



Edmondson Park Precinct 3 Urban Design & Place Making Report

The Concept Plan responds to the site setting and unique natural, physical and historic characteristics to create a new community which provides a range of housing opportunities and fosters a sense of place and community.

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Contents

Precinct 3 Design Review	1
--------------------------	---

Site Setting and Context	3
--------------------------	---

The Site	5
----------	---

Site Analysis	9
---------------	---

Drainage

Vegetation

Topography

Bushfire Prone Land

Vehicular Access / Movement

Heritage

Site Analysis Summary

Urban Design Principles	17
-------------------------	----

Urban Design Response	19
-----------------------	----

The Concept Plan

Open Space and Green Grid Connections

Roadway Hierarchy and Streetscape Principles

Pedestrian and Cycle Connectivity

Housing Diversity

Summary	29
---------	----

Precinct 3 Design Review

Forming part of the Edmondson Park South development area, Precinct 3 has been identified to accommodate a range of residential housing in close proximity to the Town Centre and Railway Station.

The site provides an opportunity to deliver a transition in housing typologies and density between the larger lot single dwellings delivered to the south, high density apartments to the north and medium density terraces to the east.

Encompassing over 20 hectares of land, and surrounding by existing major roads, the site presents a unique opportunity to deliver a contained master planned community, within walkable catchment of the Town Centre precinct.

In response to the unique site characteristics, Urbanco have undertaken a detailed master planning process in collaboration with Landcom and a diverse project team.

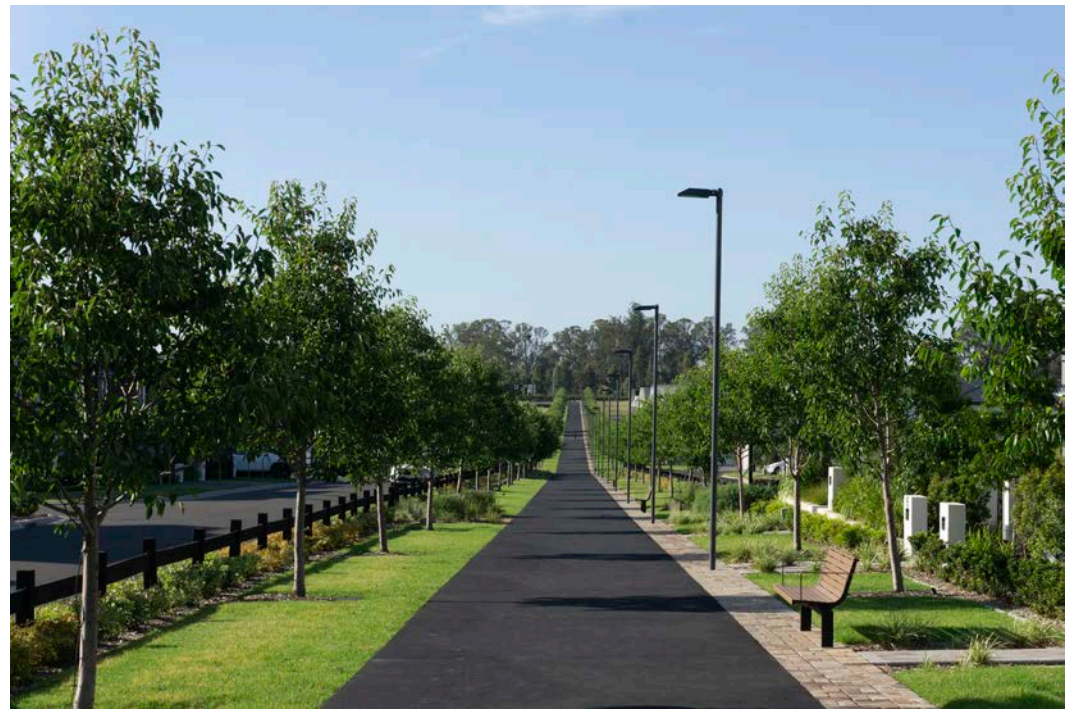
The outcome of this process has been the preparation of a site Concept Plan which provides for a diverse range of housing, local open space areas, pedestrian & cycle connections and responds to the sites unique characteristics.

The urban design outcomes create points of interest in the neighbourhood to encourage a sense of place, while delivering a grid base street pattern to assist in pedestrian permeability.

This report provides a summary of the detailed site analysis undertaken, urban design principles adopted and provides an outline of the Concept Plan outcomes and key elements.

This report and associated Concept Plan forms part of a detailed Development Application to be lodged with Liverpool Council which seeks approval for the residential subdivision of the site and incorporates all necessary detailed site investigations, engineering and landscape design.

Support for the Concept Plan and associated subdivision proposal will allow delivery of an exemplar new residential community as part of the Edmondson Park project area.



Site Setting and Context

Located 8km south-west of the Liverpool CBD and 15km east of the Western Sydney Airport, Edmondson Park forms a key urban release area in South West Sydney, centred on a new rail station, operating since 2015.

Edmondson Park is a highly accessible community, with the existing rail line providing access to existing centres to the east and south. The planned extension of the rail line will provide connection to the Western Sydney Aerotropolis.

The community is also highly accessible to the regional road network and Hume / M5 Motorway and M7 Motorway via Campbelltown Road and Camden Valley Way.

The area benefits from vehicle and public transport connectivity to a number of existing and planned employment centres including Liverpool CBD, Campbelltown CBD, Parramatta CBD and the Western Sydney Aerotropolis.

There are a number of existing educational facilities in the local area including the St Francis Catholic College, Bardia Public School and Hurlstone Agricultural High School. There are also university campuses located in Campbelltown, Liverpool CBD and Parramatta CBD.

There has been significant development completed in Edmondson Park over the last 15 years.

The Edmondson Park north area was rezoned in 2008 and will accommodate 6,000 new homes on completion. The Edmondson Park north precinct is approximately 90% complete, with predominantly low rise single dwellings being delivered.

The subject site forms part of the Edmondson Park South Precinct, which was rezoned in 2011, with an associated Concept Plan approval applicable to the project.

