



Design+
Planning

Urban Design Report

Cobbitty Sub-Precinct 5 South Creek West (Part)

MARCH 2024

BHL

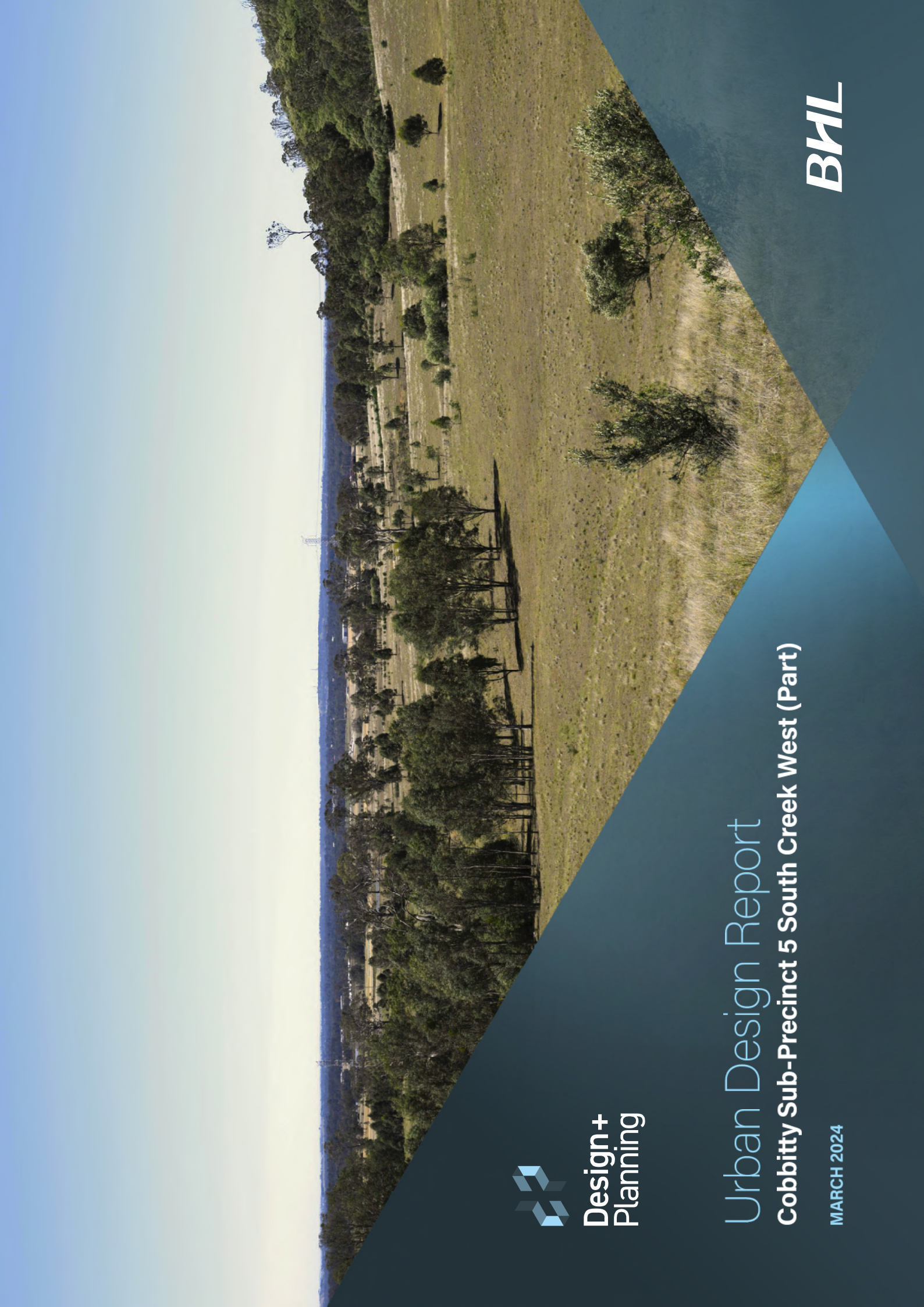


Table of Contents

1.	Introduction	3
1.1	Overview of Planning Proposal	3
1.2	Report Purpose	4
1.3	Planning Proposal Context	4
1.4	Design Principles	5
2.	Site Analysis	6
2.1	Planning Context	7
2.1.1	South West Growth Area Structure Plan	7
2.1.2	South Creek West Land Release Area	8
2.1.3	Camden Local Strategic Planning Statement	8
2.2	Current Land Zoning	9
2.3	Land Ownership	9
2.4	Access	10
2.5	Hydrology	11
2.6	Vegetation	11
2.7	Landform	12
2.8	Infrastructure and Existing Development	13
2.9	Flooding	13
2.10	Bushfire	14
2.11	Air Quality	15
2.12	Infrastructure Servicing	15
2.13	Site History and Heritage	15
2.14	Social Infrastructure	16
2.15	Retail	16
2.16	Housing Demand	16
3.	Urban Design Response	17
3.1	Vision and Design Principles	19
3.2	Indicative Layout Plan	20
3.3	Land Use Arrangement and Composition	21
3.4	Density Strategy	21
3.5	Yield and Mix	22
3.6	Housing Diversity	23
3.7	Movement and Road Configuration	24
3.8	Pedestrian and Cycle Network	25
3.9	Local Centre	26
3.10	Residential Densities and Allotment Design	26
3.11	Hilltop Investigation Area	27
3.12	Open Space	27
3.13	Heritage	28
3.14	Social Infrastructure	28
3.15	Staging	29
4.	Conclusion	

Urban Design Report
Cobbitty Sub-Precinct 5 South Creek West
Mar 2024

Prepared for: BHL

Prepared by: Design+Planning
Suite 304, 171 Clarence Street
Sydney NSW 2000

P: 02 9290 3636
E: nigelm@designandplanning.com.au

Document Status						
Version	Comment	Prepared by	Reviewed by	Review date	Approved by	Issue Date
Rev A	Draft Urban Design Report	KA	NM	16/09/2021	D+P	17/09/2021
Rev B	Draft Urban Design Report	KA	NM	29/09/2021	D+P	30/09/2021
Rev C	Draft Urban Design Report	KA	NM	02/11/2021	D+P	02/11/2021
Rev D	Draft Urban Design Report	KA	NM	16/06/2022	D+P	16/06/2022
Rev F	Draft Urban Design Report	KA	NM	13/12/2022	D+P	13/12/2022
Rev G	Final Urban Design Report	KA	NM	28/03/2024	D+P	28/03/2024

Disclaimer and Copyright

This document was commissioned by and prepared for the exclusive use of Grantlee Pty Ltd. It is subject to and issued in accordance with the agreement between Grantlee Pty Ltd and D+P.

D+P acts in all professional matters as a faithful advisor to its clients and exercises all reasonable skill and care in the provision of professional services. The information presented herein has been compiled from a number of sources using a variety of methods. Except where expressly stated, D+P does not attempt to verify the accuracy, validity or comprehensiveness of this document, or the misapplication or misinterpretation by third parties of its contents.

This document cannot be copied or reproduced in whole or part for any purpose without the prior written consent of D+P.

1. Introduction

1.1 Overview of Planning Proposal

This Urban Design Report has been prepared by Design+Planning on behalf of BHL Group (the proponent), the applicant. It accompanies a Planning Proposal for a proposed amendment to the State Environmental Planning Policy (Precincts – Western Parkland City) 2021 (Parkland City SEPP) for the site located along the Northern Road and which forms part of Cobbitty Sub-Precinct 5, in the South Creek West Land Release Area.

This planning proposal is seeking to rezone 172.68ha of land which forms 57% of Precinct 5. The remainder of Precinct 5 (130.41ha, 43%) is owned by a separate landowner, which is not subject to this Planning Proposal. The intended outcomes of this planning proposal is to amend the Parkland City SEPP as follows:

- Incorporate the site on the 'Land Application Map' for the Parkland City SEPP
- Rezone the land to part:
 - E1 Local Centre
 - MU1 Mixed Use
 - C2 Environmental Conservation
 - C4 Environmental Living
 - R2 Low Density Residential
 - R3 Medium Density Residential
- Introduce building heights as follows:
 - 9 metres for low-density residential uses, allowing for developments of up to two storeys in height.
 - 12 metres for medium-density residential uses, allowing for development of up to three storeys in height.
 - 21 metres for the village centre where mixed-use developments are proposed and will allow for development of up to 5 storeys in height.

The Planning Proposal is supported by a revised Indicative Layout Plan which will accommodate approximately 2,312 dwellings and a population of approximately 7,056 people. This will be supported by a thriving local centre and 19.98ha of active and passive open space.

The proposed ILP has also sought to embed the Government Architect's Connecting with Country design framework through its design. The ILP has designed with Country by protecting ridgelines, creeks and view corridors; celebrating the riparian corridors and waterways through incorporation into open space and locating key uses on flat parts of the site to limit cut and fill.



The proposed amendments seek to transition the existing rural landscape into a new residential community, which importantly builds on the NSW Government's vision and aspirations under the Western Sydney Growth Areas program. In line with the NSW Government's vision, a diverse range of housing typologies will be planned, targeted for and delivered to meet the residential market desire in Southwest Sydney.

This Planning Proposal also seeks to introduce a site-specific schedule to the Camden Growth Centre Precincts Development Control Plan to support the Precinct's development in accordance with the draft ILP and supporting technical investigations.

It is noted that the findings/recommendations/conclusions of this Urban Design Report were based on a previous Indicative Layout which considered the entirety of Sub-Precinct 5. The current ILP only incorporates Lots 2 & 4 in DP 1216380, Part Lot 3 in DP 1216380, Lot 4 in DP 1273487 and Lot 500 in DP 1231858.

The findings/recommendations/conclusions of this report remain relevant, providing a holistic assessment of the precinct to inform future development on the subject site. It is intended this report will be updated to reflect the refined ILP and any comments received following public notification.

1.2 Report Purpose

This Urban Design Report (UDR) presents the urban design background and design context for part of Cobbitty Sub-Precinct 5, in the South Creek West Land Release Area. The Indicative Layout Plan (ILP) represents detailed design for the site and is underpinned by an extensive urban design process undertaken to inform the rezoning of the land. The formulation of the urban design outcome has been the consequence of detailed site and context analysis, with the urban design outcome being informed by a multidisciplinary team input. The resultant Urban Design output, the Cobbitty Sub-Precinct 5 Indicative Layout Plan, demonstrates the intended urban fabric for the establishment of a new urban community which is a component of, and an addition to, the emerging South West Growth Area.

The urban design approach has been built on the three pillars of:

- Context
- Structure
- Best Practice

Each of these pillars comprise urban design principles which have been embodied into the Indicative Layout Plan.

1.3 Planning Proposal Context

The South Creek West (SCW) Land Release Area forms part of the wider South West Growth Area (SWGA). Given the scale of the release area, the then Department of Planning, Industry and Environment (DPIE) divided SCW into five distinct sub-precincts numbered 1 – 5. The land to which this Planning Proposal relates to forms part of Cobbitty Sub-Precinct 5, also known as Precinct 5. The Precinct totals approximately 303 hectares and has been characterised by rural residential and agricultural land uses and activities.

The Precinct was released by the Minister for Planning on 24 November 2017 for urban development. The release formally commenced the rezoning process for land within the precinct, including the subject site. In late 2019 the Minister for Planning and Public Space's announced a new approach to precinct planning in NSW, which saw Camden Council take the lead in the planning for the SCW with support from DPIE.

Precinct 5 is located within the south-west portion of SCW, within the suburb of Cobbitty in the Camden LGA. The Lowes Creek Maryland Precinct is located to the north of the Precinct and has recently been rezoned. The Pondicherry Precinct is located to the immediate east of The Northern Road and is in the process of being rezoned. The Oran Park Precinct adjoins Precinct 5 to the south and south-east, which contains established residential neighbourhoods and the growing Oran Park Town Centre.

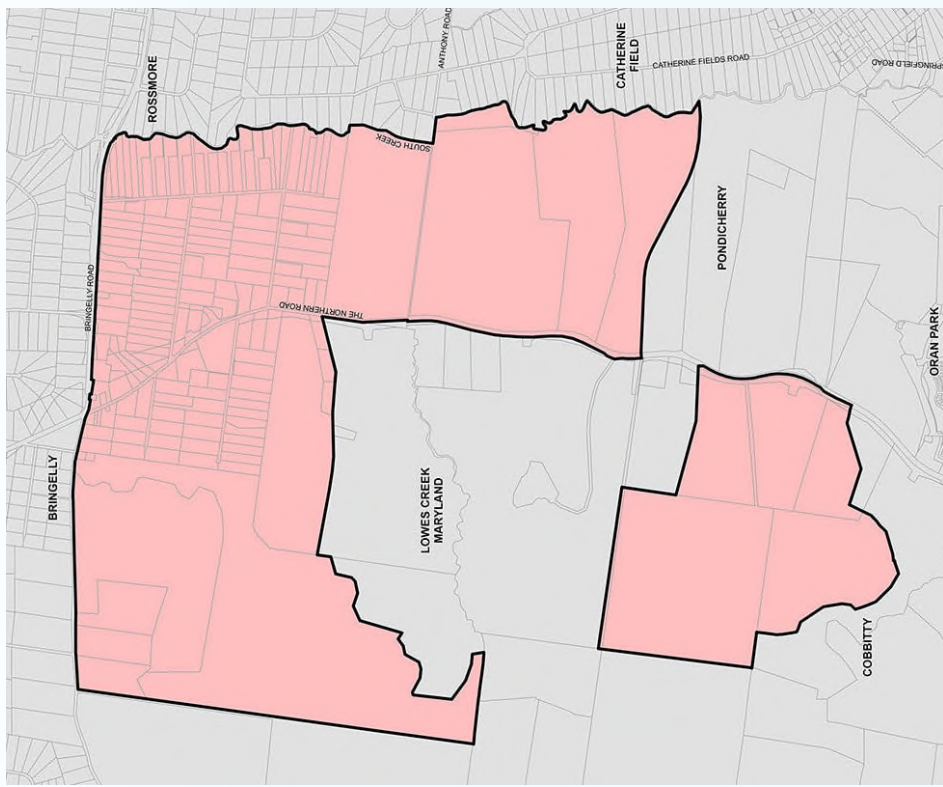


Figure 1 illustrates the site boundaries of South Creek West Land Release Area.

