

LAKE ALBERT HEIGHTS DEVELOPMENT

URBAN DESIGN REPORT

BRUNSKILL ROAD, MITCHELL ROAD, SILVERWOOD ROAD & BIRCH ROAD,
LAKE ALBERT NSW 2650

JUNE 2020

RobertsDay
planning·design·place



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CLIENT	SALVESTRO PLANNING
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OPPORTUNITIES & CHALLENGES

LOCALITY CONTEXT



TO BOMEN INDUSTRIAL

WAGGA WAGGA CBD

WAGGA WAGGA TRAIN STATION

5.0KM

2.5KM

STURT HIGHWAY

INGLEWOOD ROAD

WAGGA WAGGA AIRPORT

CREMATORIUM & LAWN CEMETERY

0.8KM TO LAKE ALBERT

LAKE ALBERT

LAKE ALBERT SHOPPING CENTRE

RAWLINGS PARK

LAKE ALBERT PUBLIC SCHOOL

MATER DEI CATHOLIC COLLEGE

GREGADOO ROAD

GLENFIELD ROAD

BOURKE STREET

KOORRINGAL ROAD

BAKERS LANE

RED HILL ROAD

LOCALITY CONTEXT PHOTOS



ANGEL STREET FOOTBRIDGE TO RAWLINGS PARK



RAWLINGS PARK



WAGGA WAGGA BOAT CLUB



WAGGA WAGGA AIRPORT



LAKE ALBERT



LAKE ALBERT

SITE CONTEXT

The subject land is located within 2kms of the Village Centre. Lake Albert is situated within 7kms of the Wagga Wagga CBD whilst benefiting from a rural, community-based character and setting.

The land provides well established links to key recreational and neighborhood business areas including Rawlings Park and Lake Albert Village.



SITE CONTEXT PHOTOS



CREMATORIUM AND LAWN CEMETERY



LAKE ALBERT VILLAGE



MATER DEI CATHOLIC PRIMARY SCHOOL



LAKE ALBERT PUBLIC SCHOOL

SITE

The subject site is semi-rural in character with large established dwellings on three sides, and the Crematorium and Lawn Cemetery to the north.

Existing dwellings are focused on the perimeter of the site, with the centre of the site largely underutilised. This provides the opportunity for additional dwellings that contribute to the rural character of its surrounds.



CREMATORIUM & LAWN CEMETERY

BRUNSKILL ROAD



LARGE LOT RESIDENTIAL

REDWOOD ROAD

BIRCH ROAD

MITCHELL ROAD



PRIMARY PRODUCTION SMALL LOTS

SILVERWOOD ROAD



LARGE LOT RESIDENTIAL

SITE PHOTOS



VIEW NORTH FROM SILVERWOOD ROAD
Gravel driveway access into existing dwelling



SILVERWOOD ROAD
Rural character of road with no kerbs and gutter, and rural wire fences



VIEW WEST FROM MITCHELL ROAD
Open vista into site with rural wire fences defining boundaries



MITCHELL ROAD
Dense tree plantings along street with formal timber rural fence to residential dwelling



VIEW SOUTH FROM BRUNSKILL ROAD
Open vista into site with rural wire fences defining boundaries



BRUNSKILL ROAD
Dense tree plantings along street



VIEW EAST FROM BIRCH ROAD
Open vista into site with rural wire fences defining boundaries



BIRCH ROAD
Dense tree plantings along street, and gravel driveway into dwellings

SLOPE & VIEWS

The site is characterised by a gentle slope, predominantly falling towards the existing creek in the west. The land is elevated and outside the natural hazard area of local flooding from the Crooked Creek corridor. The gently sloping land limits its views of the adjoining land, however the site provides unique views of the surrounding hills and rural lifestyle. The available views enhance the rural character of the local area.

OPPORTUNITIES

- Gently sloping topography allows for runoff to join the nearby watercourse
- Residents are elevated from local flooding from the Crooked Creek corridor
- Views enhance the rural character

CONSTRAINTS

- Development must consider its visual impact on existing and future surrounding character



LEGEND

- 1m Contours
- Slope downwards
- - - Ridgeline
- View Corridor

EXISTING CHARACTER RETAINED

Existing dwellings & established landscaped areas to be retained, where possible, to maintain rural residential character & amenity.

Existing dwellings are not setback consistently along the street frontage, which should be respected to maintain the rural character of the area.