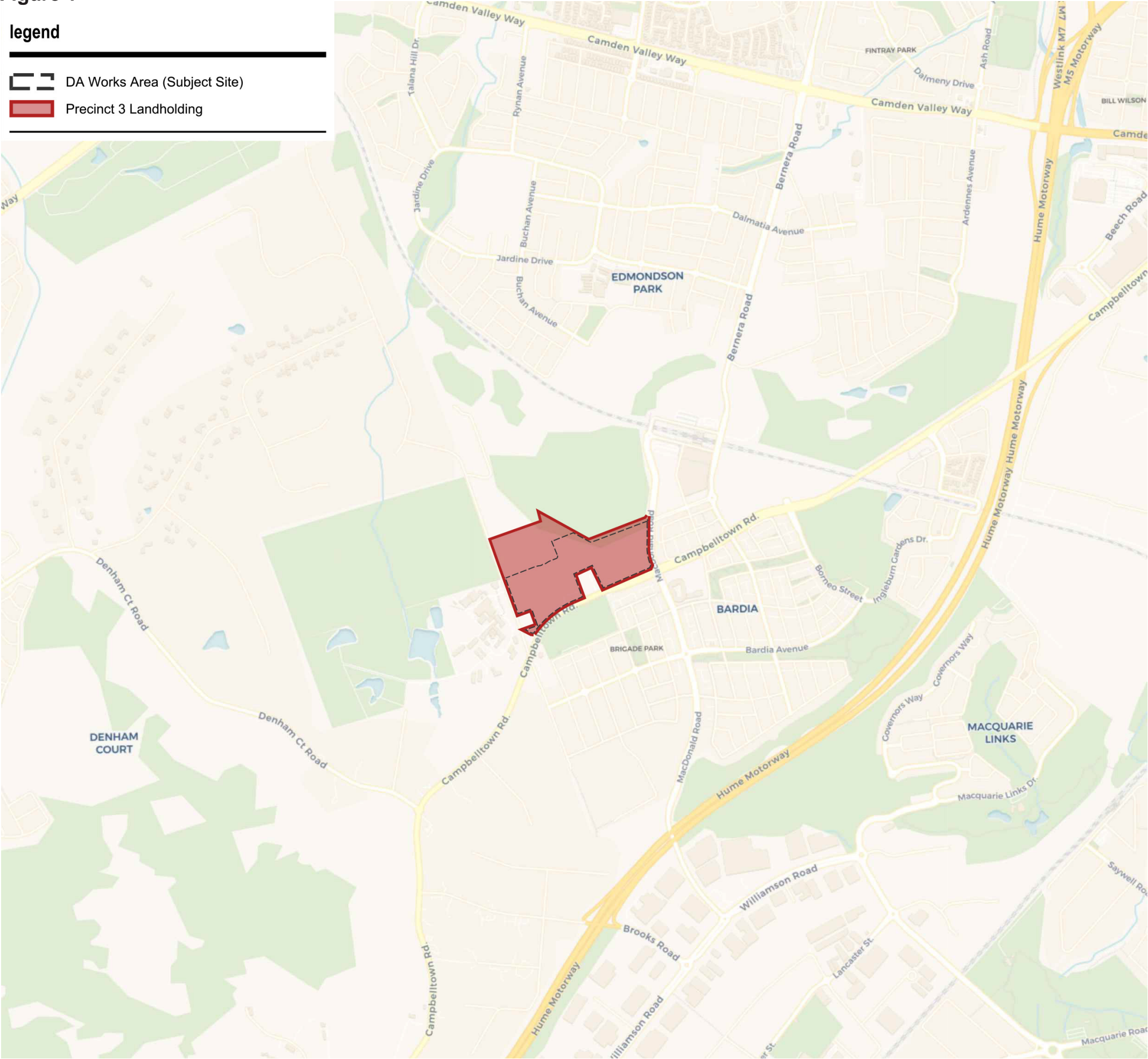
Since rezoning, approximately 80% of the Edmondson Park South Precinct has been delivered, incorporating existing residential areas to the south of the site and significant components of the Town Centre retail and high density housing to the north-east.

The local area is also well serviced by existing and planned open space and recreational facilities in the local area which provide opportunities for active lifestyles, passive recreation and extensive pedestrian and cycle pathways.

Figure 1

legend

- DA Works Area (Subject Site)
- Precinct 3 Landholding



The Site

Precinct 3 encompasses a land area of 20 hectares, situated on the northern side of Campbelltown Road in the Liverpool Local Government Area (LGA).

The site encompasses three separate allotments which are identified as follows:

- Lot 2 DP 1272931
- Lot 3 DP 1272931
- Lot 5 DP 1272931

The site is bordered by MacDonald Road to the east, Campbelltown Road to the south, Zouch Road to the west and the National Parks reservation land to the north.

Campbelltown Road forms the primary frontage of the site. However as a major arterial roadway, no intersections or access are permissible along this frontage into the site. The site is accessible via both Zouch Road to the west and MacDonald Road to the east.

The existing heritage listed Bardia Barracks is also located centrally along the southern edge of the site on Campbelltown Road. The heritage listing and curtilage for the Bardia Barracks is contained to the barracks property and does not extend within the subject site.

The site is located only 200m from the Edmondson Park Town Centre and 400m from the Edmondson Park Railway Station to the north. The site is situated within a walkable catchment of the rail line and Town Centre, with existing pathways providing easy access for pedestrians and cyclists.

Land to the south and the east of the site has been developed with the delivery of residential allotments, roadways and medium density housing as per the approved Concept Plan.

There is a range of existing two and three storey medium density housing directly adjacent to the site on the eastern side of MacDonald Road.

The subject site is zoned primarily R1 General Residential allowing for a range of residential housing typologies to be delivered.

There is a large scale open space (zoned RE1 Public Open Space) in the western corner of the site which will accommodate a future active recreational facility.

A portion of the site is also zoned C1 National Parks and Natures Reserves, which corresponds with the National Parks reserve to the north of the site.

We have provided a more detailed analysis of the sites attributes in the following sections of this report.

