alternatively, the M7 can be accessed via Elizabeth Drive located South of the site.

Figure 2 highlights some of the broader regional features surrounding Westgate.

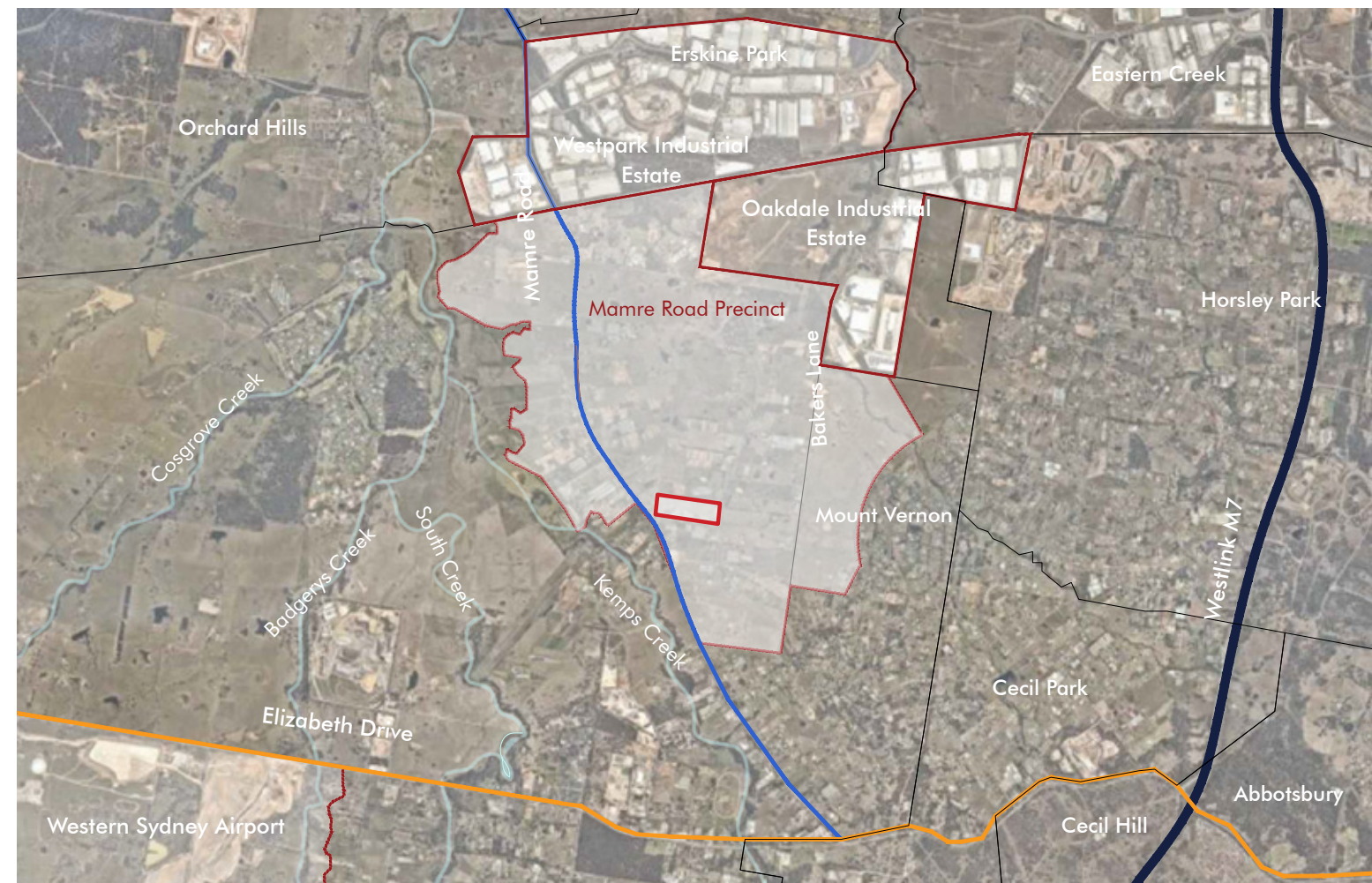


Figure 2 – Subregion Map

- Westgate boundaries
- Precinct boundaries
- Suburb boundaries
- Major link roads

1.3 Greater Sydney Region Plan

The Region Plan is built on a vision of three cities, where most residents live within 30 minutes of their jobs, education and health facilities, services and great places. It identifies four themes: infrastructure and collaboration, livability, productivity, and sustainability. Within these four themes, a set of planning priorities and actions are identified to achieve the Region Plan's vision.

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

Figure 3 shows Westgate in relation to the Greater Sydney Region Plan.

Figure 4 shows the plan of Greater Sydney's 'Three Cities'.



Figure 3 – Greater Sydney Region Plan [Source: Greater Sydney Commission]

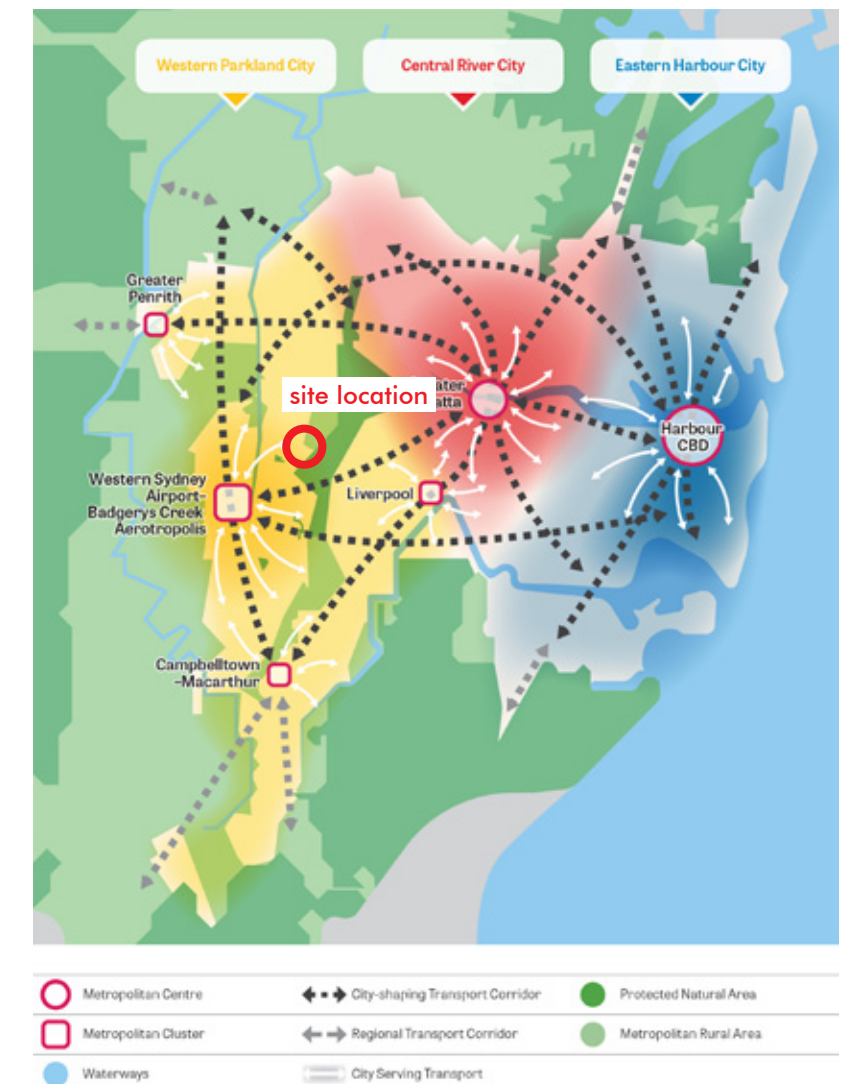


Figure 4 – Plan of Greater Sydney's 'Three Cities' [Source: Greater Sydney Commission]

1.4 Western Parkland City District Plan

The population of the Western Parkland City is projected to grow from 740,000 in 2016 to 1.1 million by 2036 and to well over 1.5 million by 2056.

The city will be established on the strength of the new international Western Sydney Airport and Badgerys Creek Aerotropolis. It will be a polycentric city capitalising on the established centres of Liverpool, Greater Penrith and Campbelltown-MacArthur.

New city-shaping transport and the airport will make the city the most connected place in Australia. The Australian and NSW Governments will deliver the first stage of the North South Rail Link from St Marys to the Western Sydney Airport and Badgerys Creek Aerotropolis. A potential new east-west mass transit corridor will connect the Western Parkland City to the Central River City. In the long term, a potential Outer Sydney Orbital will provide the city with direct connections to Greater Newcastle, Wollongong and Canberra cities.

Figure 5 shows Westgate in the context of the Western District Structure Plan.

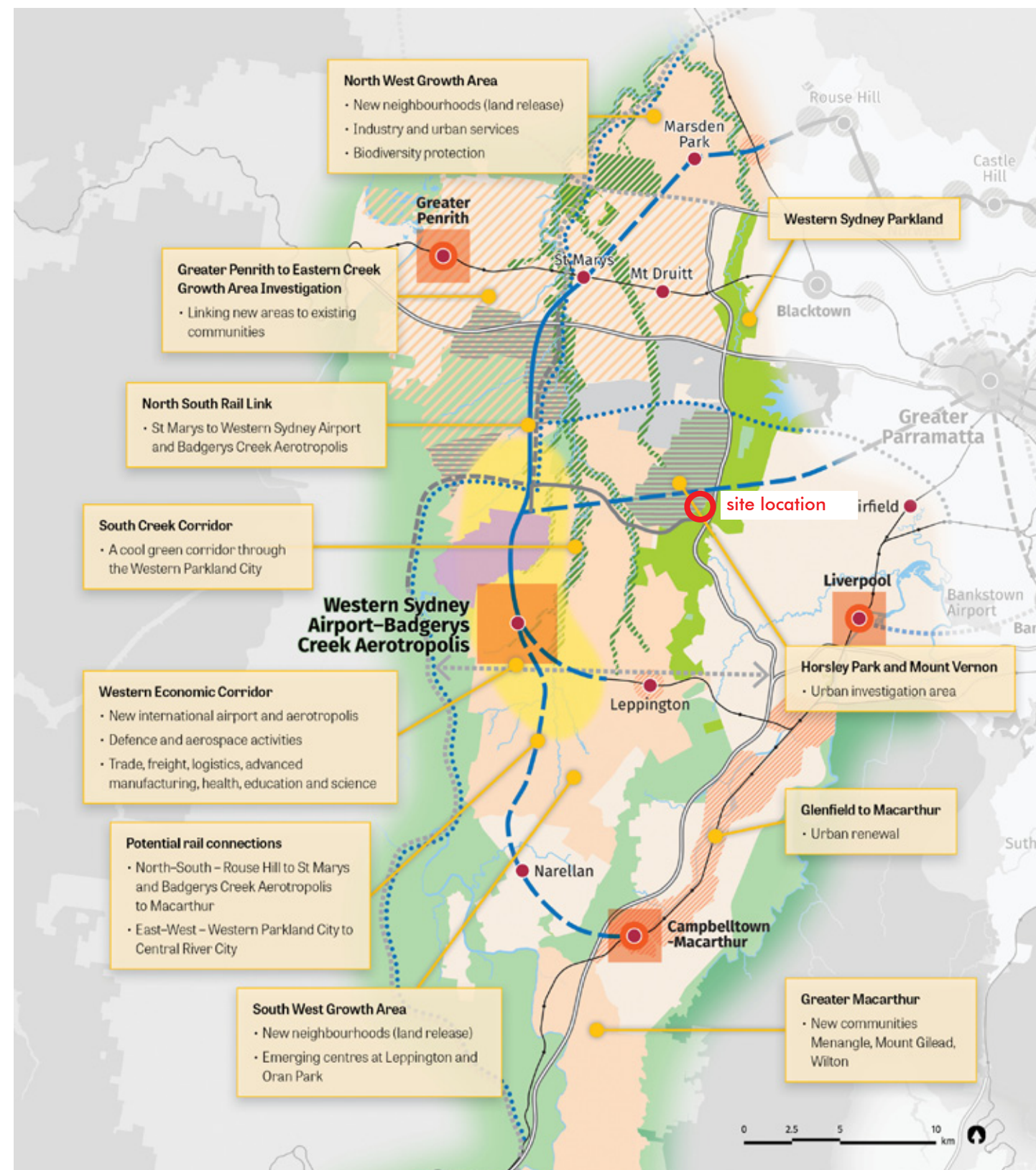


Figure 5 – Western District Structure Plan [Source: Greater Sydney Commission]

1.5 Western Sydney Employment Area (WSEA) SEPP

The New South Wales Government established the WSEA to provide businesses in the region with land for industry and employment, including transport and logistics, warehousing and office space.

On 12 June 2020, Westgate as part of the Greater Mamre Road Precinct was rezoned to formally be included in the WSEA by way of a SEPP amendment. The zoning is predominantly IN1 General Industrial, with environmentally sensitive areas zoned E2 Environmental Conservation.

The changes to the WSEA SEPP and introduction of the Mamre Road Precinct structure plan ensures that:

- The precinct becomes a warehousing industrial hub providing around 17,000 new jobs in Western Sydney;
- Surrounding rural residential areas are protected from industrial activities with buffers between homes and the industrial hub;
- Built and natural heritage are protected with the preservation of approximately 95 hectares of environmentally sensitive land, including Cumberland Plain Woodland;
- Over 50 hectares of open space, recreation areas, cycle and walking paths in the precinct, including alongside South Creek; and
- Critical transport corridors are preserved and potential opportunities for an intermodal terminal are explored.

Figure 6 shows Westgate in the context of the WSEA.

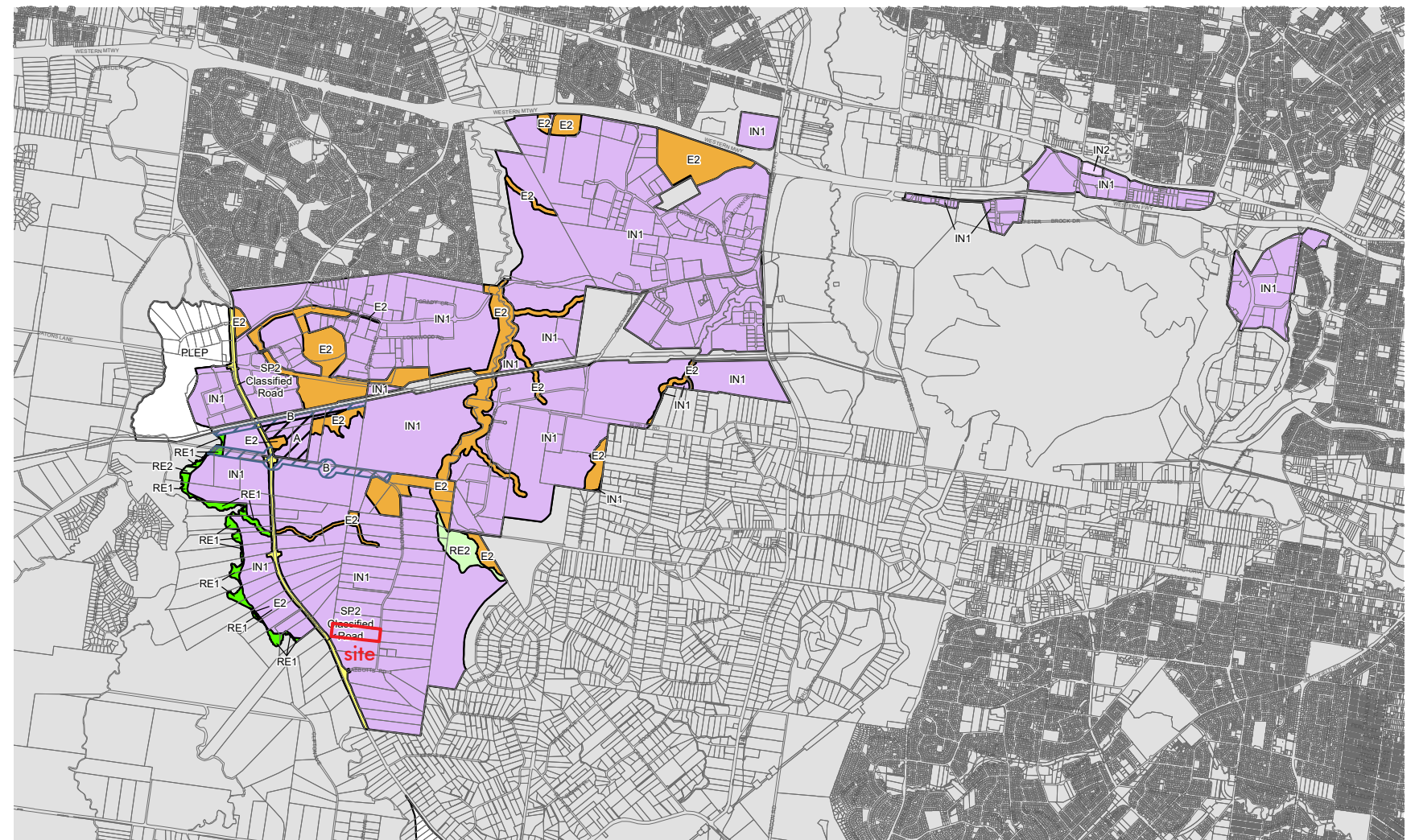


Figure 6 – State Environmental Planning Policy (Western Sydney Employment Area) 2009, Land Zoning Map
[Source: NSW Department of Planning, Industry & Environment]

E2	Environmental Conservation	SP2	Infrastructure
IN1	General Industrial	PLEP	Penrith Local Environmental Plan 2010
IN2	Light Industrial		Transport Investigation Area A
RE1	Public Recreation		Transport Investigation Area B
RE2	Private Recreation		Cadastre 21/05/2020 © Spatial Services

1.6 Mamre Road Precinct Structure Plan

On 19th November 2021, the structure plan was included in final Mamre Road Precinct DCP. The structure plan identifies Westgate as IN1 industrial land. Further, there is a proposed intersection upgrade from Abbotts Road to Mamre Road to provide easier access to the site.

Figure 7 shows Westgate in the context of the Mamre Road Structure Plan.