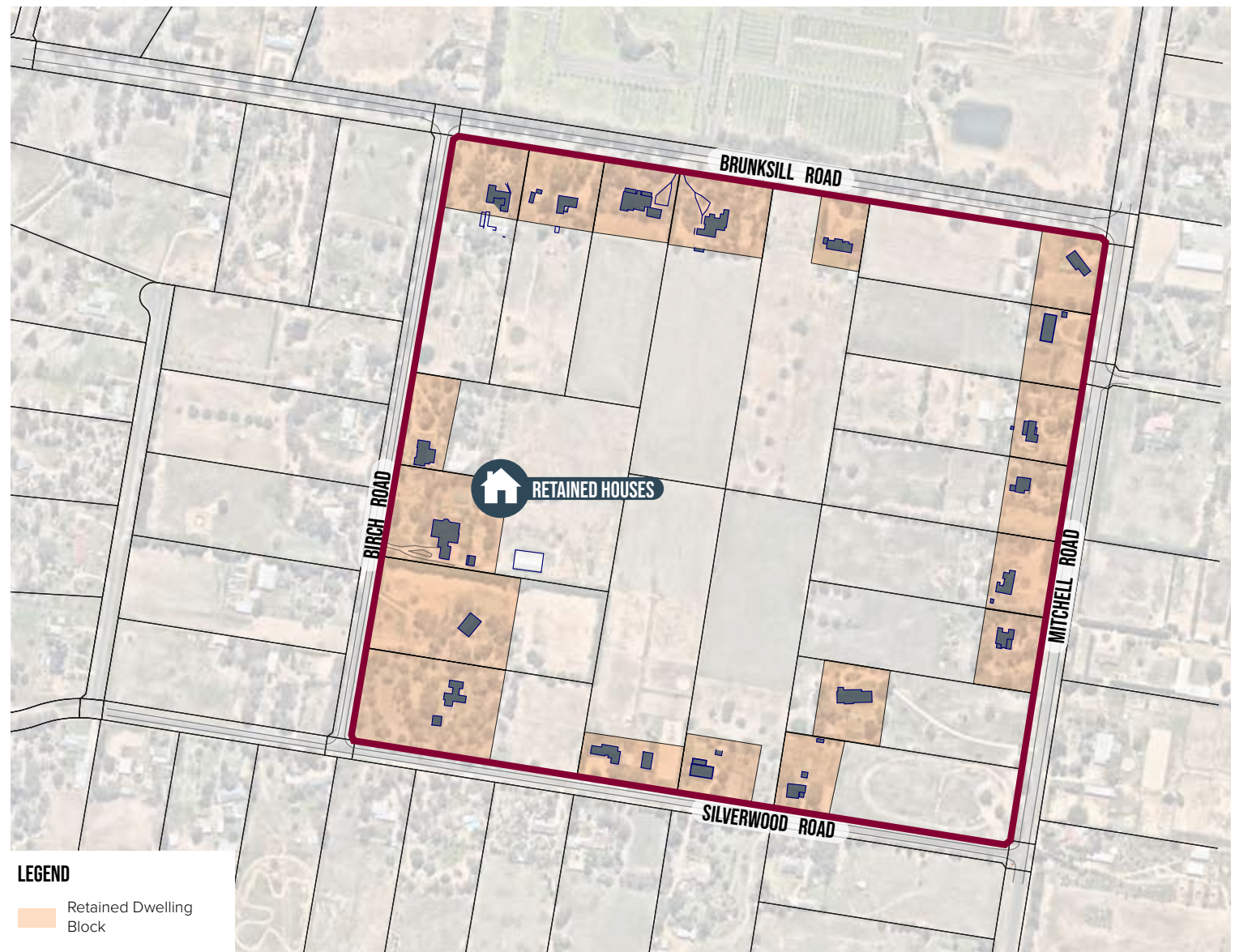
Existing dwellings that are connected to onsite effluent will continue to access these services up until an augmented gravity network has been installed with appropriate connectivity arrangements.

