

Ropes Creek Precinct

Draft Development Control Plan

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Development Control Plan (Draft)



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Client: Department of Planning and Environment

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DRAFT**Quality Information**

Document Ropes Creek Precinct


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Reviewed by Amanda Harvey

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A	25-Sep-2015	Working Draft	Amanda Harvey Associate Director	
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1.0 Introduction

1.1 Name of this Development Control Plan

This Plan is known as the 'Ropes Creek Development Control Plan' (DCP). It has been prepared in accordance with section 74(C) of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

This DCP was adopted by the Secretary of Planning and Environment and came into force on [TBC]. It applies to all land within the Ropes Creek Precinct as shown in **Figure 1**.

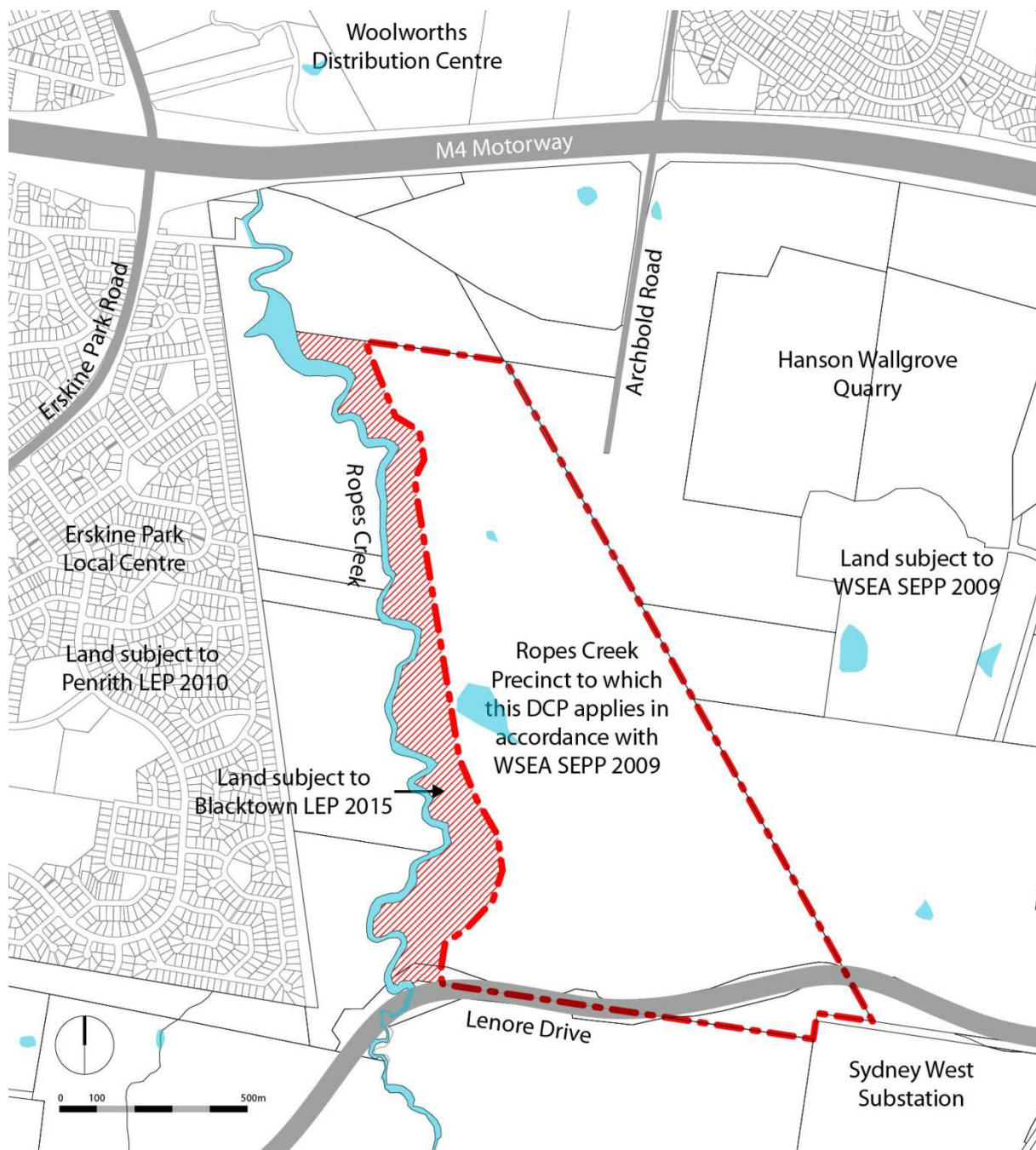


Figure 1 Land to which this DCP applies
Source: AECOM, 2016

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1.2 Purpose of this Development Control Plan

The land to which this DCP applies (herein referred to as 'the site') is zoned part 'IN1 General Industrial' and part 'E2 Environmental Conservation' under the *State Environmental Planning Policy Western Sydney Employment Area 2009* (WSEA SEPP) – see **Figures 1** and **2**.

The site relates to the northern portion of the Ropes Creek Precinct as identified by the Land Application Map pursuant to the WSEA SEPP – see **Figure 3**.

The other portion of the Ropes Creek Precinct, south of the site is subject to a separate Concept Plan determined under Part 3A (Application number 10_0127, approved 24 October 2011).

This DCP has been prepared in accordance with Clause 18 of the WSEA SEPP, which requires the preparation of a DCP before the consent authority can grant consent to development on land to which the SEPP applies. Specifically the structure of this DCP accords with the provisions of Schedule 4 of the WSEA SEPP and provides clear objectives and development controls to guide the future development for the site.

In preparing this DCP the layout and details of the approved Concept Plan for the adjoining site to the south have been considered to ensure consistency in the planning for the whole of the Ropes Creek Precinct.

The preparation of this DCP has been informed by the following reports:

- *Ropes Creek Analysis and Opportunities Report*, prepared by AECOM, dated 18 December 2013
- *Ropes Creek Precinct – Biodiversity and Riparian Assessment*, prepared by Eco Logical Australia, dated 28 November 2015
- *Blacktown Lot 4, DP 262213: Market Prospects Assessment*, prepared by SGS Economics and Planning Pty Ltd, dated August 2009
- *Statement of Evidence: Town Planning Report on Lot 4 DP262213 off Old Wallgrove Road, Eastern Creek*, prepared by Ingham Planning September 2007
- *Planning Report: Lot 4 DP262213 Old Wallgrove Road, Eastern Creek*, prepared by Planning Workshop Australia, August 2005
- *Town Planning Report: Acquisition of Lot 4 in DP262213 at Eastern Creek*, prepared by Design Collaborative Pty Ltd, August 2005
- *Lot 4 DP262213 off Old Wallgrove Road, Eastern Creek (Draft)*, prepared by McKenzie Land Planning Services Pty Ltd, dated May 2005
- *Aboriginal and Historical Heritage Study – Lot 10 DP 1157491, Eastern Creek, NSW*, prepared by Eco Logical Australia, dated March 2016
- *Land Capability, Salinity and Contamination Assessment*, prepared by WSP Environmental Pty Ltd, dated January 2016
- *Ropes Creek Infrastructure Report*, prepared by Mott MacDonald, dated March 2016
- *Lot 10 DP 1157491 Ropes Water Cycle Management Strategy – Data Review Preliminary Advice*, prepared by Cardno dated 10 March 2016
- *Archbold Road Upgrade and Widening (Old Wallgrove Road to Great Western Highway) Review of Environmental Factors – Traffic and Transport Impact Assessment* prepared by Jacobs, dated 29 February 2016

The purpose of this DCP is to:

- a. Communicate the planning, design and environmental objectives and controls against which the consent authority will assess future Development Applications (DAs);
- b. Consolidate and simplify the planning controls to ensure the orderly and efficient development of the Ropes Creek Precinct as envisaged by the *State Environmental Planning Policy Western Sydney Employment Area 2009* (WSEA SEPP).

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- c. Promote high quality urban design outcomes within the context of environmental, social and economic sustainability;
- d. Clearly set out the processes, procedures and responsibilities for the involvement of the community and key stakeholders in the development of land;
- e. Ensure that development will not detrimentally affect the environment and ensure that satisfactory measures are incorporated to ameliorate any impacts arising from the proposed development;
- f. Encourage innovative and imaginative design with particular emphasis on the integration of buildings and landscaped areas that add to the character of neighbourhoods; and
- g. Provide safe and high quality environments for workers and visitors of the land to which the DCP applies.

1.3 Aims of the Western Sydney Employment Area SEPP

The overall objective of the WSEA SEPP is to protect and enhance the Western Sydney Employment Area (WSEA) for employment purposes. The specific aims of the WSEA SEPP are as follows:

- *To promote economic development and the creation of employment in the WSEA by providing for development including major warehousing, distribution, freight transport, industrial, high technology and research facilities.*
- *To provide for the co-ordinated planning and development of land in the WSEA.*
- *To rezone land for employment or environmental conservation purposes.*
- *To improve certainty and regulatory efficiency by providing a consistent planning regime for future development and infrastructure provision in the WSEA.*
- *To ensure that development occurs in a logical, environmentally sensitive and cost-effective manner and only after a development control plan (including specific development controls) has been prepared for the land concerned.*
- *To conserve and rehabilitate areas that have a high biodiversity or heritage or cultural value, in particular areas of remnant vegetation.*

1.4 Location and Description of the Site

The land to which this DCP applies is located within the Blacktown Local Government Area (LGA) and is approximately 36 kilometres west of Sydney's CBD. It is legally identified as part Lot 10 in DP1157491, is irregular in shape and has a total area of 134.8ha.

In accordance with the WSEA SEPP the site is zoned part IN1 General Industrial uses and part E2 Environmental Conservation (which relates to an existing tributary across the site) – see **Figure 2**.

It should be noted that the western edge of Lot 10 of DP 1157491 is zoned under Blacktown Local Environmental Plan 2015 (BLEP) part RE1 Public Recreation zone and part E2 Environmental Conservation. This DCP does not relate to this land – see **Figure 1**. Any development on this land is to be carried out in accordance with BLEP and Blacktown Development Control Plan 2015.

The site is bound by a parcel of land owned by Roads and Marine Services (RMS) to the north, Hanson Wallgrove Quarry and Eastern Creek industrial land to the east, the recently constructed Lenore Drive to the south and Ropes Creek and riparian corridor to the west. South of Lenore Drive is the continuation of the Ropes Creek Precinct under the WSEA SEPP 2009. This land is subject to a Concept Plan Approval (MP10_0127 and MP10_0128) relating to the development of an industrial estate for light industry, warehouses and distribution centres.

The site is gently undulating with the lowest lying land along Ropes Creek (approximately RL 50), and the highest peak at RL 90 in the south eastern corner of the site. A 200m wide transmission easement runs along the eastern edge of the site's boundary. A building of heritage significance is located on the site near the transmission easement, however it is in a state of disrepair.

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Ropes Creek and riparian land form the western boundary to Lot 10 and is an Order 3 Stream. An Order 2 stream also traverses the site in an east-westerly direction. The western part of the site and the Order 2 Stream are both affected by flood events to 1 in 100 ARI Figure 6

The site includes high value vegetation, including Cumberland Plain Woodland listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and *Threatened Species Conservation Act 1995* (TSC Act) and River-flat Eucalypt Forest listed under the TSC Act.

An Asset Protection Zone follows the riparian zone along the E2 Environmental Conservation Zone with a 20m buffer. The remaining riparian areas have a 10m buffer

The recently constructed Lenore Drive provides direct road access from the south of the site and is planned to connect with the existing Archbold Road into the future. This will not only provide a vital entry point into the site, but also an important north south connection for the wider region. A shared path for cycling and pedestrians is located along Lenore Road, connecting to Erskine Park Road in the west and is planned to link with the proposed Old Wallgrove Road upgrade works in the east, which includes a shared pathway linking to Wallgrove Road and the M7 to the east.

The M4 Motorway and the industrial area west of Minchinbury are situated approximately 500m north of the site. The low density residential area of Erskine Park (located within the Penrith LGA) is located approximately 500m west of the site. The M7 Motorway is located approximately 3 kilometres to the east, with access from the site via Lenore Drive and Old Wallgrove Road.