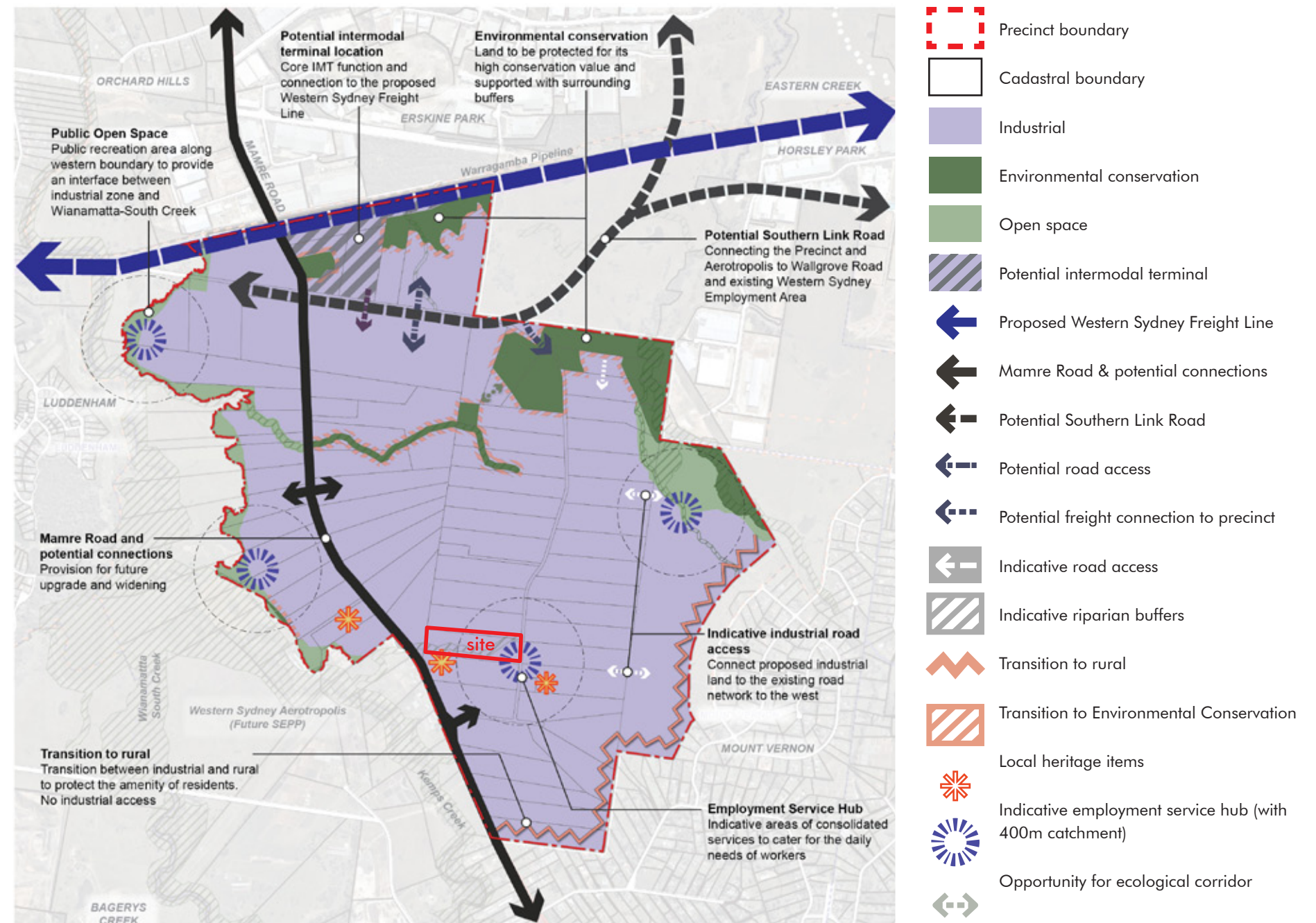


Figure 7 – Mamre Road Structure Plan (June 2020) [Source: NSW Department of Planning, Industry & Environment]

1.7 Mamre Road Precinct Road Map Network

On 19th November 2021, the Road Network Map was updated and included in the final Mamre Road Precinct DCP. The map identifies the hierarchy and design of the road network within the Mamre Road Precinct.

Westgate is located at the proposed signalised intersection of Aldington Road and Local Industrial Road, where the Local Industrial Road will be connected to the immediate area to the northern estate boundary. Further, there is a proposed intersection upgrade from Abbotts Road to Mamre Road to provide easier access to the site.

Figure 8 shows Westgate in the context of the Mamre Road Precinct Road Network Map

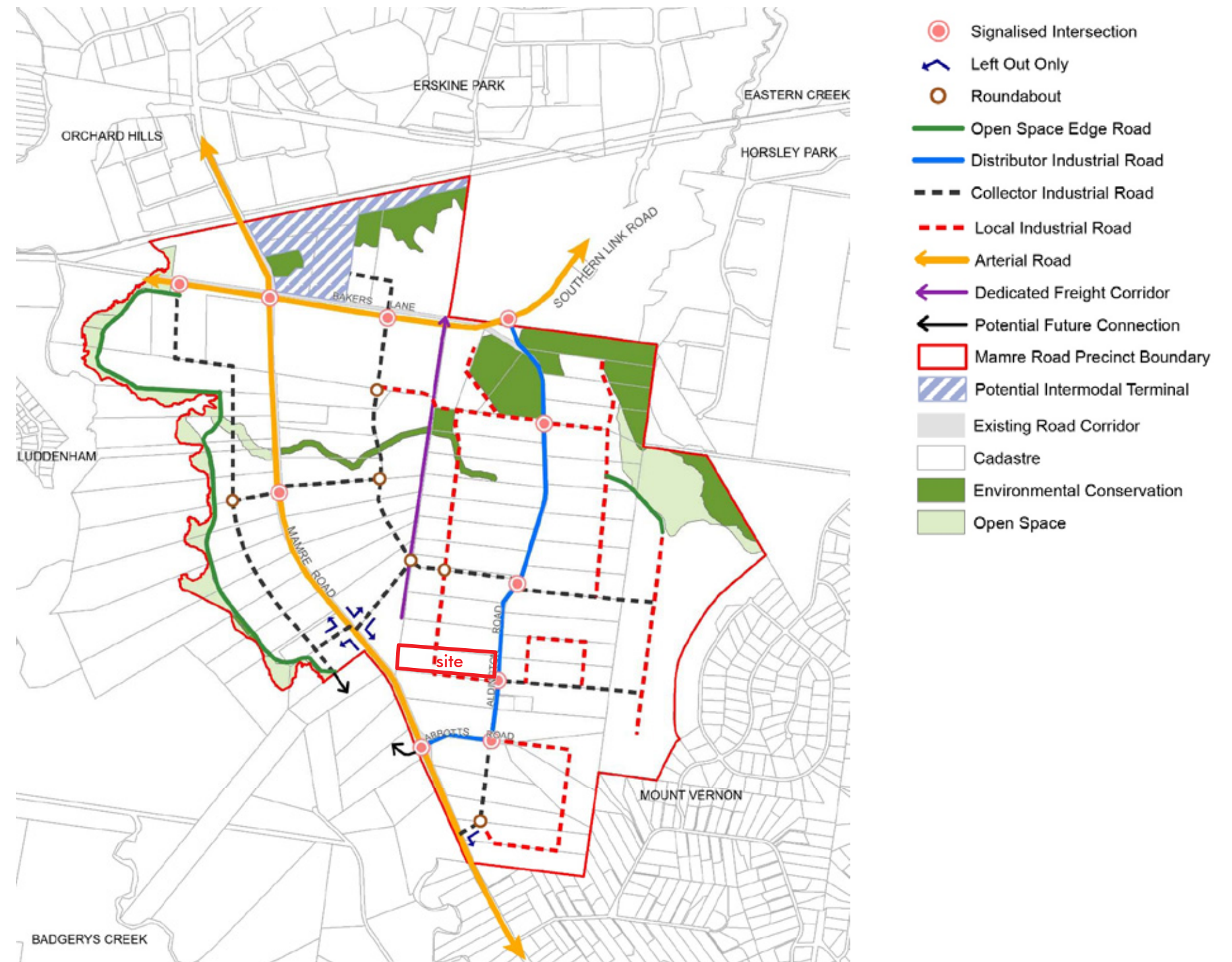


Figure 8 – Mamre Road Network Map (November 2021) [Source: NSW Department of Planning, Industry & Environment]

1.8 Western Sydney Aerotropolis Planning Package

On 11 September 2020, the Department of Planning, Industry and Environment released the finalised Western Sydney Aerotropolis Plan (WSAP), the State Environment Planning Policy (Western Sydney Aerotropolis) (SEPP) and the Western Sydney Aerotropolis Development Control Plan (DCP) Phase 1.

The WSAP is a strategic document which recognises that the Airport is the catalyst for the Aerotropolis. It does so by defining how the broader region's environment, waterways, infrastructure and economics will come together to create the Aerotropolis as a contemporary metropolitan city. The WASP is implemented through the Aerotropolis State Environmental Planning Policy (SEPP) and Development Control Plan (DCP).

Through the WSAP, the Mamre Road Precinct land is to be rezoned separately under the WSEA SEPP.

Figure 9 shows the Western Sydney Aerotropolis Land Zone Plan.

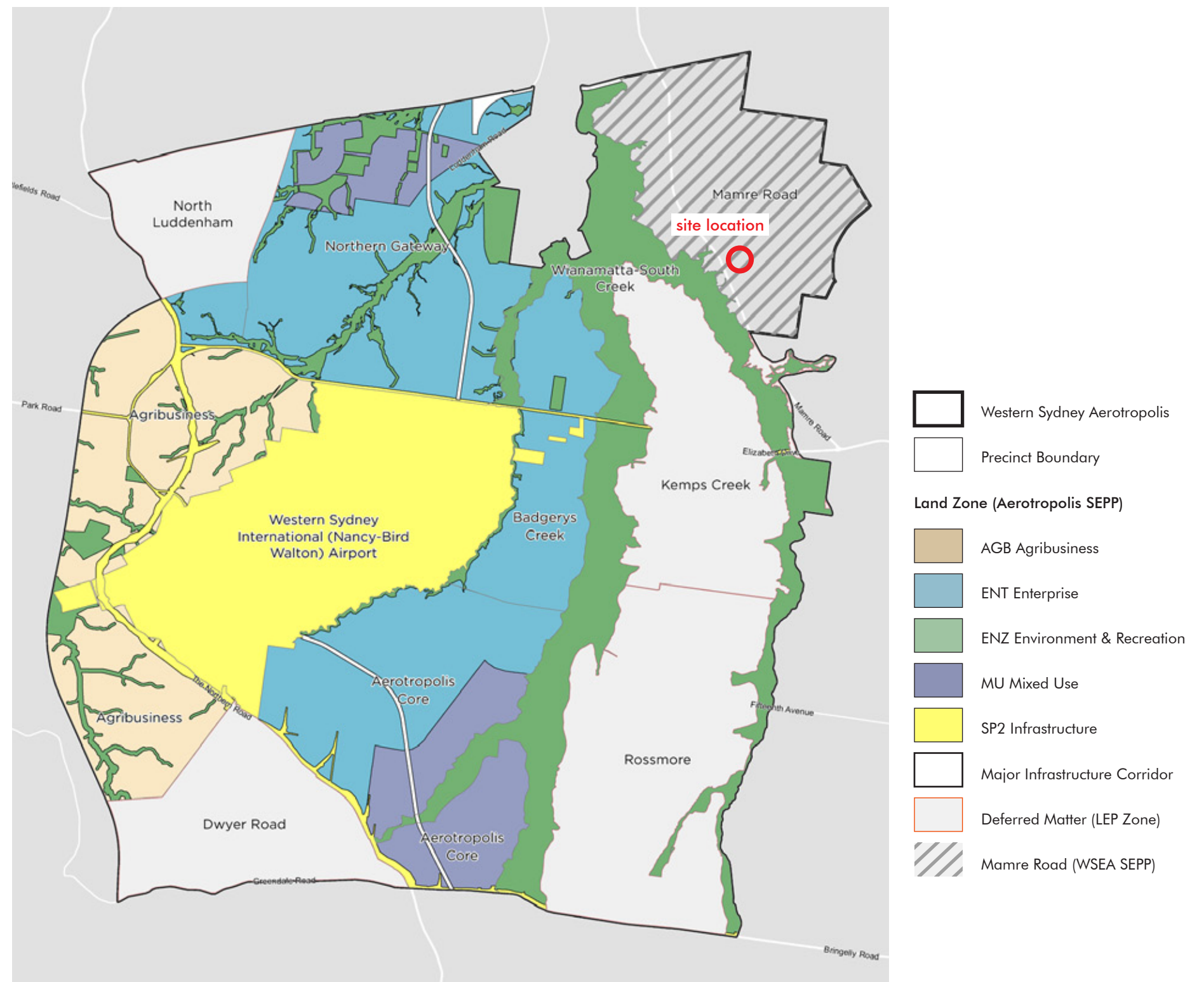


Figure 9 – Western Sydney Aerotropolis Land Zone Plan (September 2020) [Source: NSW Department of Planning, Industry & Environment]

1.9 Penrith LEP

Current Planning Controls

Westgate site is subject to the Western Sydney Employment Area "Mamre Road Precinct" Development Control Plan, published November 2021, published by NSW Department of Planning, Industry and Environment

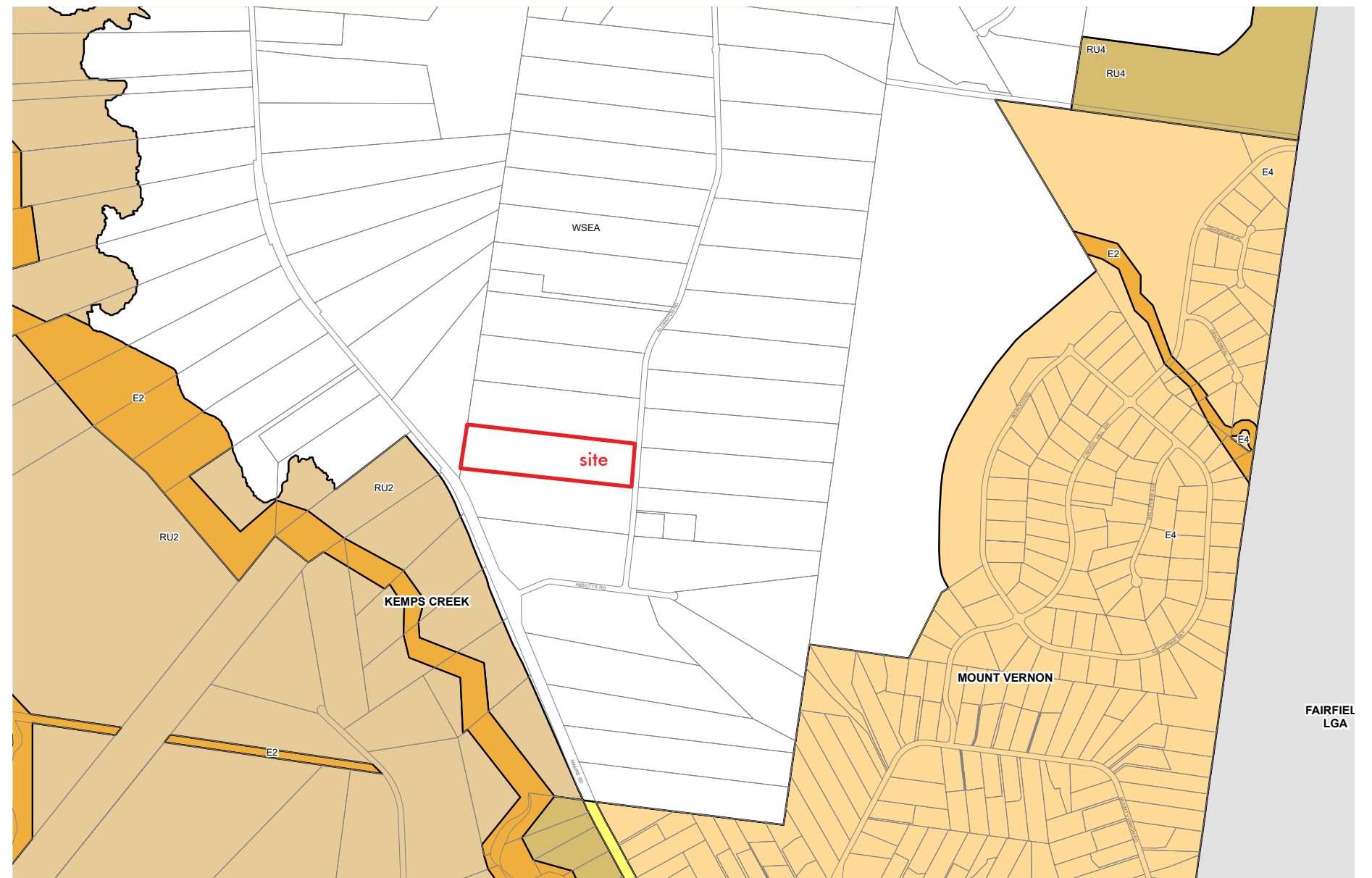


Figure 10 – Penrith Local Environmental Plan 2010 Land Zoning Map June 2020 [Source: NSW Department of Planning, Industry & Environment]

E1	National Parks and Nature Reserves	RU1	Primary Production	WSEA	SEPP (Western Sydney Employment Area) 2009
E2	Environmental Conservation	RU3	Rural Landscape		
E3	Environmental Management	RU4	Primary Production Small Lots		
E4	Environmental Living	SP2	Infrastructure		

1.10 Planned Infrastructure

Mamre Road Upgrades

The NSW Government has started early planning for a future upgrade of a 10 kilometre section of Mamre Road, between the M4 Motorway and Kerrs Road to support economic and residential growth in the area. The NSW Government has committed \$220 million to upgrade of Mamre Road between M4 and Erskine Park Road.

M12 Motorway

Announced as part of the \$4.1 billion road investment program, the new M12 Motorway between the M7 Motorway and the Northern Road will provide direct connection to the Western Sydney Airport. There is provision for a future grade-separated interchange in the vicinity of Devonshire Road / Mamre Road. Start date of major construction expected 2022 with expected completion before the opening of the Western Sydney Airport.

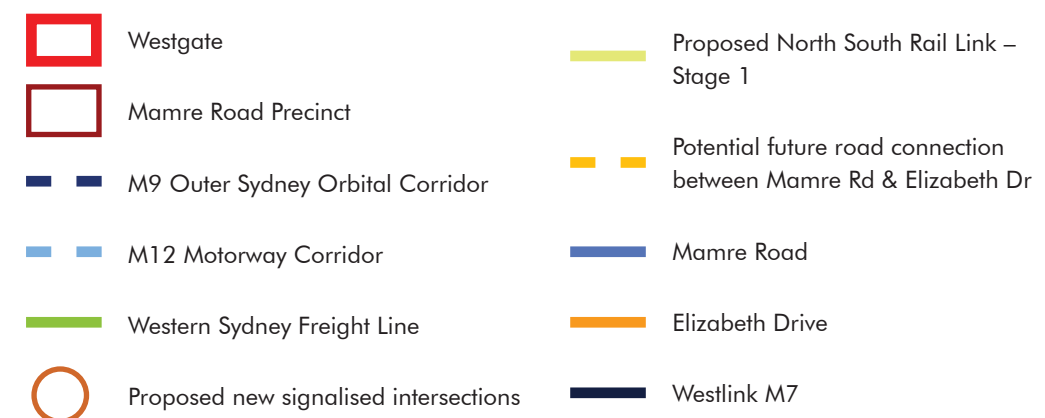
Western Sydney Freight Line

The NSW Government announced on 1st July 2020 the preservation of the Western Sydney Freight corridor between the M7 at Horsley Park and the future Outer Sydney Orbital at Luddenham.