1.4 Design Principles

A site analysis supported by technical studies has informed the following design principles for the Indicative Layout Plan:

Phase 1 Context

Understand the existing characteristics of the site and its surrounds.

Creating great places relies on a deep appreciation of the site and its context to existing areas and places, including a strong appreciation of what elements and characteristics create the ingredients for designing and establishing a place that is uniquely local and meaningful.

Design for the place is about understanding the various elements that influence the experience of place, which is greater than just the built environment.

PRINCIPLE 1: CLIMATE

Climate responsive design is essential in managing the environmental impacts of urban areas and establishing resilient communities of the future.

PRINCIPLE 2: LOCAL CHARACTER, FORM AND CULTURE

Memorable places, places with their own identity, reflect the distinctive qualities of their physical setting, heritage and community values.

PRINCIPLE 3: WORK WITH NATURE AND LANDSCAPE CHARACTER

Integrate the local natural and landscape characteristics of the site and area into the design of the new community is essential. First is to recognise what is the 'sense of place' and then the challenge is to build and embody the critical components into making place.

Phase 3 Best Practice

Demonstrate best practice and leading-edge design and place making - design to create 'place':

To achieve great places relies on engagement with specialists to draw together the interdisciplinary influences that create better solutions and meet the urban challenges of the future, innovation and collaboration are important.

PRINCIPLE 8: TAKE THE LEAD

Innovation in creating great places is the challenge that ensures that you achieve a sustainable urban outcome. Urban design is the art of bringing together all the relevant elements associated with a place to result in an outcome that embodies resilience and adaptability over time as the place evolves from initial establishment through to maturity.

PRINCIPLE 9: ENGAGE

Engagement is the key to success. It is essential that urban design draws together the precious essence of all the various multidisciplinary elements to create a robust and adaptable place. It is essential that urban design provides the foundation for communication and engagement with decision makers and interested parties to bring places to life.

Phase 2 Structure

Establish a robust structure, an integrated and connected urban form to enable the local structure to flourish.

Creating places is delivering a rich mix of local needs for the future community, designed in a meaningful and purposeful way to ensure that the community flourishes in perpetuity.

Experience demonstrates that creating great places is achieved through designing for the place and ensuring that the local community needs are easily and conveniently accessible

PRINCIPLE 4: CREATE A LEGIBLE AND CONNECTED PUBLIC REALM

Design the road and public space realm to ensure that it conveniently connects people to places they want and need to go, create a pleasant experience. Design with the public realm experience in mind, to ensure that everyone who interfaces with the place is given equal opportunity to enjoy the place in a meaningful way.

PRINCIPLE 5: DESIGN FOR PEOPLE

Establishing great living environments relies on ensuring that the variety of daily needs of the local residents is achieved within or close to their community. The full complement of local needs such as recreation, business, parks and education are convenient and highly accessible. These are the essential pillars of establishing a well balance, integrated and friendly community.

PRINCIPLE 6: DELIVER DIVERSE DEVELOPMENT FORMS AND DENSITY

Vibrant places require a rich mix of building types, a quality public realm and contemporary architectural solution to support sustainable population densities, encourage diversity, and assist in creating a strong sense of local identity.

PRINCIPLE 7: EMBED OPPORTUNITIES FOR ADAPTATION AND CHANGE

The most resilient places are those that can be re-purposed and re-occupied; they are places that are capable of adapting easily to changing social, economic and environmental influences.



2. Site Analysis

2.1 Planning Context

Cobbitty is located within Camden Local Government Area in South Western Sydney, approximately 50km from the Sydney CBD, 16km from the Western Sydney Airport and Aerotropolis, 14km from the Campbelltown CBD and 5km from the Narellan Town Centre. The subject site forms a part of the South Creek West Land Release Area in the South West Growth Area, and is identified as Precinct 5.

The site is located on the western side of The Northern Road. To the immediate north of the site is the Lowes Creek Maryland Precinct, the east across The Northern Road is the Pondicherry Precinct, to the south-east is Oran Park and to the south is the Arcadian Hills development.

The site and surrounding region were predominantly used for agricultural purposes in the past, however the South West Growth Area was identified as being suitable location to concentrate a large portion of Sydney's new housing development. Over the last decade there have been significant investments to enhance the infrastructure of the region to cater to the rapidly growing population of region, as well as to improve access to the upcoming Western Sydney Airport nearby. This included upgrading The Northern Road from two to four lanes, which allows quick and easy access to Cobbitty from the wider region. Additionally, the future Oran Park Train Station will be located approximately 1 kilometre away, which will enhance public transport connections to the surrounding areas.

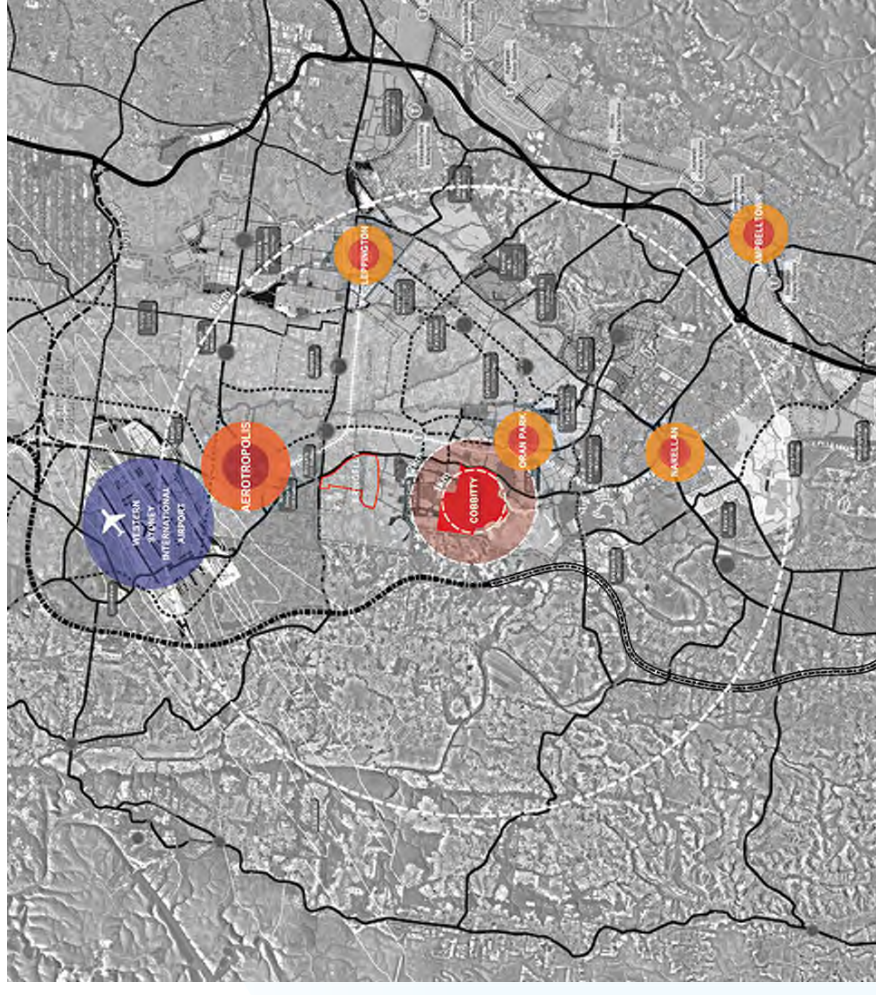


Figure 2 Regional Context Plan

2.1.1 South West Growth Area Structure Plan

The South West Growth Area (SWGGA) Structure Plan (Figure 3) sets out the desired framework for the region. The Indicative Layout Plan (ILP) for Cobbitty Sub-Precinct 5 is generally consistent with the current SWGA Structure Plan, with some minor modifications to better integrate with the surrounding developments to create a more refined and cohesive area.

The ILP for Cobbitty Sub-Precinct 5 has provided a green corridor along the Central Riparian Corridor as envisaged by the Structure Plan, while the proposed road network is also generally consistent with additional connections to the recently finalised Lowes-Creek Maryland ILP to the north.

The previous version of the Structure Plan (Edition 3) included a village centre at the heart of the Precinct, which has been provided as the proposed Local Centre. Whilst this is not identified on the current Structure Plan, a Local Centre is necessary within the Precinct to meet the essential and convenience needs of the future community.



Figure 3 South West Growth Centre Structure Plan

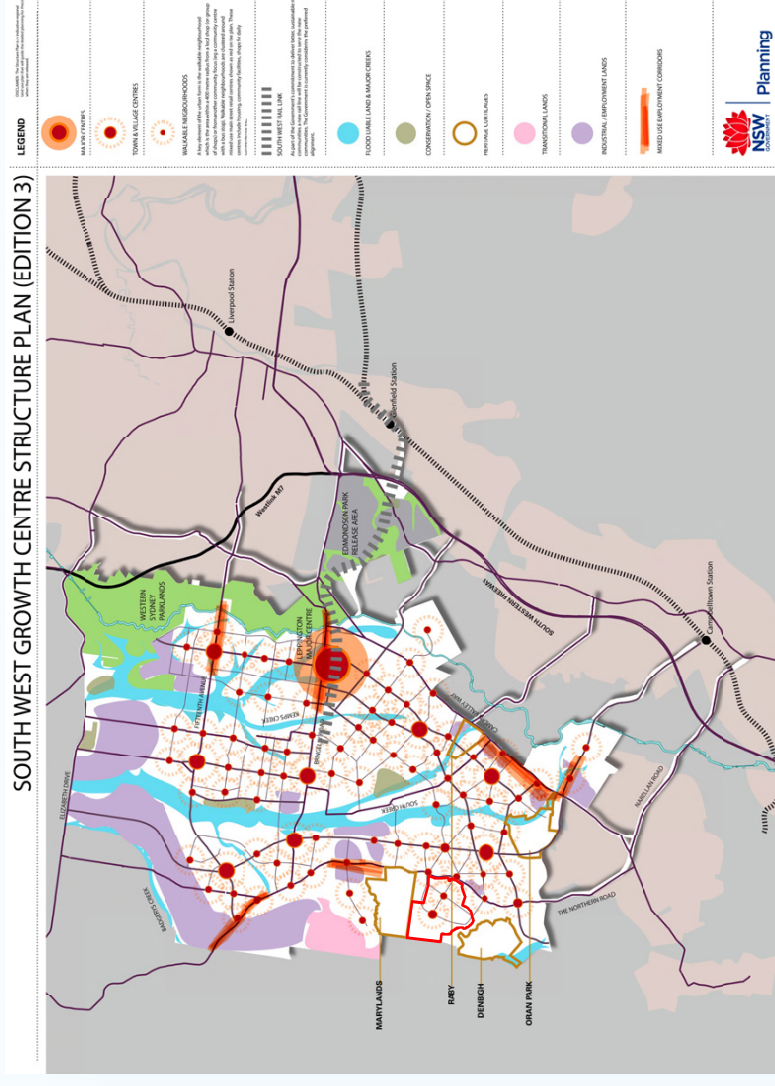


Figure 4 South West Growth Centre Structure Plan (Edition 3)

2.1.2 South Creek West Land Release Area

The South Creek West Land Release Area (SCW) is a precinct within the wider South West Growth Area and is comprised of sections of the suburbs of Bringelly, Oran Park and Cobbitty. SCW is located immediately south of the Aerotropolis and north of the Oran Park Precinct, with South Creek forming its eastern boundary. Given the scale of the release area, the then Department of Planning, Industry and Environment (DPIE) divided SCW into five distinct sub-precincts numbered 1 – 5. The land is characterised by the existing rural residential and agricultural land uses and activities with the recently upgraded The Northern Road running through the centre of release area. The subject site to which this Planning Proposal relates is referred to as Cobbitty Sub-Precinct 5, also known as Precinct 5.

2.1.3 Camden Local Strategic Planning Statement

The Camden Local Strategic Planning Statement (LSPS) sets the 20-year planning vision for the Camden Local Government Area. The LSPS, which was adopted in March 2020, outlines the characteristics which shape the area's local identity and directs how future growth and development will be managed. The LSPS is made up of four themes which mirror those in the Sydney Region Plan and Western City District Plan. These themes are Infrastructure and Collaboration, Liveability, Productivity and Sustainability. These four themes will be implemented through 21 local planning priorities which are outlined in the LSPS and will guide land use decisions and development in Camden.

As with the other relevant State and Local strategic planning documents, the LSPS also identifies Cobbitty-Sub Precinct 5 as land for future residential development and as being the location for a new neighbourhood centre.

2.2 Current Land Zoning

Presently the entire site is zoned RU1 Primary Production under the Camden LEP 2010. The RU1 zone generally applies to land utilised for intensive agricultural, intensive livestock, forestry, mining and other commercial primary production land uses.