Figure 2

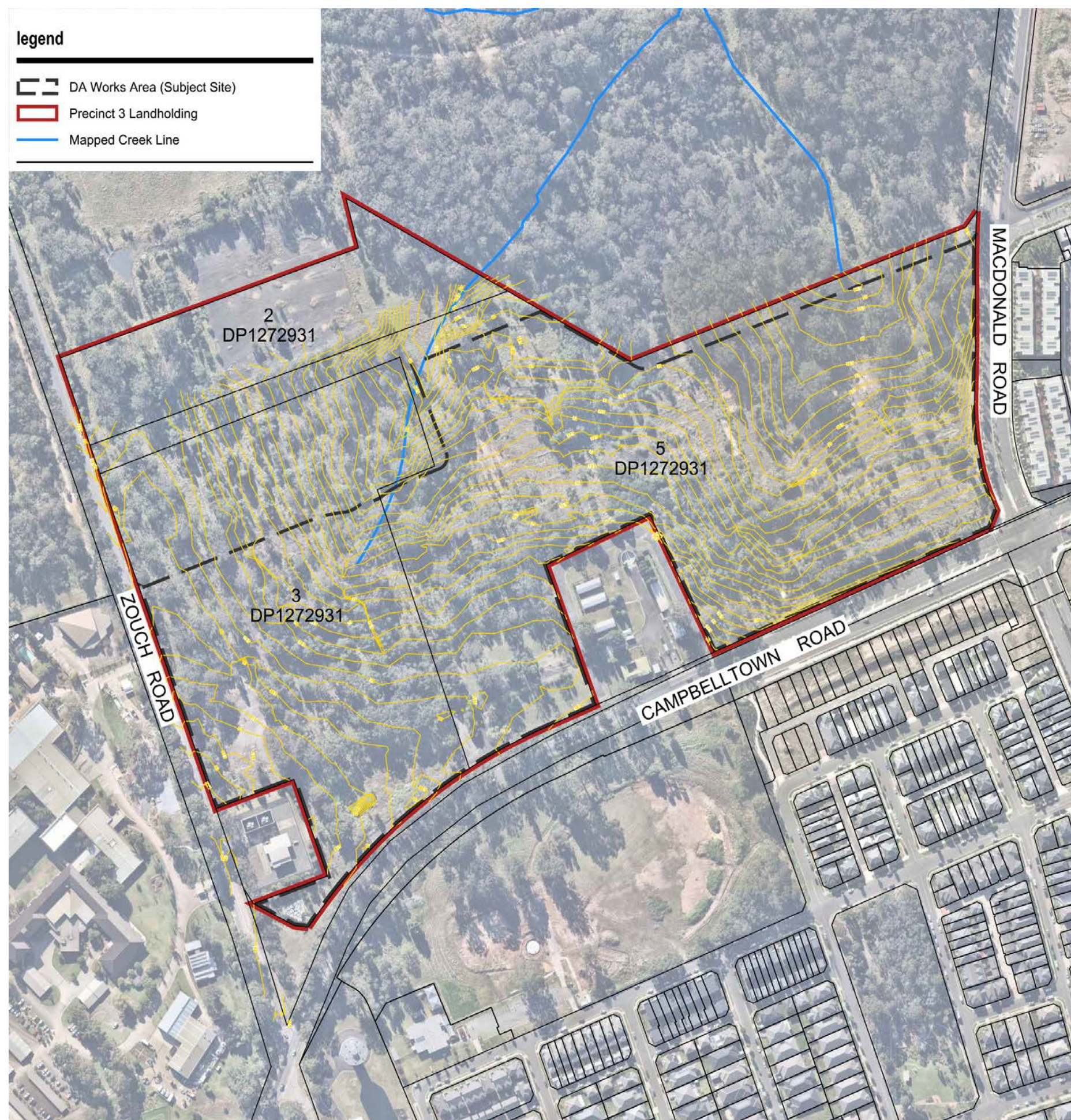
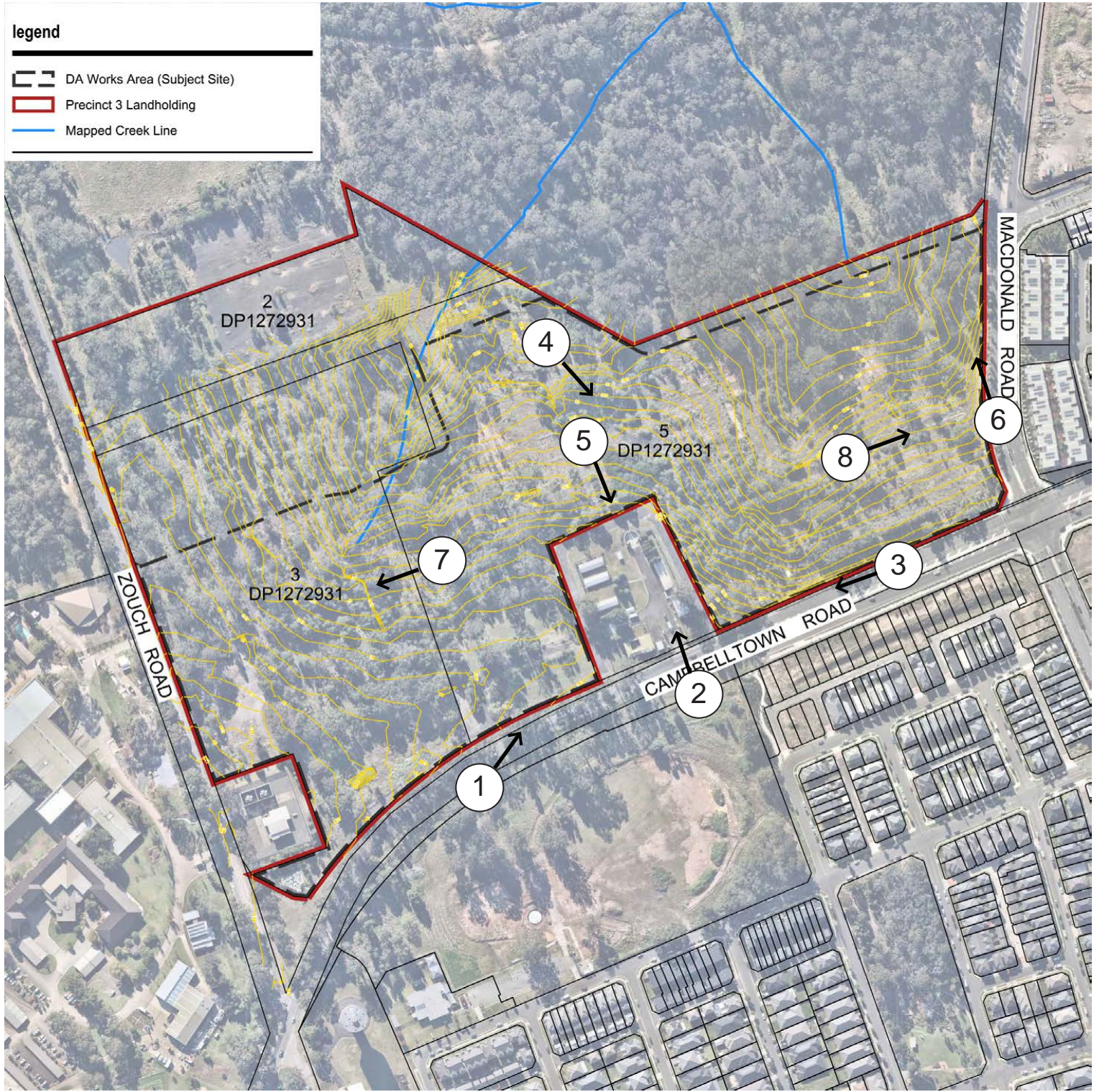






Figure 3



Site Analysis

Drainage Lines

The site incorporates two drainage lines, with one mapped as a creek line under the regional topographical mapping data.

The eastern portion of the site incorporates an existing drainage line which flows to a mapped creek line in the nature reserve to the north.

The western drainage line is a mapped creek line within the site, which drains to the north-east.

These drainage lines were inspected during a site walkover undertaken as part of this design review.

Eco Logical Australia have also undertaken a Riparian Corridor review and field validation as part of the site investigations. Eco Logical Australia found that the mapped water course, within lot 3 DP 1272931, was an overland flow path. The drainage line is not classified as a riparian corridor until outside of the site approximately 230 m downstream of the start of the mapped 1st order watercourse.