Figure 11 shows the planned infrastructure in the region.



Figure 11 – Planned Infrastructure Map



1.10 Planned Infrastructure

Western Sydney Airport

Construction of Western Sydney International (Nancy-Bird Walton) Airport is underway and on track to begin operations in 2026. The airport is a transformational infrastructure project that will generate economic activity, provide employment opportunities closer to home for people in the Western Sydney region, and meet Sydney's growing aviation needs. The airport will be a full-service airport operating curfew free, delivering international, domestic, passenger and freight services.

Figure 12 shows the Planned Infrastructure supporting the Western Sydney Airport.

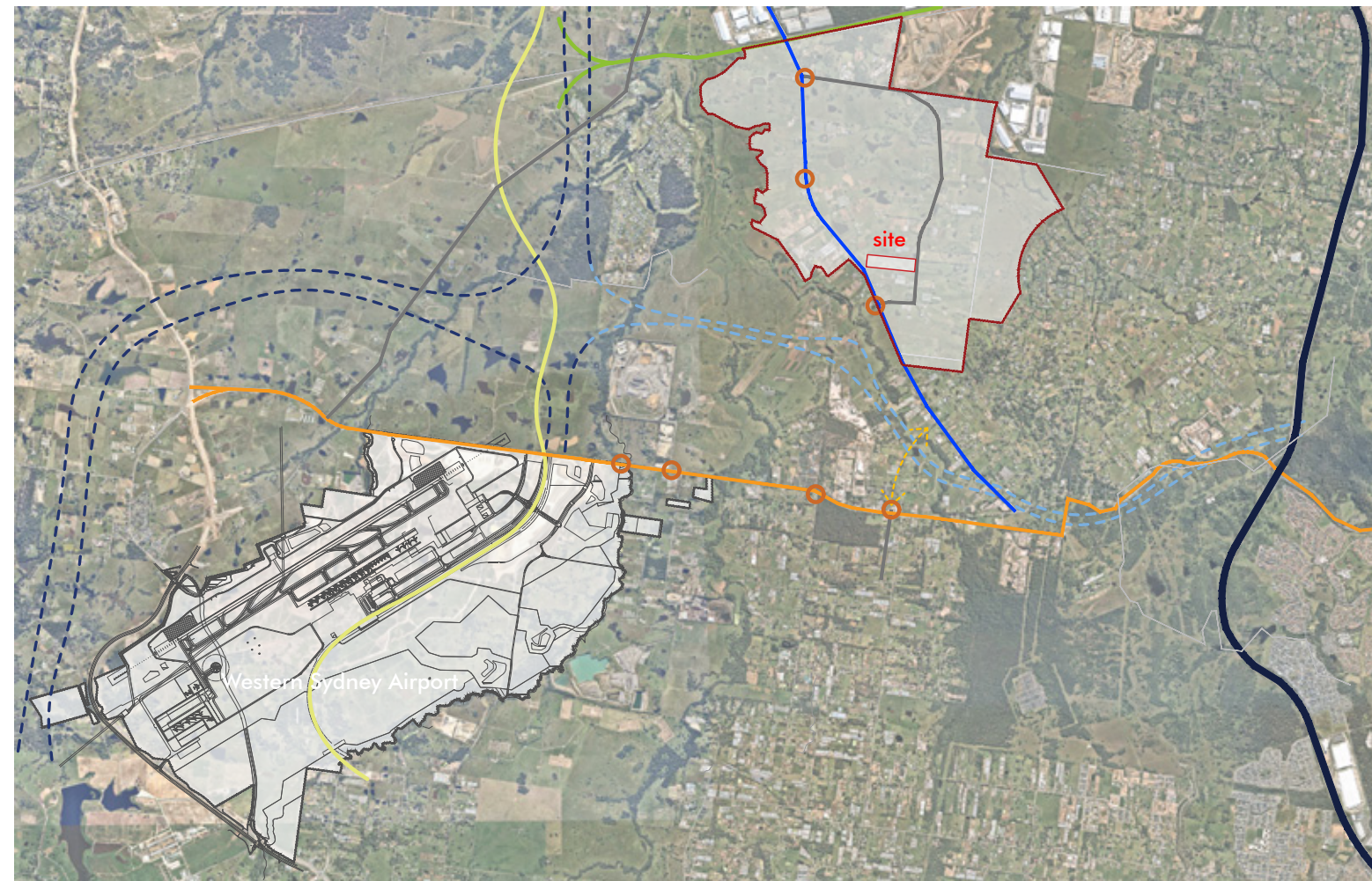
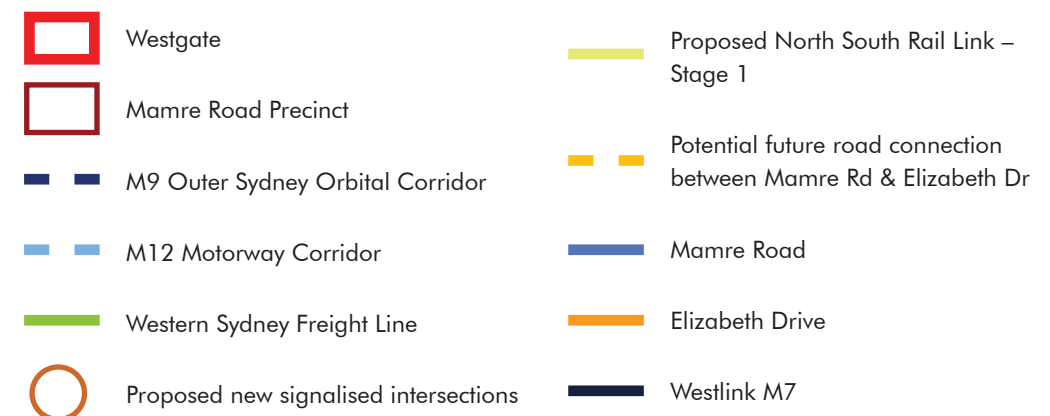


Figure 12 – Planned Infrastructure supporting the Western Sydney Airport



1.11 Mamre Road Precinct Stormwater Scheme Plan

On 21 December 2022 an updated Mamre Road Precinct Stormwater Scheme Plan was released (Figure 12a) by Sydney Water.

Westgate is located along the proposed conceptual Naturalised Channel Alignment which runs east-west through the site. This proposed development seeks to modify the existing conceptual infrastructure sizing and locations to suit the development footprint subject to Sydney Water Approval. Refer to Water Cycle Management Strategy report prepared by AT&L for more details.

This Stormwater Scheme Plan shows the regional stormwater infrastructure required to service the Mamre Road precinct and to be managed by Sydney Water.

The Stormwater Scheme was developed in line with NSW Government planning requirements and ensures that development complies with NSW Government waterway objectives and stormwater targets specified in the Mamre Road Precinct Development Control Plan. The scheme outlines the infrastructure required to deliver a regional stormwater harvesting solution to achieving the stormwater targets.

This stormwater Scheme Plan is a conceptual layout which has been refined following public and stakeholder comment. The infrastructure sizing and locations are fixed from the point with exception of minor modifications subject to Sydney Water approval.

(Source: Sydney Water)

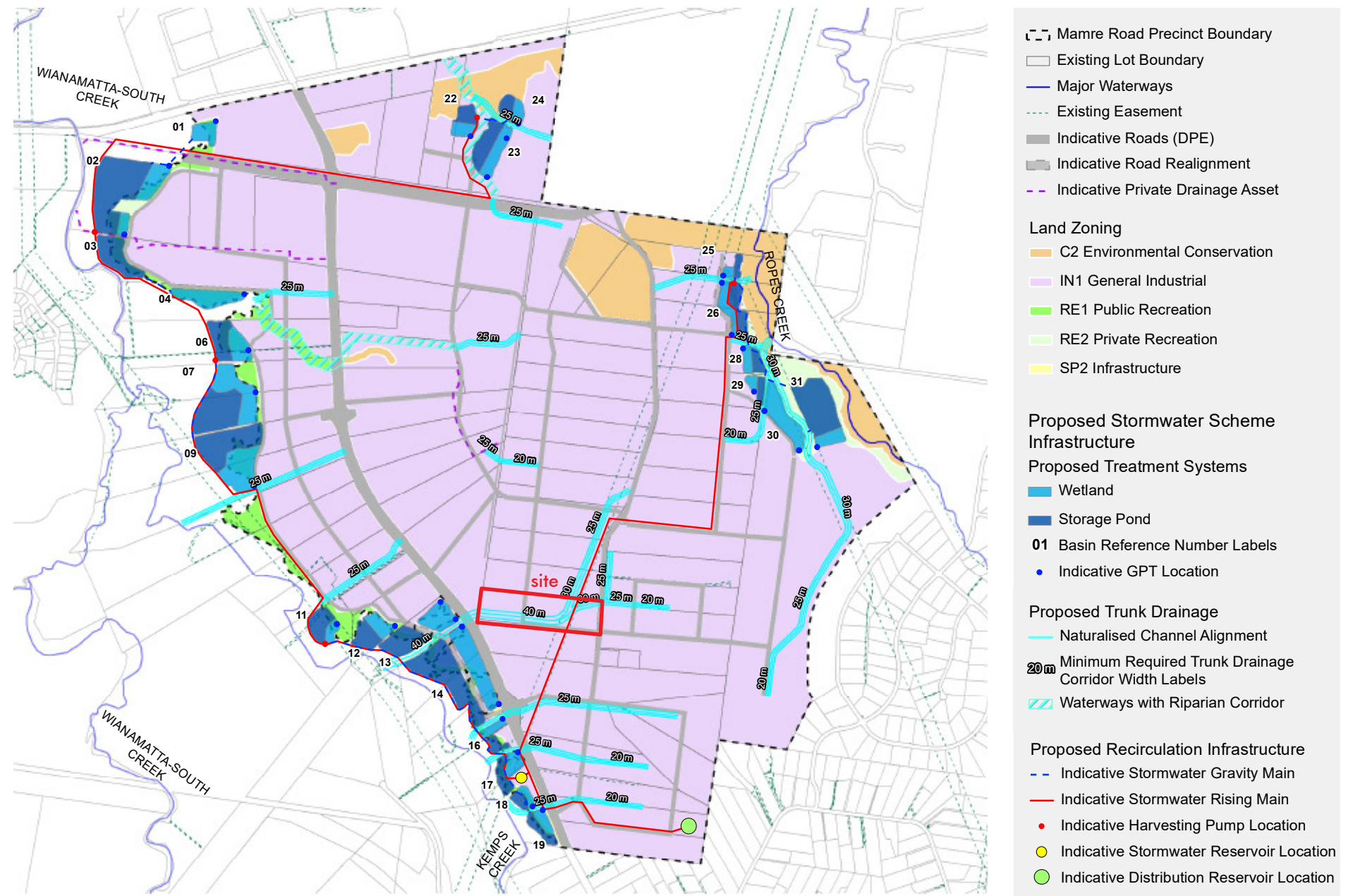


Figure 12a – Mamre Road Stormwater Scheme Plan (December 2022) [Source: Aurecon, Sydney Water, LPI, DPIE, ESRI]

2.1 Topography

With the existing highest ground level at the South East Corner of the site (RL 55.00), the Westgate site has an undulating topography with crossfalls towards the waterways. The site's lowest point is at the south-west corner (RL44.00).

The site currently comprises a rural residential land uses with small farming ventures throughout.

Figure 13 shows the topography of Westgate site



Figure 13 – Westgate Site Topography

Topographic contours

2.2 Transport & Access

As discussed in the Planned Infrastructure section, the NSW Government has started initial planning work for a future upgrade of Mamre Road between the M4 Motorway and Kerrs Road.

The Westgate accesses from Section 2 of the proposed Mamre Road upgrade from Erskine Park Road to Kerrs Road. The Department of Planning, Industry and Environment released State Environmental Planning Policy (SEPP) maps on 12th June 2020.

The Access Road is to be accessible is to be from Aldington Road and a signalised intersection access as indicated within the Transport for NSW proposed Mamre Road design and as per Figure 8 Precinct Road network and hierarchy from the Mamre Road Precinct DCP.

Figure 14 shows the proposed new Access Road to facilitate the future Mamre Road Upgrade as shown within the Mamre Road Precinct SEPP maps.

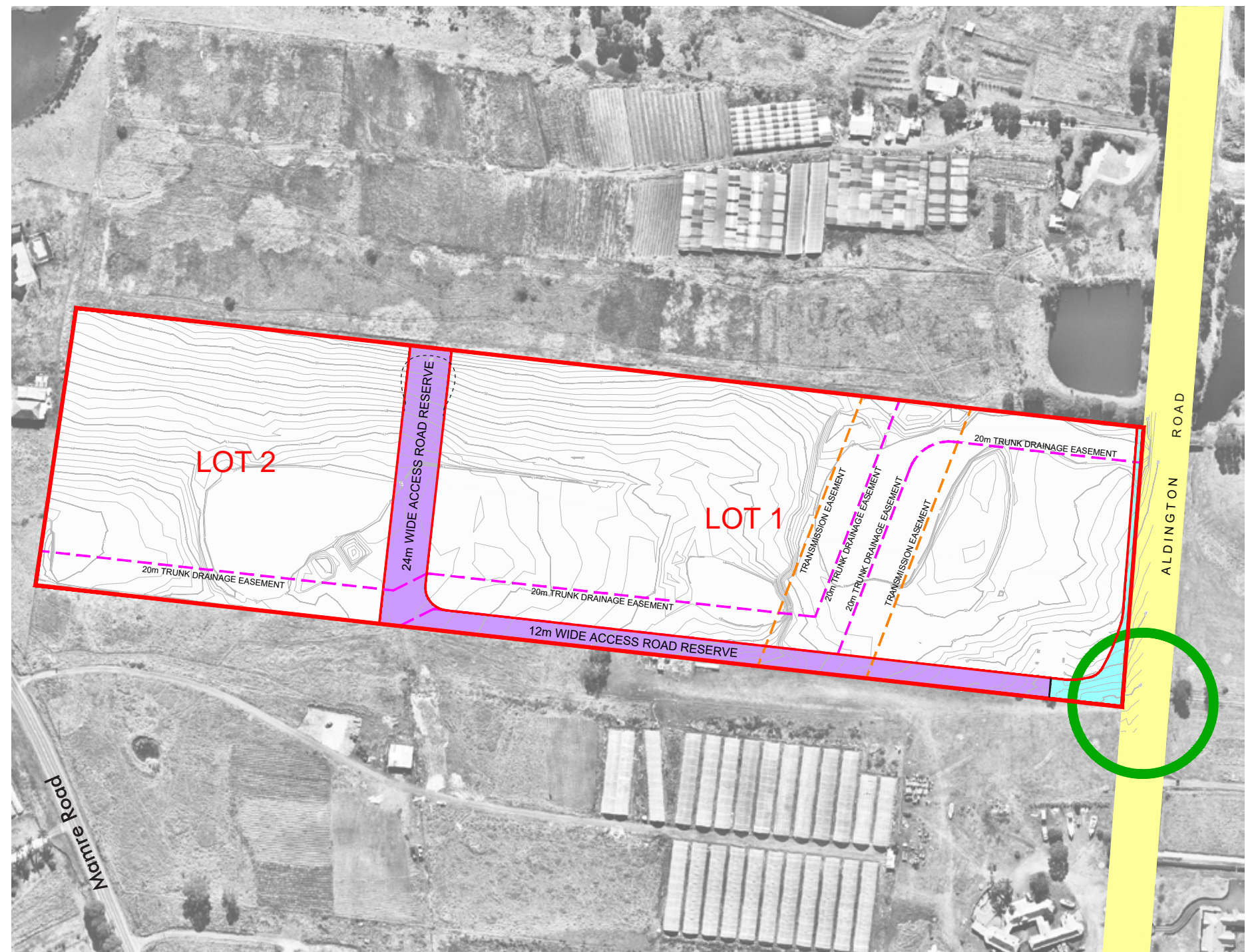


Figure 14 – Westgate Site Transport and Access



2.3 Flooding

The site is unaffected by the 1 in 100 year ARI flood event and the Probable Maximum Flood from South Creek as defined within the following supporting flood studies:

Figure 15 shows the Westgate site relative to the flood planning land map extracted from the Advision flood study.