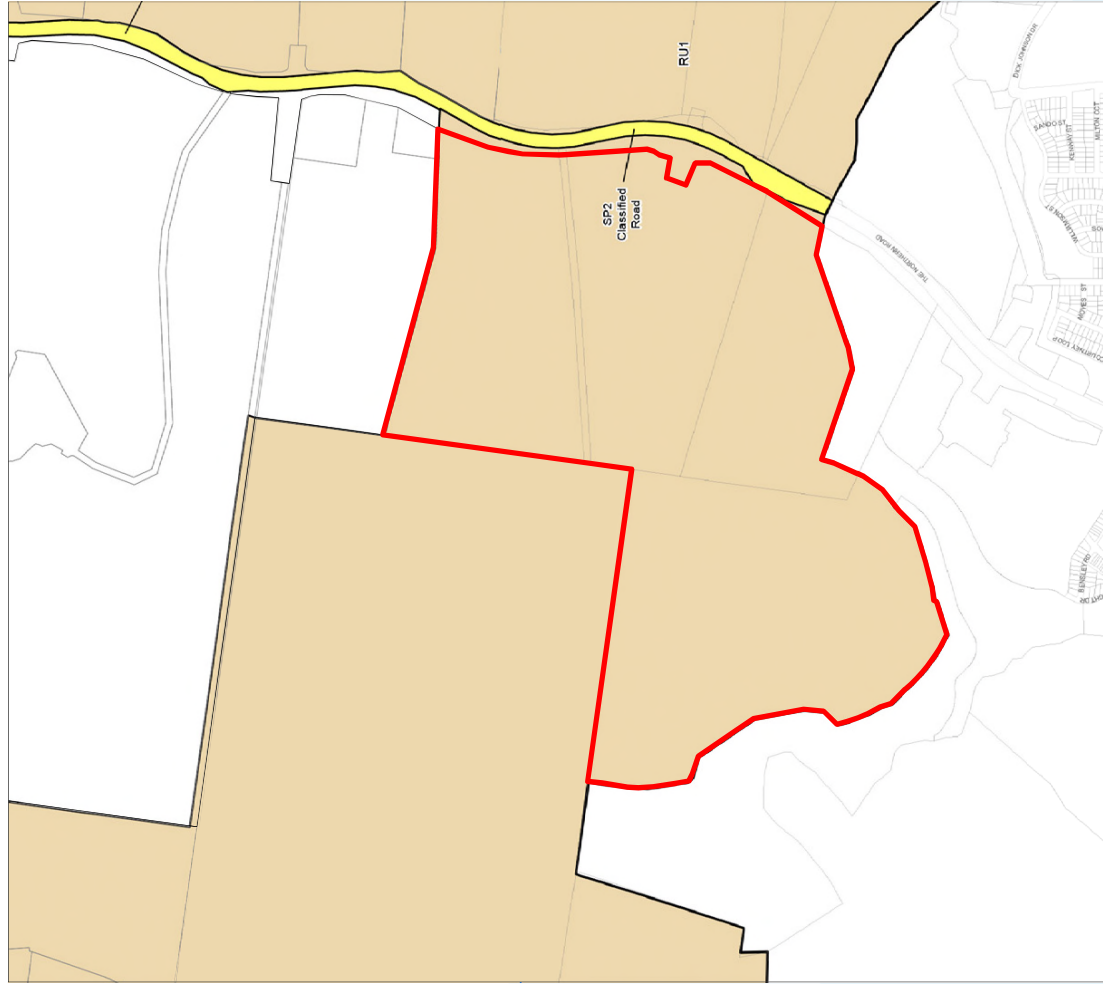


Figure 5 Current Land Use Zoning

2.3 Land Ownership

The land within Sub-Precinct 5 comprises two landowners. The smaller north-western portion of land is owned by the Lopresti family and has an area of 130.41ha. The larger south-eastern portion is in the control of BHL and has an area of 172.74ha or 57% of the Precinct. This report only relates to the land controlled by BHL. In some cases, design has been done over the Lopresti land for precinct context purposes only.

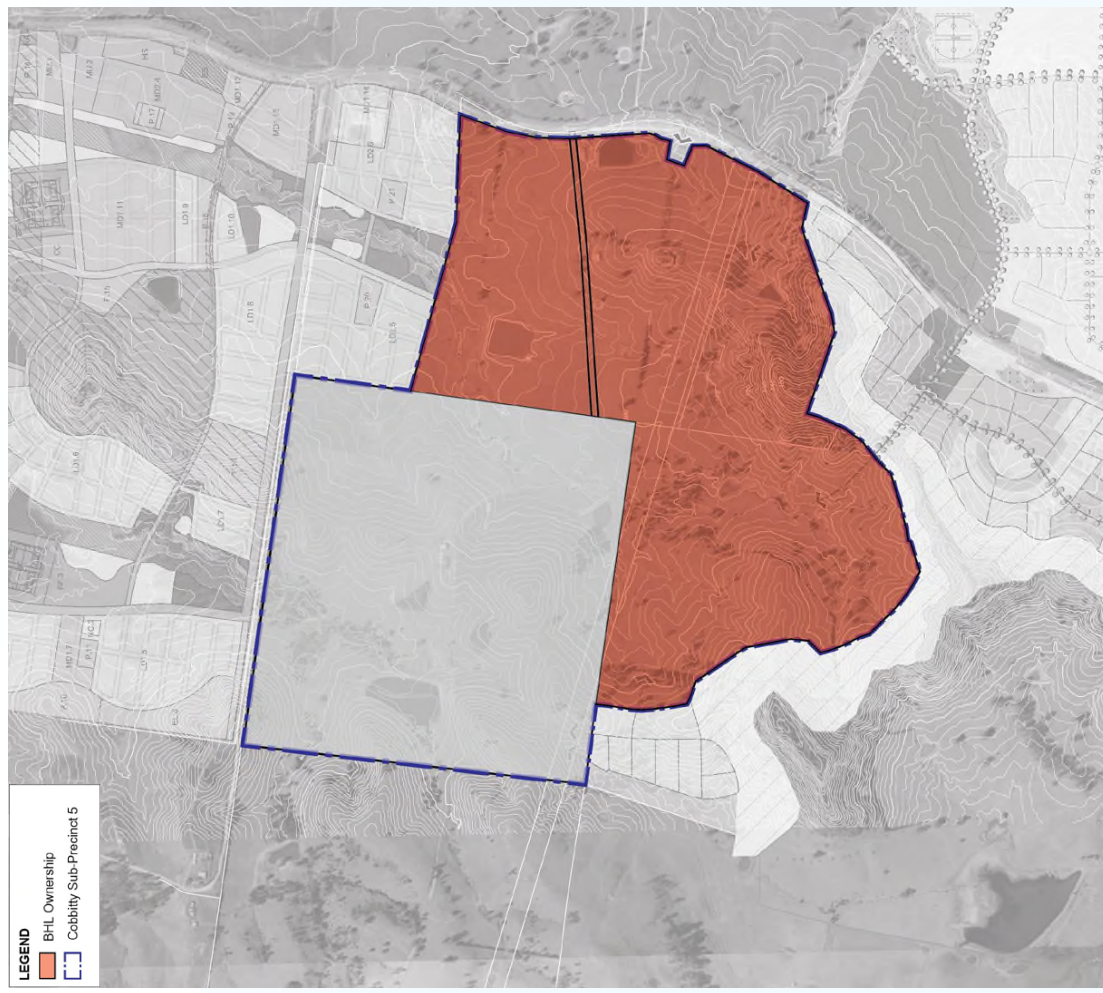


Figure 6 Land Ownership Plan

Note: The proponent is in discussion with the owner of Lot 3 DP1216380 Access Handle

2.4 Access

The Northern Road has recently been upgraded, which provides quick and easy access to the site. The upgrade of the road from two to four lanes also included the construction of numerous signalised intersections in anticipation of future development along the road corridor. This included the Marylands Link Road 1 intersection which provides direct access to site from the east. The site can also be accessed from the Dick Johnson Drive intersection via a neighbouring development to the south.

There are several future connections to the upcoming Lowes Creek Maryland Precinct to the immediate north of the site, including one collector road and several local roads. These connections will provide seamless access between the two Precincts. Opportunities for additional connections northward will be afforded by the future development of the remaining portion of Sub-Precinct 5.

There is also a sub-arterial road connection from the south, being an extension of Dick Johnson Drive, which provides direct access to future commercial land uses at the intersection with The Northern Road, as well as direct connection to the Oran Park Town Centre.

Chapter 4 Major Infrastructure Corridors of the State Environmental Planning Policy (Transport and Infrastructure) 2021 protects the delivery of North South Rail Line corridor, where a future extension of the Sydney Metro - Western Sydney Airport will be provided. The corridor runs parallel to The Northern Road and will service the current and future communities in the South Western Sydney region. Cobbitty Sub-Precinct 5 will be roughly 2 kilometres from the proposed metro station at the Oran Park Town Centre, while other future stations in Narellan and Bringelly will also be easily accessible from the site via The Northern Road.

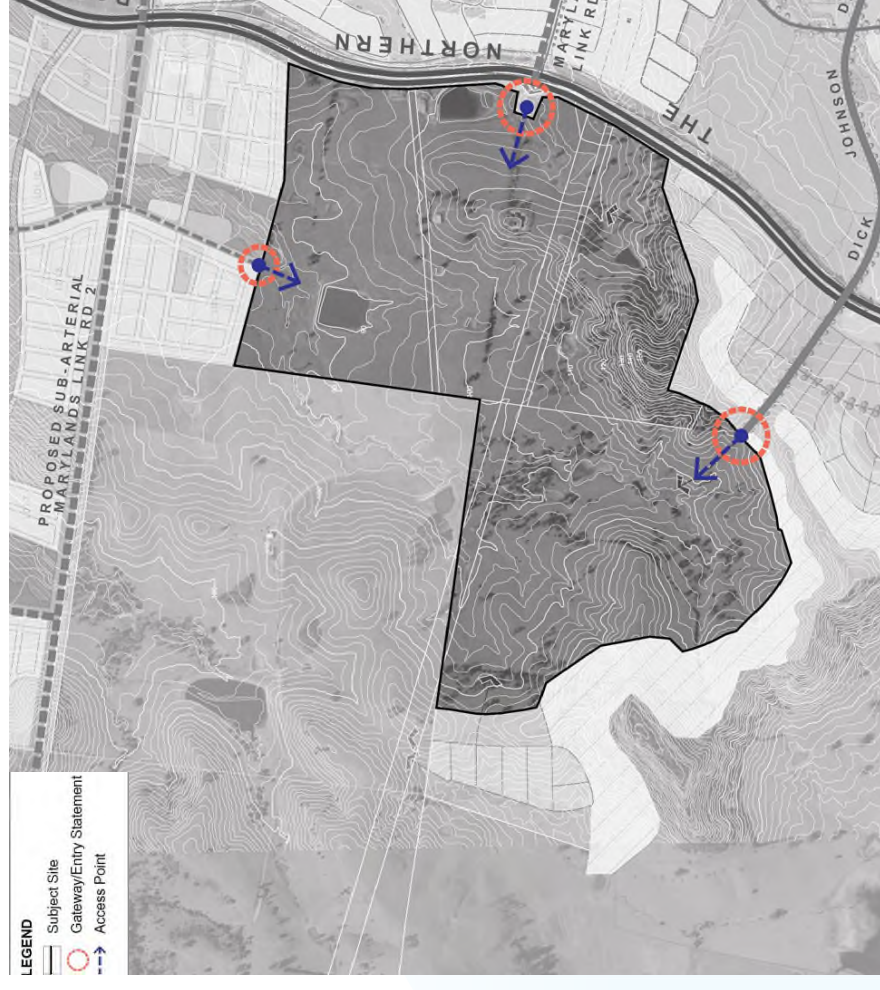


Figure 7 Access Analysis Plan

2.5 Hydrology

The topography of the site is shaped by the large Central Creek Corridor which traverses Cobbitty. This creek and their smaller tributaries generally flow in a north or north-easterly direction towards Lowes Creek, which itself is a tributary of the larger South Creek on the eastern side of The Northern Road. There are also multiple existing farm dams scattered throughout the site.

Applying the Strahler stream classification system to the hydroline streams indicates that there are a range of streams from category 1 through to category 4. The creek lines in the site have been altered from their natural state due to works along the creek such as the creation of dams and crossings, removal of native riparian vegetation to facilitate agricultural land uses, increases in sediment and nutrient transport through the system and various other factors.

2.6 Vegetation

The site has been used for agricultural purposes over several decades, therefore it has largely been cleared of significant vegetation and predominantly comprises of exotic pasture grasses with no ecological value.

The land is also bio-certified under the Growth Centres SEPP. There are however several dispersed clusters of remnant Cumberland Plain Woodland across the site which vary in size and quality. There are additionally multiple pockets of exotic vegetation scattered across the site, particularly to the south and surrounding the dwellings.

The exotic species on the site include African Olive, Box Thorn and the Canary Island Date Palm. The largest section of vegetation is located in the south-eastern corner of the site which sits on a ridgeline that traverses the southern boundary of the site and the neighbouring site. This ridgeline forms a natural green curtain and backdrop to the rest of the site.