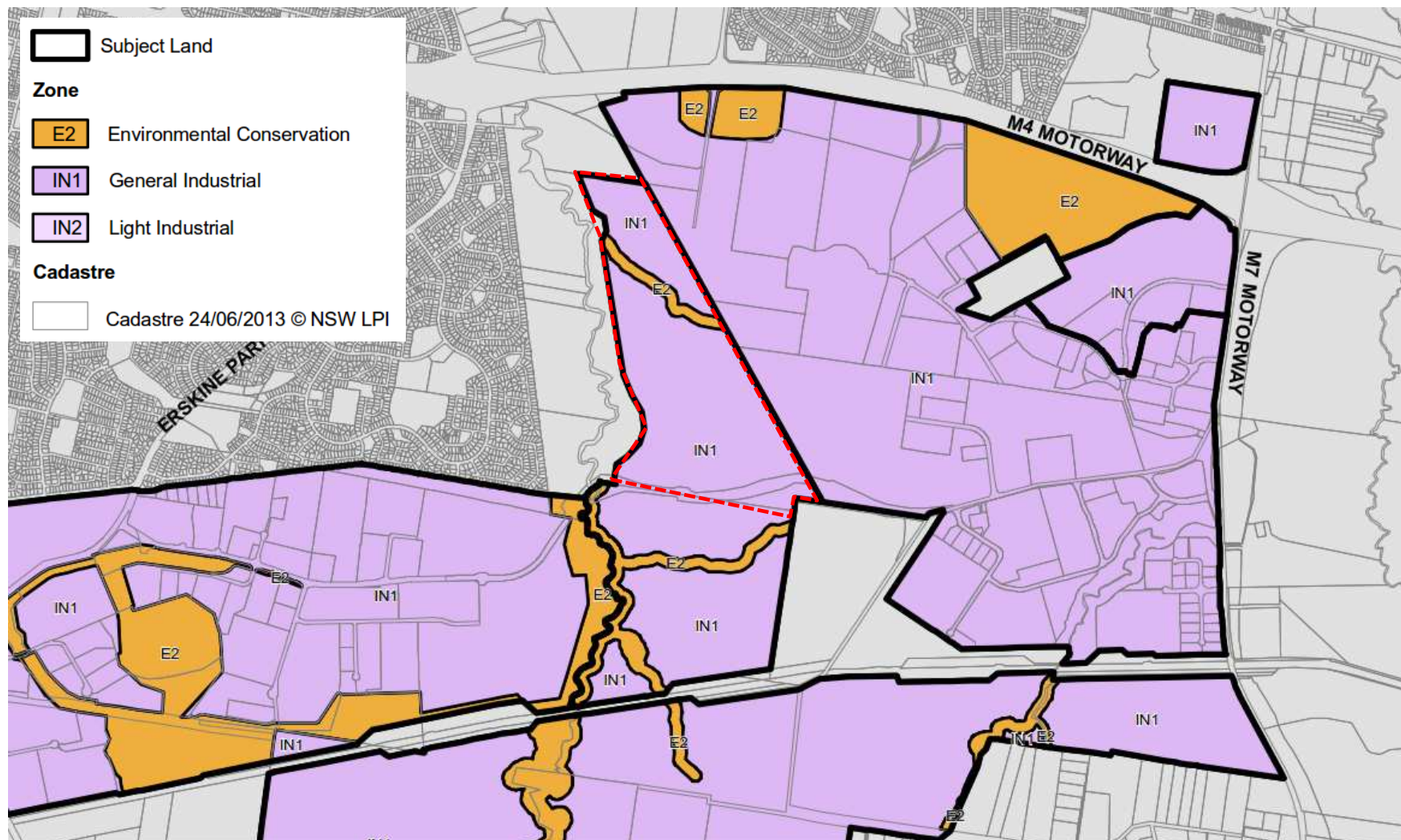
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Figure 2 Western Sydney Employment Area SEPP Zoning Map

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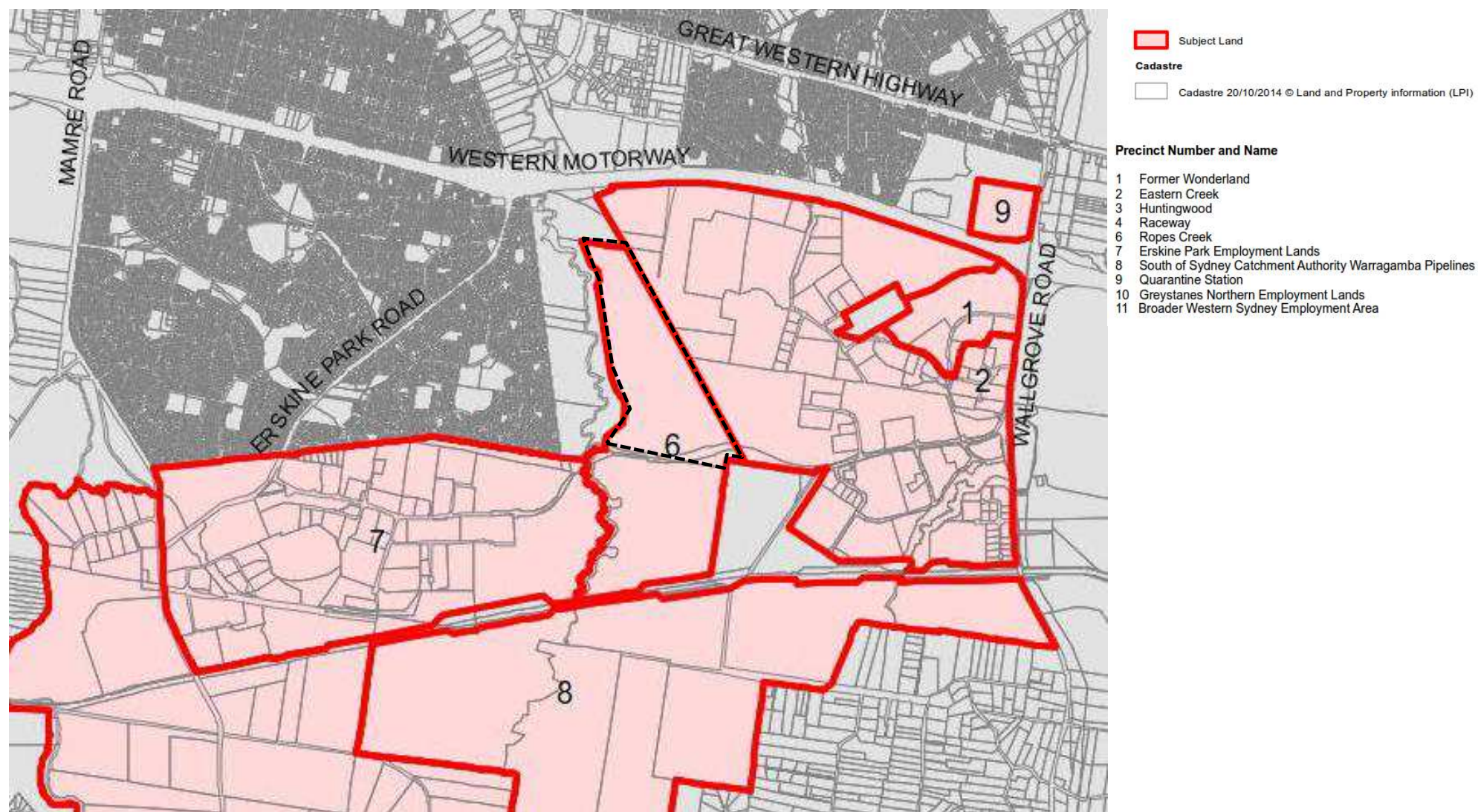
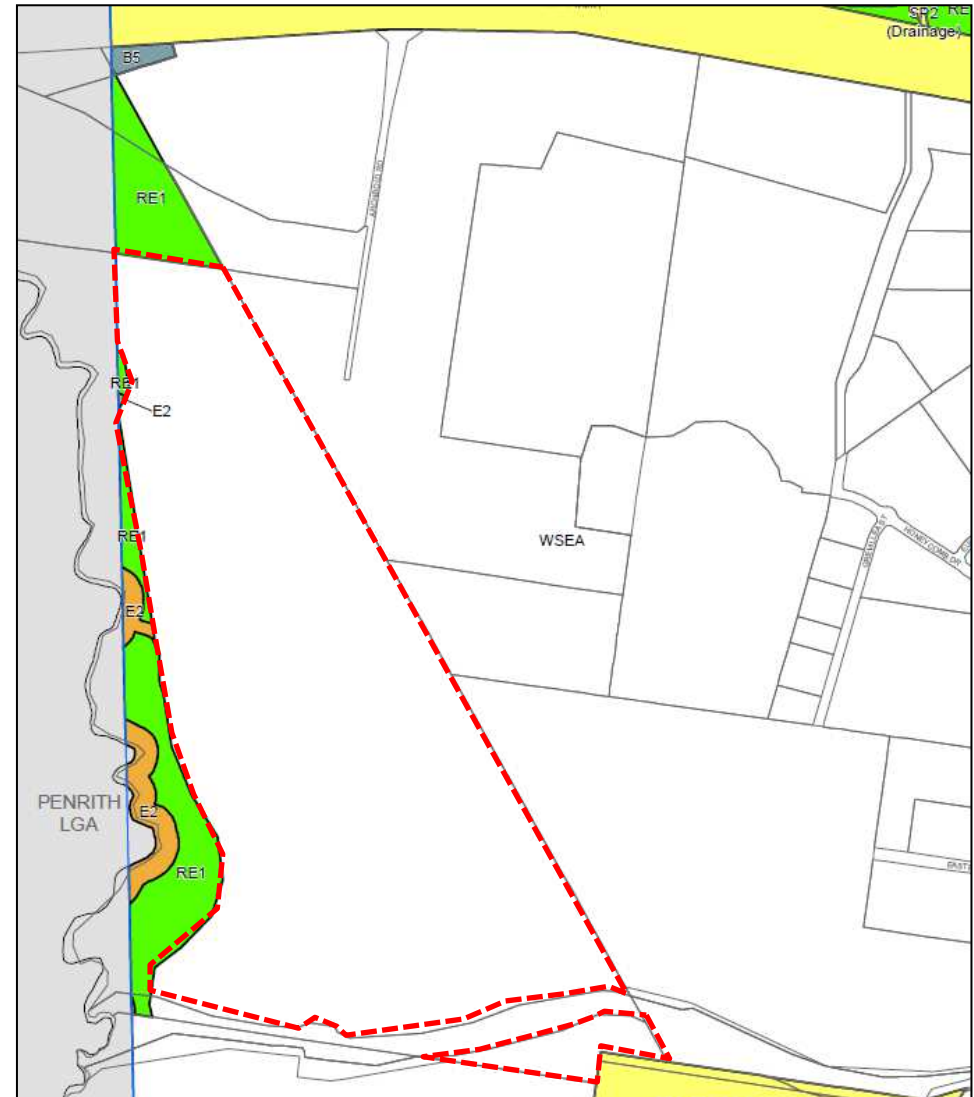
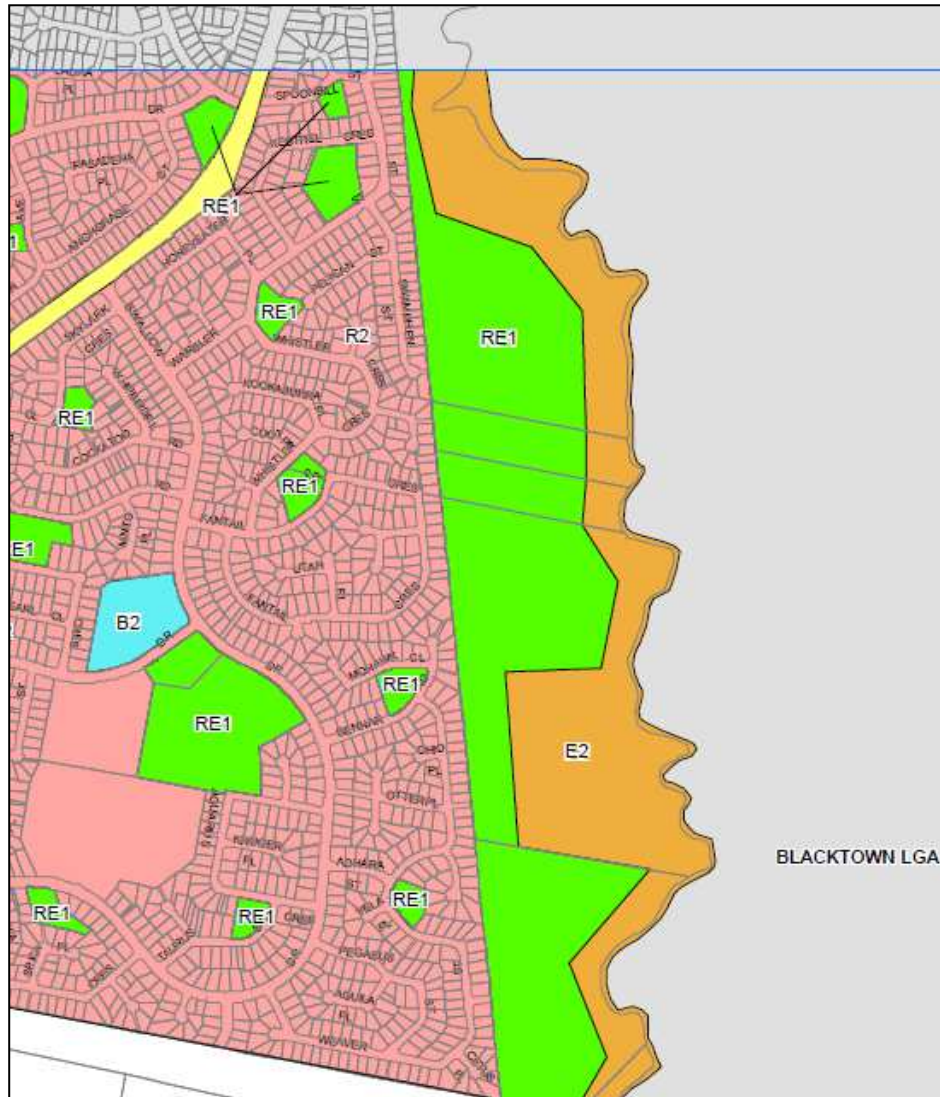