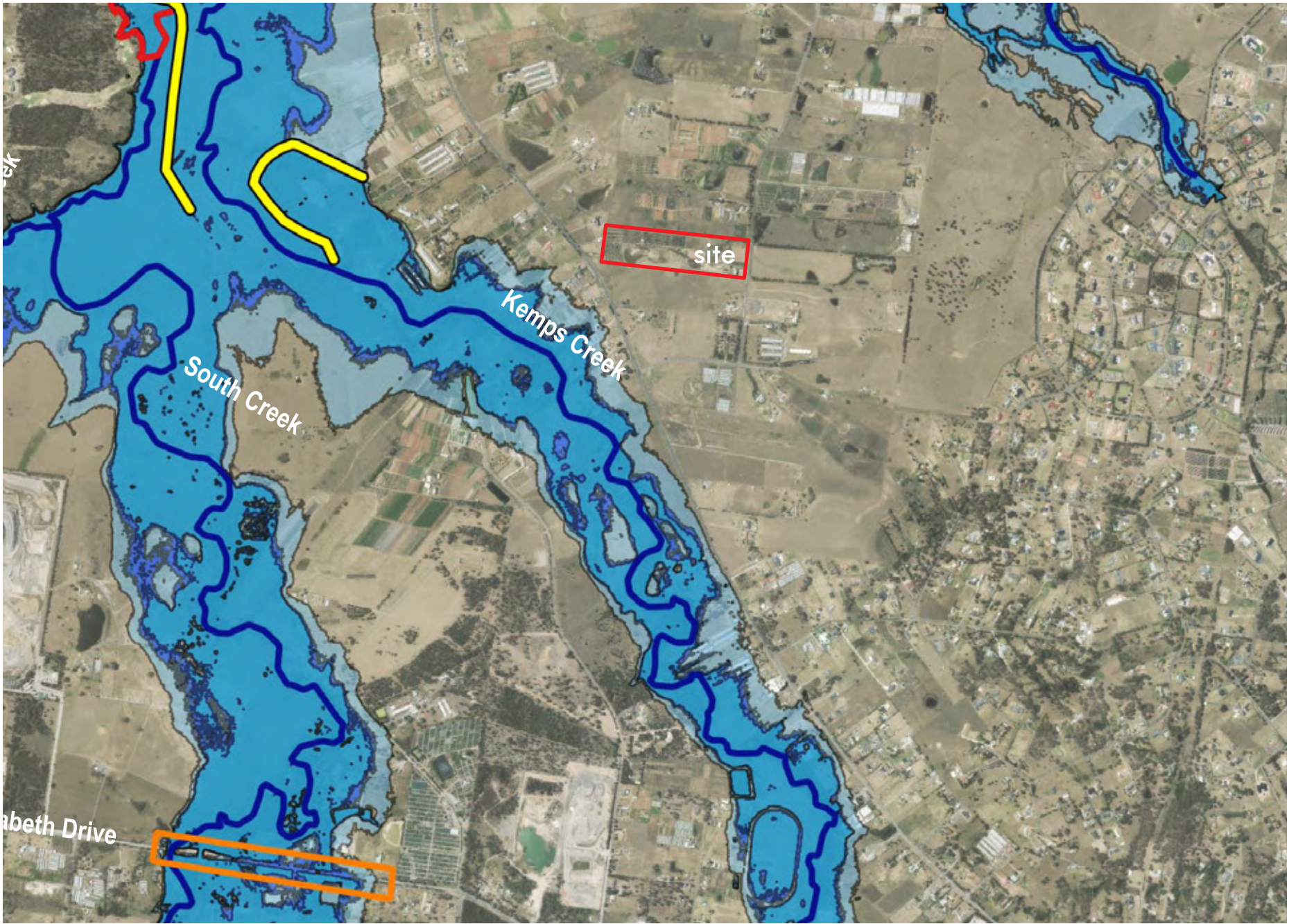
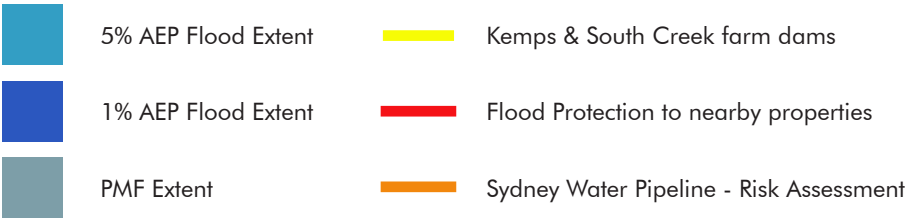


Figure 15 – South Creek Floodplain Risk Management Study [Source: Penrith City Council]



2.4 ANEF Contours

ANEF is the short form for Australian Noise Exposure Forecast. These forecasts provide predictions for aircraft noise levels expected into the future.

When visualised diagrammatically the forecasts are expressed as “Australian Noise Exposure Concept (ANEC) and take into account the anticipated number of movements, types of aircraft, and flights paths including the height for arrivals and departures”

Using these predictions, planning and development can be managed by aligning noise tolerant land uses within areas of greater airport noise exposure and less tolerant uses within quieter areas. Additionally, the design of buildings within ANEC impacted areas can be designed to higher standards to mitigate their exposure.

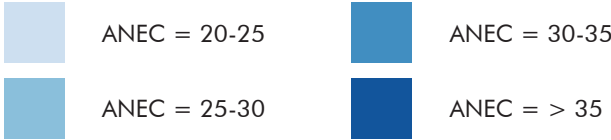
Prefer Direction 5 refers to the operational direction of a single runway with most departures being to the north-east and arrivals from the south-west.

As the Westgate site falls within an area that is exposed to <20 ANEC development may need to adopt appropriate design and construction standards to reduce potential noise impacts within the Prefer Direction 5, 2030 stage one scenario.

Figure 16 shows the ANEF Contours from the Stage 1 5 direction scenario.



Figure 16 – ANEF Contours Map Stage 1 (Year 2030) Prefer 5 Direction Scenario [Source: Australian Government Department of Infrastructure, Transport, Cities and Regional Development Noise Modelling Tool]



2.4 ANEF Contours

Prefer Direction 23, 2030 stage one scenario refers to the operational direction of a single runway with majority departures to the south-west and arrivals form the north-east.

Within the Prefer direction 23, the Westgate site falls is outside the ANEC 20-25 contour. Within this contour conditional acceptance may be given to residential uses, motels/hotels, schools, universities or hospitals and nursing homes. Light industrial uses are acceptable in ANEC <30 whilst all other industrial uses are acceptable in all contours.

As the site is located outside the prefer direction 23, 2030 stage one scenario, it has no significant impact as industrial uses are permissible within this noise contour.

Figure 17 shows the ANEF Contours from the Stage 1 23 direction scenario.

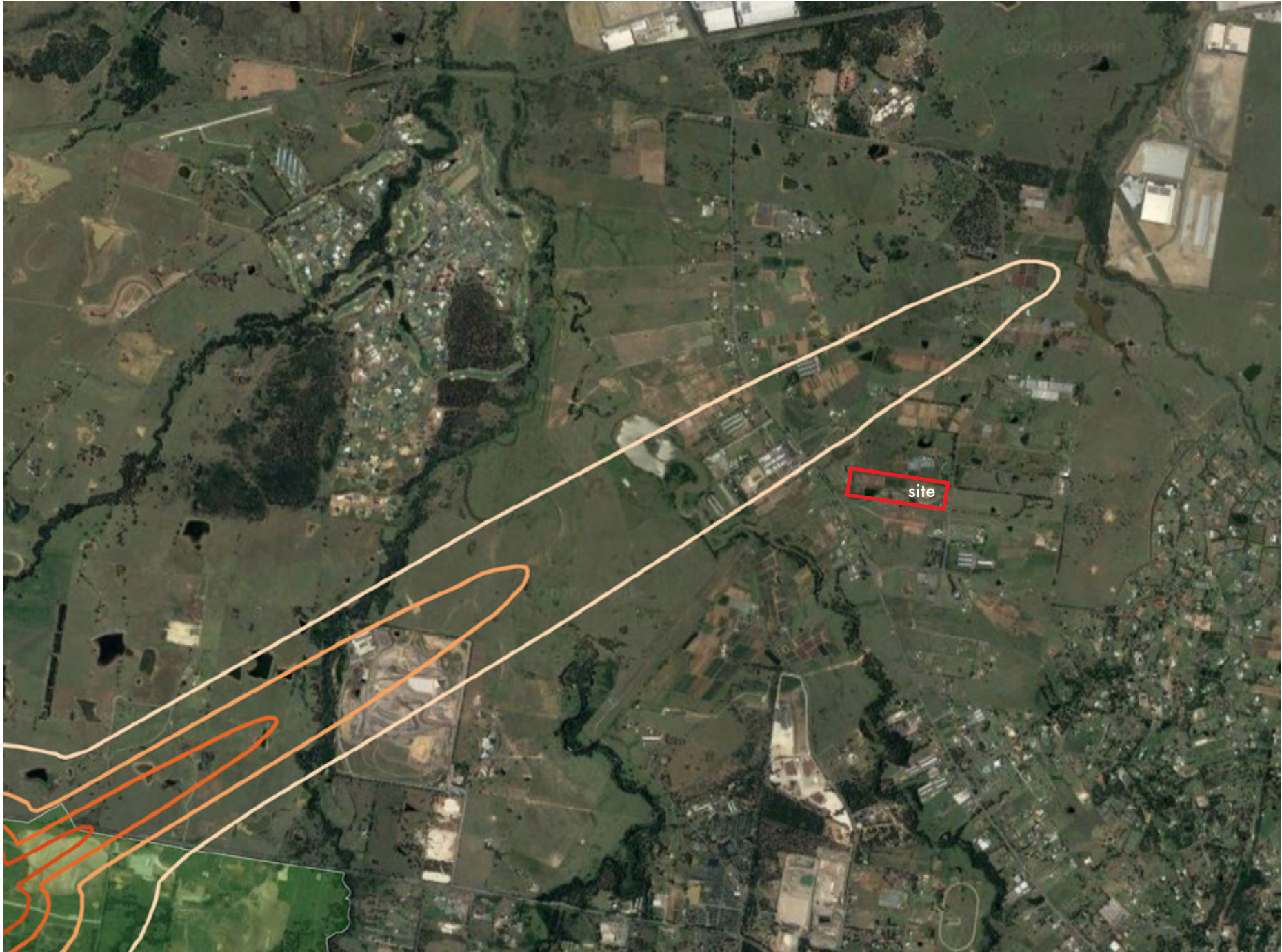
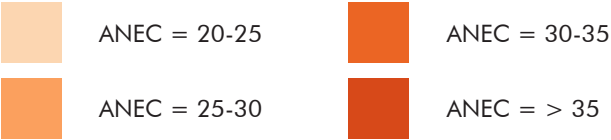


Figure 17 – ANEF Contours Map Stage 1 (Year 2030) Prefer 23 Direction Scenario [Source: Australian Government Department of Infrastructure, Transport, Cities and Regional Development Noise Modelling Tool]



2.4 ANEF Contours

Prefer Direction 5, 2050 scenario refers to the operational direction of a single runway with most departures being to the north-east and arrivals form the south-west.

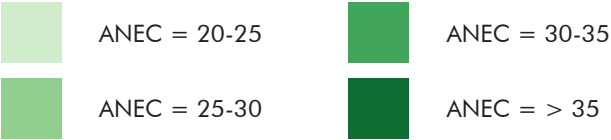
Within the Prefer Direction 5, the Westgate site falls outside the ANEC 20-25 contour. Within this contour conditional acceptance may be given to residential uses, motels/ hotels, schools, universities or hospitals and nursing homes. Light industrial uses are acceptable in ANEC <30 whilst all other industrial uses are acceptable in all contours.

Although Westgate is located outside the Prefer Direction 5, 2050 scenario, it has no significant impact as industrial uses are permissible within this noise contour.

Figure 18 shows the ANEF Contours from the One Runway 5 direction scenario.



Figure 18 – ANEF Contours Map One Runway (Year 2050) Prefer 5 Direction Scenario [Source: Australian Government Department of Infrastructure, Transport, Cities and Regional Development Noise Modelling Tool]



2.4 ANEF Contours

Prefer Direction 23, 2050 scenario refers to the operational direction of a single runway with most departures being to the north-east and arrivals from the north-east. Within the Prefer Direction 5, the Westgate site is partially in the ANEC 25-30 contour. Within the ANEC 20-25 contour conditional acceptance may be given to residential uses, motels/hotels, schools, universities or hospitals and nursing homes. While within the 25-30 contour residential uses are unacceptable, and acceptance of other uses may be conditional to stricter design and construction controls to whole or part of buildings. Light industrial uses are acceptable in ANEC <30 whilst all other industrial uses are acceptable in all contours. Although Westgate sits outside the Prefer Direction 23, 2050 scenario, it has no significant impact as industrial uses are permissible within this noise contour. Figure 19 shows the ANEF Contours from the One Runway 23 direction scenario.

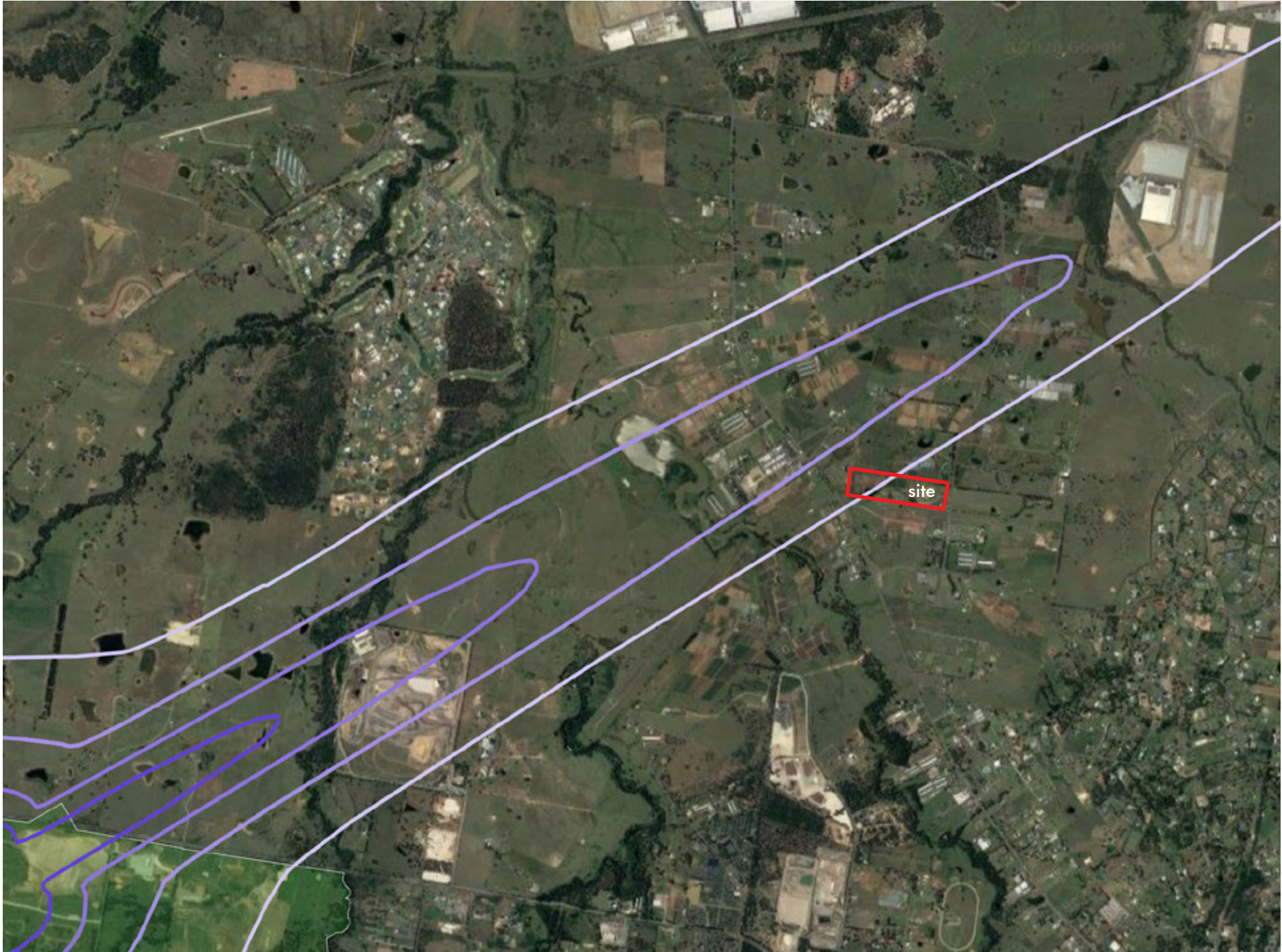
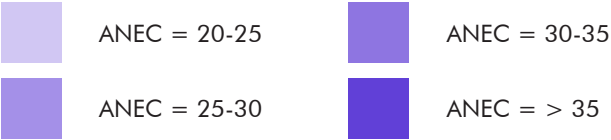


Figure 19 – ANEF Contours Map One Runway (Year 2050) Prefer 23 Direction Scenario [Source: Australian Government Department of Infrastructure, Transport, Cities and Regional Development Noise Modelling Tool]

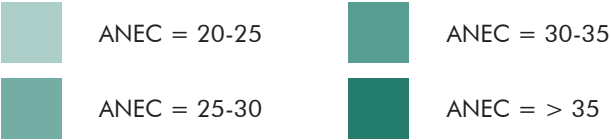


2.4 ANEF Contours

Prefer Direction 5, 2063 long term scenario refers to the operational direction of dual runways with most departures being to the north-east and arrivals form the south-west. Within the Prefer direction 5, the Westgate site falls within the ANEC 20-25 contour. Within this contour conditional acceptance may be given to residential uses, motels/ hotels, schools, universities or hospitals and nursing homes. Light industrial uses are acceptable in ANEC <30 whilst all other industrial uses are acceptable in all contours. Although Westgate sits within Prefer Direction 5, 2063 long term scenario, it has no significant impact as industrial uses are permissible within this noise contour. Figure 20 shows the ANEF Contours from the Long Term 5 direction scenario.



Figure 20 – ANEF Contours Map Long Term (Year 2063) Prefer 5 Direction Scenario [Source: Australian Government Department of Infrastructure, Transport, Cities and Regional Development Noise Modelling Tool]



2.4 ANEF Contours

Prefer Direction 23, 2063 long term scenario, refers to the operational direction of dual runways with majority departures to the south-west and arrivals from the north-east.

Within the Prefer direction 23, the site falls mostly within the ANEC 20-25 contour. Within this contour conditional acceptance may be given to residential uses, motels/hotels, schools, universities or hospitals and nursing homes. Light industrial uses are acceptable in ANEC <30 whilst all other industrial uses are acceptable in all contours.

Within the ANEC 25-30 contours residential uses are unacceptable, and acceptance of other uses may be conditional to stricter design and construction controls to whole or part of buildings.

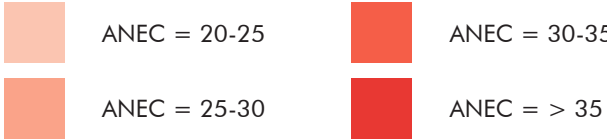
As the modelling currently stands this scenario poses a more significant impact the Westgate in its long-term development, however it will not restrict industrial uses. The development may need to adopt appropriate design and construction standards to reduce potential noise impacts.

The ANEC contours presented in the current modelling are expected to come under review and recalibrated over time in line with the Airports Act 1996 and/or as aircraft technology develops.

Figure 21 shows the ANEF Contours from the Long Term 23 direction scenario.



Figure 21 – ANEF Contours Map Long Term (Year 2063) Prefer 23 Direction Scenario [Source: Australian Government Department of Infrastructure, Transport, Cities and Regional Development Noise Modelling Tool]



3.1 Westgate Industrial Estate

Westgate is located within the broader Mamre Road Precinct. Within the Western Sydney Employment area, the proposed precinct is intended as a warehousing industrial hub, providing around 17,000 new jobs in the area.

The proposed structure plan guiding our precinct defines the general framework for the area. It sets out the critical transport corridors, sets aside land for environmental conservation, drainage and open space and defines riparian buffers. Whilst also highlighting local heritage items, potential intermodal terminal locations and protecting nearby, existing, residential land uses.

Westgate road network has been designed to ensure connectivity can be provided to the wider Mamre Road Precinct.

Figure 22 overlays the proposed and indicative road networks and Westgate site on the Mamre Road Structure Plan.