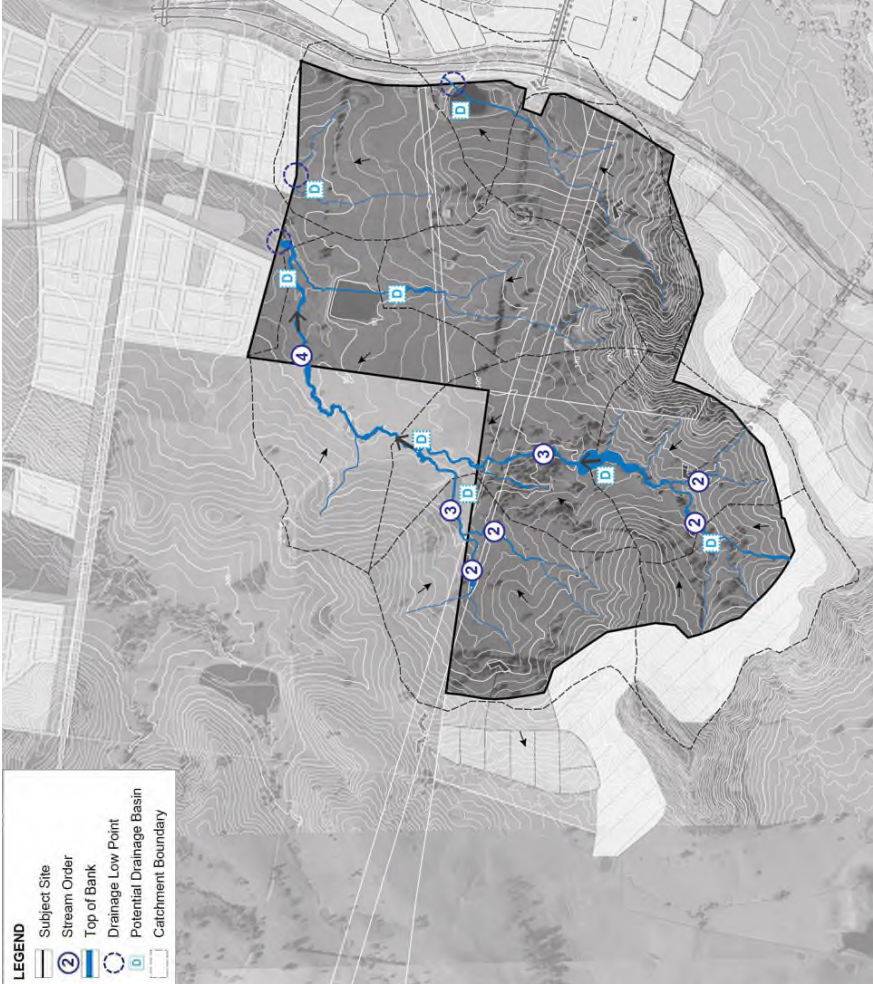


Figure 8 Hydrology Analysis Plan

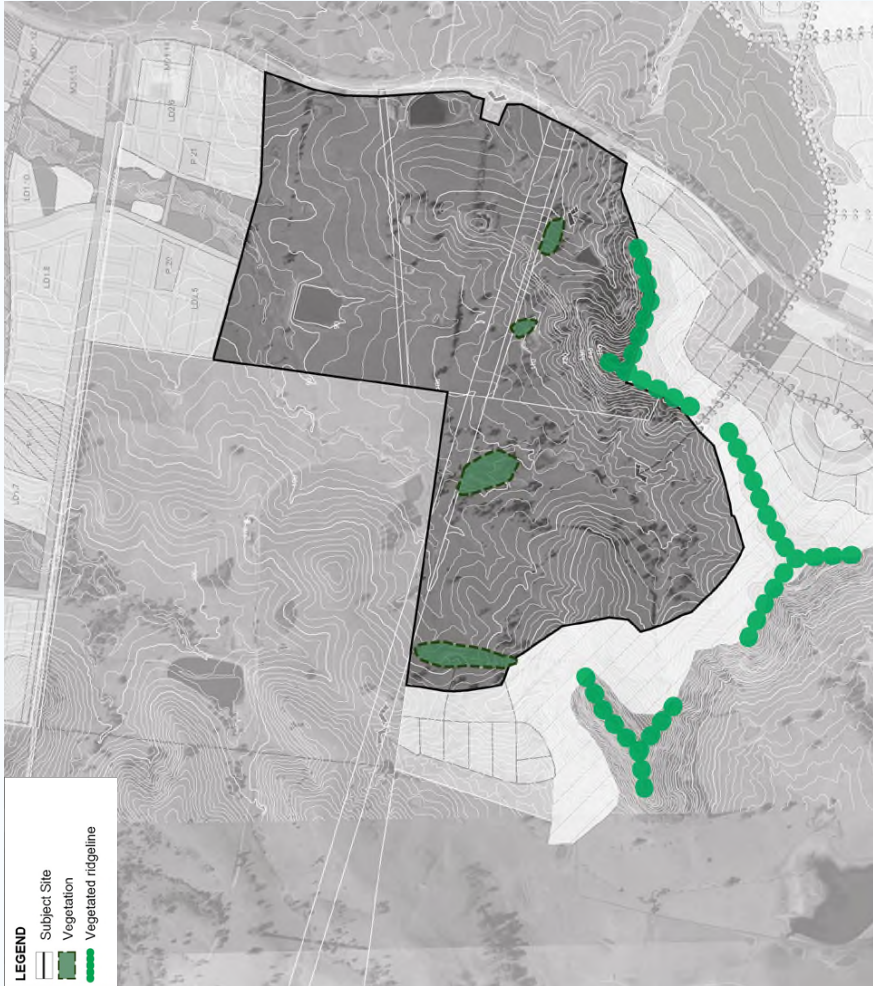


Figure 9 Vegetation Analysis Plan

2.7 Landform

The landform of the site is characterised by ridgelines and valleys. The most prominent feature affecting the site is a main ridgeline to the south which straddles the boundary to the south west. This ridgeline has a high point of 164m. A secondary ridgeline runs west towards the Northern Road along the site boundary, with a highpoint of 154m where two water towers are located. This area forms the majority of the site's steep land, where slope is above 15% in grade.

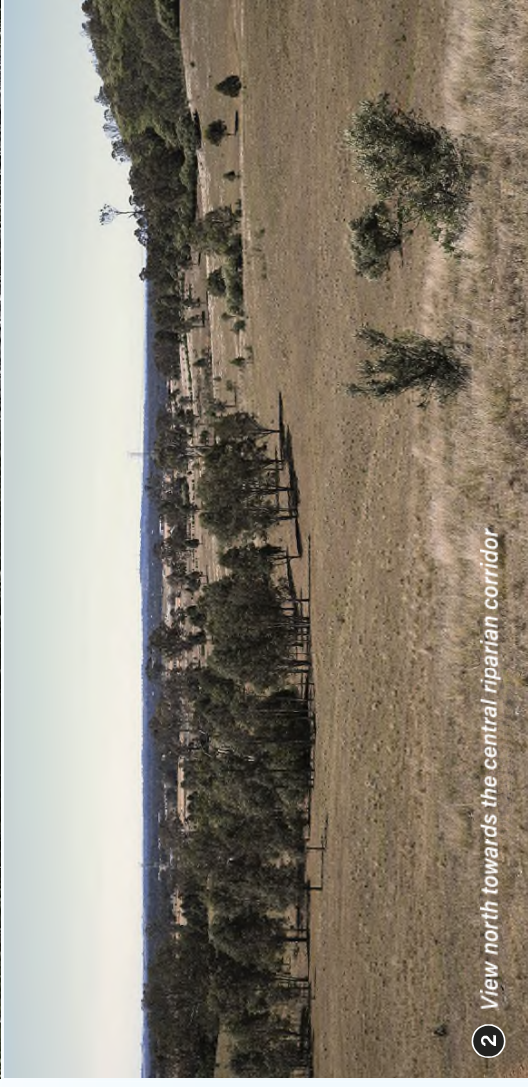
Several gentler ridgelines transverse the site perpendicular to the major and southern ridgeline. These smaller ridgelines are separated by the creek corridor valleys, which create natural amphitheatres, including a large one centred on the Central Creek Corridor in the heart of the Precinct. The topography of the site generally falls gently from the ridgelines towards the natural amphitheatres and then continues to fall northward towards Lowes Creek in the neighbouring precinct. This provides numerous locations for views from within and outside site.



Figure 10 Landform Analysis Plan



1 View north from the Main ridgeline south of the site



2 View north towards the central riparian corridor



3 View south towards the secondary ridgeline and Sydney Water Tower hilltop

2.8 Infrastructure and Existing Development

Other constraints for consideration include a 330kv powerline easement that traverses east-west through the site. Sydney Water have also located a water tower at the top of the southern ridgeline with access from the southern boundary. There are also two existing homesteads situated on the eastern and western ridgelines which are access via the Northern Road.



Figure 11 Infrastructure and Existing Development Analysis Plan

2.9 Flooding

Despite being traversed by a creek, the site is not considered to be flood prone. The Flood Impact Assessment for the site determined flooding within the central riparian corridor is generally contained within the creek lines, except for existing farm dam locations where flood extents increase due to the spillway embankments and find alternate overland routes back to the watercourse. The existing conditions flood depths and extents generally reflect well-defined watercourses through and adjacent to the site.

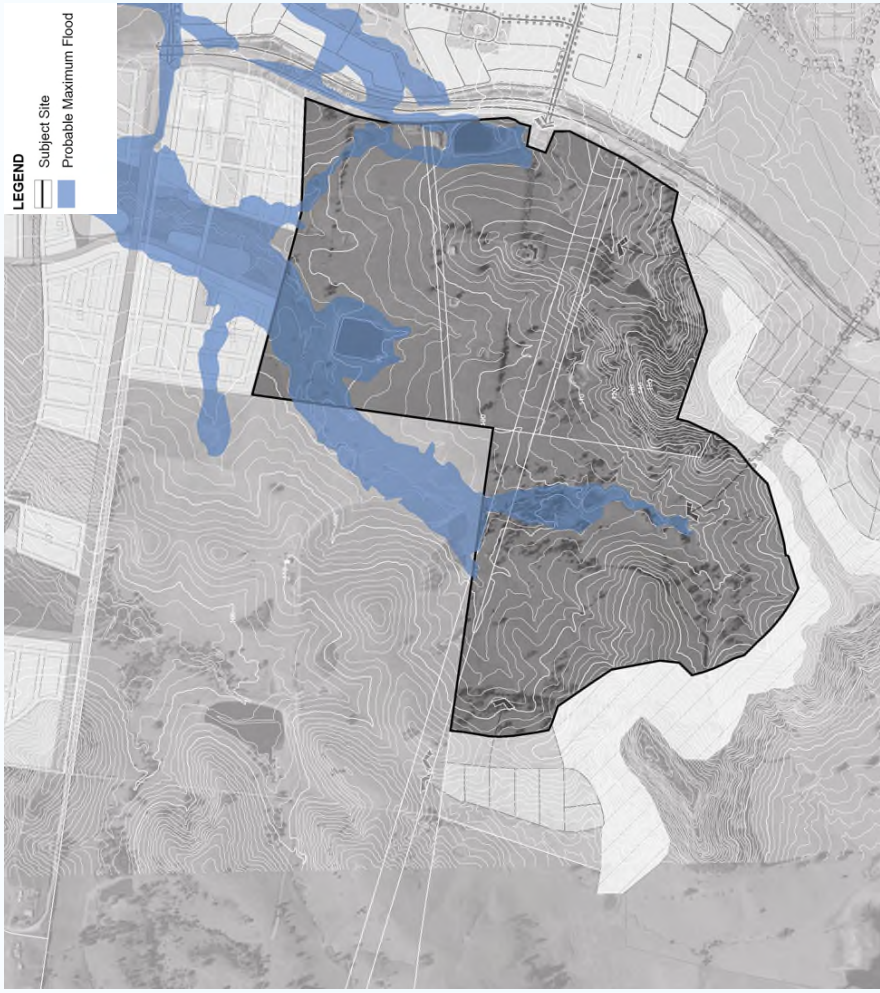


Figure 12 Flood Mapping Plan

2.10 Bushfire

As the site and surrounding area presently comprise mostly of cleared agricultural grasslands, the majority of the site is considered to be bushfire prone land. However, a Strategic Bushfire Study that was undertaken for the site found that fire history mapping shows that there has been negligible fire occurrence within 5 km of the subject site and only smaller fires confined to bushland remnants within 5-10 km of the subject site. Limited vegetation connectivity, increased surveillance and higher response times has resulted in subdued fire activity on a landscape scale in the immediate area. Furthermore, following the urbanisation and development of the subject site and surrounding areas, the bushfire threat will be significantly reduced.

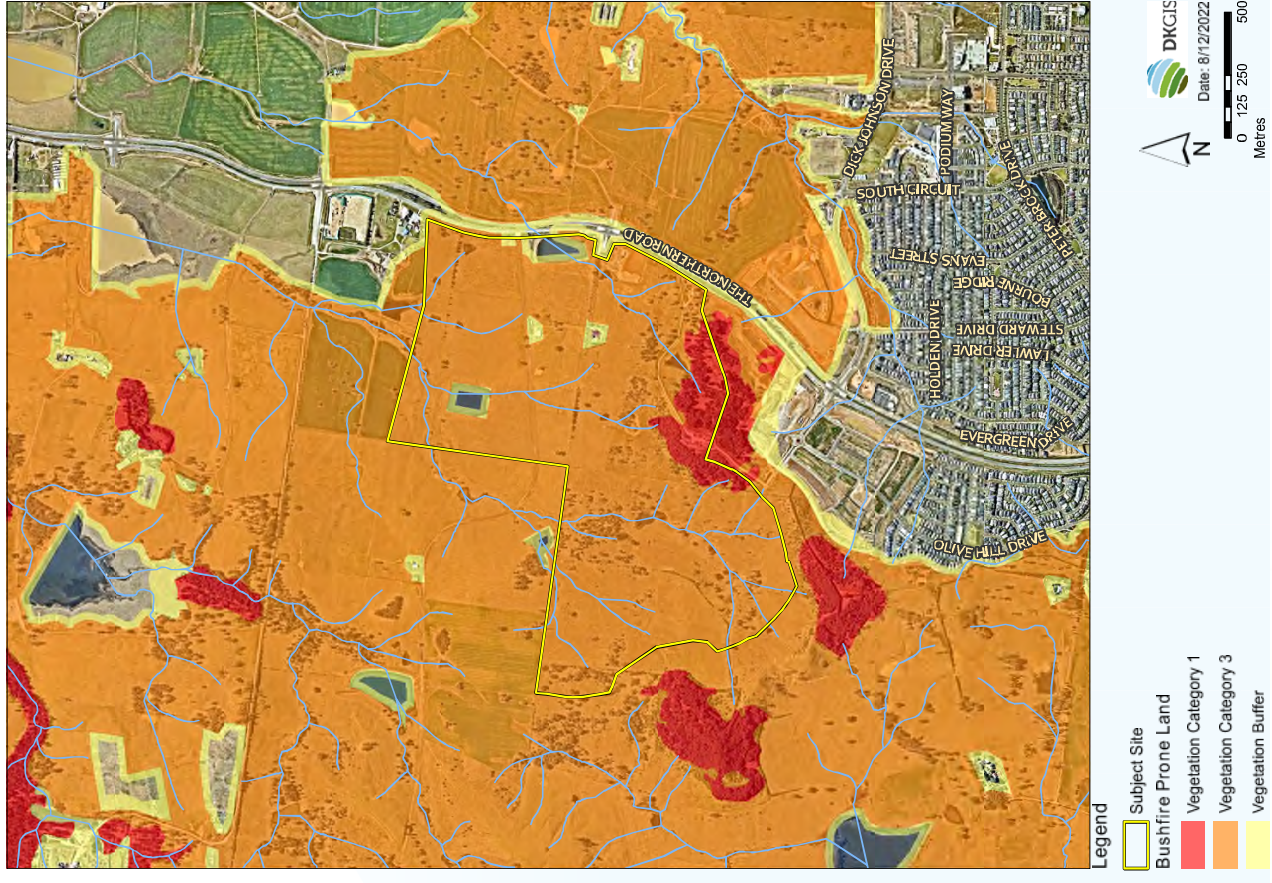


Figure 13 Bushfire Analysis Plan

2.11 Air Quality

An air quality assessment was undertaken on the site. The results of this assessment indicate that the air quality of the site is generally good with no significant impacts from the surrounding farms, major roads and other land uses and activities. While there may be minor odour impact from composting operations nearby, these will be limited to the north-western boundary areas of the site.