Figure 3 Western Sydney Employment Area SEPP Land Application and Precinct Map

Figure 5 Extract of Blacktown LEP 2015 Zoning Map



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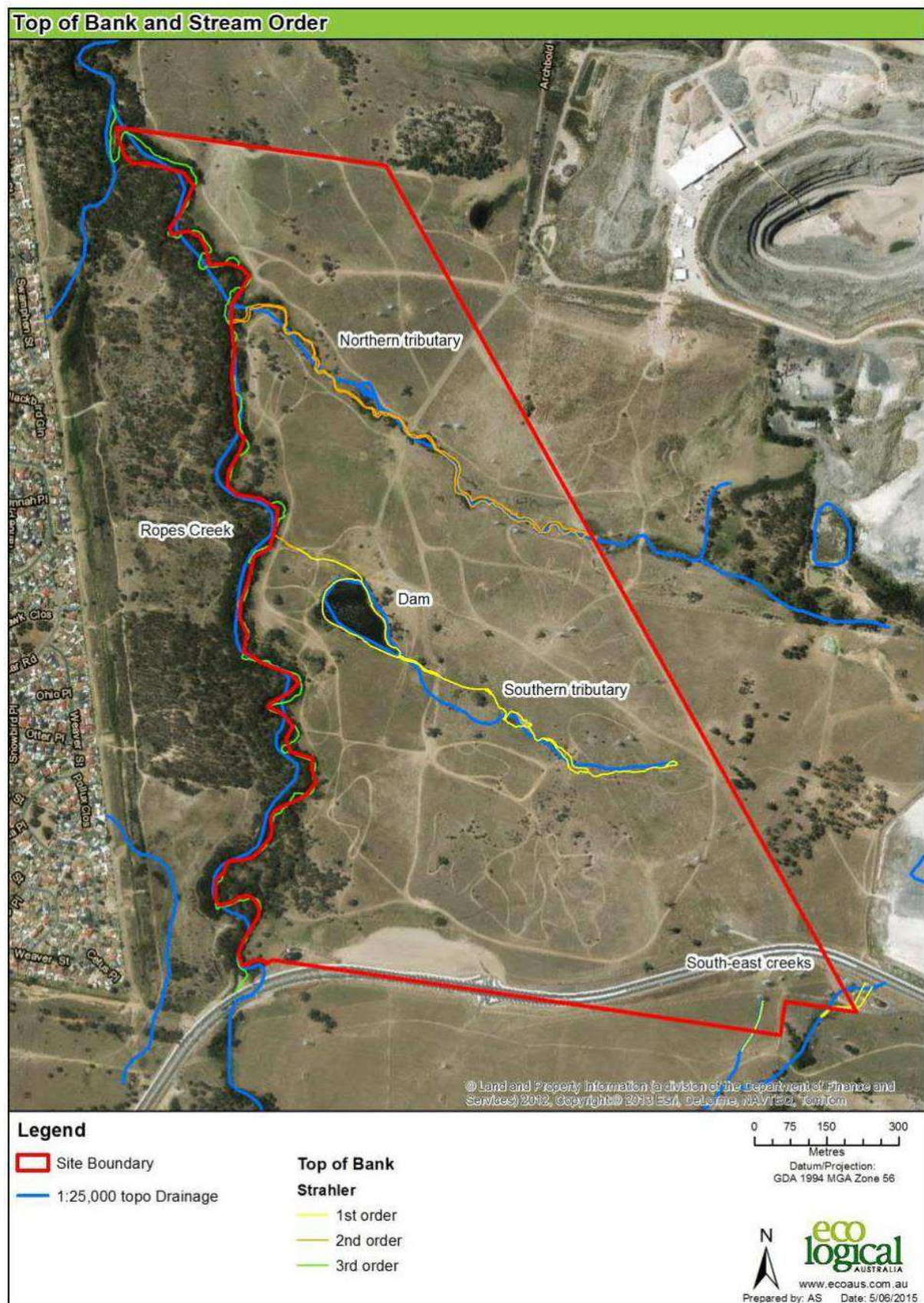


Figure 6 Stream Order for Site

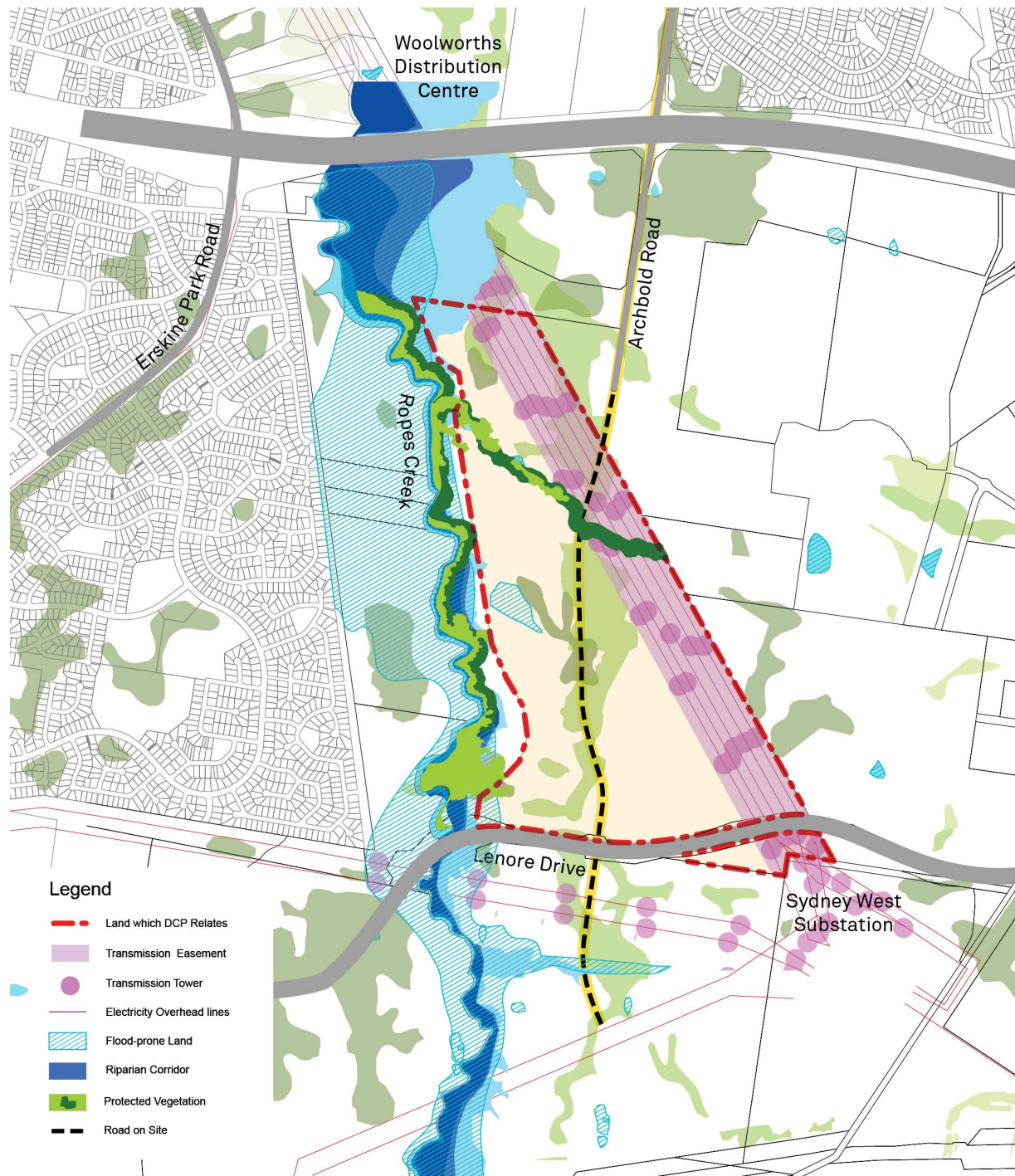
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Figure 7 Key Characteristics
Source: AECOM, 2015

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1.5 Aims and Objectives of this DCP

This DCP aims to reinforce the provisions of the WSEA SEPP, by providing guidelines for the detailed planning and development of the Site. The specific objectives of the DCP are to:

- a. Promote economic growth and employment opportunities consistent with the objectives of the Metropolitan Plan for Sydney 2036 and the WSEA SEPP.
- b. Ensure the orderly provision of infrastructure and services in a manner that minimises impacts on the environment and cost to government.
- c. Ensure ecologically sustainable development that actively anticipates and prevents damage to the environment.
- d. Conserve areas of environmentally sensitive land and minimise the impact of development on these areas.
- e. In flood prone area, encouraging development and construction which is compatible with the identified flood hazard to ensure safety to life and property.
- f. Ensure the traffic and public transport needs for the Precinct are achieved.
- g. Ensure high quality urban design outcomes are achieved.
- h. Allow for the provision of adequate landscaped areas for the use and enjoyment of the working population.

This DCP responds to the requirements relating to the preparation of and content of DCPs as listed in Schedule 4 of the WSEA SEPP.

1.6 Relationship to other planning instruments

This DCP should be read in conjunction with *State Environmental Planning Policy Western Sydney Employment Area 2009* (WSEA SEPP) and other relevant State planning policies. This DCP should also be read in conjunction with the following State and Council policies and/or guidelines:

- *Environmental Planning and Assessment Act 1979 (NSW) (as amended)*
- *Environmental Planning and Assessment Regulation 2000 (NSW) (as amended)*
- *Environmental Planning and Assessment Regulation 2010*
- *Local Government Act 1993 (NSW) (as amended)*
- *Threatened Species Conservation Act 1995 (NSW) (as amended)*
- *State Environmental Planning Policy (Exempt and Complying Development) 2011*
- *Planning for Bushfire Protection 2006 (NSW Rural Fire Service 2006) (as amended)*
- Blacktown Council Guidelines

In accordance with section 74(3) of the EP&A Act, Part E (Development in Industrial Zones) and Part J (Water Sensitive Urban Design) of Blacktown Development Control Plan 2015 additionally applies to the site and its development.

In the event of any inconsistency between this DCP and any other DCP or policy of Council, this DCP will prevail to the extent of the inconsistency.

It should be noted that the western edge of Lot 10 of DP 1157491 is zoned under Blacktown Local Environmental Plan 2015 (BLEP 2015) part RE1 Public Recreation zone and part E2 Environmental Conservation. This DCP does not relate to this land. Any development on this land is to be carried out in accordance with BLEP 2015 and Blacktown Development Control Plan 2015.

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1.7 Consent Authority

Unless otherwise authorised under the *Environmental Planning and Assessment Act 1979*, Blacktown Council is the consent authority to all development on the land to which this DCP applies.

Council will assess development against the objectives and requirements of this DCP.

1.8 Exempt and complying development

Exempt and complying development is to be undertaken in accordance with the requirements of the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*.

1.9 Development application process

1.9.1 Information to be submitted with development application

All development applications must be accompanied by a completed application form and comply with the relevant checklist requirements, which can be accessed from Blacktown Council's website here: http://www.blacktown.nsw.gov.au/Resident_Services/Application_Forms/Development_Construction_Forms

1.9.2 Variations to development controls

Council may grant consent to a proposal that varies from the requirements of this DCP, providing the aims and objectives of the controls are achieved. In these instances, a Development Application will be assessed on its merits and must demonstrate that the proposed variations are:

- Consistent with the objectives and requirements of the State Environmental Planning Policy (Western Sydney Employment Area) 2009;
- Achieve the relevant objectives of this DCP; and
- Will not likely result in significant impacts to the environment or adjoining development.

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2.0 Ropes Creek Vision and Development Objectives

2.1 Vision

In conjunction with the adjoining Erskine Park Employment Lands and Eastern Creek Precinct, the site will form a key component of the Western Sydney Employment Area (WSEA).

The WSEA was established to reserve land for employment purposes that is well serviced by strong road links and infrastructure at the M4 and M7 junction. This area will provide support to and is likely to benefit from its proximity to the future Western Sydney Airport. WSEA is expected to deliver more than 36,000 industrial jobs and 21,000 office jobs over the next thirty years, therefore enabling and supporting the growth of Western Sydney¹. Transport, logistics and warehousing are anticipated to be the main emerging employment sectors utilising the WSEA in the short to medium term while enhanced infrastructure will provide opportunities for higher density employment, such as business parks, in the longer term.

The Ropes Creek Precinct will likely support a range of industrial uses, potentially including transport depots and freight transport facilities, industrial retail outlets, warehouse or distribution centres and other industries (other than offensive or hazardous industries).

The indicative layout and subdivision pattern included at Section 2.2 of the DCP demonstrates flexibility in the potential uses and changes over time for the site. The built form, including building siting and envelopes, will respond to the constraints of the site, including the tributaries and riparian land, and the transmission line easement. The tributaries and riparian corridors of the Precinct are to be conserved and protected.

The provision of ancillary supportive uses should be encouraged to create a high amenity business environment, such as food and drink premises, local shops and services. A high quality public domain is to be achieved that clearly differentiates between public and private land, and contributes towards a comfortable microclimate with soft and hard landscaping.