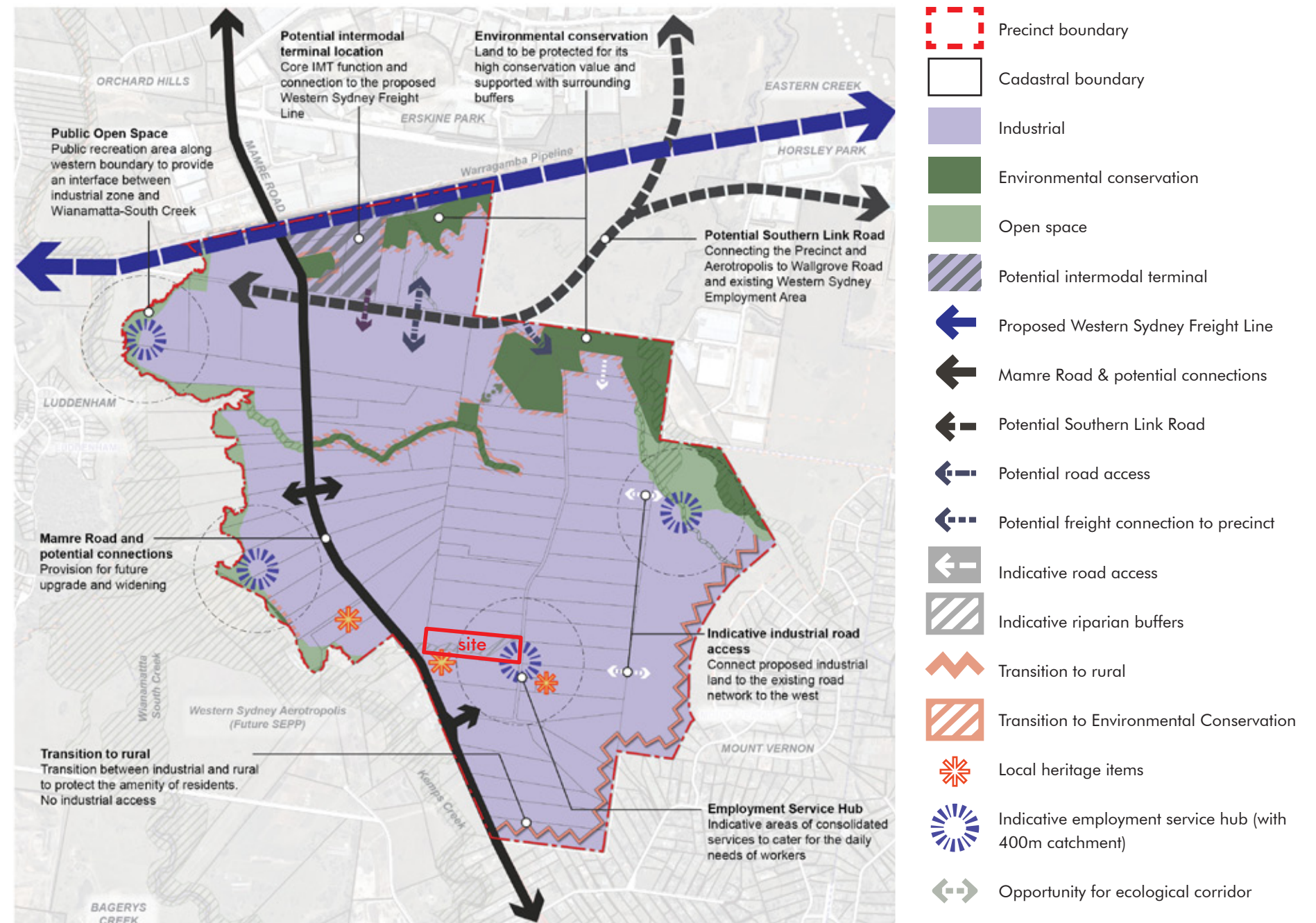


Figure 22 – Mamre Road Structure Plan (June 2020) [Source: NSW Department of Planning, Industry & Environment]

4.1 Project Vision

The Future for Industry & Logistics

The vision for Westgate Industrial Estate is to redefine industrial and logistics facilities in Western Sydney through emphasis on design quality, flexibility, technology and sustainability.

Quality

To deliver quality design, presentation and attention to details.

Flexibility

Design to maximise flexibility, through ability to accommodate for changing customer requirements, such as automation.

Technology

Incorporate construction, technological and digital solutions to deliver value for customers and pioneer a “first of its kind” for Australian logistics.

Deliver SMART buildings which maximise occupant control and building performance.

Sustainability

Implement sustainability initiatives within Westgate.

To ensure that developments are environmentally sustainable to minimise energy and water consumption in buildings and to encourage use of building materials to minimise impact to the environment.

Figure 23 shows an artist impression of Office 2.



Figure 23 – Artist impression – Office 2

5.1 Key Controls Summary

The Westgate development area is guided by the Mamre Road Precinct Development Control Plan (DCP) published by NSW Department of Planning, November 2021.

The DCP includes specific objectives that address the principal development standards listed within the SEPP WSEA and the planning principles developed during the precinct planning process.

A summary of the key controls in the DCP is provided in Table 2. The DCP controls have been used to inform the design of the Concept Master Plan.

Issue/Element	Control
Site Coverage	No maximum, defined by setbacks
Minimum Lot Size	Minimum 1,000sqm for IN1 - General Industrial
Minimum Frontage	Minimum 40m (excluding cul-de-sacs)
Minimum Lot Width	Minimum 35m (at building line)
FSR	-
Building Height	Maximum 20m (unless otherwise increased by Consent Authority Approval)
Building Setback - Primary Frontage	Minimum 12m to Aldington Road (including min. 6m or 50% of the setback along the road frontage as landscaping) Minimum 7.5m to Local Estate Roads (including average of 50% of setback along the road frontage)
Building Setback - Side	5m building (No minimum for landscaping)
Building Setback - Rear	5m building (2.5m landscape setback)
Building Setback - Rural	Minimum 30m building setback to be provided that directly adjoin a rural residential zone. (15m min. Landscape Setback)
Car & Bicycle Parking	On-site car parking to be provided at the following minimum rates: Warehouse - 1 space/300sqm GFA or 1 space per 4 employees, whichever is the greater. Ancillary office - 1 space/40sqm GFA. Industries - 1 space/200sqm GFA or 1 space per 2 employees, whichever is the greater. Accessible parking - in accordance with the provisions of the Building Code of Australia and relevant Australian Standards. 1 accessible spaces/100 spaces Bicycle parking - 1 space per 600sqm of gross floor area of office and retail space (over 1200sqm gross of floor area) - 1 space per 1000sqm of gross floor area of industrial activities (over 2000sqm gross floor area)
Road Infrastructure	1. The internal industrial subdivision road shall comprise of the following: 1.1. 24.0m road reserve for roads connecting to Distribution Road including: a. One x 4m verge width (including a 1.5m concrete footway) b. One x 5m verge width (including a 2.5m concrete shared footway) c. A 15.0m carriage way, comprising 7.5m for through traffic lanes in both directions and two x 4.00m kerbside lanes.

Table 2 – Key DCP Controls

6.1 Master Plan

The proposed Westgate Master Plan is based on concept which:

- Permits greater connectivity to broader precinct to the north and east.
- Includes a signalised intersection in a location consistent with Aldington road strategic design and access strategy.
- Responds to topography particularly steeper areas in the south-east of the site.
- Maintain clear access to the transmission easement line by having separated warehouse buildings on either side
- Responds to the geometry of the site and provides for regular, orthogonal shaped parcels for efficient employment development.
- Provides flexible allotments capable of accommodating a range of sizes. The Westgate master plan utilises landscaping and urban design features to complement biodiversity values. The Westgate plan will enable storm water infrastructure to be designed to have dual functions of water cycle management, recreation and amenity.

With direct access to Aldington Road, consistent with the TfNSW Mamre Road Upgrade design, the Westgate master plan provides for connectivity to the adjoining development lands on the north and southern side.

The Westgate master plan provides contextually and economically appropriate design whilst responding to topography constraints to limit site earthworks requirements and retaining walls fronting public road reserves. The Westgate provides for economic and orderly development to cater for IN1 - General Industrial user requirements for large regular shaped flexible allotments to provision for a diverse range of customer requirements.

The master plan provides for 4 warehouses with undercroft car parks to address the topography of the existing ground levels.

Figure 24 shows the Westgate master plan.

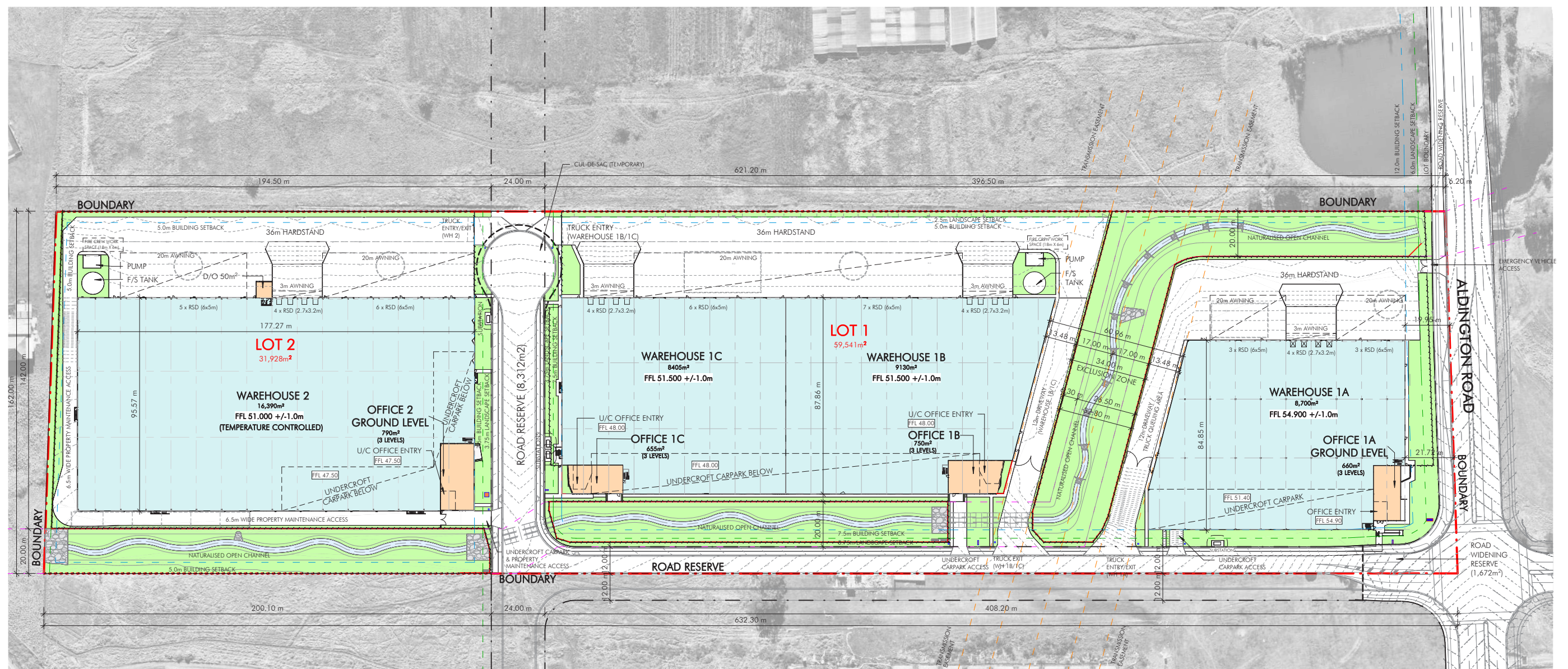


Figure 24 – Westgate Master Plan

6.2 Design Analysis – Height, Bulk & Scale

Located within a newly established industrial estate, the Westgate master plan and building design plans have been developed in terms of bulk, height and scale, to match in with expectable design qualities of industrial usages and to create a minimal visual impact to the surrounding environment. In considering this context the buildings have:

- Designed to a total height of 17.2m (warehouse 13.7m + 3.5m Undercroft car park), below the 20m maximum building height from existing ground levels in line with the DCP control. The highest building's pinch point occurs near the southwest corner of Lot 2, with a total building height of approximately 19.5m above the existing ground level. [Proposed Warehouse 2 building height of RL63.50 minus Existing ground level of RL44.00 = 19.5m high]
- Implemented a dynamic geometric façade to break up elevations and create visual interest, minimising perceived bulk.
- Office components are sited so as to further break up the site and define the corner condition of warehouses along Aldington & Access Road.
- Office components are architecturally designed to provide textural contrasts to warehouse materials.

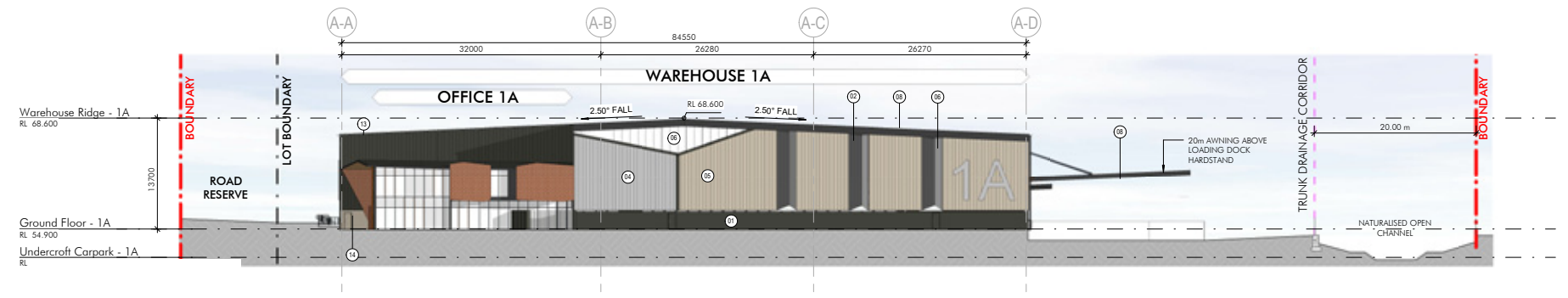


Figure 25 – Warehouse 1A – East Elevation (Aldington Road, Frontage)

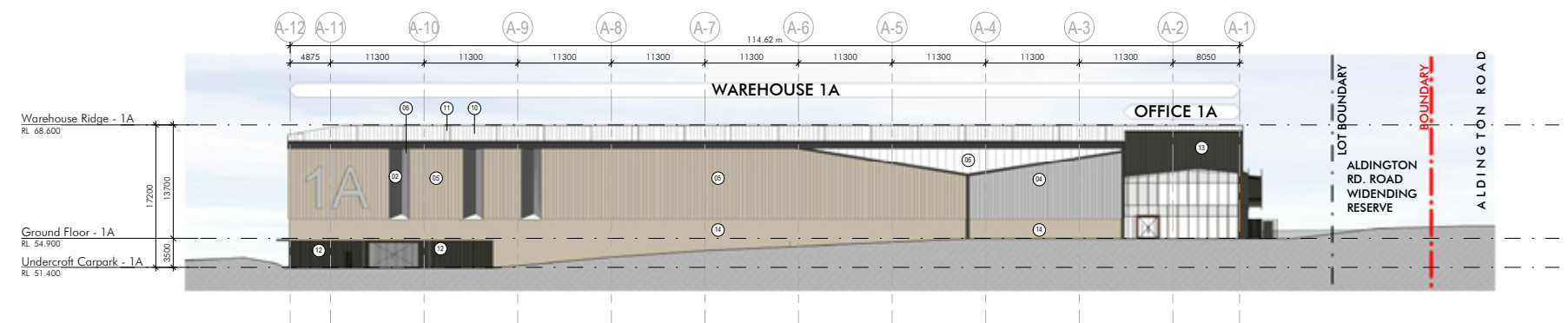


Figure 26 – Warehouse 1A – South Elevation (Access Road, Frontage)

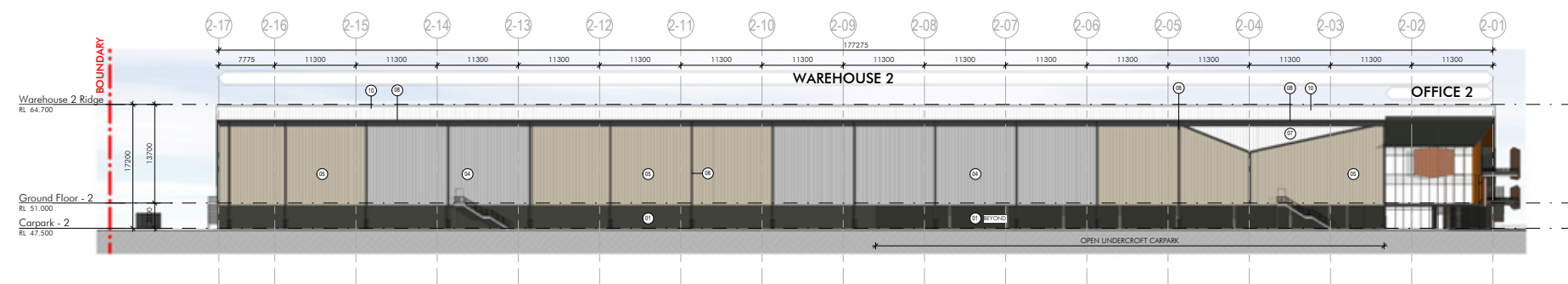


Figure 27 – Warehouse 2 – South Elevation

6.3 Urban Design & Visual Analysis

The Westgate master plan and building design plans have been developed to create a minimal visual impact to the surrounding environment. In considering this context the buildings are:

- Generally designed in line with building setback allowances in the DCP as listed below, except for proposed Office 1C and Office 2 balcony structures will intrude into the building setback lines.
 - Aldington Road: 12m building setback.
 - Access Road: 7m building setback.
 - Side & Rear Lot Boundaries: 5m building setback.
- A large setback along the western side of Aldington Road, allows significant space for landscaping and other natural features to further minimise the perceived bulk and scale of the development.
- The eastern lot boundary along the hardstand area of Warehouse 1A is screened from the public domain via trees and 2.1m high black palisade fence.
- A future industrial development within the immediate surrounding area to the north of Westgate is subject to an SSD application from Frasers Property. This will form a major industrial hub along Aldington Road. Many potential visual receptors of the Westgate development will be removed as a result. Refer to Visual Impact Assessment (VIA) Report prepared by GEOSCAPES for greater details for Visual Analysis.