Figure 4

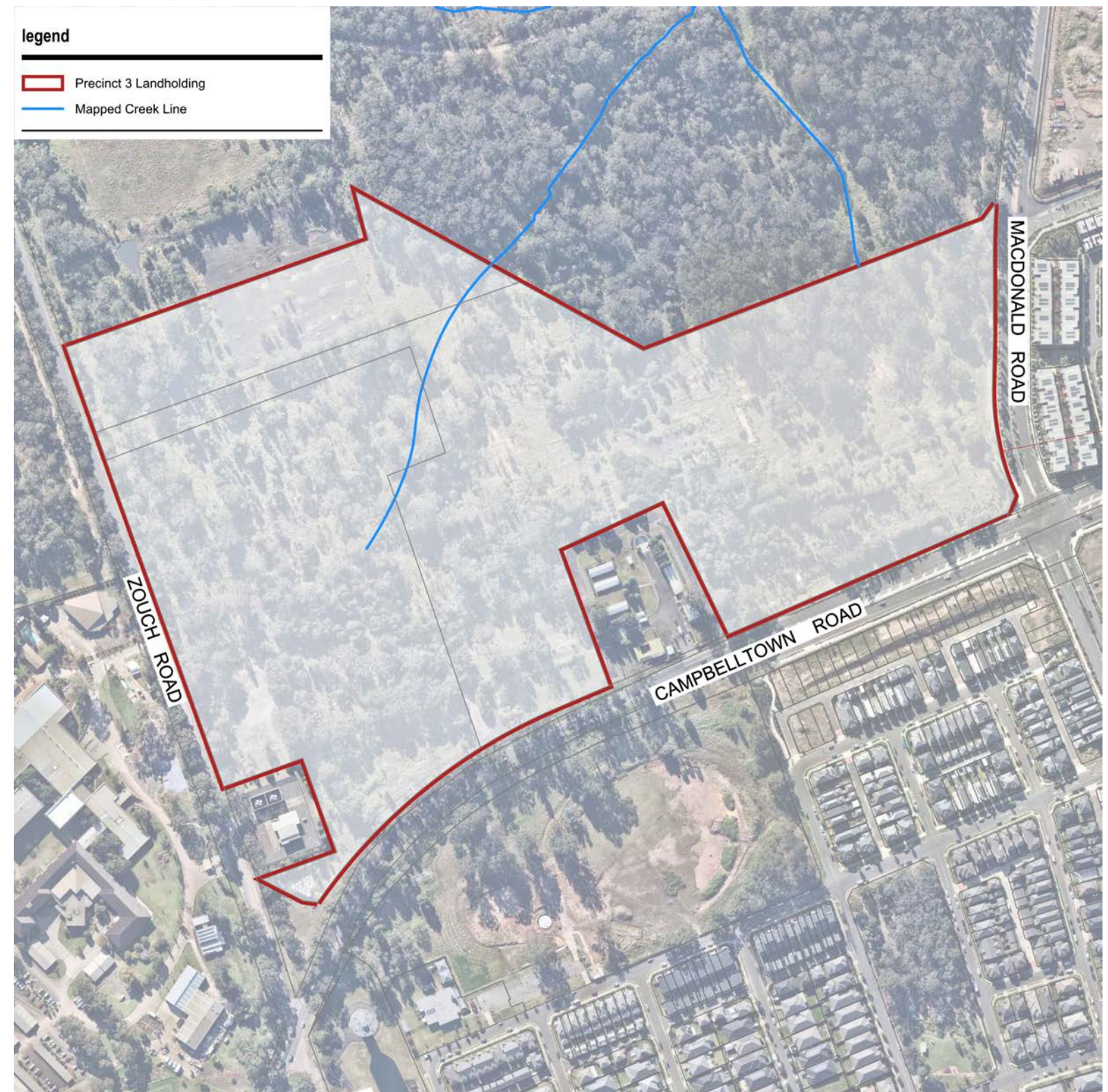


Figure 5

Vegetation

The site has previously been cleared in association with the former use as a military based.

There is a range of existing vegetation which is primarily re-growth areas, exotic landscape plantings from the former use and some areas of native landscaping.

A Development Application is currently being assessed by Council for the removal of vegetation within the development areas, which are certified land under the Biodiversity Act.

There are significant areas of vegetation to the north of the site which form part of the Edmondson Park Regional Park which will be transferred to National Parks and Wildlife Services.

Areas of remnant vegetation within non-certified land in the north-western portion of the site will be retained and form part of the nature reserve in the future.



Topography

The Precinct 3 development area grades from Campbelltown Road in the south to the northern property boundary.

There is a high point which traverses the site from the north-eastern corner of the barracks to the northern boundary which creates two catchments, being the eastern and western portion of the site.

The western portion of the precinct has flatter grades along the southern edge and adjoining the Bardia Barracks. There are steeper sloping land areas adjacent to the drainage channel and toward the north-western boundary of the development area.

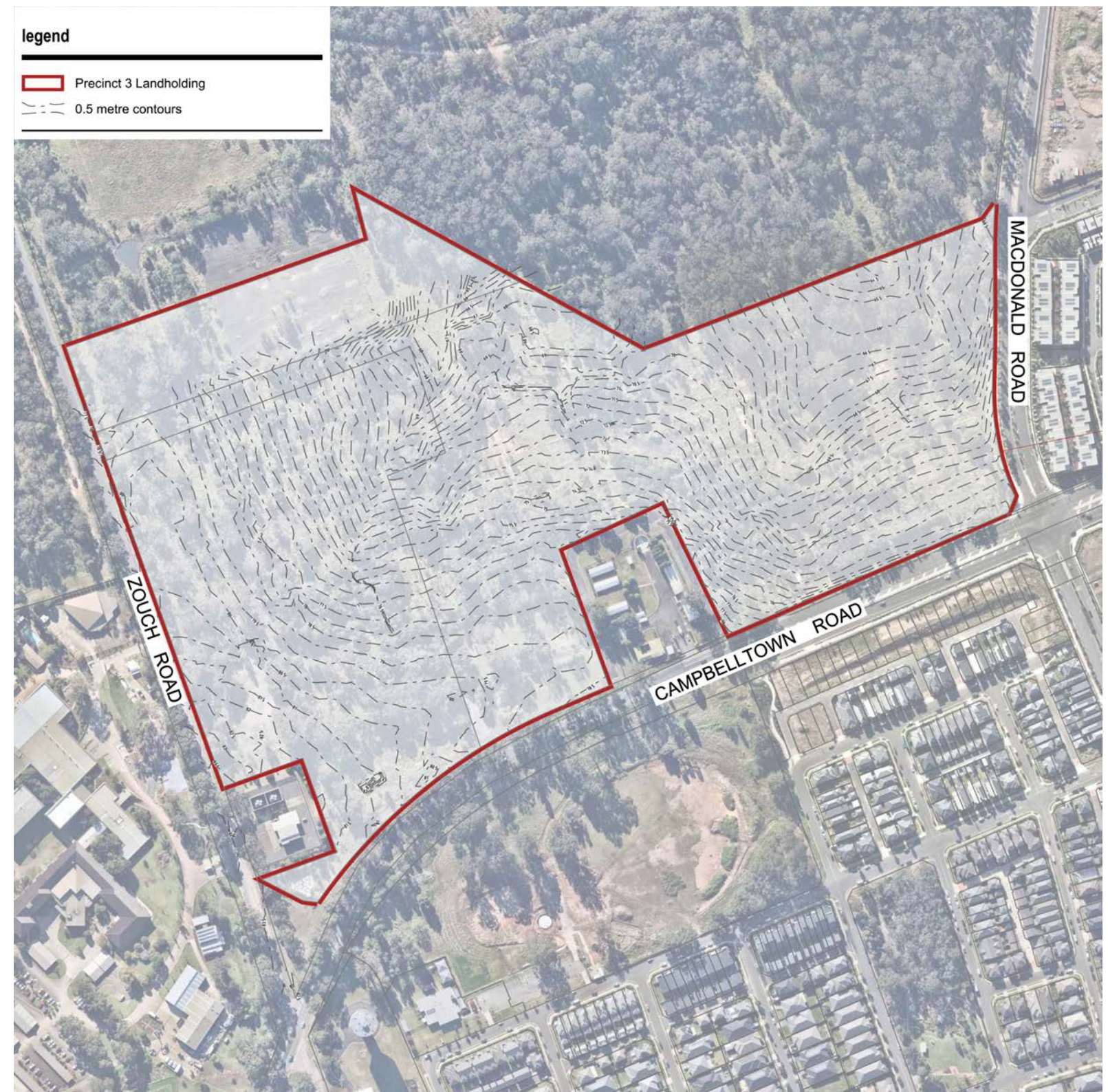
In the eastern portion of the Precinct, there are isolated areas of steeper grades directly adjacent to Campbelltown Road and centrally along the MacDonald Road frontage sloping into the site.

The balance of the eastern portion has a gentle grade to the northern property boundary.

The site level is consistent with the road level (at grade) at the Campbelltown Road / MacDonald Road intersection.

The site level is also consistent with the road level (at grade) at the MacDonald Road / General Boulevard intersection and along the Zouch Road frontage.

Figure 6



Vehicular Access / Movement

The development site does not have any active vehicle entry / exit points. Access to the site is currently achieved via the existing entry to the Bardia Barracks from Campbelltown Road.

New access intersections will be required to be constructed as part of the delivery of residential housing on the site.

As discussed above, Campbelltown Road is a major Arterial roadway and the development is not able to achieve direct vehicular access from this road.

The adopted Concept Plan and DCP identified the delivery of an intersection providing access to the site from MacDonald Road at the intersection with General Boulevard.

Zouch Road also provides opportunity for site access along the northern edge of the active open space area outside of the non-certified lands.