2.12 Infrastructure Servicing

The Infrastructure Servicing Strategy analysed the current and required services for the proposal. The site is serviced by electricity, NBN satellite technology, the Telstra 4G and 5G networks. The site is not presently serviced by the Sydney potable water network, the sewer network or gas. Expansions and enhancements to existing services in the area are planned and will be undertaken as required to cater to the increasing demand.

2.13 Site History and Heritage

The site like much of the surrounding region has a long Aboriginal history, with the Camden area being the intersection of the Dharug, Gundungurra and Tharawal people. However, following European colonisation and extensive land clearing for agriculture, it is likely many sites and artefacts of Indigenous cultural or historic significance were lost.

An extensive search of the Aboriginal Heritage Information Management System (AHIMS) found only a handful of Aboriginal Heritage items which are concentrated on the eastern boundary along The Northern Road and the southern boundary along the Southern Ridgeline. A Preliminary Aboriginal Heritage Assessment was undertaken and found four new Aboriginal sites and nine areas of potential archaeological deposit (PAD), all of which are within or adjacent to the Central Creek Corridor in the south west of the site.

Despite a significant European history in the area spanning back to the early 1800's, the site does not include any heritage items nor located within a heritage conservation area. The land was originally a part of the historic Denbigh property which is located to the south over the Main Ridgeline. Ownership of the land was transferred several times throughout its history, however it has only been used for cattle grazing since the earliest land grants were issued for the area and there is no evidence to suggest that there were previous structures or uses of the land. Presently, the site contains a rural residences and grazing properties, both of which comprise a house and sheds. Native and introduced trees have been planted to mark fence lines, driveways and boundaries and African Olive and Box Thorn have run rampant across much of the southern part of the site.



Figure 14 Preliminary Aboriginal Heritage Survey Results

2.14 Social Infrastructure

As the land has been historically used for pastoral purposes, there is presently no social infrastructure on the site. The site is in proximity to existing and emerging areas that have existing and planned social infrastructure items that will complement the infrastructure proposed on the site. A social infrastructure assessment (SIA) for the proposal determined based on the size of the site and the projected future population, a total of 22.43ha of open space, 10 playgrounds, a community centre, library and a local retail centre with a supermarket would be required.

The nearby Town Centres and Neighbourhood Centres in Oran Park, Lowes Creek Maryland and Pondicherry are easily accessible from the site by car, bicycle or foot. These Centres will include the social infrastructure, facilities and services that are not likely to be available within the Precinct, such as high schools, libraries, public swimming pools and leisure centres.

2.15 Retail

Presently, apart from Oran Park, Arcadian Hills and the newly established Oxley Ridge development, there are no residential completed residential areas within or surrounding the site. The Retail Demand Analysis (RDA) for the site has taken into consideration the future growth of the locality and determined the local trade area for a future shopping centre on the site would have a projected residential population of 56,870 persons and approximately 13,600 in the primary trade area alone. The RDA determined a shopping centre with total Gross Leasable Area of 7,500sqm, including a supermarket and around 1,600sqm of non-retail would be required to support the catchment.

2.16 Housing Demand

The Housing Needs Assessment for the site identified a major shortfall in the amount of new housing required to meet projected housing demand across the South West Sydney Region to 2041. Even though there may be sufficient theoretical dwelling capacity, it is unlikely all land will be developed. The proposal is of critical importance to mitigate the forecast shortfall in housing supply. Beyond the important issue of housing supply, the location of the site proximate the Western Sydney Aerropolis is of strategic importance. Ensuring housing supply proximate one of Greater Sydney's largest planned employment precincts is delivered in timely and orderly fashion will be critical to the success of the Aerropolis.

Market investigations suggests that the trend towards smaller lot sizes and denser housing product which has been observed over the past decade is continuing amidst an enduring housing affordability issue. In particular, the market appears to be willing to compromise on lot size if a detached product can be secured. Detached housing typologies remain the preferred product of choice for most prospective purchasers across the SWGA, though the popularity and acceptance of medium-density and high-density typologies is growing. This is directly observable in neighbouring precincts such as Oran Park and Edmondson Park.



Figure 15 Social Infrastructure Analysis Plan

3. Urban Design Response

Site specific design considerations:

- Create a new local centre combined with a new primary school to establish a community focal point.
- Provide opportunities for a diverse mix of housing types, with medium density housing located around the local centre and major open space amenity.
- Integrate the development with the existing Arcadian Hills and Oran Park to the south and the upcoming Lowes Creek Maryland Precinct to the north.
- Retain key creek lines and capitalise on the opportunity to create a central green link and smaller green links throughout the precinct.
- Retain existing significant vegetation as natural bushland or riparian corridors.
- Improve water quality, water flow and the health of riparian corridors.
- Manage and retain views.
- Provide links between the Oran Park Precinct and Lowes Creek Maryland Precinct, creating a meaningful urban road network.
- Utilise landscaping and topography on the southern boundary to manage noise.
- Promote pedestrian and cycle linkages.

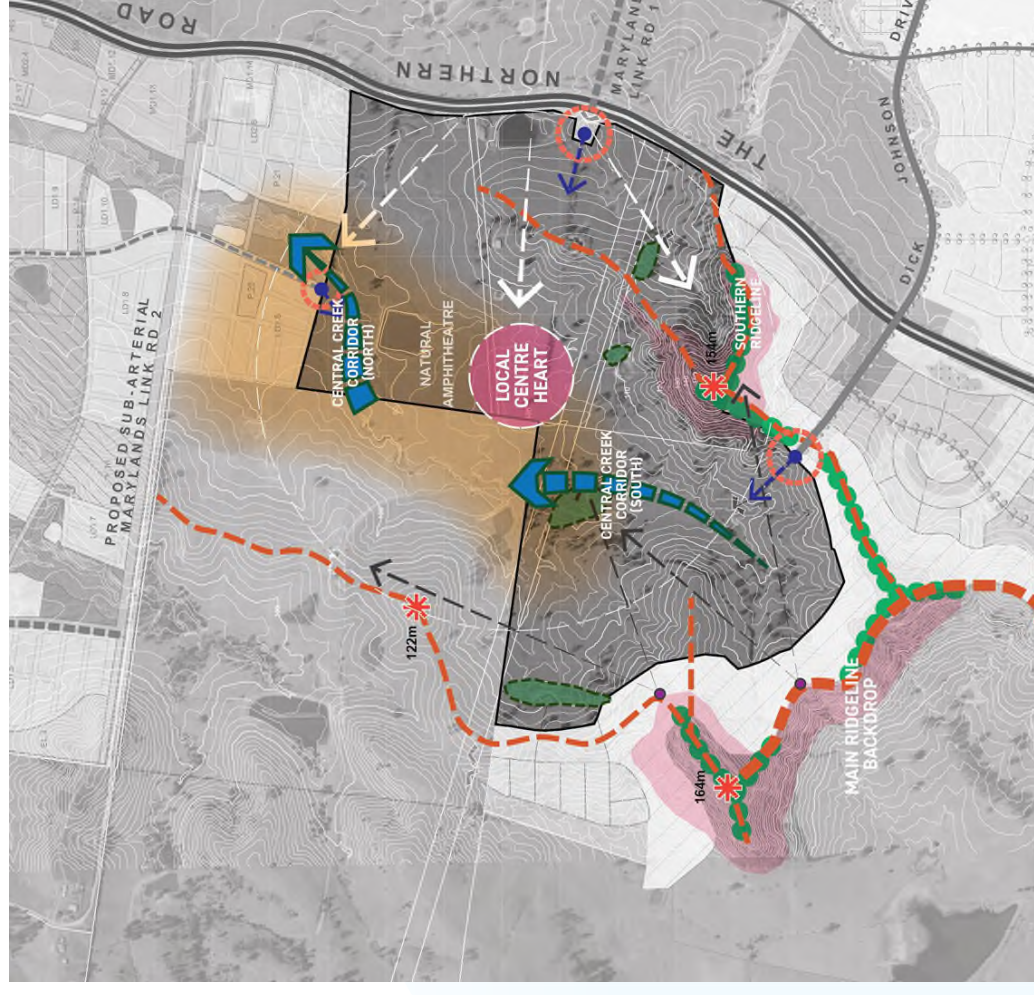


Figure 16 Site Specific Design Considerations Plan

3.1 Vision and Design Principles

The vision for the proposal was shaped by site-specific design principles which seek to take advantage and enhance the natural features of the land whilst simultaneously ensuring the design and layout of the development is well integrated with it's surroundings and easily accessible for the future community.

The key elements which shaped the design of the site are:

- 1) The Central and Western Creek Corridors as spines through the Precinct
- 2) The top of the Southern Ridgeline as a green backdrop
- 3) The natural amphitheatres and local topography characteristics
- 4) Vehicle and Active Transport Linkages
- 5) Retention of significant vegetation
- 6) The Local Centre as the heart of the community
- 7) A diversity of housing and the creation of unique neighbourhoods within the precinct to cater to diverse demands

The most prominent feature of the subject site's ILP is the Central Creek Corridor which is being retained in a wide riparian zone that will form the spine of the Precinct. The preservation and enhancement of this large riparian area will connect the community within and beyond the Precinct, while also serving a crucial role in allowing the development to Connect with Country and preserve the site's long Aboriginal History. The Preliminary Aboriginal Heritage Assessment recommends avoiding certain identified Aboriginal Heritage objects within the Precinct, most of which are within the Central Creek Corridor, allowing for their protection.

The Southern Ridgeline which forms the southern boundary of the site is another unique feature, therefore the ILP has been designed to allow the ridgeline and the trees that grow along it to serve as a green backdrop. This green curtain will continue the vegetated ridgeline character created by the main ridgeline south of the site, preserving the landscaped views from various locations within the development. Lower density residential and environmental living have been proposed along the foot of the ridgeline to allow for larger lots which can accommodate trees up slope, further contributing to the canopy cover and enhancing the scenery of the future community.

The topography of the site includes two natural amphitheatres around the creek corridors. The road network has been arranged where possible to take advantage of the natural topography of the land to enhance views and vistas. This in turn provides the development with a special charm, with the undulating nature of land being retained to mirror the natural landforms of the agricultural and bushland areas to the west, therefore retaining some of the original character of the site.

The sub-arterial and collector roads been aligned specifically to provide the most efficient and direct routes in, out and within the site. This will ensure traffic and congestion is minimised on local roads, improving safety for the community, while also reducing travel times. The active transport links within the site have similarly been designed to enhance the amenity of the development while also serving as practical and efficient routes for pedestrians and cyclists to minimise the dependence on cars, wherever possible.

The site has several areas of remnant Cumberland Plain Woodland and other pockets of native vegetation which are largely concentrated on the Southern Ridgeline and in the Central Creek Corridor. The significance and importance of these areas both ecologically and historically are acknowledged and have therefore been preserved in riparian corridors and parks or incorporated into large residential lots. This will allow for preservation and enhancement of these threatened ecosystems while also bringing the community closer to the natural history of the site.

The Local Centre has been strategically positioned at the confluence of several major roads and the Central Creek Corridor, making it easily accessible from all areas of the Precinct. The co-location of the mixed-use Local Centre, school and playing fields surrounded by medium density residential development will create a vibrant heart of the future community.

There is a need for a diverse range of housing types and styles, therefore the ILP has been shaped to create distinct neighbourhoods within the development, graduating from higher to lower density from the centre outward. Smaller, denser housing typologies will be located around the Local Centre and near open spaces. The low-density residential development will encircle the medium density areas. The large lot neighbourhoods will be situated at the southern and western peripheries of the site, providing a coherent transition from the proposed development to adjoining bushland and rural lands.



3.2 Indicative Layout Plan

The Indicative Layout Plan (ILP) for Cobbitty was shaped by the aforementioned site-specific design principles and the South West Growth Area Structure Plan combined with fundamental urban design concepts to create a refined and cohesive ILP.