Figure 28 – Viewpoint 3 – Mamre Road – North, Kems Creek – Looking Southwest (Source: Geoscapes)



Figure 29 – Viewpoint 2 – Aldington Road – North, Kems Creek – Looking Southwest (Source: Geoscapes)

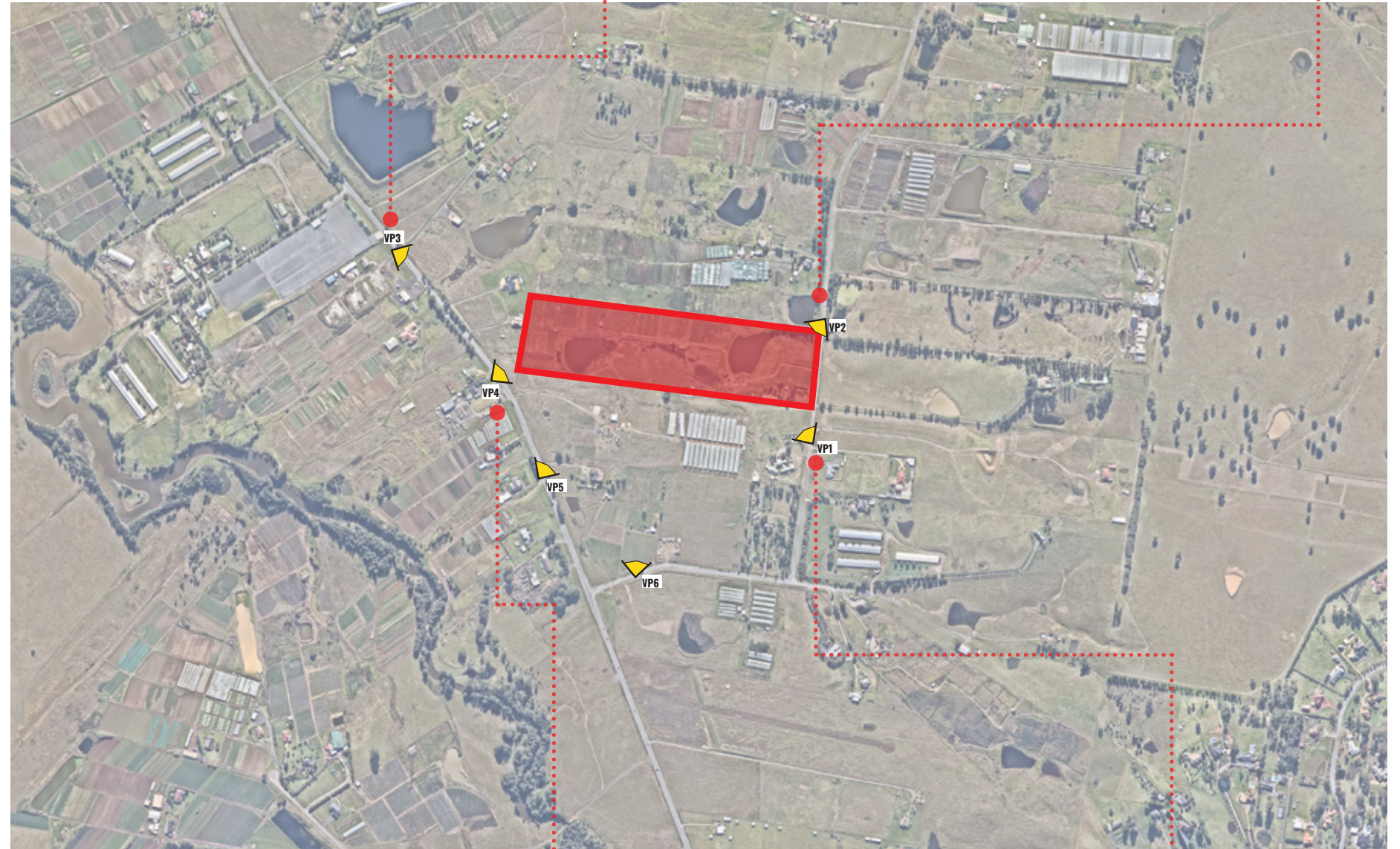


Figure 30 – Viewpoint Locations (Source: Geoscapes)



Figure 31 – Viewpoint 4 – Mamre Road, Kems Creek – Looking East (Source: Geoscapes)



Figure 32 – Viewpoint 1 – Aldington Road – South, Kems Creek – Looking Northwest (Source: Geoscapes)

6.4 Building Materials & Finishes

Design Intent & Principles

The proposed building materials and finishes have been selected based on the following design intent & principals

- Dynamic geometric facade to break up elevations
- Textural contrasts between warehouse & office buildings
- Sustainable, low-impact materials
- Natural, robust
- Unfinished/raw
- Recycled/local where appropriate
- Palette should evoke 'sustainability'



Colorbond Metal Sheetting
'Dover White' – Translucent sheeting effect
for warehouse 2 (temperature controlled
space)



Colorbond Metal Sheetting 'Shale Grey'



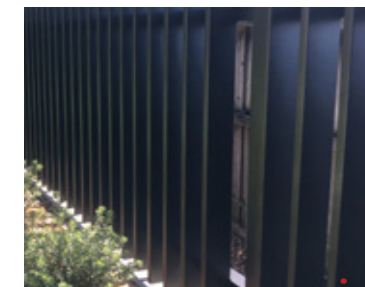
Vertical Aluminium Sunshade



Vision/Spandrel Glazing



Perforated Aluminium Screen



Vertical Metal-Slat Fence



Polycarbonate Translucent
Sheeting



Figure 33 – Office 1C – Looking from South-West Corner of Access Road
(Note: illustrated streetscape varies from the Master Plan to demonstrate
building materials)

Green Wall



6.5 Access & Circulation

The development provides direct access from Aldington Road through a signalised intersection. The Access Road would provide a future connection to the immediate surrounding area to the north. A future southern connection may be proposed subject to the future landowner. The following roadway provides an interim solution before future developments:

- A temporary cul-de-sac at the northern end between Warehouse 1C & Warehouse 2 truck driveways.
- 8m wide half-roadway along the southern estate boundary.

Westgate master plan provides for a road vehicle, pedestrian and cycle connectivity to and from the wider Mamre Road Precinct.

- In order to encourage both public transport use and walkability/cyclability the planned road reserves provide for pedestrian pathways along each road edge. In addition, as highlighted, a wider pathway is provided to allow for shared pedestrian and cycleways in the following locations:

- North-to-south direction: along the western side of Access Road &
- East-to-west direction: along the southern side of future full 24m wide Access Road reserve.

- Truck and car access points are separated to minimize potential pedestrian and vehicular conflicts throughout the estate in the following locations:

- Truck access: from Access Road on the opposite sides of office buildings except for Warehouse 1B & 1C exit point is provided adjacent to the Office 1B building.
- Car access: undercroft car park access points are provided at all buildings from the Access Road safely leading passengers into the undercroft office entry lobby areas.
- Emergency vehicle access is provided around the warehouse buildings which are connected to the Access and Aldington roads. The proposed emergency access between Aldington Road and Warehouse 1A hardstand area will be strictly limited for emergency vehicles usage only.

Figure 34 shows Westgate Master plan with the inclusion of cycleways and vehicular access.

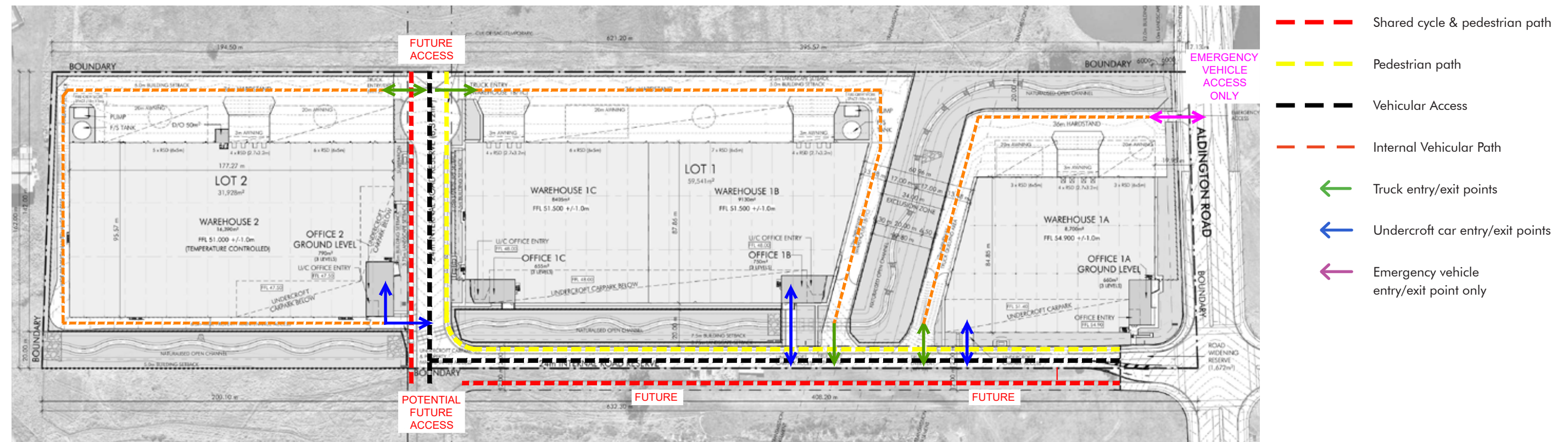


Figure 34 – Westgate Master Plan Cycleways & Vehicular Access

6.6 Fencing & Security

Westgate fencing provides operational noise controls and security for employees, visitors, immediate surrounding occupants. The proposed fencing types were selected based on the following design intent & principals

- Where fencing is required for safety or security reasons to be forward of the building line, it should be of a standard and style that does not detract the landscaping and main building facades.
- Fencing should be sited so it does not impede sightlines for drivers.
- Fencing is omitted around the office building areas to create perceived main entry points.

The following 4 x fencing types are incorporated into the design:

- Type 1 - Along road frontage: 2.1m high palisade fence in black powder-coat finish.
- Type 2 - Along office outdoor recreational area: 2.1m high vertical metal-slat fence in black powder-coat finish.
- Type 3 - Along undercroft car parks: full height vertical metal-slat fence in Colorbond 'Jasper' powder-coat finish.
- Type 4 - Elsewhere: 2.1m high black PVC coated chain wire fence with 3 x row of barbed wire (2.4m total height).



Type 4: Chainwire Fence

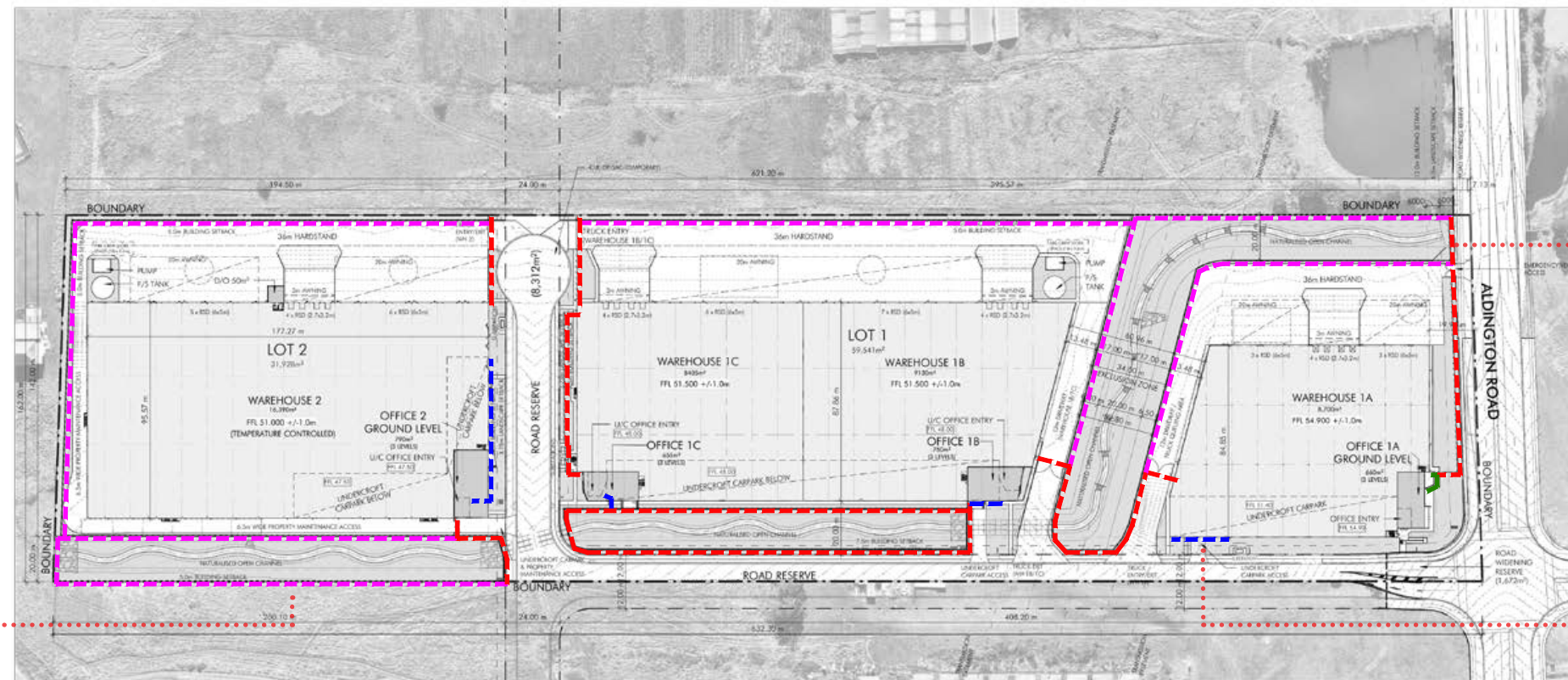
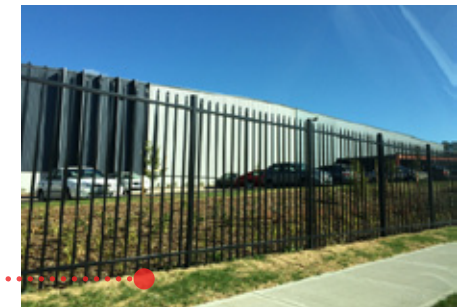


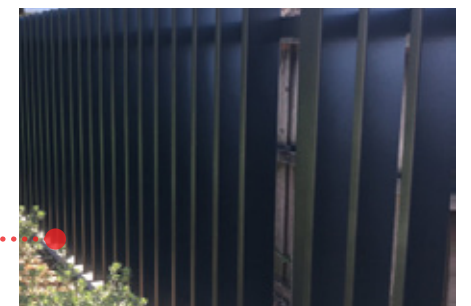
Figure 35 – Westgate Master Plan Fencing & Security

Fencing Types:

- Type 1 - 2.1m high palisade fence
- Type 2 - 2.1m high vertical metal-slat fence
- Type 3 - Full height vertical metal-slat fence
- Type 4 - Chain wire fence (2.4m total height)



Type 1: Palisade Fence



Type 2 & 3: Vertical Metal-Slat Fence

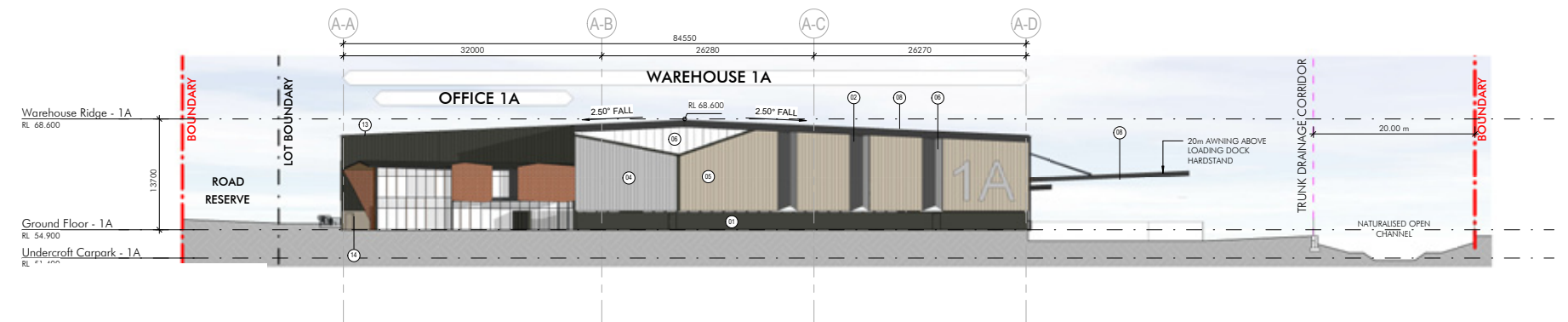
6.7 Signage

Design Objectives:

- To provide businesses the opportunity of identifying their location and activity -
- To ensure signage does not detract from the visual appeal of the buildings
- To ensure signage is of a high quality of design and construction and an integral element of the built environment and landscape setting

Design Guidelines:

- Advertising, other than real estate signage should be kept to a minimum and should relate only to the use occurring on the respective property and is to identify the relevant business name
- Signage should be of a size and location which does not obscure vehicular sightlines and/or control signs
- Warehouse numbering should be applied to give cohesion to the warehouses in the estate. Signage should be integrated into the feature/accent material expressed at the corners
- Directional signage for car parking, loading docks are to be well designed and located at a convenient point close to the Access Road
- Signage are not to cause environmental damage to trees or large shrubs



Warehouse 1A – Eastern Elevation (Aldington Road Frontage)

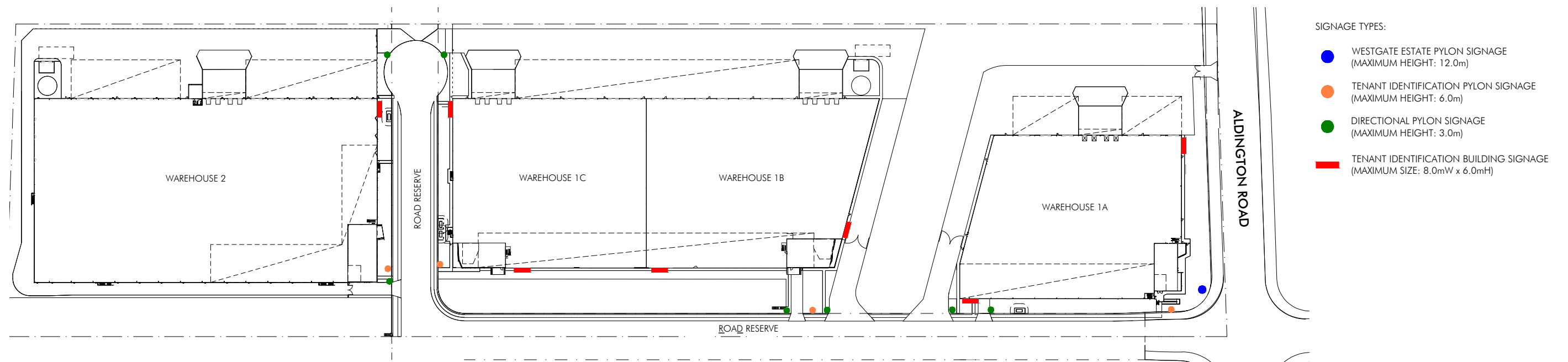


Figure 36 – Westgate Master Plan Signage Plan

6.8 Undercroft Car Park – Lighting & Safety

General Arrangement

Undercroft car park is provided to all buildings. The following standards have been generally incorporated into the car park design:

- AS2890.1: Parking Facilities_Part 1 - Off-street car parking.
- AS2890.3: Parking Facilities_Part 3 - Bicycle parking facilities.
- AS2890.6: Parking Facilities_Part 6 - Off-street car parking for people with disabilities.
- Table D3.5 of BCA, minimum number of accessible parking for people with a disability (1 space every 100 carparking spaces).