Figure 8

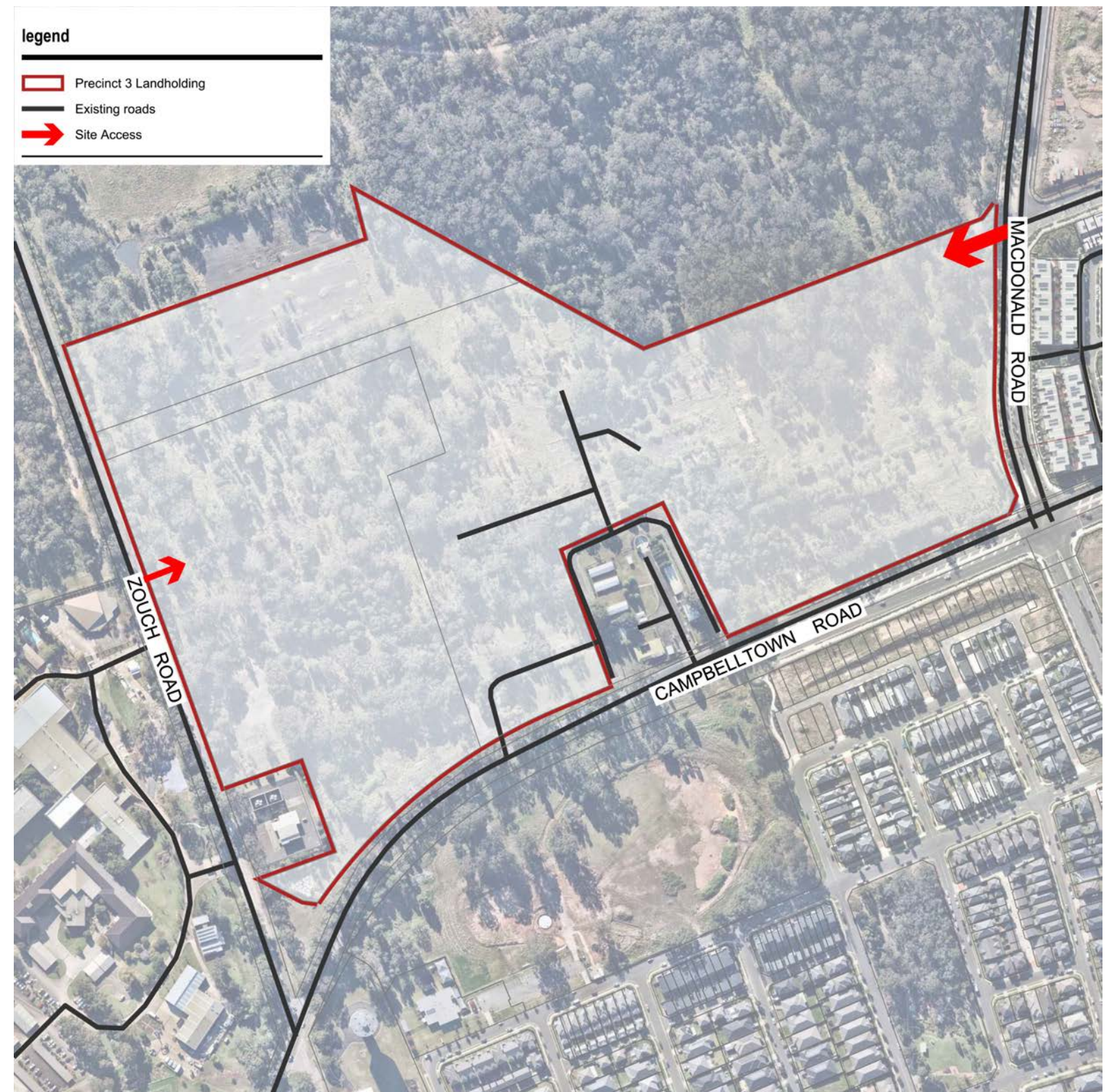


Figure 9

Heritage

The subject site adjoins the existing Bardia Barracks which form part of the heritage listed Ingleburn Military Heritage Precinct and Mont St Quentin Oval.

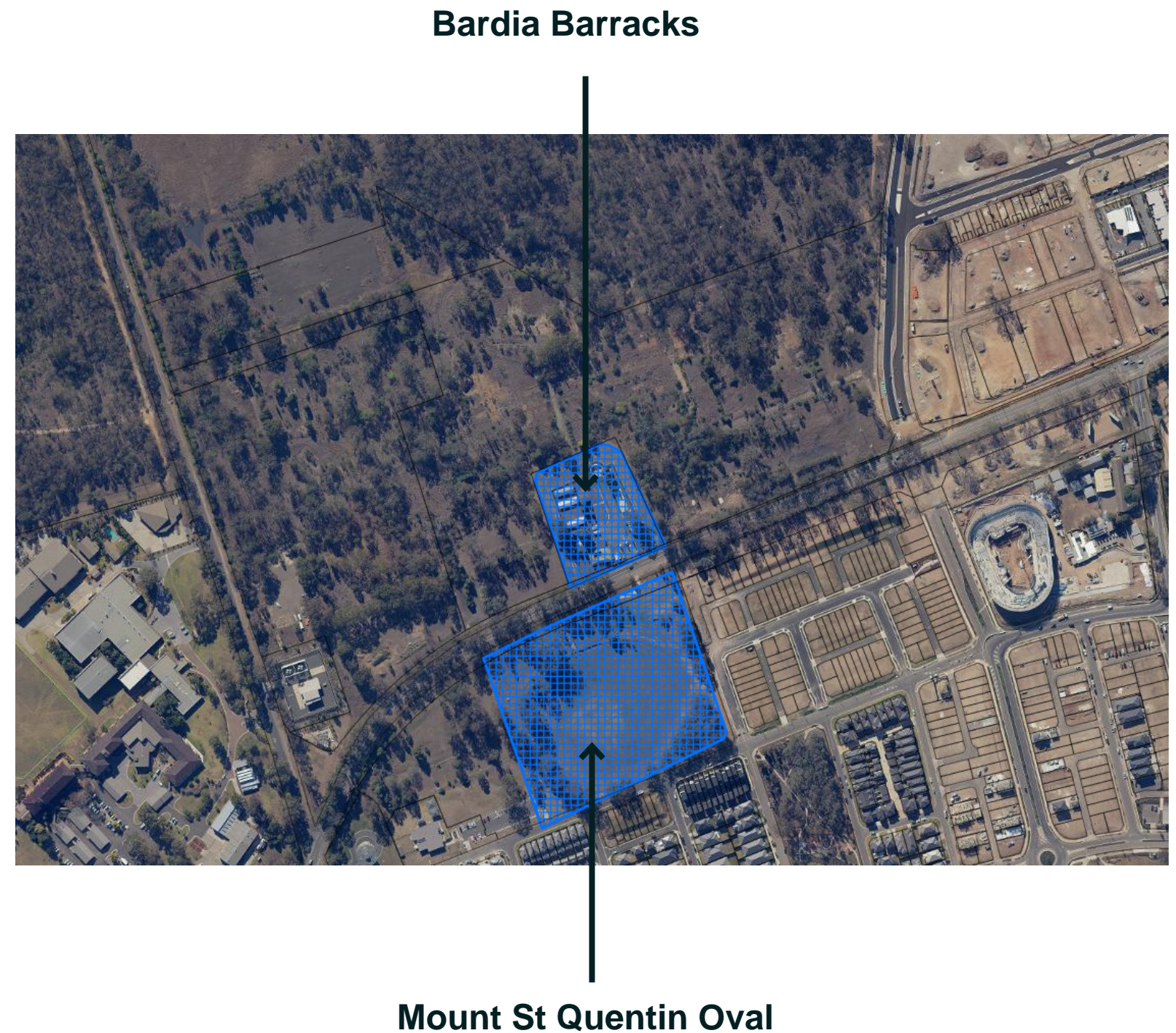
The Military Heritage Precinct and Mont St Quentin Oval is part of the former Defence Site which was originally established in 1939 on 276.8 ha of land.