A safe and permeable street network is to be provided with separate pathways for pedestrians/cyclists and vehicles, and promotes accessibility and connectivity. Additionally and where appropriate, the public domain areas and landscape treatment of development should reflect the native vegetation of the area. Consideration should be given for the integration of the existing dam into the public domain.

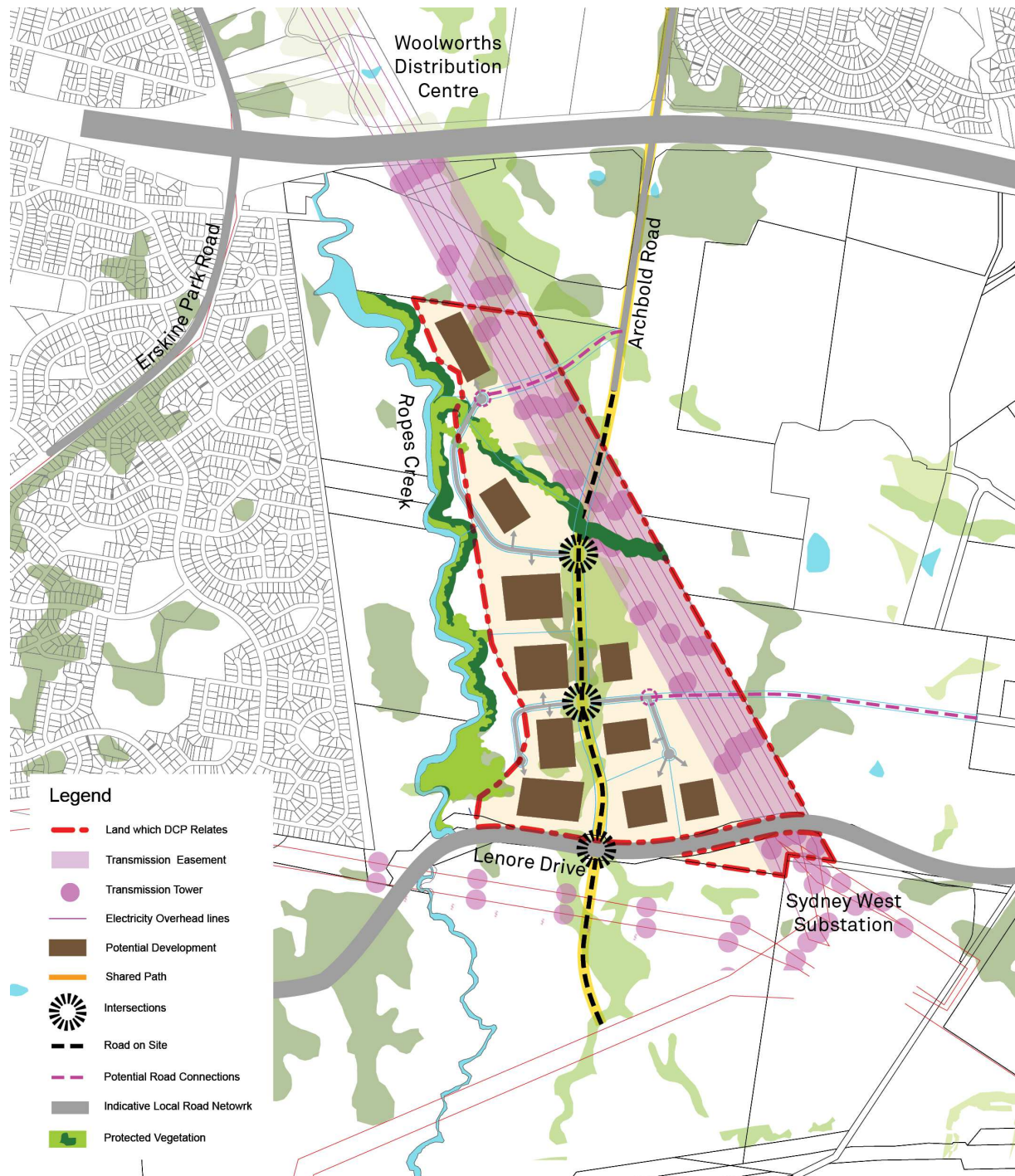
2.2 Indicative Concept Plan

The Indicative Concept Plan (ICP) (**Figure 8** Ropes Creek Indicative Concept Plan

8) conceptually illustrates the potential urban structure and key principles for the planning and future development of the site.

Specifically the ICP is not binding, however outlines the potential subdivision pattern including the alignment of the extension of Archbold Road to Lenore Drive, new local access roads, the incorporation of the transmission easement into the urban design of the site and potential building footprints.

¹ Department of Planning and Infrastructure, 2013, Draft Broader Western Sydney Employment Area Structure Plan

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3.0 Development Controls

3.1 DCP requirements

Schedule 4 of the WSEA SEPP requires the DCP to make provision for an appropriate subdivision layout that achieves a high degree of access for all forms of transport and safe access for pedestrians. The provisions of Section 3 of this DCP provide detail on subdivision layout and lot size in response to the vision for the site, context analysis, proposed road network and areas of environmental sensitive areas.

Development controls are provided for urban design and landscaping, to ensure that the vision for the site is achieved, whilst maintaining flexibility to support a wide range of permitted uses. The urban design principles respond to the site context and key features.

3.2 Subdivision layout

3.2.1 Subdivision

Objectives

- To ensure that allotments are of a shape and size that supports a range of land uses and employment opportunities.
- To ensure that access to individual allotments is provided from secondary roads.
- To provide an internal road network that supports the role of Archbold Road as a north-south link road between Ropes Creek Precinct and the Great Western Highway.
- To provide suitable separation between environmentally sensitive areas and development.

Controls

- The minimum allotment size for the creation of Torrens Title lots is 1,500m².
- Where possible, irregular shaped lots should be avoided.
- The minimum allotment width is 30m.
- Development must not have direct access and/or frontage to Archbold Road. All frontages and access to any development must be made via a secondary road. See the Indicative Concept Plan (**Figure 5**) for guidance.
- Battle-axe handles should have a minimum width of 8m. However, where 2 battle-axe handles adjoin and provide a shared driveway with reciprocal rights-of-way over the other, the minimum width of the shared driveway must be 10m.
- The minimum site area of battle-axe allotments excludes the area of the access handle.²
- Where a residue lot is created through subdivision, the applicant must demonstrate that future development of that residue lot can meet the controls in this DCP.

² Battle-axe allotments are not generally encouraged. However, they may provide an optimum solution to constrained or irregularly shaped land.

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3.3 Built form and streetscape amenity

3.3.1 Siting and Setbacks

Objectives

- To achieve the appropriate minimum building line setbacks and consistency in street frontages.
- To ensure that allotments provide high quality landscape treatment within setbacks to all public roads.
- To ensure suitable building separation between allotments.
- To protect the electricity transmission easement from inappropriate development.

Controls

- a. Buildings and structures are to have the following minimum setbacks:
 - 10m from Lenore Drive.
 - 10m Archbold Road.
 - 7.5m from any other local road.
 - 5m setback from adjoining RE1 Public Recreation under the Blacktown LEP 2015.
 - 3m for all other boundary setbacks including secondary setback from a local road.
- b. Front setbacks may incorporate an off-street parking area if it can be demonstrated that the car parking is located behind at least a 4m wide landscaped area.
- c. Buildings should be designed so that they provide a well-defined street address and entrance to the primary frontage. Lots which address more than one road should ensure that high quality landscaped treatment is also accommodated within the setback to secondary frontages.
- d. No storage of any kind (including water tanks and temporary structures) is to occur within the front setback area. Any proposed storage areas are to be effectively screened and sealed. Full details of storage areas and ancillary buildings are to be included in the DA, including the size and location of the storage area, to be shown on plans and elevations drawings.
- e. Buildings and structures are not permitted within the 200m wide transmission easement located along the eastern edge of the site. Any permissible development within the easement must seek permission from the relevant authority prior to the commencement of works.

3.3.2 Built form and design controls

Objectives

- To ensure that development presents an acceptable bulk and scale as viewed from adjacent sites and the public domain.
- To encourage visual interest in the design of buildings.

Controls

- a. To provide visual interest and where a development has a secondary street frontage to Archbold Road, buildings are to include articulated building facades facing Archbold Road and/or the development must include suitable dense landscaping fronting Archbold Road to screen built development.
- b. Consideration should be given to optimising building orientation and siting to natural elements such as topography, wind and sunlight, to maximise energy efficiency.

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- c. Articulation of building facades is encouraged through the use of elements such as:
- Recessed patterns and varying wall alignments;
 - Decorative features, textures and colours; and
 - Locating offices and highlighting entries within front facades to reduce the apparent bulk and scale of the structure.

3.3.3 External building materials and colours

Objectives

- To enhance the visual quality and durability of development through the selection of appropriate materials and colours.
- To encourage the use of materials that minimise impact on the environment.
- To ensure that any reflective materials are used with sensitivity to neighbouring development, vehicular traffic and public domain areas.

Controls

- a. Applicants are required to submit with all DAs a materials sample board detailing external colours and finishes.
- b. The extensive use of one material or colour scheme across the façade of a building adjacent to a public road will not be permitted unless suitable articulation (such as the inclusion of major doorways and windows) is used to break up the building bulk and improve the visual appearance of the building.
- c. External finishes should be constructed of durable, high-quality and low maintenance materials.
- d. Building materials should be selected such that reflection is minimised and will not adversely affect adjacent development, vehicular traffic and public domain areas.
- e. The following should be considered in the choice of building materials in all developments:
- energy efficiency;
 - use of renewable resources;
 - low maintenance;
 - recycled or recyclable;
 - non-polluting; and
 - minimal PVC content
- f. Non-residential developments including mixed use developments, with a construction cost of \$1 million or more are to demonstrate a commitment to achieving no less than 4 stars under Green Star or 4.5 stars under the Australian Building Greenhouse Rating system (now part of the National Australian Built Environment Rating System (NABERS)).
- NABERS can be used to rate commercial offices, shopping centres and hotels.
 - Green Star can be used for projects from apartment buildings to schools, university buildings, hospitals, offices, shopping centres and industrial facilities.

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3.3.4 Entrance treatment

Objectives

- To provide an active frontage and surveillance to the street.
- To ensure that an identifiable entrance point is provided to each site.
- To ensure that safe pedestrian access is provided from the street and/or parking areas to the main entry building.

Controls

- a. Buildings entrances should be clearly visible to pedestrians and motorists and be integrated into the overall design of the development. This should be achieved through appropriate signage, orientation of the entry, lighting, and hard and soft landscape treatments.
- b. Pedestrian access is to be provided from the street and/or parking areas to the main entry, which complies with the requirements of the *Building Code of Australia* and the *Disability Discrimination Act 1992*.

3.3.5 Fencing

Objectives

- To provide security where appropriate, clearly delineating between the public and private domain.

Controls

- a. Development fronting Lenore Drive and Archbold Road is encouraged to provide open style fencing, which does not obstruct the view of landscaping from the street or reduce visibility for access and egress. Fencing shall be a minimum height of 1.2m and a maximum of 2.1m and constructed so as to prevent vehicular and pedestrian access to or from those roads.

3.3.6 Signage

Objectives

- To encourage the use of signage to contribute to way finding, safety, the identity of businesses, and to reinforce the character of the precinct.
- To ensure that signage provides an appropriate amenity and function in both the day and night.
- To ensure that signage does not detract from the visual quality of buildings.

Controls

- a. Advertising signage should be kept to a minimum, should relate only to the use occurring on the respective property and should identify the relevant business name.
- b. A signage plan is required at DA Stage detailing the dimensions and area, location, construction materials, colour, wording, logos, symbols, illumination, light spill diagram and hours of illumination.

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3.4 Landscape design

Objectives

- To contribute to a high quality landscape character and built form for the site.
- To reduce the impacts of the urban heat island effect and contribute to comfortable micro climate conditions through the use of both hard and soft landscaping treatments.
- To encourage retention of existing landscape elements and native vegetation, and the use of native species of flora and low maintenance landscaping.

Controls

- a. A landscape plan is to be submitted with the DA for any new built form development and should include the following information:
 - North point.
 - Scale.
 - Main structures on the site (buildings, carpark, driveways, walls, fences, paving, storage areas, etc.)
 - Existing trees to be removed or retained.
 - Proposed planting areas.
 - Proposed turfed areas.
 - Drainage areas and irrigation.
 - Contours and/or spot levels (existing and proposed).
 - Details of paving, fencing, wall and edge treatments.
 - Details of seating and other outdoor furniture including bins, bollards and signs.
 - Lighting.
 - Planting schedule including botanical and common names.
 - Water sensitive urban design features.
 - Sections and/or elevations where necessary to show special features or alterations in levels.
- b. Preservation of trees and vegetation should be in accordance with WSEA SEPP 2009, Clause 32.
- c. Existing trees, particularly native species are to be retained as far as practical.
- d. Landscaping in the vicinity of a driveway entrance should not obstruct visibility, to ensure safe ingress and egress of vehicles and pedestrians.
- e. All setback areas are to be landscaped and maintained. Car parking areas are to be suitably treated with landscaping to provide shading for parked cars. At a minimum standard one tree should be planted every 10 metres and be at a minimum height of 1m at the time of planting. Trees should be planted to achieve 50% shading of the carpark at ten year maturity.
- f. Setbacks may incorporate an off-street parking area if it can be demonstrated that the car parking is located behind at least a 4m wide landscaped area.
- g. All landscaped areas are to be separated from vehicular areas by means of a kerb, dwarf wall or other effective physical barrier, however full fencing of landscaped areas is not encouraged.
- h. Undeveloped areas are to be stabilised to prevent soil erosion. Landscaping may be required around the perimeter of undeveloped areas.
- i. The setback of sites with a boundary to Archbold Road and Lenore Drive are to provide high quality plantings and hedging.
- j. Trees are to have a minimum height of 1m at the time of planting.