Crime Prevention Through Environmental Design (CPTED)

Undercroft car parks to be appropriately designed and provided with the following four main principles to create a safe and secure environment that encourages activity, vitality and viability, enabling a greater level of security.

- Principal 1: Natural Surveillance– undercroft car park to be appropriately screened so that people can see what others are doing. Full height vertical metal-slat fences (not solid) are provided in current design.
- Principal 2: Access Control – undercroft car park to be appropriately designed and provided with clear controlled access points and sight lines. Clear access points are provided at the access points using directional pylon signage.
- Principal 3: Territorial Reinforcement – undercroft car park to be appropriately designed and provided with distinct transition between the public (external area) and private area (within undercroft carpark). Full height vertical metal-slat fences are provided in current design to achieve distinct transition between the two areas.
- Principal 4: Space Management – undercroft car park to be appropriately maintained by future users

Lighting Standards

The lighting to the undercroft car park including the, store / plant room and office lobby areas to be designed and installed in accordance with the relevant parts of following Australian Standards:

- AS4282: Control of the obtrusive effect of outdoor lighting
- AS1680.1: Interior Lighting_Part 1 – General principles and recommendations
- AS1680.2.1: Interior and workplace lighting_Part 2.1 - Specific applications, Circulation spaces and other general areas.

Egress Path

Multiple egress paths are provided leading users safely to exit from all undercroft car park space. Figure 37 illustrates egress path proposed from Warehouse 1B & 1C undercroft car park.

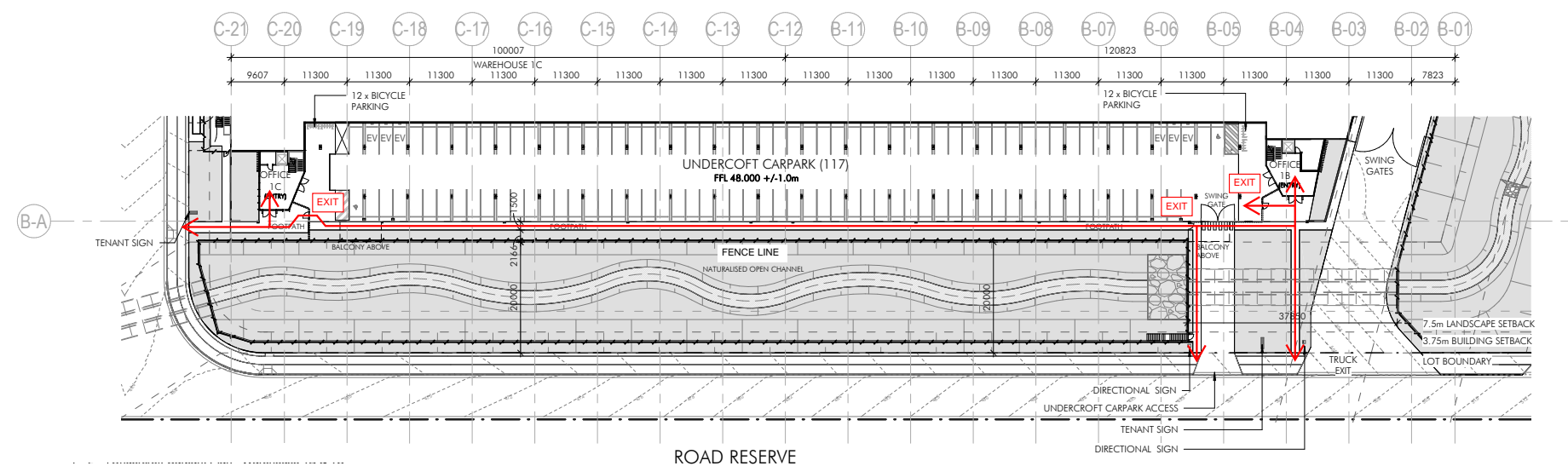


Figure 37 – Warehouse 1B/1C – Undercroft Car Park Plan

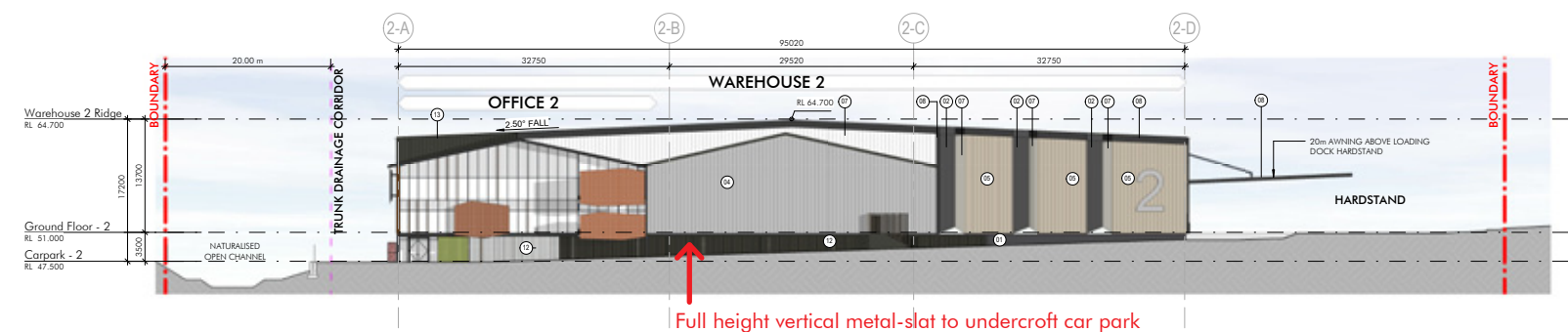


Figure 38 – Warehouse 2 - Eastern Elevation

6.9 Future Fitout Approach

Westgate building design consists of site and base building works. The base building works include building locations, scale (bulkiness & height), façade/shells and internal layout including:

- Party walls between the warehousing and office spaces, access doors, vision glazing and secondary stairs.
- Main office circulations (lifts & stairs) & general and accessible amenities that could be utilised for future tenants.

An approach for future tenant fitout works may be carried out as Complying Development Certificates (CDC) subject to future tenants' requirements and building surveyors' assessments.

In particular, Warehouse 2 has been allowed for future *Temperature Controlled Tenants* which may require a large external area for refrigeration planting units, which could potentially trigger MOD application/s for future warehouse fitout works.

Each future fitout work shall be assessed in individual cases to ensure proposals would cause minimal or zero environmental effects to the surroundings.

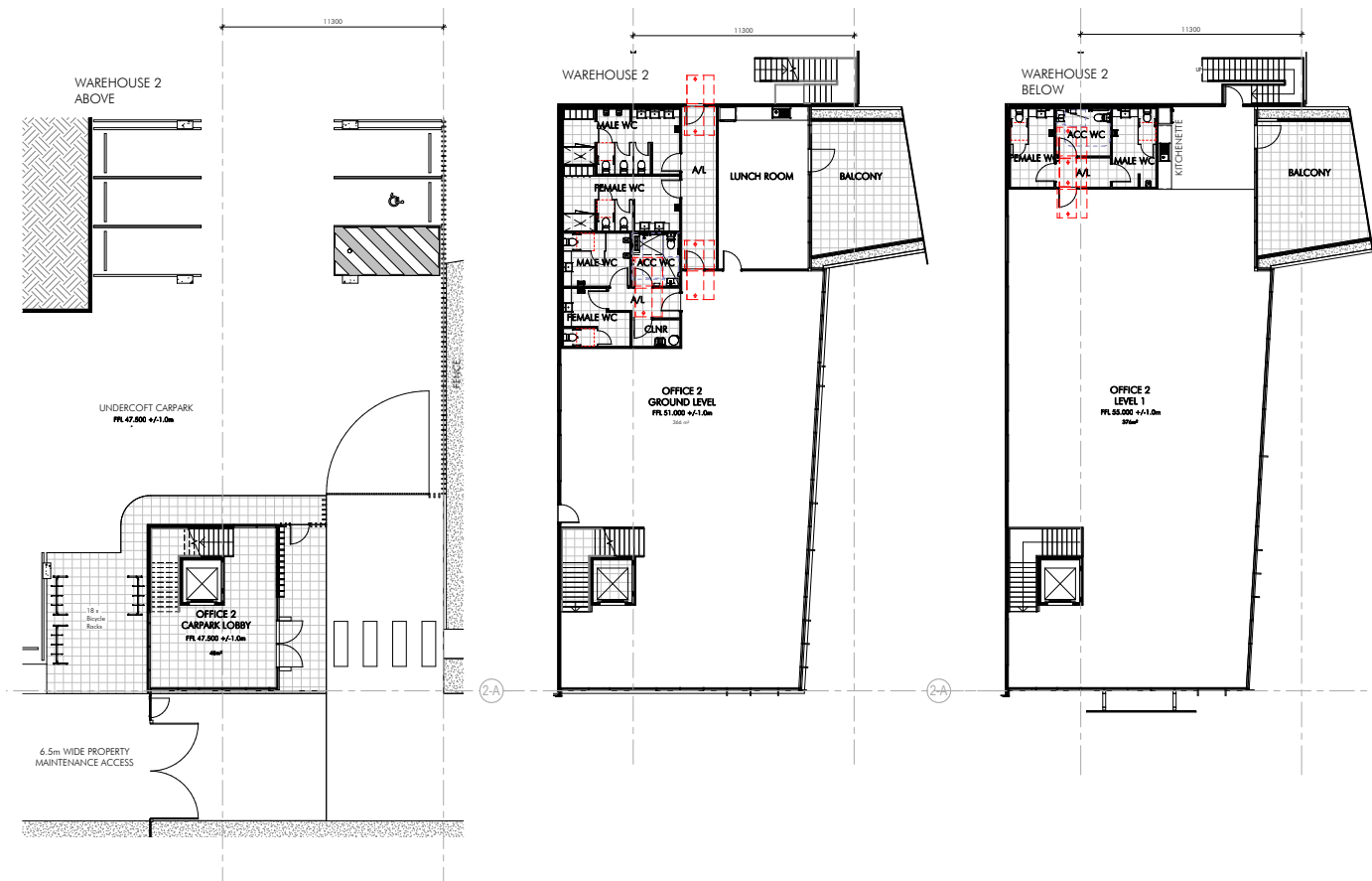


Figure 40 – Warehouse 2 – Office 2 Floor Plans

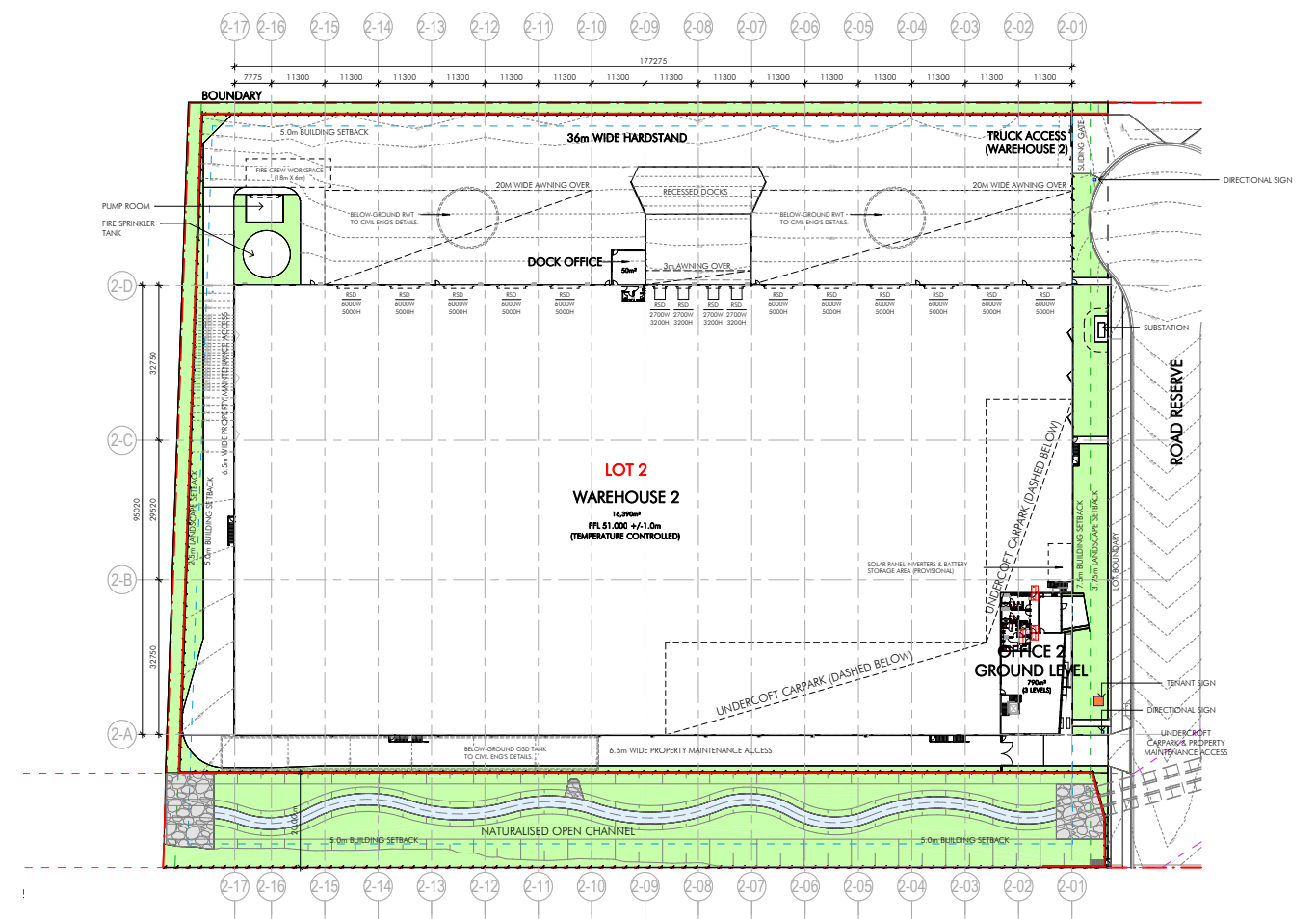


Figure 39 – Warehouse 2 – Ground Floor Plan

6.10 Good Design & Better Places

The building form talks to this report which with regards to the design principles of Clause 31 of SEPP WSEA Guidelines and the objectives for Better Placed (Government Architect NSW, 2017). This has been achieved in the following ways;

1. Better Fit – by understanding the existing rural setting that is surrounding the estate and the colour palette of the built form continue with the neutral tones to the façade treatment to sit within the landscaping. This assists in mitigation of visual impacts for the local precinct.
2. Better Performance – By capitalising 1,000m² of warehouse roof area for each tenancy with the use of a solar array, this allows to reduce the overall running costs during the usual hours of operations. The design of the eastern facing offices that is adjacent to the arrival point of the estate & Access Road, brings together layers of shading via the perforated screen and spandrel glazing system to reduce direct sunlight to the overall office floorplate and reduce performance on air-conditioning requirements. The facility will have a rainwater tank, sized appropriately for the site for watering of the landscaped areas. With reducing the environmental impact of the proposed development, we will be striving for a 5 Star Greenstar As-built facility.
3. Better for Community – By incorporating high-quality finishes with colour tones that have been chosen to help sit the built form within an aesthetically pleasing landscape setting. This creates an outlook for visitors and workers that will be welcoming to the premise. With the use of end of trip facilities within the proposed building, this provides opportunities for workers and visitors to benefit from the shared footpath and cycleways that will link up throughout the precinct in the future.
4. Better for People – By creating separate safe access points, either via pedestrian or vehicular access, you arrive at a singular entry point at the lower ground floor lobby. With external break out spaces, from a landscaped and screened external recreational area at the lower level to balconies that are adjacent to kitchenettes at the office levels above. This promotes areas for workers and visitors to interact and provide well-being for all.
5. Better Working – The amenities are clustered to the internal partition wall, to allow easier access for workers from either the warehouse or the office. Kitchenettes are located within proximity to balconies off the office area. This provides an environment which works well for workers and evolving lifestyles for long-term functionality.
6. Better Value – The approach to the built form of the AREI, is to create an architectural treatment towards high quality and cohesive estate with an attractive appearance. By adopting high quality prefinished materials to the majority of the facility. This rewards in more user friendly, better performance and lower-maintenance.
7. Better Look and Feel - The building is created with a concern for exacting proportion control and elemental expression. The office component of the building has been created in alignment with this report for the Estate, which encourages variation on a theme of landscape and natural tones with screening elements. These elements will articulate the main point to attract visitors, as well as creating the main focal point of the building and entry to the estate.



Figure 41 – Artist Impression Office 1B

6.11 Landscape Master Plan

The landscape design prepared for Westgate, being one of the first in this part of the precinct, aims to set a standard of public domain outcomes and resilient landscapes. In order to achieve this high standard of development, the design meets and/or exceeds the key objectives of the NSW Planning Mamre Road Precinct DCP, Greener Places and Urban Tree Canopy Guidelines, as well as other guidelines relevant to Western Sydney.

The creation of resilient industrial landscapes is achieved in the first instance by maximising tree planting in order to mitigate heat island effects caused by large expanses of pavement and to screen built form. The on-lot development will incorporate 156 native and 10 exotic trees in order achieve a 2.4% canopy coverage and address these requirements.

Permeable surfaces comprising a combination of native, endemic and carefully selected exotic vegetation, shade and drought tolerant turf species and gravel, will be maximised in order to reduce run-off. Plant species are also to be low maintenance and adaptable to a range of climatic conditions, ensuring all new landscaped areas are water sensitive and tolerant of the harsh Western Sydney climate.

[Source: Scape Design]



Figure 42 – Landscape Master Plan [Source: Scape Design]

6.12 Landscape Sections

A 20m wide trunk drainage channel runs east-west through the site. The Channel development has a canopy coverage of 9.88%, that is comprised of 100 native trees. A further 44 local native tree species are proposed for the public domain in order to achieve a minimum of 13.16% canopy coverage to public domain areas. Designed in conjunction with the civil engineers, this channel will intercept overland flow from the development and adjacent public domain areas in order to slow down water velocities and will discharge stormwater with an improved water quality before it is allowed to release to the a drainage line associated with the Mamre Road corridor.