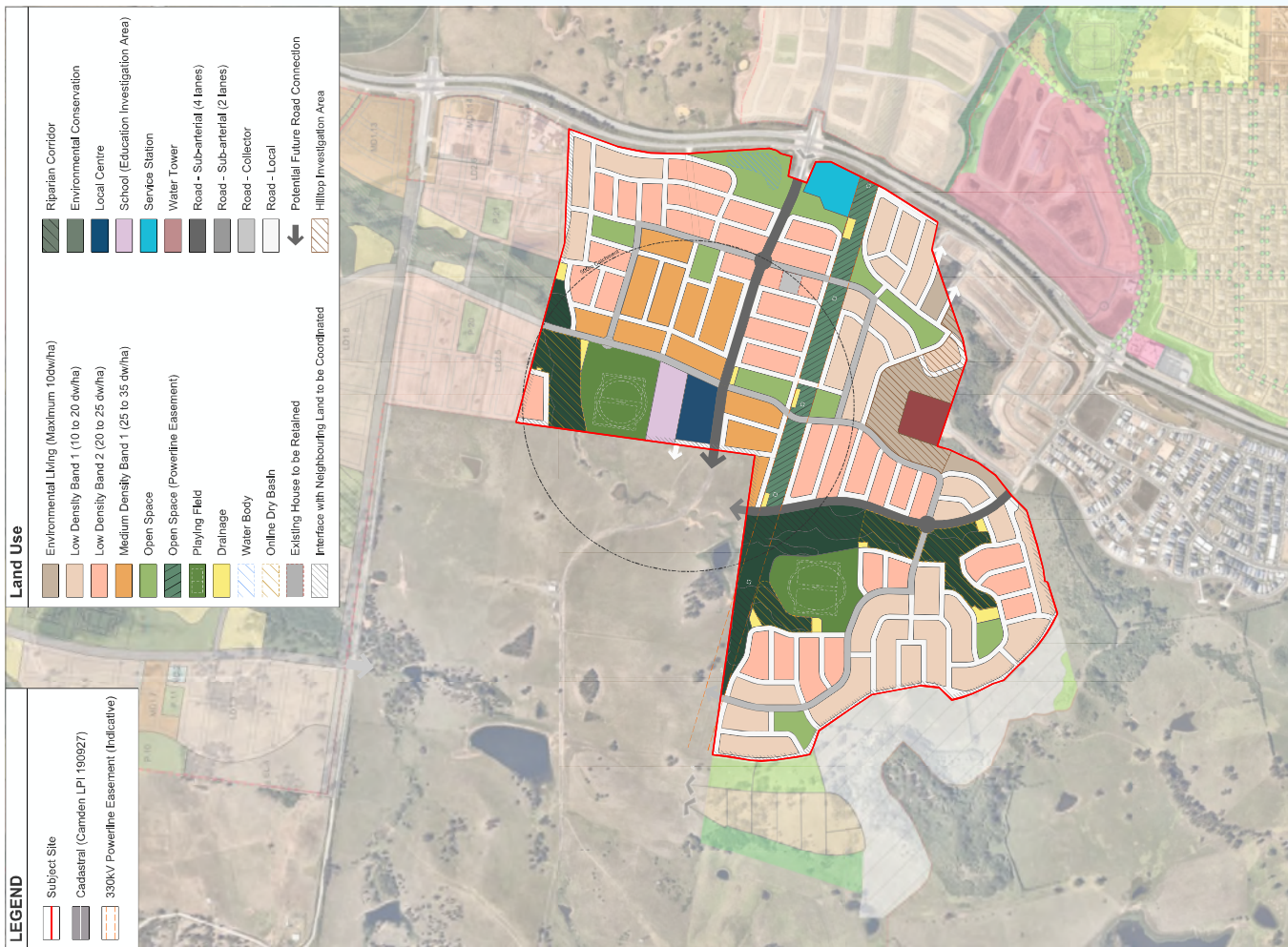


Figure 17 Indicative Layout Plan

3.3 Land Use Arrangement and Composition

The proposed land use arrangement has been specifically tailored to ensure that all land uses are compatible with their specific location and the urban design principles outlined above.

The Local Centre and primary school are located at the intersection of multiple sub-arterial and collector roads in the heart of the Precinct, making them easily accessible by all future residents. These land uses have been located adjacent to open space and the riparian corridor to ensure they are highly accessible by active transport means. The co-location of the primary school and playing fields adjacent to the Local Centre strengthens community identity and sense of place. Most of the precinct will be residential land, with medium density surrounding the Local Centre and gradually reducing in density towards the periphery of the Precinct. An area of large lot residential is proposed along the southern boundary to allow of the retention and enhancement of existing vegetation on the southern ridge line.

The Central Creek Corridor will be retained as a large, wide riparian zone traversing the middle of the Precinct. This will serve multiple purposes including; mitigating the impacts of flooding, enhancing the health of the local ecosystem, providing recreational opportunities for the community, increasing the tree canopy cover and improving the visual appeal of the development. Many local parks, open spaces and playfields have been located along these riparian corridors, however many others are dispersed throughout the proposal, ensuring there is adequate and easily accessible open space for all residents. There will be approximately 19.98 hectares of open space in total.

A service station will be located in the only MU1 Mixed Use zoned land adjacent to the main entrance to the site on The Northern Road. This will be separated from residences by open space and the powerline easement.

LAND USE STATISTICS FOR REZONING AREA

The Planning Proposal is seeking to rezone 172.68ha of land that forms part (57%) of Cobbitty Sub-Precinct 5. A breakdown of the land uses are provided in the table below.

Land Use Statistics for Rezoning Area (BHL Land)

Land Uses	Area	% of Rezoning Area
Residential	771,240 m ²	44.7
Residential (Existing)	3,568 m ²	0.2
Local Centre	18,755 m ²	1.1
School	20,360 m ²	1.2
Service Station	17,957 m ²	1.0
Infrastructure	17,421 m ²	1.0
Roads	430,274 m ²	24.9
Open Space	103,164 m ² (includes waterbody 9,804 m ²)	6.0
Open Space (powerline easement)	55,035 m ²	3.2
Detention Basins and Rain Gardens	13,799 m ² [A total drainage area of 103,859 m ² includes online basins (90,060 m ²)]	0.8
Riparian Corridor	168,969 m ² (includes online basins and water bodies)	9.8
Playing Fields	106,310 m ²	6.1

3.4 Density Strategy

The site proposes approximately 2,312 dwellings, with an average household size of 3.1 persons. New dwellings will be delivered in the form of detached, semi-detached, terrace homes and apartments.

Housing Type	Density Range (dw/ha)	Average Lot Size (sqm)
Environmental Living	10	1,141
Low Density Band 1	10 – 20	427
Low Density Band 2	20 – 25	309
Medium Density Band 1	25 - 35	229

3.5 Yield and Mix

The housing mix for the proposal is captured in the table below and aligns with the housing market demand assessment.

Density Range	Proposed Mix
Environmental Living	2%
Low Density Band 1	30%
Low Density Band 2	41%
Medium Density Band 1	23%
Local Centre (Medium Density Band 2)	4%



3.6 Housing Diversity

The proposal will provide a broad range of dwelling types with a focus on attractive residential streetscapes structured around well connected, walkable neighbourhoods and local passive open spaces. The variety of lot sizes, shapes and types will allow for a diverse range of housing styles to cater to different needs. The high amenity area surrounding the Local Centre will also offer the opportunity for medium density residential and apartment dwellings encouraging housing diversity and a broad socioeconomic mix.

Housing Typology Examples		Example Product
Single Storey Front loaded homes		
Double Storey Front loaded homes		
Attached Double Storey Front Loaded homes		
Attached Double Storey Rear Loaded homes		

Housing Typology Examples		Example Product
Attached Three Story Rear Loaded homes		
Studios		
Manor homes		
Shoptop Housing		
Apartments		

3.7 Movement and Road Configuration

The ILP has been designed with a logical and meaningful road network that maximises accessibility and efficiency. The proposed road layout establishes a clear road hierarchy with sub-arterial roads, collector roads and local roads.

The three main entrances to the Precinct will be via the two sub-arterial roads, both of which connect with the recently constructed intersections on The Northern Road. The main gateway to the Precinct is expected to be via Marylands Link Road 1 intersection with The Northern Road, therefore entry statement features are proposed here. The sub-arterial roads have been designed to bring people to and through the community. The two sub-arterial roads meet adjacent to the Local Centre which has been planned intentionally as this will serve as the focal point of the precinct.

The various collector roads have been designed to cater to local traffic, allowing for easy and quick commuting within the precinct. The Local Centre benefits from it's own collector road typology, with a wider verge to enable the creation of a plaza space interface between the centre, school and road. Road alignments have additionally been positioned to capture views of key features within the landscape where possible, taking advantage of topography of the site.

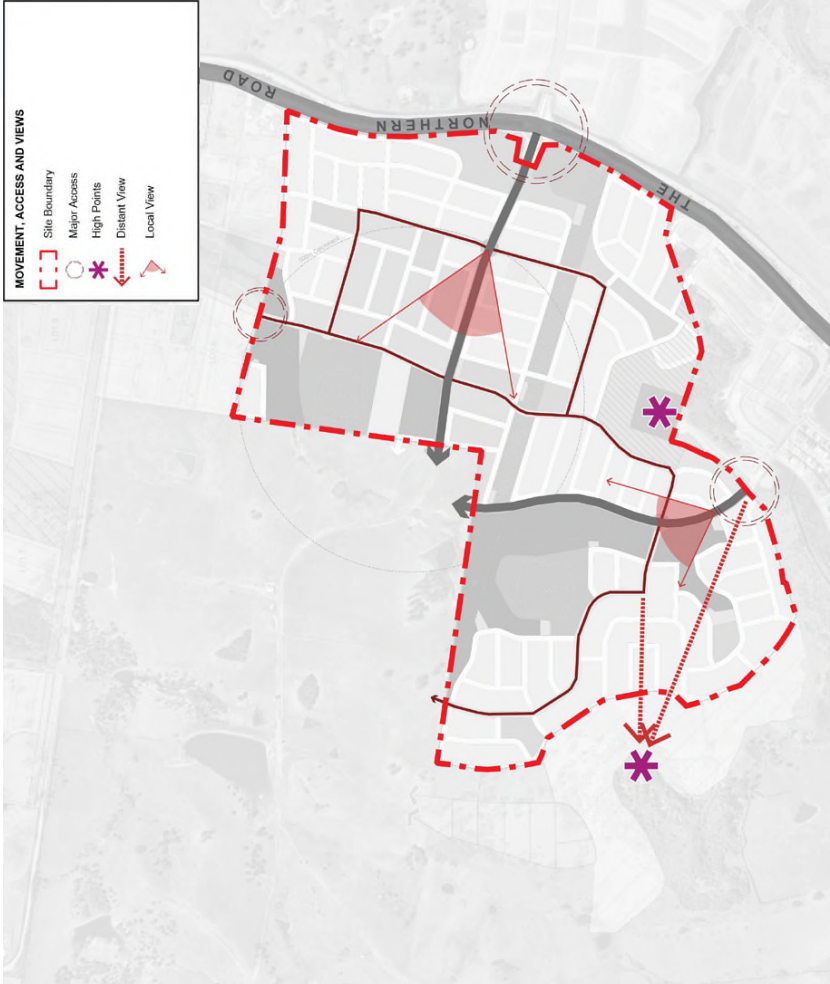


Figure 18 Movement, Access and Views

The road network has been designed to connect seamlessly with neighbouring existing (Oxley Ridge) and proposed (Lowes Creek Maryland) infrastructure networks, creating a coherent local road network and easing the flow of traffic between precincts. Opportunity for a road extension westward has also been provided as part of the ILP in anticipation of potential future development to the west of the Precinct.

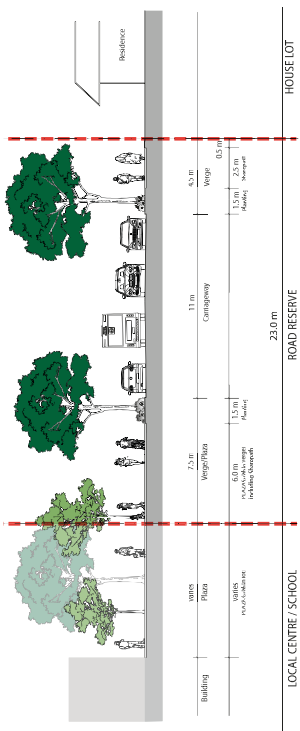


Figure 19 Local Centre Collector Road Section

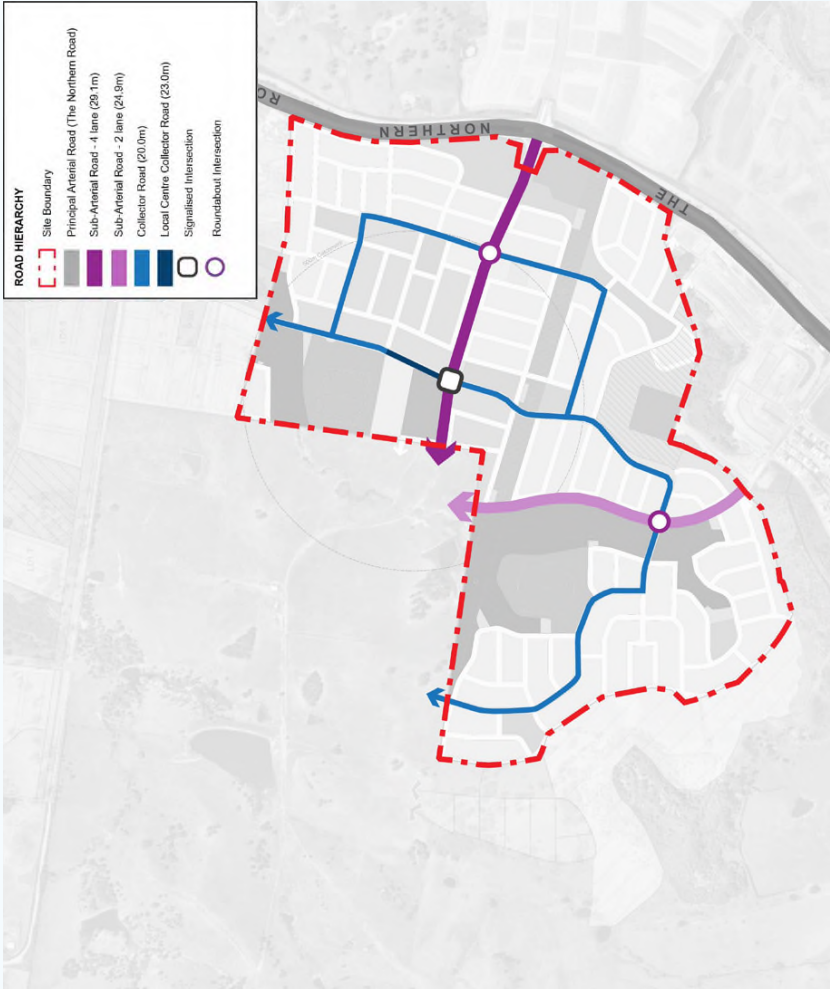


Figure 20 Road Hierarchy

3.8 Pedestrian and Cycle Network

As with the road network, the pedestrian and cycle network within the Precinct have been designed to achieve a hierarchy that prioritises the movement of pedestrians and cyclists throughout the development. The alignment of sub-arterial and collector roads provide sharepath linkages to open spaces within the subject site and ensures that connections to the Local Centre are direct and legible. There are additional pedestrian and cycle links within the various open spaces and riparian corridors throughout the precinct which will encourage the community to opt for active transport modes when possible.