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- k. Earth mounding (where on-site detention of drainage is not required) may be used within the setback area. Embankments should not be steeper than 1:3 gradient in order to enable vegetation to be grown and maintained
- l. All irrigation systems shall be automatic and designed to meet specific site requirements. Minimisation of water consumption should also be a consideration in the design of irrigation systems.
- m. Planting in the riparian zone are to be consistent with the Vegetation Management Plan prepared for the Site. Refer to Section 6.3.
- n. All landscaping is to be completed to the satisfaction of the Consent Authority prior to occupation of the development. Details of the works, including proposed plant species, are to be provided in the landscaping plans submitted with the DA.

3.5 Cut and fill

Objectives

- Ensure that any cut or fill does not adversely affect local stormwater drainage or change floodplain characteristics.
- Ensure that cut or fill does not contaminate land by utilising clean material where landfilling is required.
- Ensure that soils are suitably treated to minimise soil erosion and weed infestation.
- Ensure that the development provides for the installation of sedimentation controls to minimise the potential for water pollution.
- Ensure that the alteration of ground levels does not cause a negative visual impact from more sensitive vistas.

Controls

- a. Buildings should be designed to minimise the amount of cut and fill.
- b. No cut, fill or batters are permitted within the 10m setback of the boundary of a:
 - Conservation Area;
 - Open Space Area; or
 - Drainage detention basin or wetland area.
- c. Retaining wall elements must be no greater than 3m in height. All retaining walls must be screened by vegetation. Where filling requires a retaining wall element to be greater than 3m in height, the retaining wall shall be terraced to allow for a ratio of 3m in height to 1.5m in length. The 1.5m terraced area must be provided with suitable landscaping to screen the height of the retaining wall (see **Figure 9**).
- d. Any embankment batters from the property boundary must be no greater than a grade of 3m in length to 1m in height, and landscaped to reduce erosion and provide suitable screening (**Figure 10**).
- e. Notwithstanding (d), Council may consider a retaining wall element higher than 3m where it can be demonstrated that the retaining wall is structurally sound, is not visible from the public domain, and where it will not detract from the overall appearance of the development.
- f. Appropriate soil erosion and siltation measures are to be implemented on site. Details of the proposed measures are to be provided with the Development Application.
- g. A Development Application that includes cut and fill on a site adjoining a conservation area, open space area, or trunk drainage area is to address the potential environmental impacts of the proposed works on those areas.
- h. A Traffic Report, detailing the transportation of landfill, may be required, dependent on the volume of landfill required to be transported to a site.

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- i. Soil Contamination Report may be required to identify the source of the landfill. Such a report would need to be prepared by a NSW Office of Environment and Heritage accredited consultant.
- j. In general, landfilling within a floodplain is not supported. However, Floodplain Landfill Applications will be treated on their merits based on the following:
 - No net loss of flood storage and/or conveyance within the floodway extents
 - No net loss of flood storage within the 1% annual exceedance probability (AEP) critical duration flood. This requirement must address the cumulative impacts on flood levels from similar development on other areas of the floodplain.
 - The alteration of local drainage or overland flow contours and/or natural watercourses must not adversely affect adjacent property.
- k. Council may require the undertaking of detailed hydrologic / hydraulic modelling and survey contour plans by a chartered professional Civil Engineer or equivalent which addresses cumulative impacts.
- g. Where landfilling is proposed within 40m of a watercourse, under the *Water Management Act 2000* a Controlled Activity Approval must be obtained from the NSW Office of Water.
- h. Where work involves the reconstruction of creek lines, reclamation or dredging works, a separate permit will be required from the Department of Primary Industries under the *Fisheries Management Act 1994*.
- i. If the existing dam is proposed to be decommissioned and filled, the consent authority will impose conditions of development consent regarding type of fill and compaction of soil.

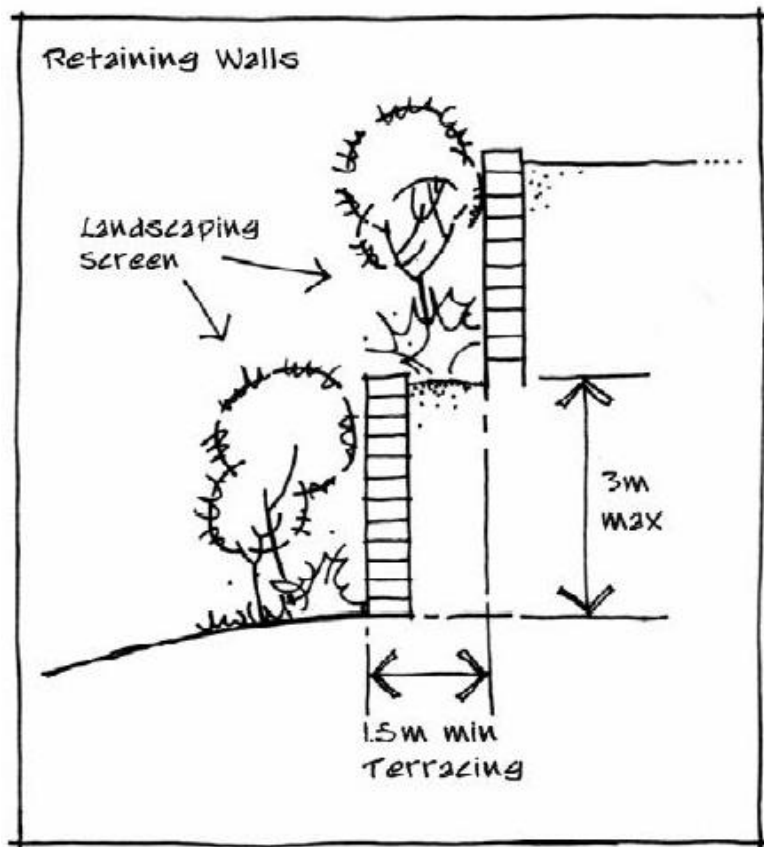


Figure 9 Retaining Wall

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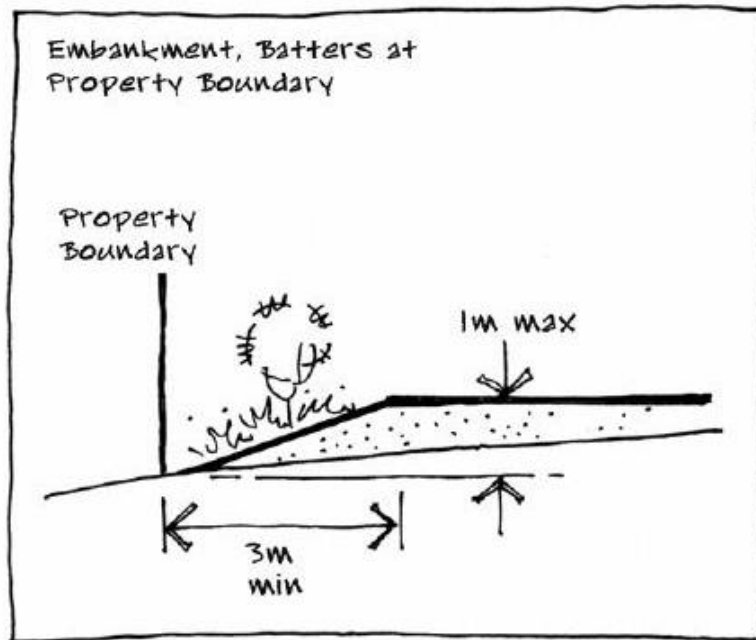


Figure 10 Embankment Batter

3.6 Safety and security

Objectives

- To ensure personal safety for workers and visitors to the site.
- To ensure that the siting and design of buildings and spaces decreases the opportunity for crime and maximises opportunities for passive surveillance.

Controls

- All development should aim to provide casual surveillance to the street and public domain areas as a means of passive security.
- Provide separate pathways for pedestrians, vehicles, and cyclists where relevant to maximise safe access within the precinct.
- Appropriate lighting should be provided to all cycle and pedestrian paths, bus stops, carparks and buildings.
- Use of CCTV should be used where appropriate to maximise security of individual sites.
- Landscape treatment should not create opportunities for concealment or unreasonably reduced site lines.
- Development which has the potential to present a crime risk will require a Crime Risk Assessment Report (Safer by Design Evaluation) to be submitted with the DA. The report should address the 4 Crime Prevention Through Environmental Design Principles of surveillance, access control, territorial reinforcement and space management. The guideline for *Safer by Design - A Practical Guide to Crime Prevention Through Environmental Design* prepared by NSW Police should be referenced in undertaking the assessment.

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4.0 Traffic, Parking and Key Access Points

4.1 DCP requirements

In accordance with Schedule 4 of the WSEA SEPP, Section 4 provides development controls to guide the delivery of road and transport infrastructure in accordance with the Indicative Concept Plan and ensure that the precinct will link to other surrounding industrial precincts by all modes of transport.

4.1.1 Overview of planned road infrastructure

The proposed Archbold Road will link to Lenore Drive, providing a main connection through the site, a vital entry point into the site, and an important north south connection for the wider region via the M4 Motorway and the Southern Link Road. The BWSEA Transport Plan specified Archbold Road as an Arterial Road which has a posted speed limit of 80km/hr with intersection spacing of 1km and road reservation of 45-70m wide (including a median) and off road cycleway however this will be confirmed through detailed design and future traffic modelling. Archbold Road is planned to service local bus services, with bus stop locations yet to be confirmed, and is planned to have a future on road cycleway. New local industrial roads will be constructed in accordance with the requirements of this DCP and the general layout in the Indicative Concept Plan to provide access to individual allotments.

4.2 Roads and traffic

Objectives

The development principles that have been adopted for the site's road system are:

- Ensure that the street system for the site establishes a logical hierarchy for the site and its connections to the Ropes Creek Precinct and the broader WSEA.
- Ensure that the system of public streets within the site and connections to adjoining sites is designed to balance the needs of pedestrians, cyclists, motorists and buses.
- Ensure that road and pedestrian linkages with the surrounding areas provide access to employment opportunities for neighbouring residential areas.

Controls

- The layout of the road network for the site is to generally accord with the Indicative Concept Plan (**Figure 5**). Where substantial variation is sought, compliance will need to be demonstrated with the abovementioned development principles.
- The design of roads and pathways within the site should be consistent with Blacktown Council's *Engineering Guide for Development 2005*, unless variation in the road reserve responds to specific traffic modelling and requirements. The general requirements of Council's Guide are outlined in Table 1.

Table 1 Recommended road hierarchy and road widths

Road Type	Carriageway (metres)	Verge (metres)	Total Road Reserve (metres)	Number of lanes
Industrial				
Collector Within new industrial areas	15.5	3.75	23	2 travel lanes and 2 parking lanes
Other industrial (Local)	13.5	3.5	20.5	2 travel lanes and 2 parking lanes

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- c. Vehicular ingress and egress to the site must be in a forward direction at all times.
- d. Turning heads of culs-de-sac in industrial areas should have a minimum radius of road reserve of 17m and a carriageway radius of 13.5m.
- e. Intersections must be provided with splay corners at the road reserve boundary in accordance with Council standard policy (8m x 8m for industrial development) and kerb lines of 8.5m radius or as required by Council in certain circumstances to allow for the provision of roundabouts.
- f. Council may require a Traffic Assessment to determine the trip generation and impacts from the proposed development during construction and/or operation.
- g. Where appropriate within the precinct, freight handling facilities are encouraged to be collocated to maximise synergies between industries with regard to materials handling.

4.3 Pedestrians and Cycling

Objectives

- To encourage active transport around the site and maximise permeability between allotments.
- To ensure safety between pedestrians, cyclists and vehicles.

Controls

- a. Applicants are encouraged to incorporate, in the design of their buildings, safe storage/parking areas for bicycles, with adequate shower and change facilities provided for staff (where appropriate).
- b. Footpaths are to be a minimum of 1.2m.
- c. Pedestrian bike link in the Ropes Creek riparian corridor, as shown in Figure 6 should be a minimum of 3m width

4.4 Car Parking

Objectives

- To provide parking areas that are convenient and sufficient for the use of employees and visitors generated by new developments.
- To ensure that vehicular access and circulation is safe and efficient and minimises potential vehicular and pedestrian conflict.

Controls

- d. Car parking is to be provided for specific types of development in accordance with the standards shown in

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Table 2. Parking is to be provided off-street and is to be readily identifiable and accessible from public roads.

- e. For activities not specifically identified in

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Table 2, car parking requirements will be determined on the merits of the application.