The generous landscape setbacks will foster a clustered, yet dense approach to tree planting, primarily with native and endemic species, which will provide visual screening to the immediate neighbours of the site, users of internal roads and footpaths, as well as longer range views. When combined with the proposed estate streetscape design, large, meaningful strips of canopy trees with mass planting of shrubs and groundcovers will form a dense vegetative screen for the development. Once within the site, feature trees assist with wayfinding by helping to define the building entry points. Wayfinding will be further emphasised by the provision of gabion blades adjacent to entries to accompany estate signage.

Overall, the landscape approach aspires to achieve the environmental and planning requirements, while also providing a memorable landscape contribution to this increasingly industrialised precinct. The health and function of the landscape has been considered during the design period and assumes skilful and careful installation, establishment and ongoing maintenance that tapers off over time once the landscape has acclimatised and is resilient to fluctuations in climate and usage.

[Source: Scape Design]

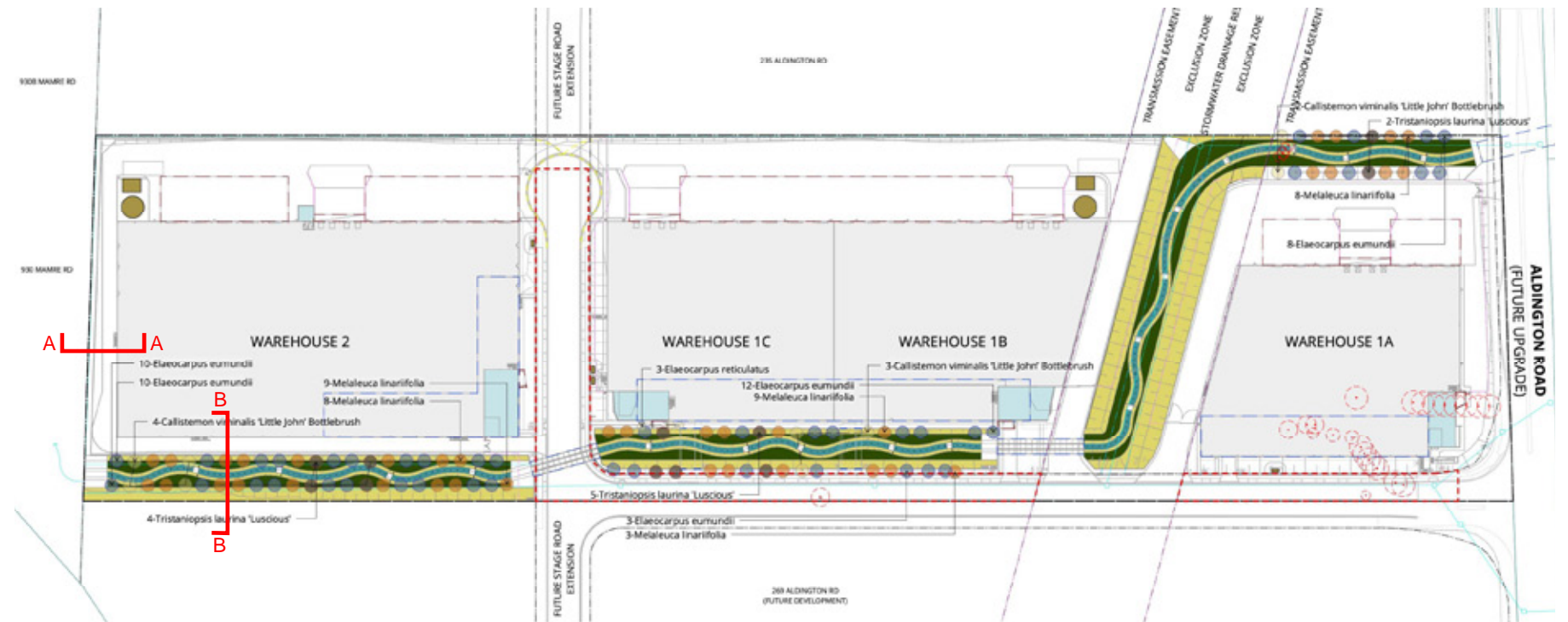


Figure 43 - Landscape Plan (Trunk Drainage Channel) [Source: Scape Design]

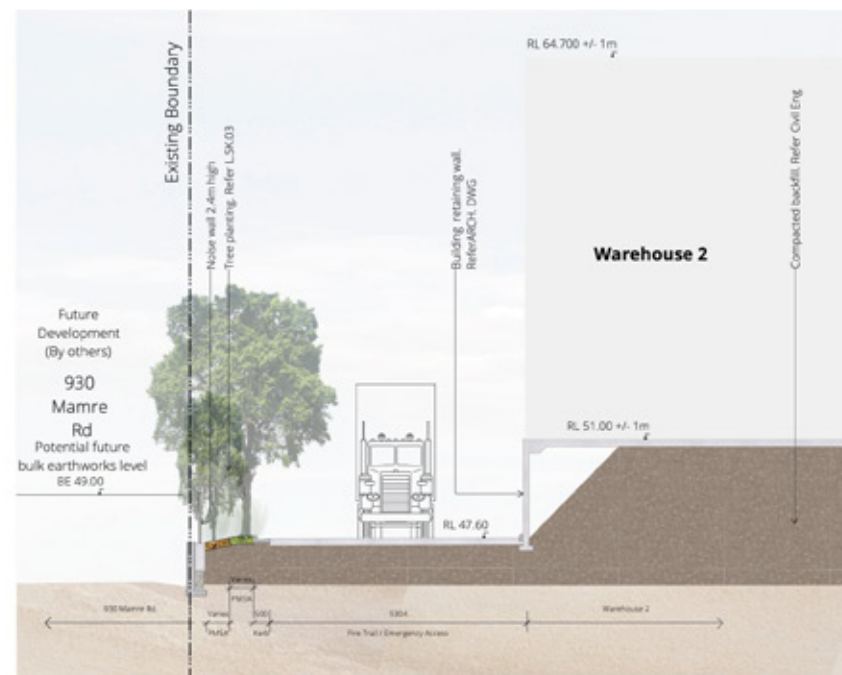


Figure 44 – Section A-A [Source: Scape Design]

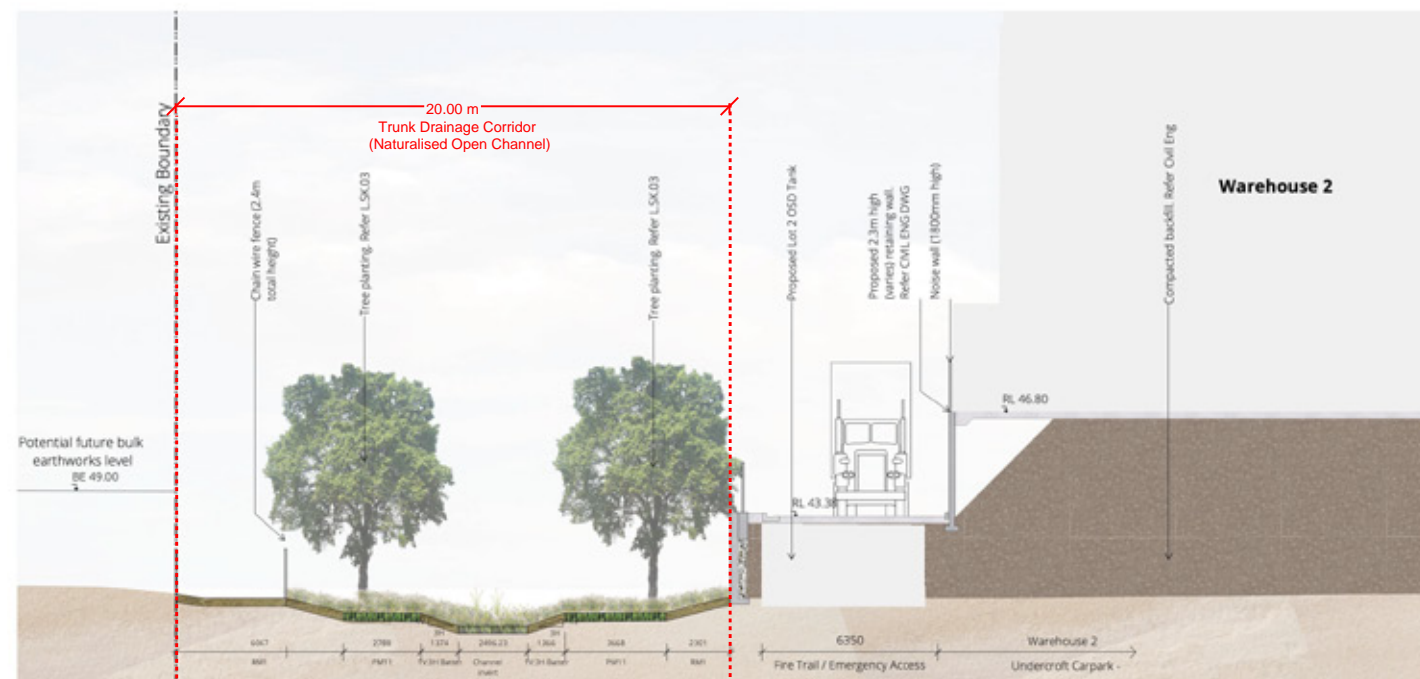


Figure 45 – Section B-B [Source: Scape Design]

6.13 Ecologically Sustainable Development (ESD)

The following key measures will be implemented to Westgate to provide improved comfort levels and environmental benefits.

- 5 Star Green Star rated building
- Provisions of 1,000m² roof area for solar panels in each warehouse
- Procurement 100% renewable electricity for building operations
- Rainwater harvesting for reuse in non-potable demands
- Compliance with NCC 2022 Section J energy efficiency requirements
- Provisions of electric vehicle charging points
- Provisions End-of-trip facilities
- Use of roofing material with a high SRI
- Provisions of green walls
- Provisions of AS1428.1 compliant internal office stairs
- Use of lower carbon construction materials
- Use of best practice PVC and low-VOC finishes

Refer to Ecologically Sustainable Development – ESD Report, prepared by Cundall Johnston & Partners for the full list of ESD measures.

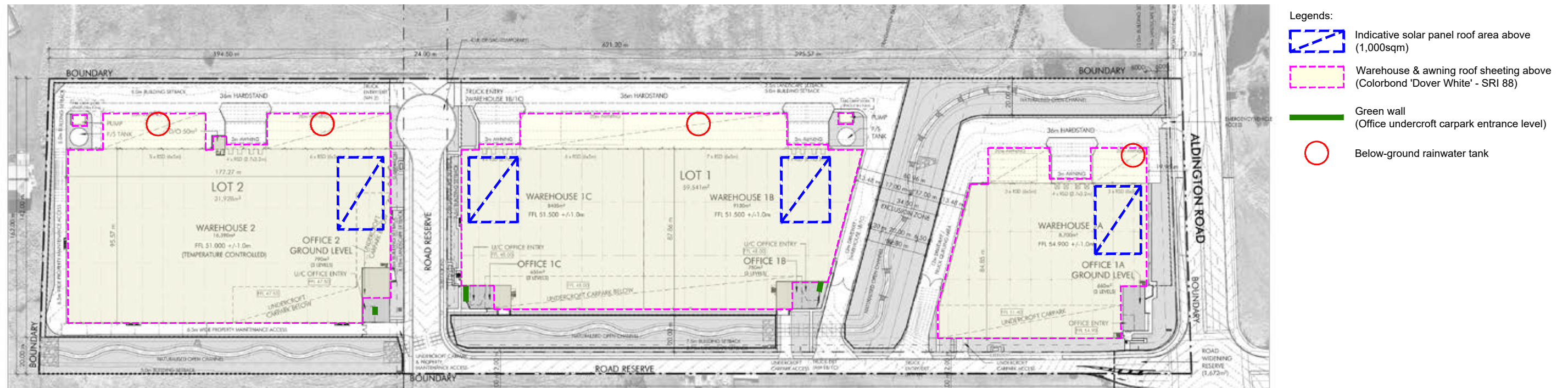


Figure 46 - Westgate Master Plan ESD Measures

6.14 Previous Options Analysis

Preliminary Option A

- This preliminary feasible option comprised of three warehouse buildings with a proposed 22.5m on-site detention basin at the southwest corner of the site.
- The design principle was to create large flexible buildings for future proof.
- The overall layout is largely consistent with the current master plan, except the Warehouse 2 building had a hardstand area to the south with dual car parking spaces, and didn't have undercroft car parks.
- This preliminary option was overlooked in terms of site topography constraints. Detailed site survey information was not available during the feasibility period and it did not respond to the steeper existing ground level in the southeast corner of the site where the road connection would occur.

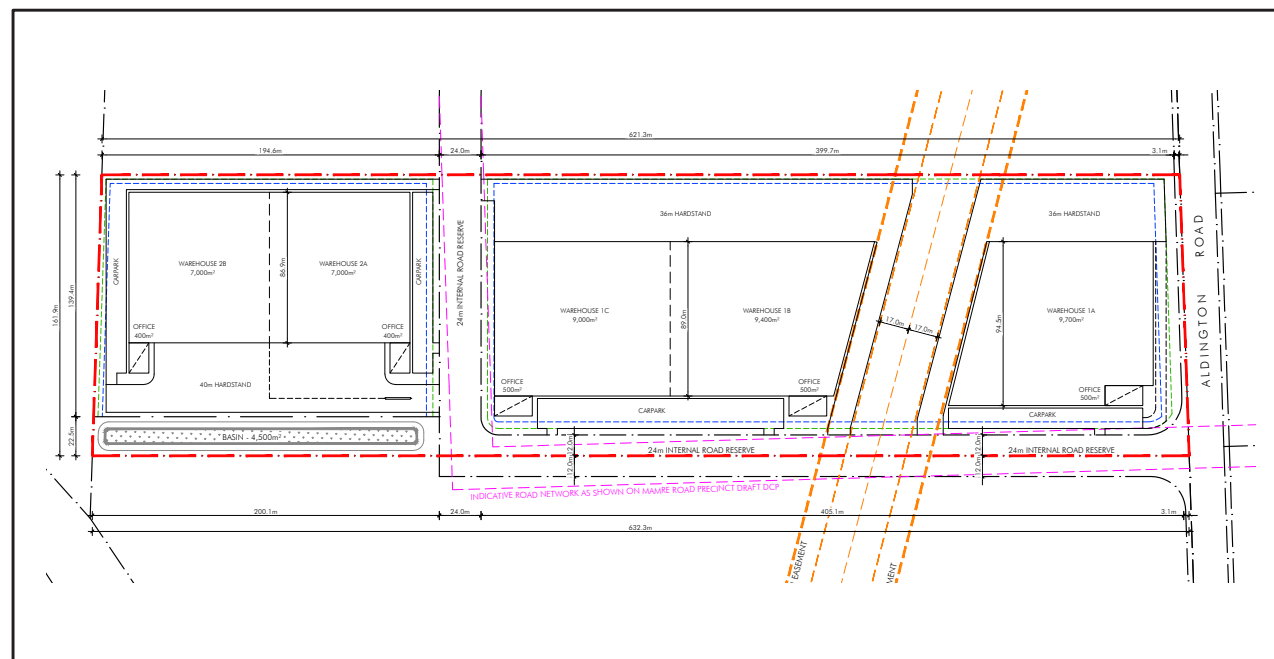


Figure 47 – Preliminary Option A

Preliminary Option B

- This preliminary feasible option comprised of discounted hardstand area within the transmission easement lines.
- The design principle was to maximize the yield by proposing hardstand areas within the easement line.
- All three buildings had regular footprints and dedicated hardstand areas for each unit, particular Warehouse 1A & 1B had very generous 43m wide hardstand areas.
- This preliminary option didn't also have undercroft car parks.
- This preliminary option was mainly overlooked in terms of permissible development within the transmission easement lines. TransGrid was opposed to this layout as a non-permissible development type within the exclusion zone in particular

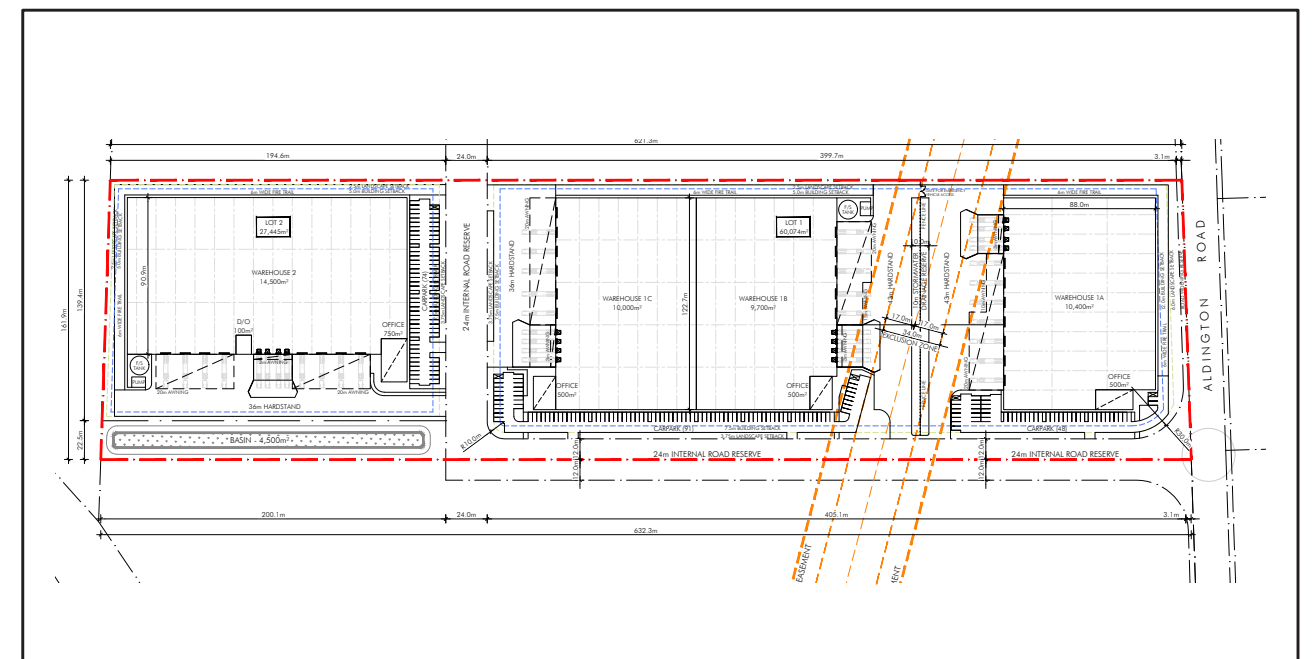


Figure 48 – Preliminary Option B



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