The surrounding South West Sydney region has an extensive existing pedestrian and cycle network. The network within the precinct is proposed to connect to the wider network to enhance active transport connections between across the region. The importance of these links will increase within the coming years when Oran Park Train Station opens and more people commute using a combination of active and public transport.

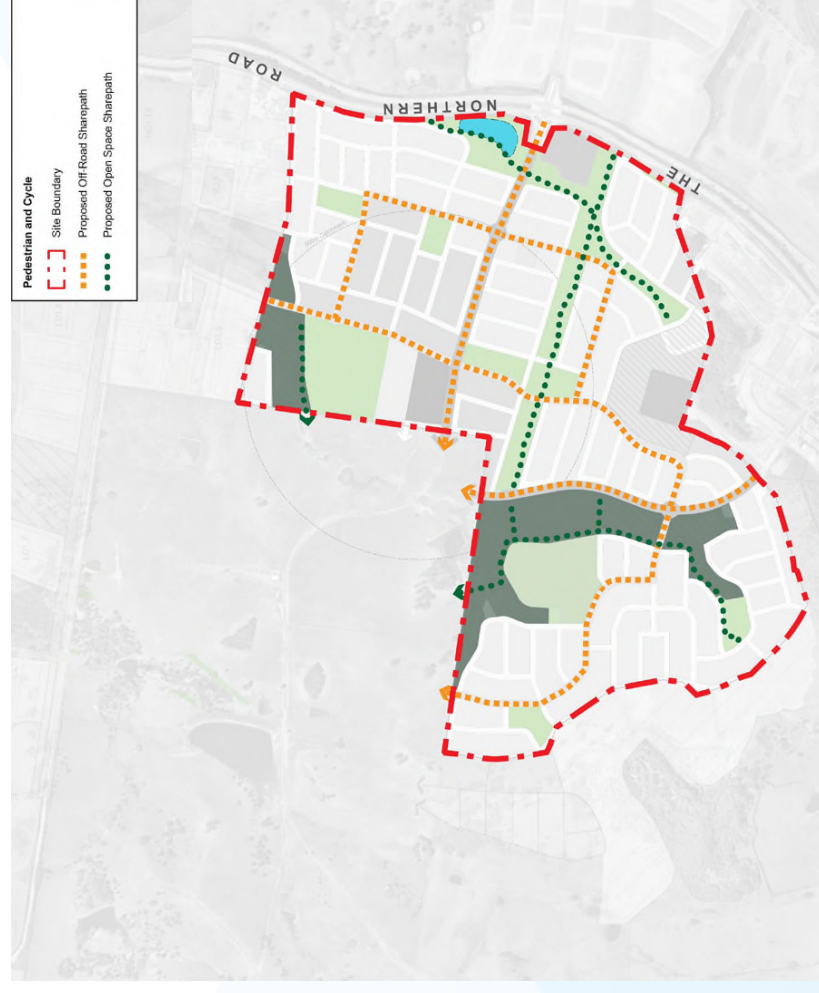


Figure 21 Pedestrian and Cycle Network

3.9 Local Centre

The Local Neighbourhood Centre will be the focal point of the Precinct. It has been strategically located in the heart of the Precinct where several of the major thoroughfares meet, making it highly accessible from the surrounding local area as well as the wider district. The Local Centre has been purposefully positioned to ensure that the future community has convenience shopping and a place that provides an opportunity for people to meet, interact and socialise.

The Local Centre will have an area of approximately 1.8 hectares. Potential amenities include approximately 7,500m² of retail floor space, a childcare centre, a community centre and shop-top housing. The proposed land use arrangement and design of the Local Centre has been informed by design principles to ensure the best outcomes are achieved for this key area.

The new primary school and an active open space have been collocated within the Local Centre to strengthen community identity, create a sense of place and provide convenience. The land uses within the Local Centre will complement each other and will likely experience considerable foot traffic in between. Accordingly, the design proposes a plaza space interface along the eastern side of the Local Centre and school along a wider collector road (Figure 24 Local Centre Collector), to provide a strong pedestrian connection that links these land uses to the active open space and riparian corridor. The plaza will also offer additional communal space for socialisation, further providing a sense of community and making the Local Centre welcoming destination. Additional, pedestrian connections through the Local Centre Precinct will be provided, including potentially connections through the school, however these will be subject to further review.

There is potential for a landmark building to be located at the intersection of the future sub-arterial road and future collector road, anchoring the corner and further providing a sense of place. It is proposed that shop-top housing will be provided above retail and commercial components of the Local Centre, contributing the creation of a lively hub for the community. DCP controls will require active frontage interfaces along key road and pedestrian thoroughfares to afford a vibrant and lively atmosphere within the Local Centre.

The vibrancy of the Local Centre will be further enhanced by the location of medium density residential development around the periphery, while the abundant open spaces encircling the area will result in a visually appealing precinct that is easily traversable by foot and bicycle. A signalised intersection and suitably located wombat crossings will ensure easy pedestrian access the major roads from the residential areas to the east and south of the local centre.

The design of the Local Centre has considered the future development of the remainder of Cobbitty Sub-Precinct 5, with the proposed layout capable of accommodating a future expansion of the Local Centre and active open space westward. However, the provision of a road along the boundary of the Local Centre will allow the space to present as visually complete in the interior.



Figure 22 Local Centre Catchment



Figure 23 Local Centre Design Principles

Figure 24 Local Centre Collector Road

3.10 Residential Densities and Allotment Design

The residential structure of the proposal includes a variety of housing densities and lot sizes to allow for a diversity of dwelling types with a gradation of density from the Local Centre outwards. The residential land surrounding the Local Centre will be medium density residential (up to 35 dwelling per hectare) as this area will be well-serviced and accessible as well as having sufficient open space, making it ideal for smaller dwelling types. The majority of remaining land will be low-density residential, with slightly higher density (25 dw/h) located on the eastern side closer to The Northern Road while the lower density (20 dw/h) will be concentrated on the western portion of the site. Large lot residential has been located on the Southern Ridgeline, providing the opportunity for unique residential development that takes advantage of the natural beauty of the area and to allow for retention and planting of native vegetation on the ridgeline.

Within the Precinct will be various separate neighbourhoods with differing characteristics shaped by the landscape, topography and locality, providing a diversity of housing choice for the future residents.

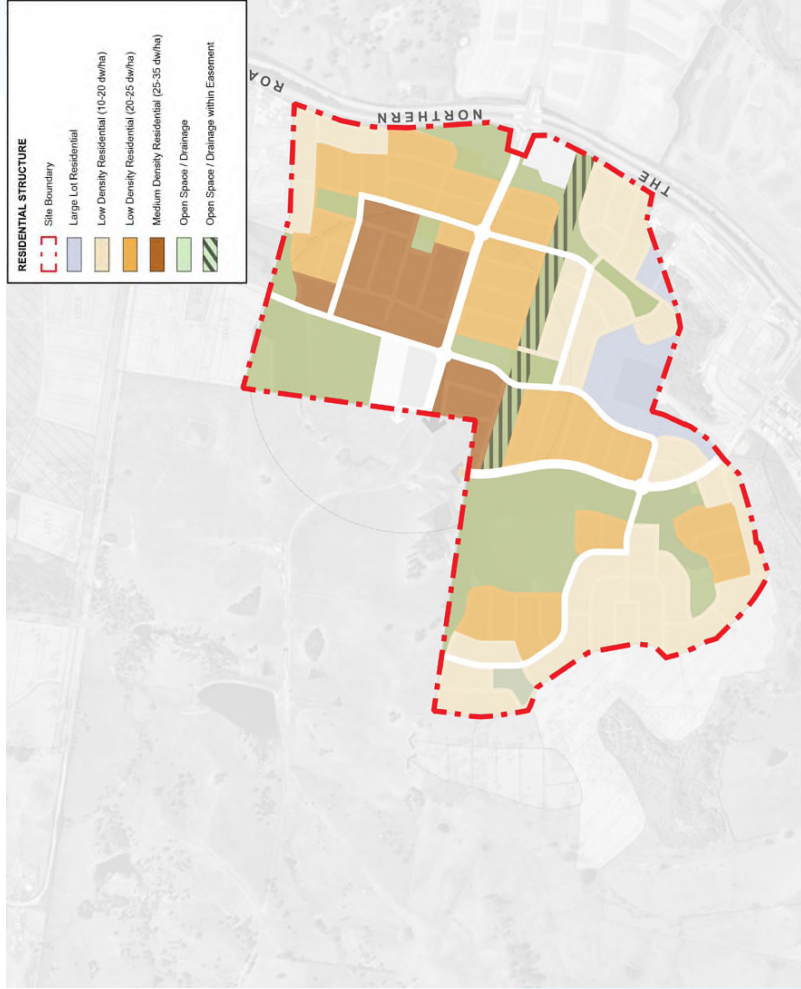


Figure 25 Residential Densities and Allotment Design

3.11 Hilltop Investigation Area

The 'Hilltop Investigation Area' applies to a portion of the site adjacent to the south-eastern boundary, enveloping the new Water Tower on the southern ridgeline. Presently, it is proposed this area will be zoned C4 Environmental Living to allow for large lot residential with a maximum density of 10 dwelling per hectare. Due to the geotechnical, topographic and ecological constraints presented by the steep terrain on the ridgeline and pockets of native vegetation, large lot residential has been determined to be most appropriate land use.

Deep lots backing on to the ridgeline are proposed, which will afford adequate depth for dwellings at the front, well as an asset protection zone (APZ) if required. The rear of the lots will encompass sections of retained native vegetation and provide opportunities for revegetation of the ridgeline.

Geotechnical slope stability assessments have also been considered through the ridgeline which includes areas of 'intermediate' to 'major' slope constraint. Further assessment of these areas is required as part of the 'Hilltop Investigation Area' to ensure the most suitable residential outcome is pursued.

The existing and newly planted native vegetation will partially screen the Water Tower from the remainder of the Precinct and areas to the east. Further, together with the vegetation on the main section of the Southern Ridgeline, the tree canopy in the Hilltop Investigation Area will also serve as a green backdrop to the Precinct, contributing to the desired sense of place and leafy character of the community.

The potential for a passive open space on the Hilltop Investigation Area was initially explored, however concluded by Council that this was not their preference. Accordingly, large lot residential is considered the most suitable land use as it achieves the objectives of retaining the character of a vegetated ridgeline whilst still effectively using the land. The offering of large lots within the Hilltop Investigation Area will also broaden the diversity of housing options and provide a unique lifestyle offering.

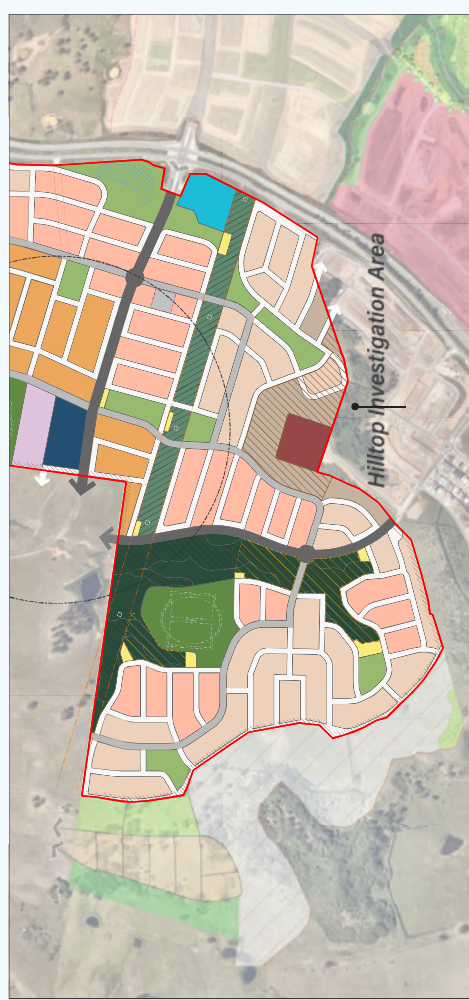


Figure 26 Hilltop Investigation Area

3.12 Open Space

The proposal includes an extensive open space network which comprises of passive open space (13.9 ha), active open space (9.2 ha), riparian areas (17.2 ha) and the powerline easement (5.8 ha). This equates to approximately 46.1 hectares of open space.