- f. Car parking areas should be in accordance with setback controls outlined in 3.3.1..
- g. All parking areas must provide for disabled parking in accordance with the provisions of the *Building Code of Australia* and relevant Australian Standards.
- h. The use of stack parking is not permitted.
- i. For industrial development bicycle parking should be provided at the rate of 1 bicycle locker or other suitable form of secure bicycle accommodation is to be provided for every 200 m² Gross Floor Area (GFA).

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Table 2 Car parking requirements

Land use	Car parking requirement *(GFA)
Bulky goods premises	1 space per 45sqm GFA
Child Care Centre	1 space per employee, plus 1 space per 6 children or part thereof for parents and visitors
Light industry, general industry, heavy industry, warehouse or distribution centre	1 space per 100sqm GFA for industrial buildings Plus 1 space per 40sqm GFA for the office component
Commercial / office	1 space per 40sqm GFA
Associated showrooms	1 space per 45sqm GFA
Pub and registered club	1 space per 18.5sqm GFA
Retail premises and business premises	200sqm or greater – 1 space per 22sqm GFA Less than 200sq.m – 1 space per 30sqm GFA
Service station	6 spaces per work bay Plus 1 space per 20sqm ancillary retail GFA
Takeaway food and drink premises	12 spaces per 100sqm GFA. Plus 1 space per 5 seats or 1 space per 10sqm dining area, whichever is the greater
Vehicle sales or hire premises	1.5 spaces per 200sqm site area

Note: GFA = Gross Floor Area

4.4.1 Parking area design and access

Objectives

- To ensure that vehicles can enter and exit premises in a safe and efficient manner.
- To minimise the impact of vehicle access points on the quality of the public domain and pedestrian safety.
- To provide off-street manoeuvring, loading and docking facilities that are adequate for the operational needs of the activity and use.

Controls

- Applicants are required to submit plans and details of proposed vehicular access and circulation for Council's approval with the DA. Details must specifically relate to vehicular movement, layout and turning circles.
- The development is to comply with the requirements of *Austroad's Guide to Traffic Management*.
- No direct vehicular access is to be provided from Lenore Drive or Archbold Road, in accordance with the Indicative Concept Plan (**Figure 5**).
- Parking areas should be designed to minimise the potential for vehicular / pedestrian conflict. Pedestrian pathway connections between car parking areas and buildings are desirable.
- Ingress and egress to or from the site should be located where they will cause the least interference with vehicular and pedestrian movement on public roads. Road access to parking areas will not be permitted in close proximity to traffic signals, intersections or where sight distance is considered inadequate by Council. The number of access points to be provided from any site to any one street frontage should be limited to one ingress and one egress. A separate entrance and exit should be provided where more than 50 spaces are proposed or where the development generates a high turnover of traffic.

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- f. The potential for on-street queuing should be eliminated by the provision of sufficient standing area for vehicles entering the carpark and loading areas.
- g. All developments must be designed and operated so that a standard single unit truck (as defined by *Austrroads Design Vehicles and Turning Path Templates* (Austrroads 2013)) may complete a 3-point or semi-circular turn on the site without interfering with parked vehicles, buildings, landscaping or outdoor storage and work areas. Large-scale developments shall be designed to accommodate semi-trailers. In general, turning circles will be required to be provided to accommodate the largest type of truck which could reasonably be expected to service the site.
- h. All internal two-way roadways are to have a minimum width of 7m. Lesser widths may be considered for one-way aisles. All internal roadways, circulation and parking areas are to be sealed with a hard-standing, all-weather material. Direction arrows are to be shown on all internal roadways in order to facilitate the satisfactory movement of vehicles.
- i. Service vehicle areas should be provided off-street with convenient access. In larger developments, service areas should operate independently of other parking areas. This includes access for loading, unloading, inspections and cleaning of vehicles.
- j. Bay and aisle dimensions should be consistent the relevant requirements of Australian Standards, AS/NZ 2890.1:2004 and AS/NZ 2890.6:2009.
- k. Driveway crossover accesses by heavy vehicles should be a minimum of 9m wide, when measured at the kerb alignment.
- l. All parking areas and access roadways must be provided with a drainage system which includes surface inlet pits. Details of pipe sizes (with capacity calculations) and drainage layouts (including discharge points) must be submitted with the DA.

4.5 Public transport

Objectives

- To encourage the use of public transport by providing clear and safe pedestrian links to public transport stops.
- To provide comfortable and safe areas waiting areas at public transport stops.

Controls

- a. Bus stop locations should correspond to the location of intersections to the local industrial roads off Archbold Road.
- b. Bus stops should be designed to provide suitable shelter and seating.

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5.0 Infrastructure Services

5.1 DCP requirements

In accordance with Schedule 4 of the WSEA SEPP this section of the DCP includes provisions in relation to utility services including water, sewerage, drainage and stormwater, telephone, electricity and gas supply. Other considerations should include stormwater management systems, rainwater harvesting from roofs and protecting water quality.

5.1.1 Overview of existing conditions

The future intensification of land uses for industrial purposes will require the installation of new infrastructure and upgrades to existing infrastructure. There may be opportunities for shared infrastructure to be provided between the WSEA precincts.

An overview is provided below for the likely sources to support utility infrastructure for the Precinct:

- **Water:** To service the site with reticulated water, a water main will be required to be constructed through the area immediately east of the site. This will be dependent on the upgrade of trunk mains and the Minchinbury Reservoir.
- **Electrical infrastructure:** New sub-station/s will likely be required to service the demands for industrial development. Opportunities for shared infrastructure between the Eastern Creek Precinct should be further explored.
- **Sewage:** The Precinct is situated within the catchment area of the St Mary's Sewage Treatment Plant (STP). A new sewer under Ropes Creek will be required to discharge to the East St Clair carrier. This carrier has adequate capacity to carry light industrial sewage discharges from the site.
- **Telecom:** telecommunication services will need to be extended from Wallgrove Road to provide infrastructure to the Ropes Creek Precinct.
- **Gas:** Reticulate gas has been provided within the Erskine Park residential area to the west of the Precinct and would be available to the site.

Sections 5.2 - 5.7 detail the development controls for utility services.

5.2 Water Services

Objectives

- To develop a water supply system that conforms to the requirements of Sydney Water and Blacktown City Council.

Controls

- a. Developers will be required to fund and construct trunk water mains, extend and/or amplify existing mains, and undertake all required reticulation works. Water mains will need to be designed to service full development of the Precinct. Water reticulation mains, to be supplied by the developer, must be laid within the road reserve and the design of the public roads will need to take this into consideration.
- b. The developer must complete a hydraulic assessment of the development, including firefighting capability. On-site water storage, and/or booster pumps may be required to supplement the reticulated water supply for firefighting purposes.
- c. Development consents granted by Council for most forms of development will include a condition requiring the applicant to provide evidence that arrangements satisfactory to Sydney Water have been made by the applicant for water supply to the development.
- d. This evidence consists of a Certificate under Section 73 of the *Sydney Water Act 1994*, stating that the applicant has paid a contribution towards water services or has made other suitable arrangements.

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5.3 Sewage Services

Objectives

- To develop a sewerage system that conforms to the requirements of Sydney Water and Blacktown City Council.

Controls

- a. At construction certificate stage, the applicant is to provide evidence that arrangements satisfactory to Sydney Water have been made for sewer connection to the development. This evidence consists of a Certificate under Section 73 of the *Sydney Water Act 1994*, stating that the applicant has paid a contribution towards the required services or has made other suitable arrangements.
- b. Development is required to address the potential impact on downstream recipients of effluent, not only with respect to volume but effluent quality.
- c. Commercial premises will be required to comply with Council's environmental health requirements and the current version of Sydney Water Corporation's Trade Waste Policy and Management Plan to ensure that the trade wastewater is of a quality that can be treated, reused or disposed of in an environmentally sound manner.

5.4 Electrical

Objectives

- Provision of safe and reliable electricity that meets the installation and operational requirements of the service provider as well as user demand.
- To allow for the development of the Precinct, while protecting existing electrical infrastructure and facilitating future foreseeable upgrades.

Controls

- a. Applicants for development are required to make satisfactory arrangements with an electricity provider for:
 - The provision of low voltage electricity to the site; and
 - The installation of street lamp brackets and fittings.
- b. Applicants will be required to obtain a certificate from the service provider outlining their notification of arrangements for servicing the site including the provision of street lighting.
- c. Electricity infrastructure is to be placed underground in shared trenches.

5.5 Telecommunications

Objectives

- Ensure the supply of a telecommunications network that meets supplier and user demand and is capable of accommodating foreseeable advances in information technology.

Controls

- a. Development is required to meet the installation and operational requirements of the network providers.
- b. Infrastructure for the future provision of fibre optic cables is to be installed in all new subdivisions. Applications for subdivision are to indicate the location of piping for these services.

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5.6 Gas

Objectives

- To develop a gas system that conforms to the requirements of the service provider and Blacktown City Council.

Controls

- a. All gas supply infrastructure is to be installed underground in shared trenches.

5.7 Transmission easement

Objectives

- To ensure that the transmission easement is protected and no unsuitable development will interfere with this infrastructure

Controls

- a. Buildings and structures are not generally permitted within the transmission easement, as illustrated in Figure 10
- b. Approval for any works within the transmission easement is subject to approval by the relevant authority to this easement.

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6.0 Environmental Management

6.1 DCP Requirements and Existing conditions

DCP requirements

Clause 20 of the WSEA SEPP establishes guiding principles designed to ensure environmentally sensitive development. These predominately relate to reducing greenhouse gas emissions and water conservation. In accordance with these principles and Schedule 4 and of the WSEA SEPP, Section 5 of this DCP approach encompasses water cycle management, energy efficiency, waste minimisation, contamination, salinity, air quality, noise, and visual amenity.

Existing conditions

- Areas of high ecological value are zoned E2 Environmental Conservation under the WSEA SEPP. The biodiversity and riparian assessment undertaken for the site determined that the site contains Critically Endangered Ecological Communities (CEEC) and habitat for threatened species listed under the NSW *Threatened Species Conservation Act 1995* and the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999*. Areas of high conservation value are found along the major riparian corridor of Ropes Creek and a minor tributary running north-west – south east across the site.
- The site contains four tributaries as follows:
 - Ropes Creek is located adjacent to the western boundary of the site and is classified as a 3rd order stream. Ropes Creek is in moderate condition with mostly intact riparian vegetation and a variety of aquatic habitat.
 - The Northern tributary is classified as a 2nd order stream and is in moderate-poor condition with large portions of riparian vegetation missing and shallow aquatic habitat. The creek is severely eroded in parts, especially beneath the power lines where tree management is likely implemented.
 - The southern tributary is classified as a 1st order stream and is in poor condition with large segments having no channel bed or bank.
 - South-east creek (eastern branch) is classified as a 1st order stream is a narrow creek beginning at the Lenore Drive box culverts and detention ponds. It is in poor condition with dense *Juncus acutus* weeds and no canopy (beneath power lines).
- The site also contains a number of riparian zones. Site survey revealed that whilst Ropes Creek and the main tributary provide reasonably good riparian habitat in parts, the other watercourses and dams on site offer little or no aquatic habitat of value. In particular the tributary with the large dam is in poor condition with the dam itself being extensively dominated by the noxious weed *Salvinia molesta*. Removal of this weed from the site will need to be undertaken with care to ensure the *Salvinia molesta* is not transported to Ropes Creek.
- No items of high or moderate archaeological value are identified on the site. A building of heritage significance is located on the site near the transmission easement; however it is in a state of complete disrepair and is not considered a constraint.
- Whilst rehabilitation efforts will be required to reduce the impact of weeds, these areas currently provide connectivity through the site for fauna. These areas align reasonably well with the lands that are zoned E2 Environmental Conservation in the WSEA SEPP.
- Western parts of the site are identified as having a low risk to flooding.
- The site is gently undulating with the lowest lying land along Ropes Creek (approximately RL 50), and the highest peak at RL 90 in the south eastern corner.

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6.2 Ecologically sustainable development

Objectives

- To ensure that the principles of ecological sustainable development are incorporated into the design of industrial development.

Controls

- a. All development must have regard to minimising greenhouse gas emissions and the consumption of potable water.
- b. The roof area should be directed to a rainwater tank and should be maximised to both increase the effectiveness and reliability of the reuse system.
- c. Development shall incorporate water efficient fixtures such as taps, showerheads, and toilets. The fixtures must be rated to at least AAA under the National Water Conservation Rating and Labelling Scheme. Where the building or development is water intensive (ie. high water user), specific water conservation objectives must be resolved with Council.
- d. Development should incorporate energy efficient hot water systems, air-conditioning, lighting and lighting control systems.

6.3 Biodiversity

6.3.1 Significant vegetation

Objectives

- To protect, restore and enhance the environmental values of significant vegetation and waterways.
- To ensure that noxious weeds are not spread throughout the site.
- To ensure that infrastructure does not unreasonably disturb environmentally sensitive areas.