OPPORTUNITIES

- Retained existing dwellings & established landscaped areas
- Excess underutilised vacant land available for additional dwelling sites
- Rural residential character and amenity maintained & enhanced
- Additional dwellings will help sustain local neighbourhood businesses
- Additional dwellings will build a stronger community well-being within the Lake Albert local area
- Potential upgrades to existing services in the future

CONSTRAINTS

- Lot layout to accommodate retained dwellings
- Lot yield may be reduced due to location of retained dwellings



HYDROLOGY

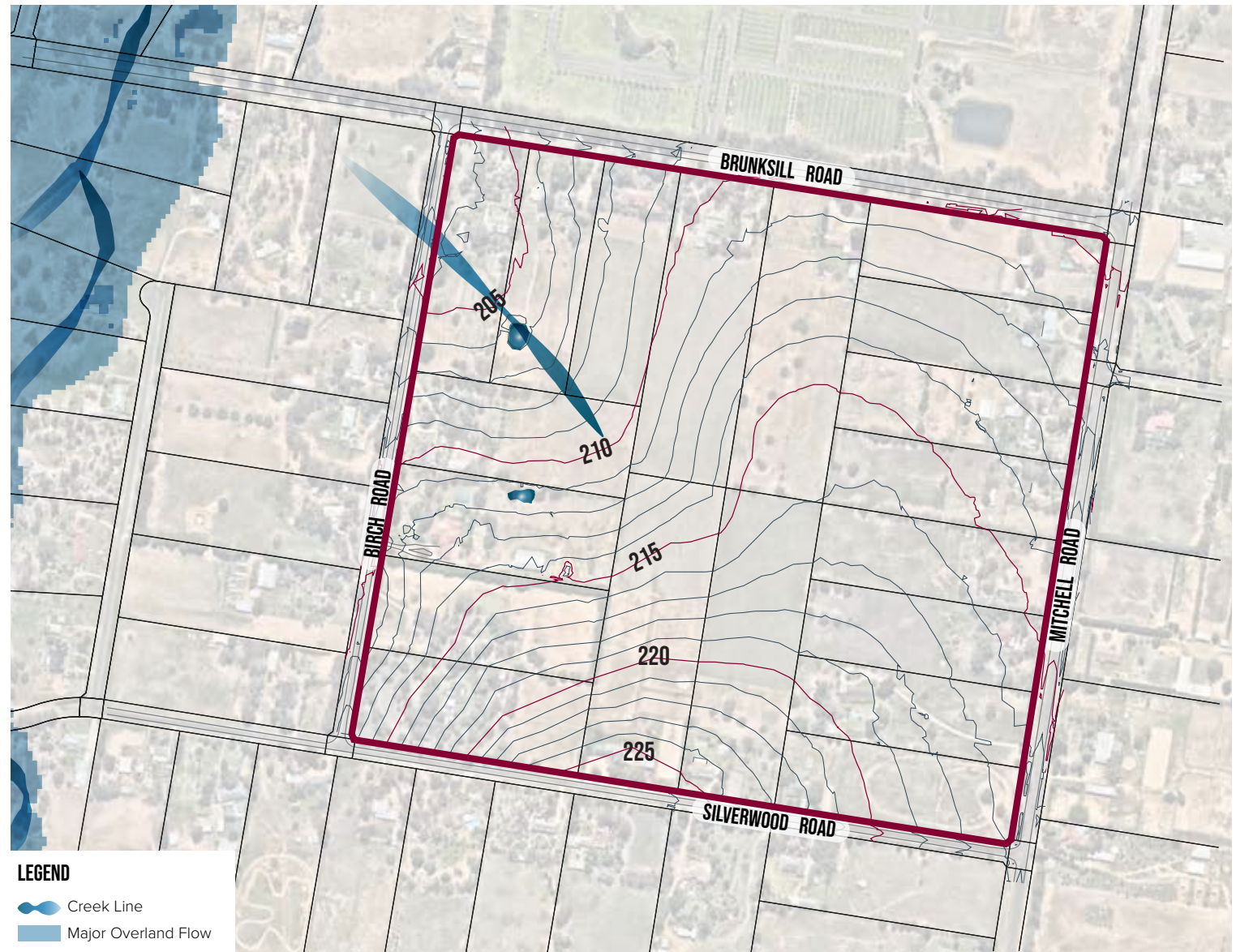
The site is not impacted by local flooding. Stormwater flows directly to the Crooked Creek natural watercourse

OPPORTUNITIES

- Detention basin turned into natural open space area, attracting native wildlife and used by residents.
- Roadside swale drainage to manage overland flow of water, directed to water feature/detention area in public park and creek system.
- Keeping the rural characteristics with swale drainage
- Bioretention/vegetated swale drain can improve stormwater quality, providing a water sensitive urban design

CONSTRAINTS

- Detention basin and outlet pipe required to limit the post development flows to existing levels