The Central Riparian Corridor will form the largest open space areas within the site, and has been designed according to the Office of Water guidelines for riparian corridors, where offsetting and the averaging rule have been applied where relevant. While they have been retained for flood mitigation and environmental requirements, the corridors will additionally serve as a space for recreational and aesthetic purposes. A detailed riparian offset plan for the rezoning area is provided in Appendix A.

Likewise, other existing clusters of native vegetation have been incorporated into smaller local parks and open spaces. The retention of mature trees will assist in achieving the desired canopy coverage and leafy green character of the proposal.

The proposal contains two large active open spaces to be used for active sporting purposes while numerous smaller local parks are scattered throughout neighbourhoods are expected to be used for general recreation by the community.

A body of water is proposed within the open space adjacent to the Marylands Link Road 1 entrance, which is designed to serve as an attractive entry feature to the community and as a point of interest within the open space network. It is anticipated that all open space areas will ultimately be in the ownership of Council and maintained in a similar fashion to other established areas within the LGA.

3.13 Heritage

The design of the development has been shaped to preserve and respect both Indigenous and European heritage within the site and the surrounding area.

Studies concluded that there are potential for Aboriginal heritage sites and artefacts within the study area especially along creek lines and areas that were less disturbed by past agricultural practices. The design has intentionally retained the areas of remnant Cumberland Plain Forest and the creek riparian corridors for both their environmental and historical value. Therefore, any potential Aboriginal artefacts or sites within these zones will not be impacted by this development.

Despite a significant European history in the area spanning back to the early 1800's, the site does not include any heritage items nor located within a heritage conservation area. The development is in close proximity to the heritage listed Denbigh property to the south and Maryland Homestead to the north, however heritage studies concluded the proposal will not have any impacts on these items, with the ridgelines, undulating terrain and vegetation largely obscuring views lines to both heritage sites.

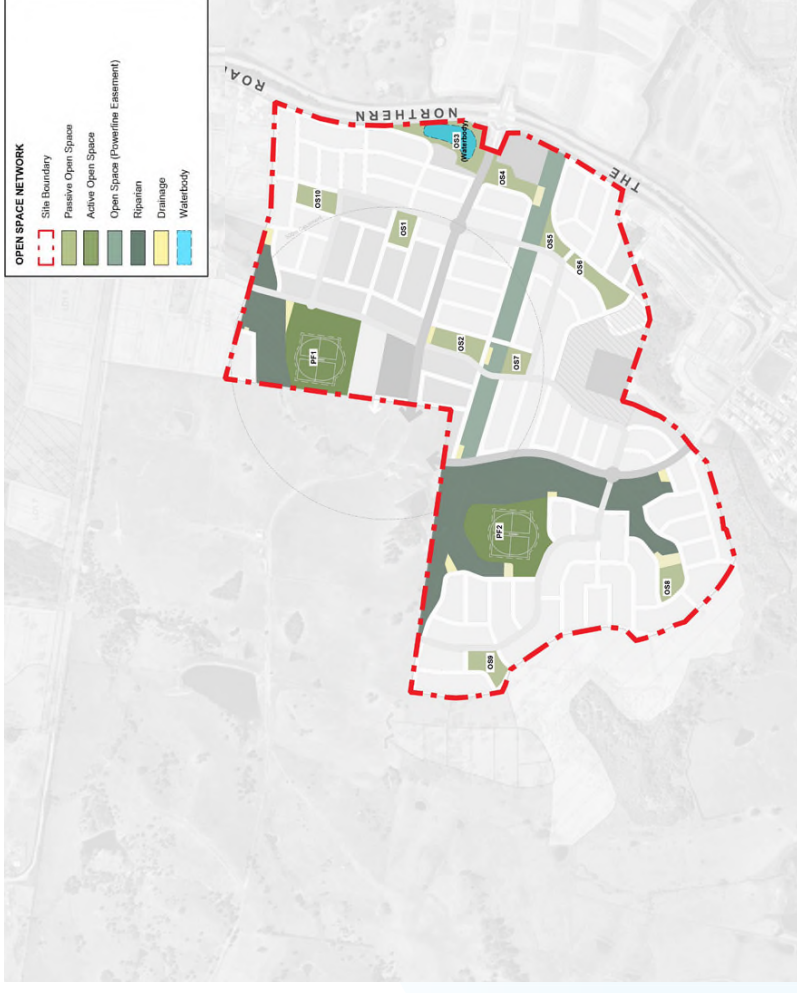


Figure 27 Open Space

3.14 Social Infrastructure

The Indicative Layout Plan for the Precinct has been specifically designed to locate key pieces of social infrastructure at accessible locations or ensure easy access to facilities in the neighbouring Precinct's such as Lowes Creek Maryland, Oran Park and Pondicherry.

The local and district facilities proposed within the Precinct include:

- a public primary school,
- a community centre,
- a childcare centre,
- a variety of retail and commercial services, including entertainment and leisure facilities,
- playgrounds and public open space, and
- sporting fields.

The Local Centre at the heart of the Precinct will contain key social infrastructure including the primary school, a community centre, a childcare centre and other essential services. Public open space and playgrounds are dotted throughout the precinct and within a short walking distance of all residential allotments. The provision of **19.97** hectares of open space within the Planning Proposal area alone will ensure that there is adequate space for future residents. This includes two large sporting fields, which are proposed adjacent to the Local Centre and Central Riparian Corridor respectively.

The pedestrian and cycle network provided within the Precinct will allow easy and efficient access to the surrounding areas.



Figure 28 Social infrastructure

3.15 Staging

To ensure an orderly and efficient delivery of the development, it is proposed that it be constructed in stages. This delivery strategy ensures that major placemaking elements of the design are delivered to support the different housing catchments and establish strong local community foundations up-front.

An indicative staging plan proposes the development be constructed in 10 stages. The first stages will be located on the eastern side of the site, adjacent to the main entry of the Precinct at the intersection of Marylands Link Road 1 and The Northern Road. This will be followed by the establishment of the Local Centre as the heart of Precinct, allowing for residents of the first stages to have easy access to essential services.

Likewise, the inclusion of large open spaces, a playing field and considerable number of smaller parks within the initial stages will ensure the community will have quality open spaces available to them promptly. The development will gradually continue westward, ending with the delivery of larger residential allotments. A final staging plan will be determined subject to further investigations on infrastructure and servicing provision.

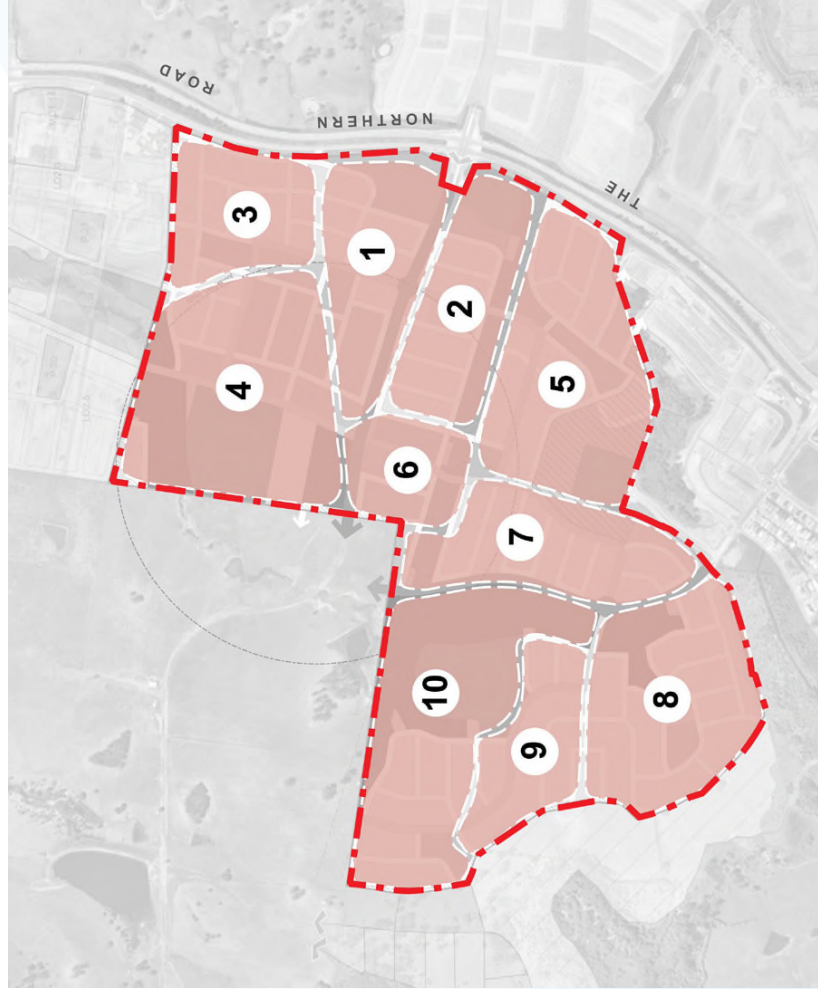


Figure 29 Indicative Staging Plan

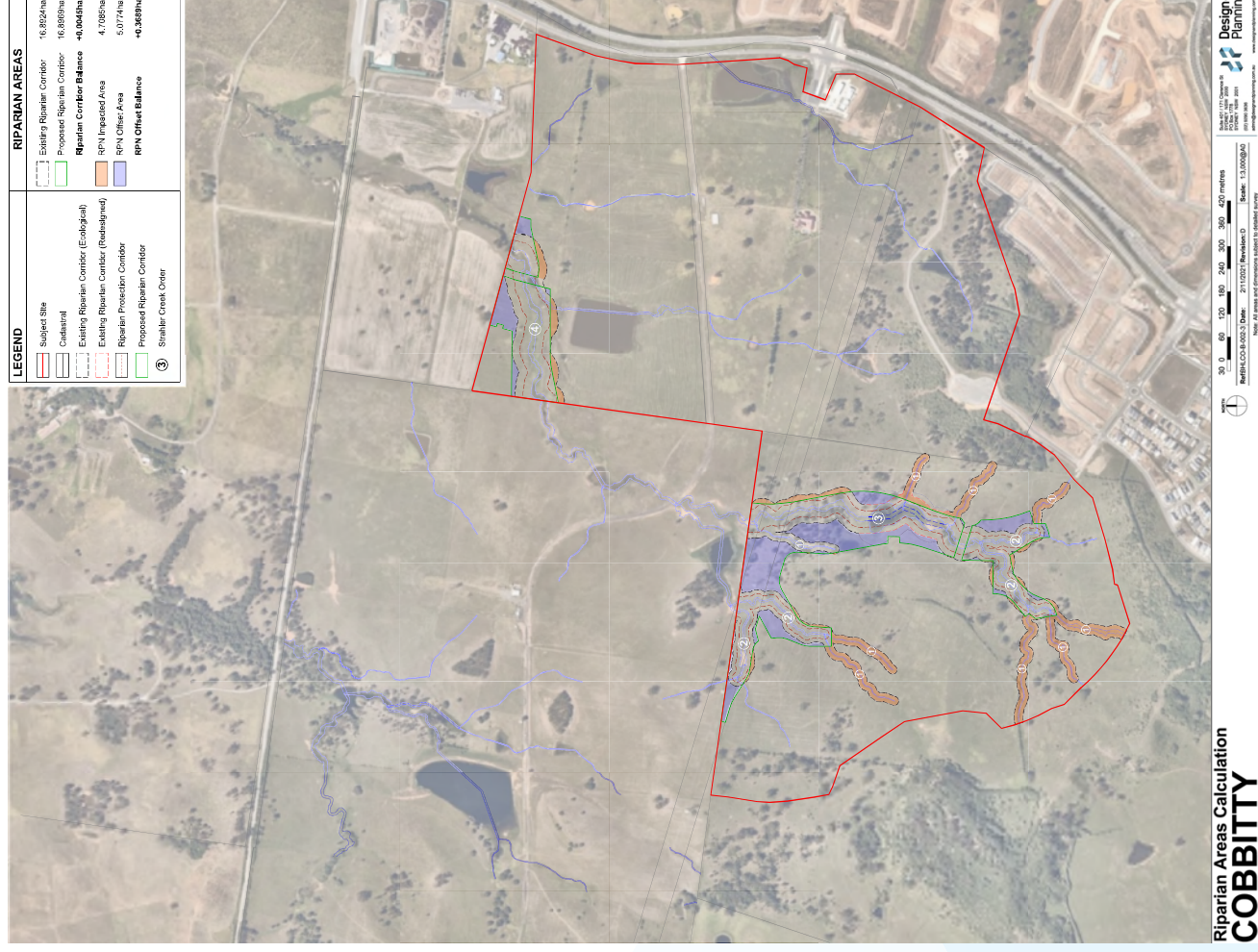
4. Conclusion

The design of the Indicative Layout Plan has been thoughtful and purposeful to ensure that a strong and cohesive community is established. The ingredients of the site characteristics and considerations from the multidisciplinary inputs have been brought together in meaningful way to establish a strong basis for achieving a well-connected and integrated place.

The elements of the site and the assemblage of the land uses provide a strong focal heart to the ultimate community, while achieving environmental benefits from the retention of vegetation on the ridge line to the south and the riparian corridors within the central area of the site. The combination of these elements will provide a strong physical and emotional connection to the landscape in which the future residents will live, work, play and educate.

The Indicative Layout Plan provides a strong foundation on which more detailed design can be progressed to deliver a community that is robust and integrated, not only within, but also externally to the mainly attractions and features of the surrounding area.

Appendix A - Riparian Offset Plan





Design+
Planning

Contact Us

Suite 304, 171 Clarence Street
PO Box 1778
Sydney NSW 2000

☎ 02 9290 3636

✉ admin@designandplanning.com.au
www.designandplanning.com.au