The barracks are located within a separate allotment and the heritage curtilage is wholly contained within the barracks property.

The Military Heritage Precinct was established in 2002 to conserve and represent the major heritage values of the larger former Ingleburn Defence Site. The precinct is enclosed by a green metal palisade fence and service road and the boundary incorporates the original white masonry gateposts and guard posts of the Bardia Barracks (the former name of this part of the Ingleburn Defence Site).

The Barracks feature a prominent war memorial in the north-eastern part of the site, within the fenced land. The memorial incorporates a flag pole which is visible from the land to the north.

The Barracks are situated on a separate allotment with no opportunity for internal access / connectivity between the residential land and the Barracks.



Site Analysis Summary

- The site is well located within a walkable catchment of the Edmondson Park Town Centre and Railway Station
- The site is also well located in close proximity to Bardia School
- There is an existing gradation in residential density from low density housing in the south - medium density housing to the east and high density apartments to the north
- There is no opportunity for vehicle access / intersections into the site from Campbelltown Road
- Vehicle access to the site is restricted to Zouch Road and MacDonald Road
- The site has good access to existing key pedestrian and cycle pathways servicing the locality
- The site is well serviced by active recreation facilities within and adjacent to the site
- The Bardia Barracks heritage item is contained within its allotment. There are no opportunities for direct pedestrian or vehicle links into the barracks
- Existing vegetation will generally be removed
- There are no validated riparian corridors within the site
- There is a stand of large trees in the centre of the site which could be retained along with an existing sandstone retaining wall
- There is an opportunity to provide a visual or design link between the stand of trees and the Bardia Barracks War Memorial

Figure 10

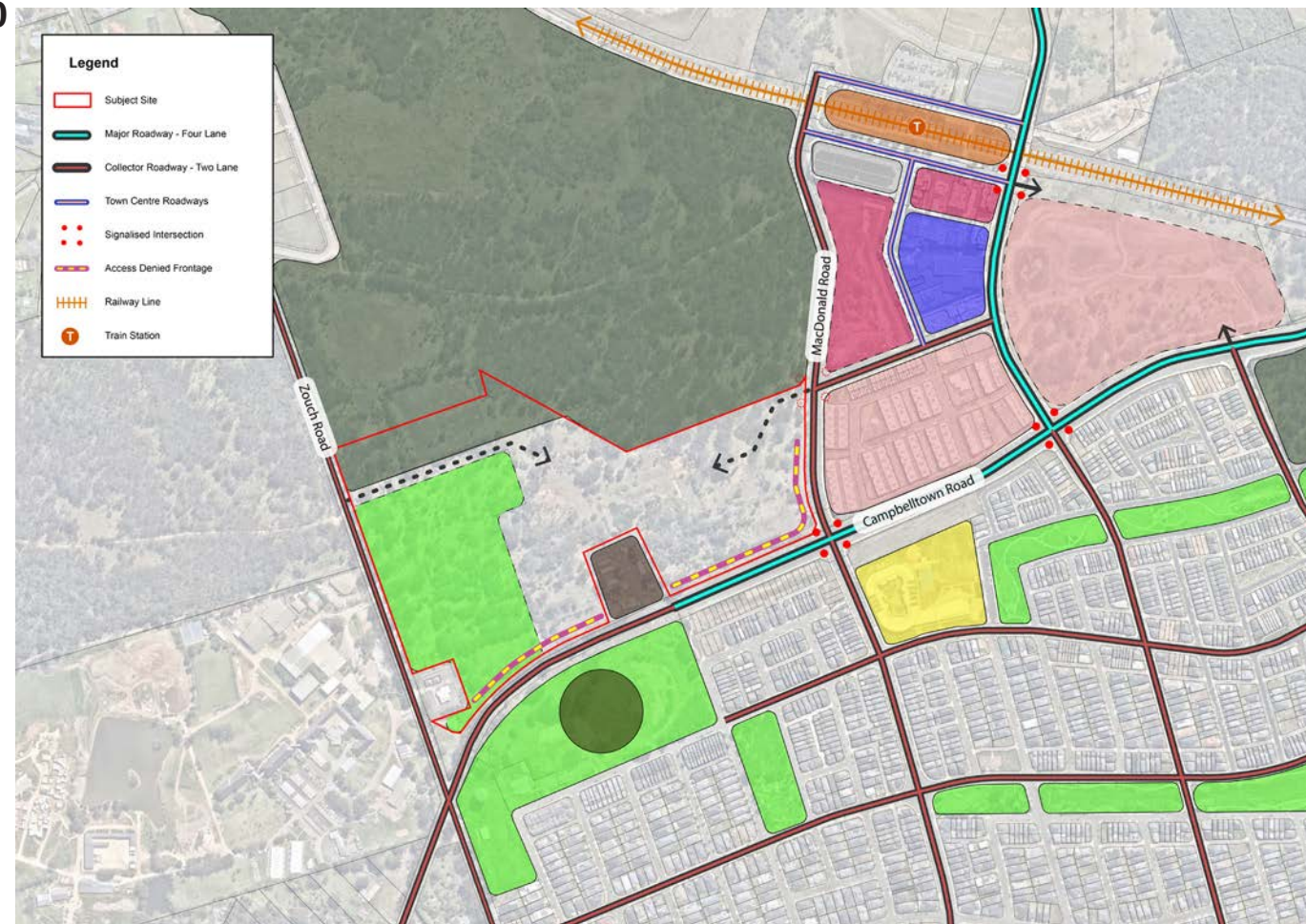


Figure 11





Urban Design Principles

There are a range of place making and urban design principles involved in delivering an outstanding new community. Planning a new community for people with a strong sense of social and environmental awareness and high expectation for amenity requires a great design.

To meet the aspirations and expectations of the future residents, employees and visitors, design principles are established to set a clear understanding of how to facilitate a quality and site responsive urban design.

The design response needs to facilitate a mix of places and spaces that encourage people to connect with each other frequently to grow relationships and feelings of belonging to where they live.

An identity and sense of place is essential to fostering the delivery of an exemplary community with all the material elements (urban layout, public spaces, landscaping) and immaterial elements (friendships, participation, acceptance).

To create a complete community, there needs to be a diverse range of facilities including shops, sporting fields, walking and cycle paths and trails, local parks and schools that combine to provide for the needs of daily living, within a short distance of where people live.