ACCESS

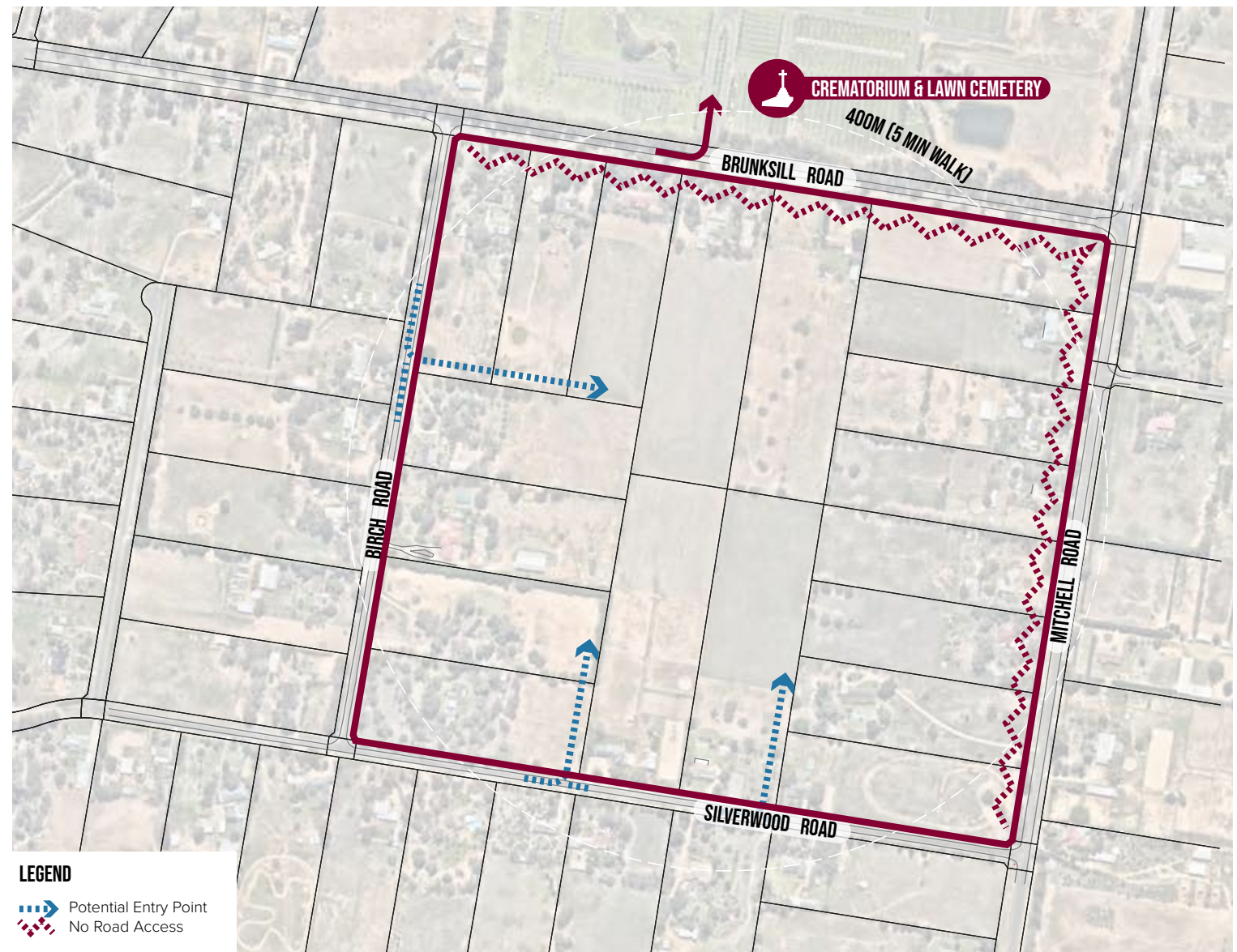
The subject land forms part of a defined precinct bounded by Silverwood, Birch, Brunskill and Mitchell Roads. Brunskill and Mitchell Roads supports traffic accessing Gregadoo Waste Management Facility, the airport, Wagga Wagga CBD, Bomen Industrial Park, and the lawn cemetery. Additional population in the local area will have access to the existing network of cycleways, walkways, open space areas, active and passive recreation areas, schools, childcare centres and other services located within walking distance of the site.

OPPORTUNITIES

- Subject site is within an easily accessible location and within close proximity to the local village centre
- Connection to existing road, footpath, cycleway and existing trail network

CONSTRAINTS

- During grave-side memorials, traffic can backup along Brunskill Road
- Increased use of walkways may need to be upgraded with defined walking paths



BIODIVERSITY & AMENITY

Certain pockets of biodiversity will be retained, where possible, to enhance the character of the development. These areas will enhance wildlife corridors and the promotion of re-vegetation.