Controls

- a. Tree and vegetation preservation is to be in accordance with Clause 32 of the SEPP WSEA 2009, Clause 5.9 and 5.9AA of Blacktown LEP 2015, and Clause 4.3 of Blacktown DCP 2015.
- b. A Vegetation Management Plan for the significant vegetation within the Site is to be prepared by a suitably qualified consultant and in accordance with the *NSW Office of Water Guidelines for Development on Waterfront Land*. If riparian corridors cannot be retained in public ownership, a Vegetation Management Plan is to be prepared and submitted with each development application for development of the adjoining employment lands. Implementation of each plan is the responsibility of the land owner of the adjacent employment lands.
- c. Areas mapped as 'Protected and managed' in Figure 11 are to be protected and conserved. Development is to be avoided in this area.
- d. Areas mapped as 'revegetation' in Figure 11 are to be restored and revegetated as part of any future development and be consistent with the recommendations of the future Vegetation Management Plan. Development is to be avoided in this area.
- e. The removal of native vegetation is to consider biodiversity offset in the areas identified for revegetation in Figure 11
- f. Removal of hollow bearing trees (if granted consent) is to be in accordance with best practice to minimise risk of injury to animals.
- g. Services such as sewer, electricity, gas and communications should be located outside the core riparian zone. Where services must traverse the core riparian zone, the installation process should be limited to non- destructive techniques such as direct drilling or boring and be designed to minimise the impact of maintenance or repair work. It must also be demonstrated that there will be minimal impact on the riparian function and the integrity of the riparian land is maintained.

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- h. Works such as environmental protection works and essential drainage from urban development and crossings may be located in the core riparian zone and vegetated buffer, however, it must be demonstrated that there will be minimal impact on the riparian function and the integrity of the riparian lands is maintained.



Figure 11 Recommended vegetation protection and management areas

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6.3.2 Riparian zones

Objectives

- To ensure stability to the watercourse, improvement in water quality, and provision of habitat for terrestrial and aquatic fauna.
- To conserve and improve the condition of riparian corridors and areas of high conservation value.
- To ensure that the removal of any existing dams does not cause the spread of noxious weeds or have other biodiversity impacts to the Site.

Controls

- a. Buffer zones around watercourses and riparian corridors are to be designed in accordance with recommended buffers outlined in
- b. Table 3 and Figure 12. For watercourses, riparian buffer areas are to be measured from the top of the bank. For dams, riparian buffers are to be measured from the bank of the dam, or if the dam is removed, measured from the reconstructed creek.
- c. The NSW Office of Water is to be consulted if it is proposed to modify or remove a creek or riparian zone and have a reduced buffer around this area in accordance with Figure 12
- d. If the dam contains *Salvinia molesta* and is to be removed, a dam decommissioning plan is required to be prepared. The implementation of this plan is to ensure this *Salvinia* weed is not transmitted to any drainage lines on the site.
- e. Core riparian zones and the vegetated buffer must be maintained, restored or rehabilitated to the full extent of the core riparian zone using locally endemic and indigenous species and include full structural floristics of the endemic vegetation community such as canopy, understorey and groundcover species

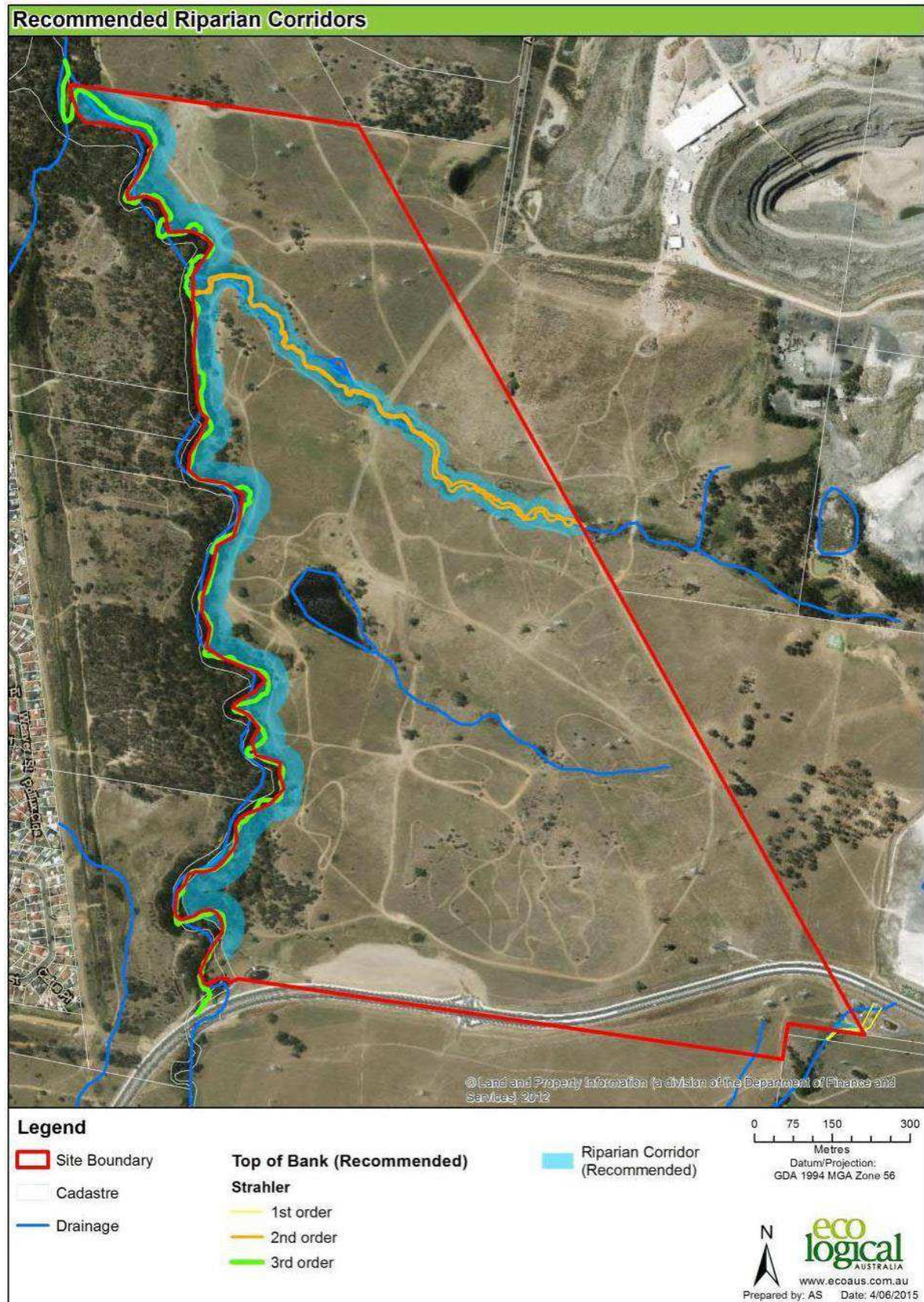
Table 3 Riparian Buffer Recommendations

Waterbody	Conservation significance	Water NSW Guidelines – buffer	Recommended Buffer *
Ropes Creek	High: This creek has a functioning riparian zone containing endangered ecological communities.	30m	30m
Northern tributary	Moderate: whilst the watercourse and riparian zone are degraded in parts, this watercourse provides a link through the site which provides moderate habitat values that could be enhanced with restoration.	20m	20m
Southern tributary	Low: Whilst a riparian zone could be rehabilitated, the catchment for this creek is small and will not provide an important link to other aquatic habitats.	10m	Nil
South-east creek (western branch).	Nil: No evidence of channel.	10m	Nil
South-east creek (eastern branch).	Low: Highly weed infested	10m	10m

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* Consultation with NSW Office of Water required prior to these buffers being implemented.

Source: Eco Logical Australia 2016



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Figure 12 Recommended riparian buffer zones

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6.4 Water Sensitive Urban Design

Control

- a. The provisions of Part J (Water Sensitive Urban Design) of Blacktown Development Control Plan 2015 apply to all development within the Site to which this DCP applies.

6.5 Topography and geotechnical conditions

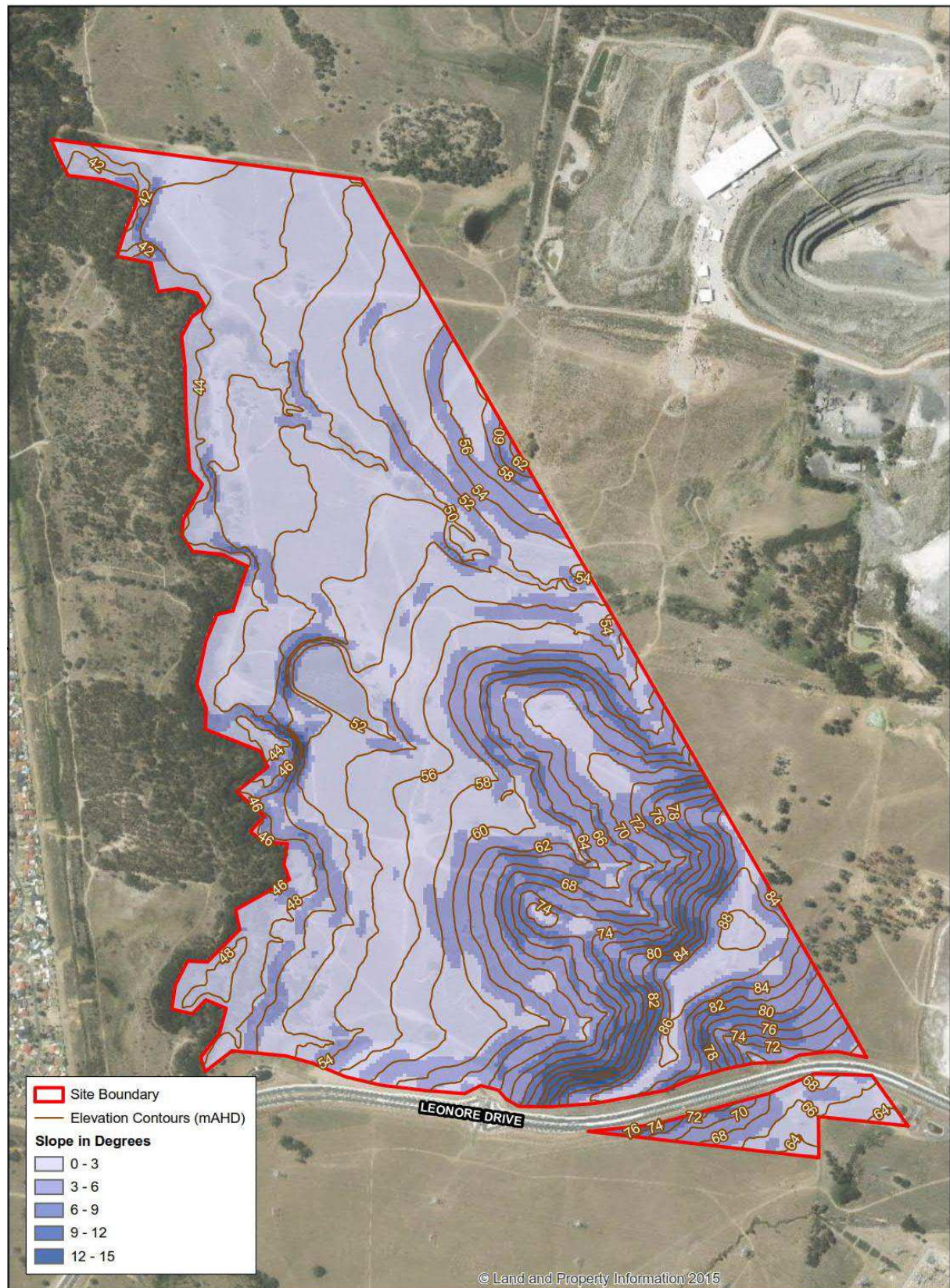
Objectives

- To encourage development to be designed in response to the natural topography of the site to minimise ground disturbance, movement or land slip.
- To ensure that any substantial modification to sloping areas to support industrial development is managed appropriately to reduce the impact of erosion and soil stability.
- To minimise the visual impact of development of land at higher elevations on adjacent sites or public roads at lower elevations.
- To ensure that landfilling associated with the existing dam does not adversely affect the soil stability for future development in that location.

Controls

- b. For ground modification works, a geotechnical assessment is required to be prepared by a suitably qualified consultant to identify that an acceptable level of risk is achieved with respect to the likelihood of movement, landslip or other geotechnical hazard adversely affecting the proposed subdivision or development or being caused by the proposed subdivision or development.
- c. Development of land on sloping sites, particularly in the south-east corner of the site as shown in Figure 13 is to have regard to the impact of bulk and scale and overshadowing on neighbouring sites, and public roads.
- d. Council will impose conditions of development consent regarding type of fill and compaction of soil for alterations to dams. DAs on land where an existing dam is present will require the submission of a geotechnical assessment to establish the suitability of land for the proposed development, as well as back filling of the dams and remediation work where required.

Note - Also refer to controls at Section 3.5 of this DCP (Cut and Fill).

DRAFT**Figure 13 Topographical constraints**

Source: WSP Environmental Pty Ltd

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6.6 Flooding

Objectives

- To ensure that development does not increase the flood hazard or extents.
- To ensure that development within flood affected land is appropriately designed to minimise damage to property or risks to loss of life.