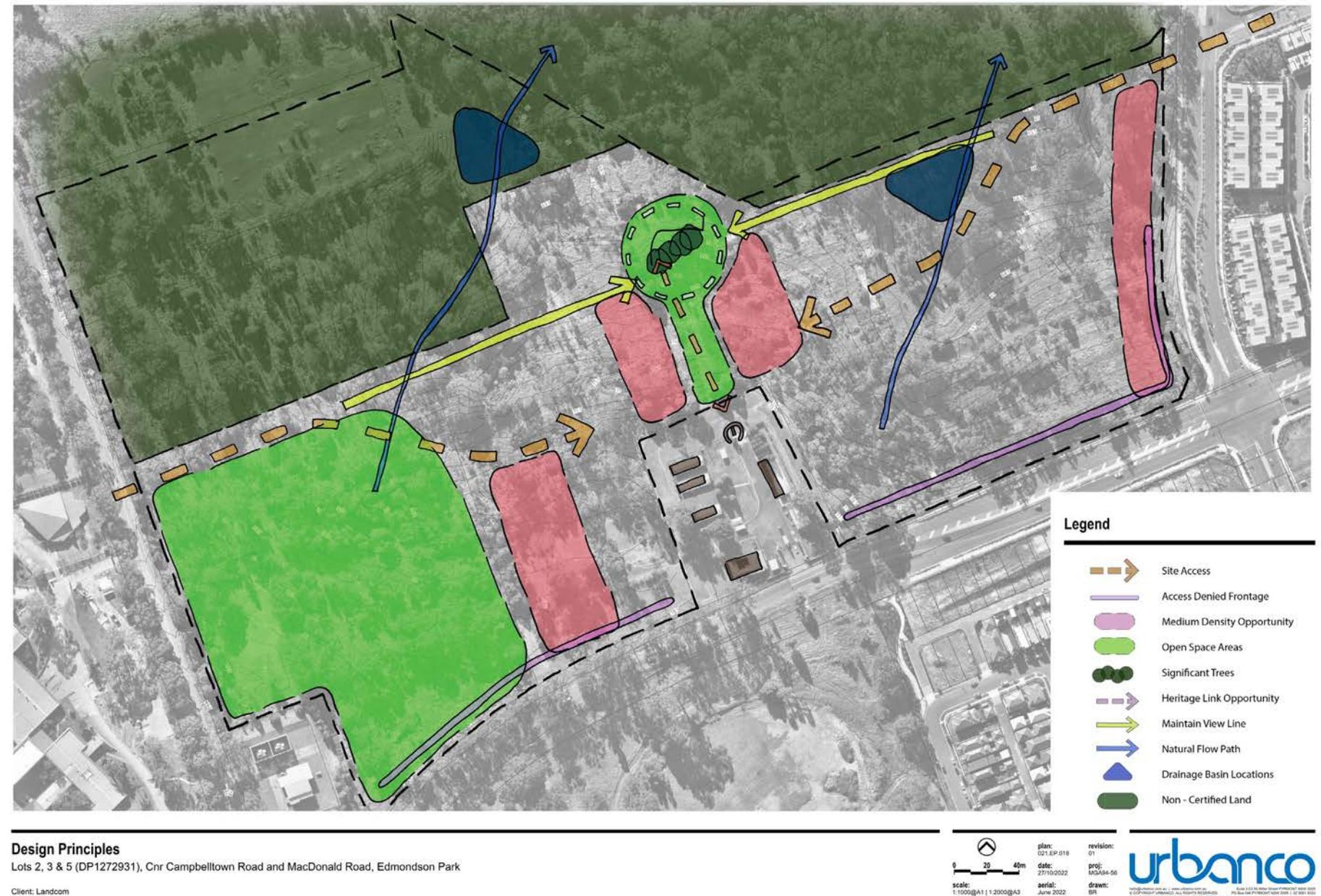
These Urban Design Principles have shape the urban layout, land uses and ingredients to create a new community and achieve a meaningful environmental response to the biodiversity values of the site.



Figure 13

Urban Design Principles

- Deliver a walkable community which provides high levels of pedestrian permeability and creates low speed traffic environments
- Respond to and celebrate the natural attributes of the site
- Locate drainage infrastructure along natural drainage lines to minimise site earthworks
- Retain the central stand of existing trees and sandstone wall in a new pocket park
- Explore opportunities for an informal / visual link to the Bardia Barracks
- Provide a range of small lot and medium density housing across the site to deliver housing diversity
- Locate medium density housing adjoining open space areas and as a transition to higher density housing on the eastern side of MacDonald Road
- Deliver new access opportunities from MacDonald Road and Zouch Road
- Create "friction points" in the road network to create a low speed traffic environment and reduce "rat run" opportunities



Urban Design Response

The Concept Plan

The Concept Plan has been prepared responding to celebrate the unique site characteristics and embody the Urban Design Principles outlined above.

The Concept Plan responds to and builds on the site analysis undertaken and summarised in this report in the preceding sections.

Principally, the Concept Plan provides for a central pocket park which acts as the green heart of the neighbourhood, a place for the community to engage and interact, while delivering a connection to the history of the site.

The Pocket Park and "heritage walk" pedestrian link will deliver long lasting community building elements which foster a sense of place and connection.

The "heritage walk" has been aligned to achieve a direct visual link from the pocket park to the Bardia Barracks memorial, providing a viewscape to the flagpole and memorial structure.

The pocket park and "heritage walk" have been framed by medium density housing and small lot dwellings, providing an activated edge treatment and direct passive surveillance.

A central roadway has been incorporated, providing vehicular access for residents to MacDonald Road in the east and Zouch Road in the west.

To provide friction in the road use, a series of roundabouts and T intersections have been introduced along this roadway.

These friction points do not impact accessibility to and from the site for residents, but create an impediment and deterrent for regional traffic to use the roadway as a rat-run to by-pass the Campbelltown Road / MacDonald Road intersection.

The central roadway meanders through the site, with local roadways providing access to residential dwellings in a grid based pattern.

The grid based street pattern promotes walk-ability and accessibility to areas of open space and surrounding major pedestrian links promoting healthy and active neighborhoods.

The key central roadway will incorporate shared pedestrian and cycle paths on both sides of the roadway and all local roads provide footpaths to deliver a truly connected active transport network.

The Concept Plan incorporate a range of housing types and options for all ages and people, ensuring a diverse future community.

A range of small lot housing has also been envisaged, providing a variety of lot types and depths responding to the sites width and design parameters.

The Concept Plan demonstrates that the land is capable of accommodating over 250 new dwellings consistent with the DCP dwelling yield targets for Precinct 3.

The plan envisages delivery of rear-loaded medium density attached terrace style housing along key interfaces. Medium Density housing frames and provides an activated edge to the heritage walk, MacDonald Road, and the future recreation facility in the south-western corner of the site.

We have provided below a detailed overview of the urban design principles and outcomes embodied in the Concept Plan addressing:

- Open Space and Green Grid Connections
- Roadway Hierarchy and Street Design Principles
- Pedestrian and Cycle Connectivity &
- Housing Diversity



Figure 14



Open Space and Green Grid Connections

The Concept Plan seeks to deliver an interconnected green grid and open space network comprising key street tree planting opportunities, activated open space areas and passive open space / drainage areas.

The Concept Plan incorporates a pocket park centrally located within the community providing a opportunity to retain existing large scale mature trees and deliver an integrated heritage walk along the axis of a view line to the Bardia Barracks memorial structure and flag pole.

The pocket park has been co-located with a drainage area to allow the delivery of a seamless large scale enhanced open space area.

The pocket park is of a scale which will enable a range of facilities including play areas, seating, kick-a-bout space and informal activity areas.

All of the proposed dwellings are located within a 400m walkable catchment (5 minute walk) of the pocket park.

The Concept Plan also incorporates the planned large scale recreational facility located in the south-western corner of the site.

This large scale recreational open space area will incorporate a range of active recreational elements. The detailed design of the open space area is currently being coordinated with Council.

Figure 15



The road network has been designed to accommodate green grid connections which allow for enhanced street tree plantings along key roads and pedestrian connections.

Opportunities for large scale tree plantings will reduce the impacts of urban heat islands effects and provide shade to streetscape areas and future dwellings.

The landscape masterplan and report prepared in association with the Development Application will provide detailed designs for the parkland and streetscape areas.



Roadway Hierarchy and Street Principles

The Concept Plan has been designed to deliver a clear and legible road hierarchy which responds to site topography and embodies an active pedestrian and cycle path network.

The road network primarily delivers a grid based street pattern which allows for ease of movement throughout the neighbourhood by both vehicles and pedestrians.

The road network and urban design delivers a clear and legible road hierarchy and encourages low speed vehicles movements and roadways as shared spaces for the minor local roads.