OPPORTUNITIES

- Embellishment of the local area with additional pockets to promote natural flora and fauna.
- Retain established trees on existing dwelling blocks. Others to be retained where possible.

CONSTRAINTS

- Existing significant biodiversity to be retained



LAND USE

The subject site is surrounded by rural lifestyle living blocks to three sides, with the Lawn Cemetery to the north.

The character of the area will be maintained by retaining the existing dwellings facing the surrounding streets. This will help reduce any impacts on the character by limiting smaller blocks to the central portion of the site.

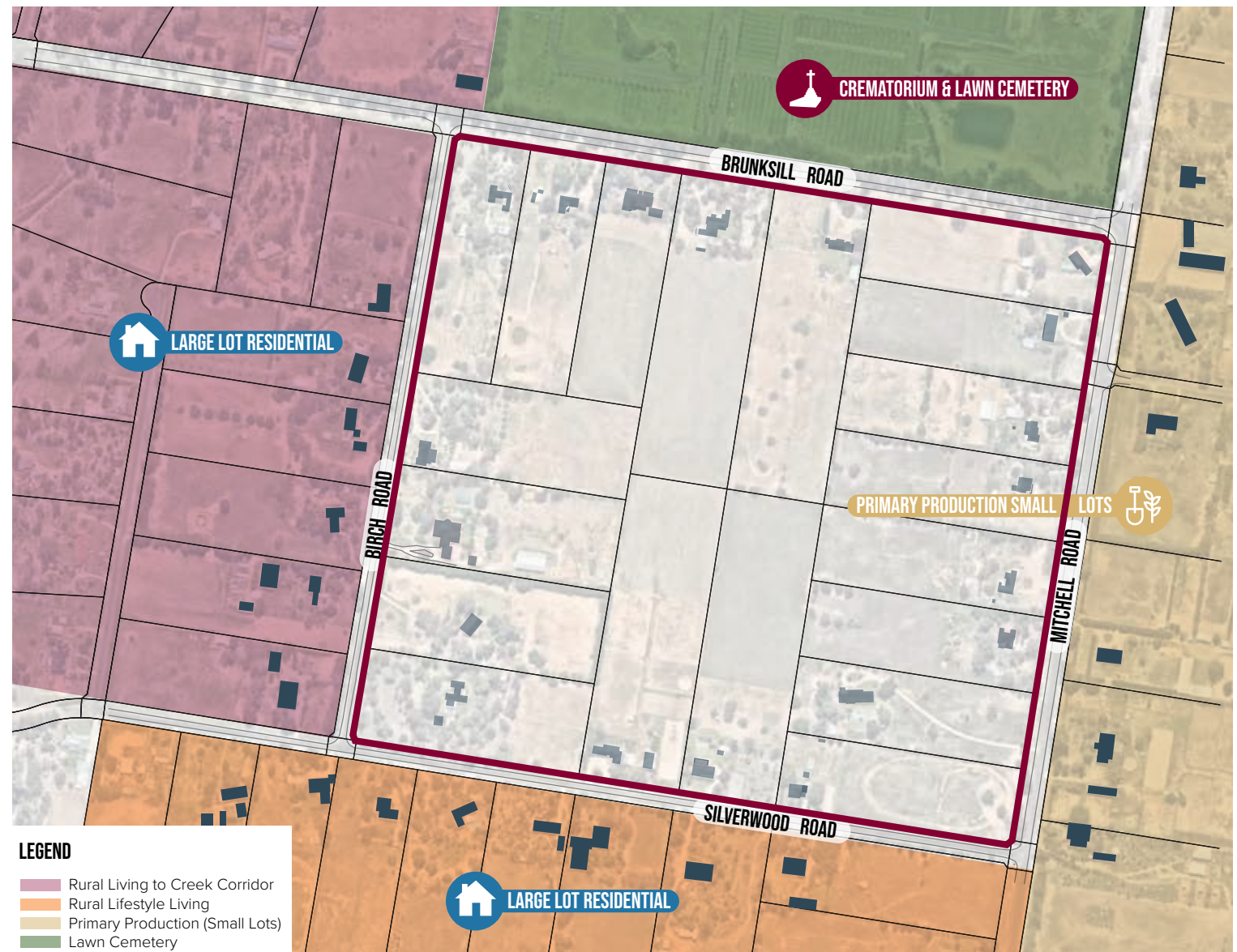
Lot sizes on the perimeter of the site should respond to the character of dwellings opposite, including setbacks to street frontage and neighbouring properties.