Controls

- a. Council may require a flood assessment to be undertaken for allotments that are flood affected, within an overland flow path or in proximity to such land – refer to Figure 14. The assessment would need to demonstrate that the development will not increase flood impacts, hazard or damage to other properties. Specifically, in accordance with the WSEA SEPP 2009, the assessment may need to address the following (subject to advice from Council):
 - the impact of flooding on proposed development, including an estimation of the extent of flood prone land, high hazard areas and floodways, the implications of the full range of floods and the safety of people using or within the site;
 - the impact of proposed development on flood behaviour on and off the site (including existing and planned development in the wider area);
 - the flood hazard in the area (including hydraulic hazard, flood warning time, rate of rise of floodwater and duration of floods) and access and evacuation issues; and
 - viable strategies to manage any adverse impact of proposed development on flood behaviour.
- b. In general, Council will not support development, including the filling of land, within the floodway due to its function as the main flowpath for flood waters once the main channel has overflowed and the possibility of a significant threat to life and property occurring in a major flood.
- c. For industrial and commercial buildings, the floor level is to incorporate a minimum 500mm freeboard above the designated flood level.
- d. Buildings within a flood prone area are to be constructed with materials approved by Council's Building Services Team, resistant to damage by immersion by flood waters for prolonged periods, to the satisfaction of Council.
- e. Council will require that applications for development within the floodway and the flood fringe are accompanied by a survey plan prepared by a Registered Surveyor which shows:
 - The boundary of the allotment of land and its location with respect to the road that it fronts
 - The location of any proposed building and filling in relation to the boundaries of the land as follows:
 - contours of the existing natural surface to Australian Height Datum at intervals of 100mm / 1% average grade of the site (e.g. if 2% grade - interval is 200mm, if 3% grade - interval is 300mm, etc). However, the one interval shall be used for the complete survey plan
 - When the proposed building / filling site for any type of development is more than 10m from the bank of the creek which generates the flooding and the level of the natural surface in this distance is generally higher than the natural surface at the proposed site by more than 100mm, then the survey plan must indicate the level and extent of this high area within the property.
 - Where any filling is proposed, the survey plan must clearly indicate that this will not create a damming effect in any localised depression, both on the subject and adjoining allotments.
- f. The origin, nature and value of the datum used to establish the levels of the survey are to be shown on the survey plan. If the origin of the levels is beyond 200m from the particular site of the survey, a temporary bench mark is to be established in an accessible location and details of its nature and value are to be shown on the plan.

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- g. Where the applicant proposes to construct flood-free access on the site by filling in excess of 200mm compacted depth above the natural surface level, the survey plan must indicate the following details:
- The location of the proposed access in relation to the boundaries of the land
 - Contours of the existing natural surface to Australian Height Datum
 - If a culvert is proposed to prevent a damming effect, the culvert size must be properly calculated and the calculations submitted to Council for approval
 - The Registered Surveyor's name, qualifications and signature.

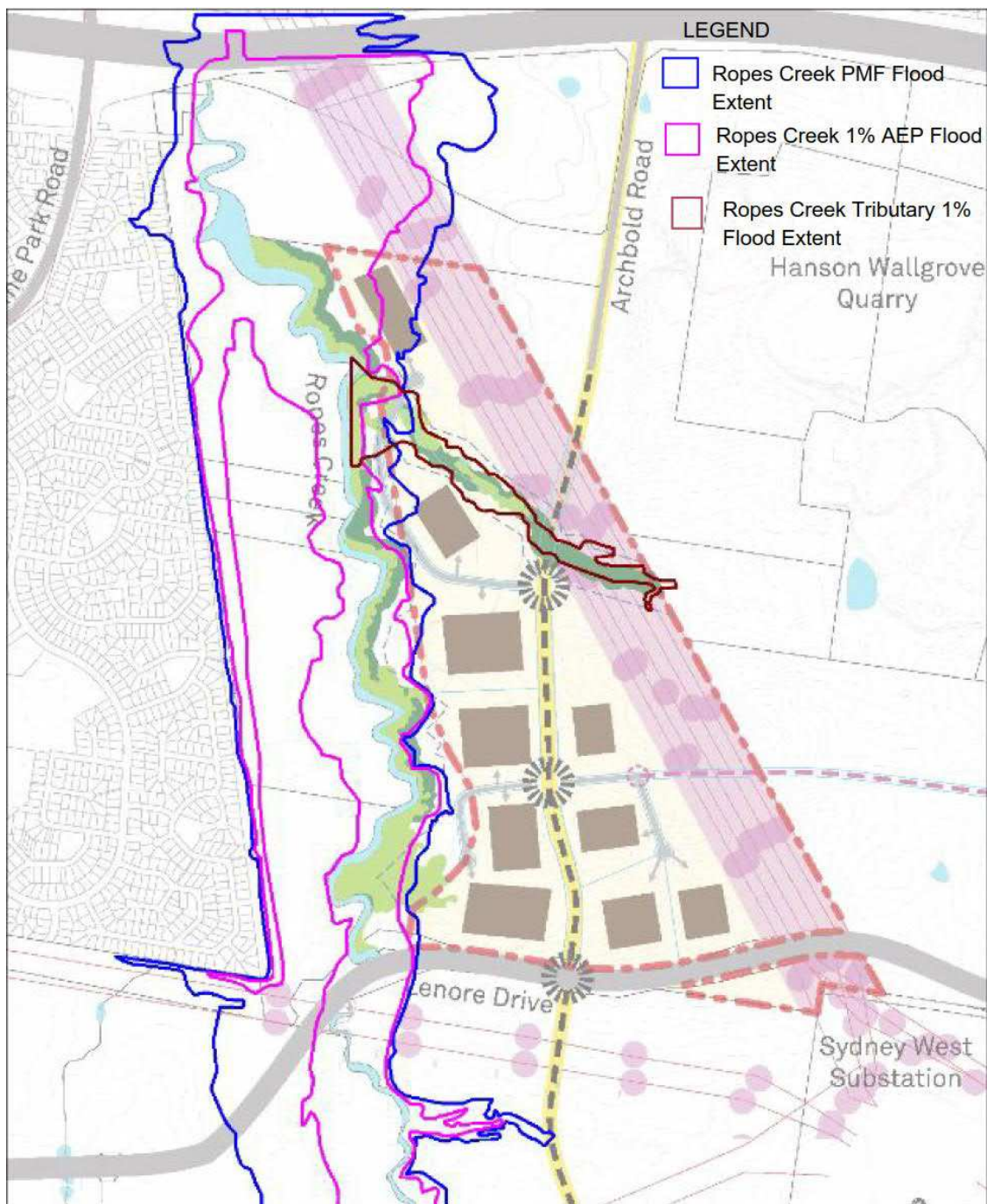


Figure 14 Flood Prone Areas
Source: Cardno

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6.7 Heritage conservation

6.7.1 Indigenous Heritage

Twenty items of indigenous heritage significance are located within the Precinct (Figure 15)

Dense ground cover prevented the location of further artefacts, however the topography, general lack of disturbance, proximity to water and the presence of multiple sites in close proximity, suggests that additional Aboriginal objects or sites both on the surface and in subsurface are likely to be present within the study area.

Any future development of the subject site will result in ground modification that may have the potential to disturb Aboriginal cultural objects in the form of stone artefacts.

6.7.2 Non-Indigenous Heritage

The subject site is assessed as having high potential for the survival of an archaeological resource relating to the occupation and development of the Chatsworth Estate homestead site over time (Figure 16). The archaeological resource is assessed as possessing local significance for association with the Chatsworth nursery and the Shepherd family. Despite their association with the development of the site, buildings such as the cottages on the hill, the long agricultural shed, the stables and the stock yards are not considered to contain a significant archaeological resource. These items are common on rural properties and were all constructed around or after 1900.

Objectives

- To ensure that any archaeological sites that are discovered are protected in accordance with the National Parks and Wildlife Act 1974.
- To conserve and record the significance of the former European Farm uses within the site.
- To encourage the interpretation of the former Chatsworth Farm within the new development.

Controls

- a. Archaeological remnants of Chatsworth Farm are to be researched and mapped prior to development or subdivision occurring on the site. Opportunities for retention of remains and future interpretation are to be investigated prior to approval of any future DAs pertaining to the site.
- b. A heritage curtilage should be established around the sensitive area similar to that in Figure 16 that prevents and protects the archaeological resource from any impact or disturbance and conserves it in situ. An Archaeological Management Plan should be developed to manage this resource.
- c. If development of the archaeologically sensitive area is proposed, no ground disturbance works may proceed in areas identified as having historical archaeological potential without first obtaining an Excavation Permit pursuant to Section 139 of the Heritage Act 1977.
- d. Preparation of a research design and excavation methodology for the excavation of the site should accompany an excavation permit application to the Heritage Division OEH.
- e. Following the archaeological investigation, an excavation report would be prepared detailing the findings of the investigation, along with a catalogue and analysis of recovered artefacts. These items could then be removed according to regulations. No state heritage items would be removed from the site.
- f. An interpretation plan should be developed for the site as a whole outlining the history and heritage values prior to commencement of any substantial development on the site.
- g. The history of the site should be considered when determining names of streets and places as part of the site's future development.

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Figure 15 – Non-Indigenous Archaeological Sites (source Eco Logical)
Source: Eco Logical Australia



Figure 16 Area of historical archaeological sensitivity (dashed red line and potential curtilage) and location of homestead (blue)
Source: Eco Logical Australia

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6.8 Contamination

Objectives

- To minimise the risks to human health and the environment from the development of potentially contaminated land.
- To ensure that potential site contamination issues are adequately addressed at the subdivision stages.

Controls

- a. A Stage 1 – Preliminary Site Contamination Investigation is to be undertaken for the Site to determine potential contamination risks associated with previous rural uses. A Stage 2 assessment will be required where the Stage 1 report identifies that the site is potentially contaminated. A Remediation Action Plan (RAP) will be required for areas identified as contaminated land in the Stage 2 Investigation.
- b. All investigation, reporting and identified remediation works must be in accordance with the protocols of the NSW EPA's Guidelines for Consultants Reporting on Contaminated Sites and SEPP 55 – Remediation of Land.
- c. Prior to granting development consent, the Council must be satisfied that the site is suitable, or can be made suitable, for the proposed use. As detailed under SEPP 55, Category 1 remediation works identified in any Remediation Action Plan (RAP) requires consent prior to the works commencing; and Category 2 remediation works require the consent authority to be notified. Council may require a Site Audit Statement (SAS) (issued by an OEH Accredited Site Auditor) where remediation works have been undertaken to confirm that a site is suitable for the proposed use.

6.9 Pollution control

6.9.1 Water pollution

Objectives

- To ensure that water pollution is minimised and mitigated against.

Controls

- h. If the premises are subject to licensing under the *Protection of the Environment Operations Act 1997*, any conditions of such a licence will form part of any building approval.

6.9.2 Air Quality

Objectives

- To Ensure that the construction and operation of the development does not cause adverse environmental impacts from air pollutants and odour.

Controls

- a. Pollution and odour management practices are to be in accordance with the requirements of the *Protection of the Environment Operations Act 1997*.
- b. For development that will generate air pollution and odour an air quality assessment is to be undertaken, including recommendations for buffers and mitigation measures. This information is to be provided in DAs.

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6.10 Waste storage and removal

Objectives

- To ensure that waste is appropriately stored and disposed of.

Controls

- a. Incinerators are not permitted for waste disposal.
- b. Adequate storage for waste materials must be provided on-site and any such waste must be removed at regular intervals and not less frequently than once per week. Proposed arrangements for the removal of waste must be detailed with the Development Application.
- c. Sydney Water may require applicants to enter into a Trade Waste Agreement for the collection and removal of trade waste in relation to a proposed development.

6.10.1 Noise and vibration

Objectives

- To minimise the impact of noise and vibration and minimise adverse impacts on surrounding land uses.
- To ensure that development is designed to protect occupants from noise and vibration from the proposed development and surrounding uses.
- To ensure that development is designed in a manner that minimises the impact of noise and vibration.

Controls

- a. A noise assessment or acoustic report is to be submitted where:
 - new development is proposed that will create noise and or vibration impacts either during construction or operation that impacts on adjoining developments;
 - a new noise-sensitive development is proposed in an area where existing noise sources are present or identified within the Indicative Concept Plan including development adjacent to arterial roads, sub-arterial roads and collector roads; and
 - a new development that will generate traffic that may create noise and or vibration impacts on adjoining developments.
- b. Noise emission from all industrial noise generating development should be assessed in accordance with the Office of Environment and Heritage's Industrial Noise Policy (INP) document.
- c. The amenity goals for individual industrial developments should be set to 10dB below the Acceptable Noise Amenity levels so as to ensure cumulative impacts meet the 'acceptable' noise levels in Table 2.1 of the INP. Consideration however may be given to alternative amenity noise goals with provision of a detailed acoustic report (e.g. the number of industrial developments with the potential to impact upon nearby receiver locations may be considered for specific cases).
- d. In general, noise generated by a development should not exceed the existing background sound pressure level by more than 5dB(A). A statement of compliance with this standard from an experienced acoustical consultant may be required to be submitted with the Development Application.
- e. Road traffic noise impact for commercial / industrial development should be in accordance with AS2107:2000.