The central Urban Street provides the main vehicular access point into and out of the site via Zouch Road and MacDonald Road.

A number of 'friction points' have deliberately been introduced in the alignment and design of the roadway to slow vehicle speeds and discourage external residents from driving through the neighbourhood.

These friction points include a number of round-a-bouts and not providing a direct through-link along the roadway, but introducing changes in the alignment and travel direction.

The Local Roads have been designed to respond to topography and provide streetscapes which encourage pedestrian friendly - low speed vehicle environments.

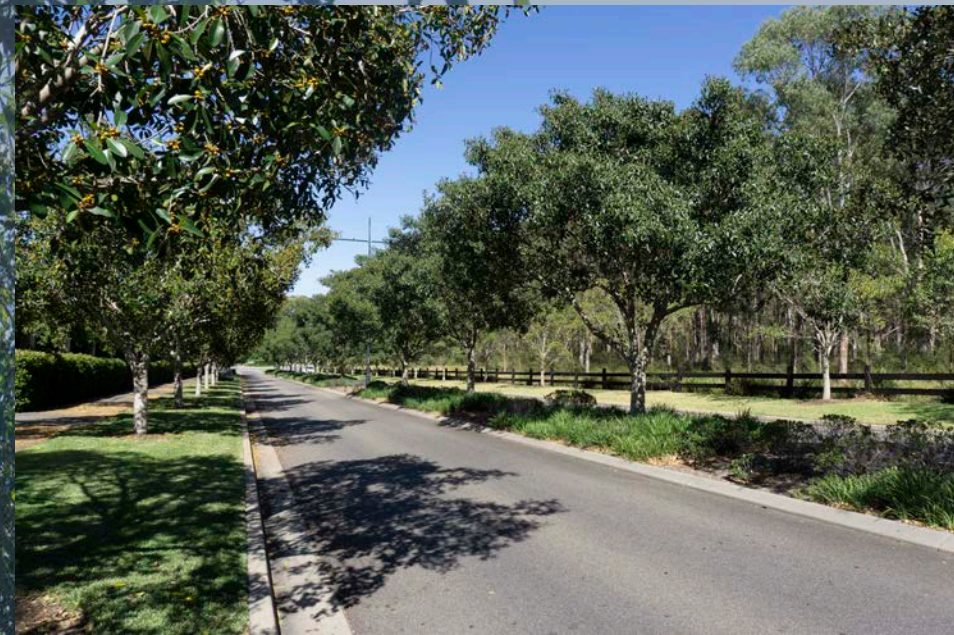
Figure 16



The alignment and design of local roadways encourages ease of pedestrian movement throughout the neighbourhood and to surrounding pedestrian networks and facilities. The local roads have adopted cross sections consistent with the adopted DCP and Concept Plan approval.

A front loaded accessway has been provided along the edge of the pocket park. This allows for homes to front the park and provide passive surveillance, while discouraging other through traffic movements.

All medium density housing sites have been designed to accommodate laneways to the rear of the properties to provide access to rear-loaded garages.



Pedestrian and Cycle Connectivity

A key element in the vision for the site is to deliver an active pedestrian transport network which provides high levels of connectivity throughout the new neighbourhood and to the existing pedestrian and cycle paths surrounding the site.

The pedestrian and cycle network will provide extensive opportunities for residents to move through the site and provide active transport linkages.

The key central spine road has been designed to accommodate of-road shared pedestrian and cycle paths in verges on both sides of the road.

This key shared path link provides an east-west connection which delivers access to the open space and recreation areas and pathways connecting to the Town Centre along MacDonald Road.

In this regard, the share paths will form a integrated link with the broader pedestrian and cycle pathway network.

These share paths also provide direct pedestrian access to the large scale recreational facility along Zouch Road for existing residents in the higher density precincts to the east and north-east.

Figure 7



Minor Roads have been designed to accommodate pedestrian pathways providing ease of access along local streets to connect with higher order pathways.

These pedestrian pathways provide direct linkages to the central share path along the spine road and also connect to the existing shared paths along Campbelltown Road and MacDonald Drive.



Housing Diversity

The Concept Plan provides for a range of housing options to encourage and accommodate housing diversity across the community and respond to site considerations.

Delivering a wide variety of housing types and sizes for all stages of life ensures that the project will accommodate a broad range of household compositions and a diverse community makeup. A community with a diverse range of families, single and couple households, and opportunities for ageing in place fosters a sense of place and encourages community interaction between residents.

The Concept Plan envisages delivery of a number of medium density housing sites which will deliver low-rise medium density housing typologies (*the missing middle*).

The density sites have been located in key locations to provide a transition in density similar to adjoining housing or at key areas of high amenity in the project.

Medium density housing sites are provided along the MacDonald Road and Campbelltown Road interface, consistent with the existing housing typologies delivered on the eastern and southern side of the roadways.

Density sites have also been provided adjacent to the pocket park / heritage walk and adjoining the large scale recreational area responding to the enhanced amenity and providing opportunity for increased passive surveillance.

Figure 18



The residential areas will also comprise a mix of small lot housing providing variation in lot width and areas to allow for a broad range of housing types to be delivered across the project.

Residential lot sizes are envisaged to range from 250m² to 500m² and allow opportunity for dual occupancy housing in key appropriate locations.



Summary

As outlined in this report, the Precinct 3 development area forms part of the Edmondson Park South development area and has been identified to accommodate a range of small lot and density housing in close proximity to the Town Centre and Railway Station.

The site provides an opportunity to deliver a transition in housing typologies and density between the larger lot single dwellings delivered to the south, high density apartments to the north and medium density terraces to the east.

Encompassing 20 hectares of land the Concept Plan and Urban Design review have demonstrated that the land is capable of delivering the required 250 new dwellings, delivering a broad range of housing types and key open space and recreational facilities for the local community.

The Precinct 3 neighbourhood is ideally positioned to benefit from existing transport links, recreational facilities, social infrastructure and schools and access to the existing Edmondson Park Town Centre, less than 400m to the north.

The Concept Plan has demonstrated that the Precinct 3 neighbourhood is able to be delivered in a unique and site responsive manner, while still forming a seamless part of the broader Edmondson Park community.

The site analysis undertaken and summarised in this report demonstrates that the land is capable of accommodating the proposed residential community and will deliver a long term and orderly urban edge to the Edmondson Park residential areas.

The site analysis demonstrates that:

- Existing vegetation of site is primarily related to the former Barracks and is proposed to be removed under an existing DA process. The residential areas are bio-certified.
- There is some limited opportunity to retain existing vegetation by introducing a pocket park.
- There are no validated riparian corridors within the residential development area.
- Vehicular access to the site is restricted to Zouch Road and MacDonald Road.
- There is limited opportunity for links to the existing Bardia Barracks
- Bushfire / RFS compliant roadways and APZ will be required along the northern boundary.
- Site topography is suitable to accommodate a range of residential housing, while responding to some isolated areas of steeper slope along Campbelltown Road.

The Concept Plan celebrates and responds to the sites natural setting, topography and creek line corridors to deliver an urban design outcome which fosters a sense of community.

Key aspects of the project and urban design outcomes include:

- A Concept Plan which responds to and celebrates natural site topography and landscape elements and provide opportunities for localised view lines.
- Delivery of passive and active open space areas which will benefit future residents and the broader community.
- Delivery of a key central Pocket Park and "Heritage Walk" acting as the heart of the community, providing a link to the past historical use of the site.
- Delivery of a range of housing options across the project responding to current and long term housing preference and demand.
- Provision of a site responsive interface and transition to adjoining roadways.
- Deliver a well connected street pattern which encourages walk-ability and active transport movement networks, while discouraging through traffic.



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