OPPORTUNITIES

- Enhance rural lifestyle living in master planned environment
- Creating better connections between the subject land and activity to west.
- Creating opportunities for future intensification of land fronting Birch and Silverwood Road.

CONSTRAINTS

- RU4 Primary Production along Mitchell Road allows a range of 'Extensive Agriculture' that may impact future dwellings through noise or heavy vehicle movements.
- Minimise land use conflicts between rural lifestyle lots and primary production small lots to the east.
- Retaining rural residential character of the local area.



LEGEND

- Rural Living to Creek Corridor
- Rural Lifestyle Living
- Primary Production (Small Lots)
- Lawn Cemetery

VISION

DESIRED FUTURE CHARACTER



OPEN SPACES - ACTIVE

OBJECTIVES

- Provide natural play spaces with reduced maintenance requirements, e.g. rock formations to climb on
- Open space should maintain natural levels wherever possible to celebrate the natural land-form and retain contextual legibility
- Create open spaces that connect into the wider open space network
- The front door of a house fronting open space is a maximum of 0.6m below the adjoining footpath
- Combination of hardscape and gravel paths to increase permeable surfaces
- Provide shaded seating areas
- Opportunities for public art



• OPEN SPACES - PASSIVE

OBJECTIVES

- Predominantly trees and grass to be used for passive recreation
- Maintain established trees where possible
- Provide shaded seating areas
- Integrate Water Sensitive Urban Design into the open space, specifically around the existing dam near the Birch Road open space
- Opportunities for public art, interpretative signage



RURAL ROADS

OBJECTIVES

- Rural character roads to maintain surrounding character
- No kerb and gutter
- Footpath to at least one side of the street
- Retain established trees where possible



INTEGRATED WSUD

OBJECTIVES

- Integrate swales into key streets to improve stormwater overland flow
- Provide for driveway and pedestrian crossings over swales



CONTEMPORARY SUBURBAN ARCHITECTURE

BLOCKS BETWEEN 1,500M² AND 2,500M²

OBJECTIVES

- Large Setbacks to front and sides
- Predominantly single storey building with double storey sections working with the topography
- Pitched roofs
- Garages should be integrated into the dwelling and using the topography to reduce dominance from the street
- Concrete driveways permissible



CONTEMPORARY SEMI-RURAL ARCHITECTURE

BLOCKS BETWEEN 2,500M² AND 3,500M²

OBJECTIVES

- Large Setbacks to front and sides
- Predominantly single storey building fronting street
- Pitched roofs
- Garages should be:
 - Integrated into the dwelling and using the topography to reduce dominance from the street, or
 - A separate 'carriage house' arrangement- detached from the dwelling and sited behind the primary building
- Rural character front fence
- No solid driveway materials (e.g. concrete)



CONTEMPORARY SEMI-RURAL ARCHITECTURE

BLOCKS 3,500M² AND LARGER

OBJECTIVES

- Large Setbacks to front and sides
- Predominantly single storey building fronting street
- Pitched roofs
- Garages should be:
 - Integrated into the dwelling and using the topography to reduce dominance from the street, or
 - A separate 'carriage house' arrangement- detached from the dwelling and sited behind the primary building
- Rural character front fence
- No solid driveway materials (e.g. concrete)

CONCEPT MASTER PLAN

CONCEPT MASTER PLAN

The conceptual master plan proposes a mix of large lot sizes ranging from 1500m² – 5000m², with some of the retained dwelling sites potentially larger.

Existing areas of vegetation are to be retained where possible, facilitated by the range of variable lot sizes. Streetscape character will retain and promote a rural residential outlook and amenity, with larger frontages retained along Mitchell and Brunskill Roads to minimize land-use conflict.

Road profiles will be consistent with Council's current Rural Residential standards incorporating swale drains (no kerb and gutter) and waterwise urban design principles. Inclusion of four public parkland/open space areas will facilitate access linkages and passive recreation areas.

The potential additional large lots to be created by this amendment is approximately 150 to 180 depending on subdivision layout and infrastructure design, in particular roads and drainage patterns.

LEGEND

	Lots	Area
Existing	19	11.7ha
Proposed	150-180	32.0ha
Open Space	4	1.5ha



DESIGN PRINCIPLES

DENSITY ALLOCATION

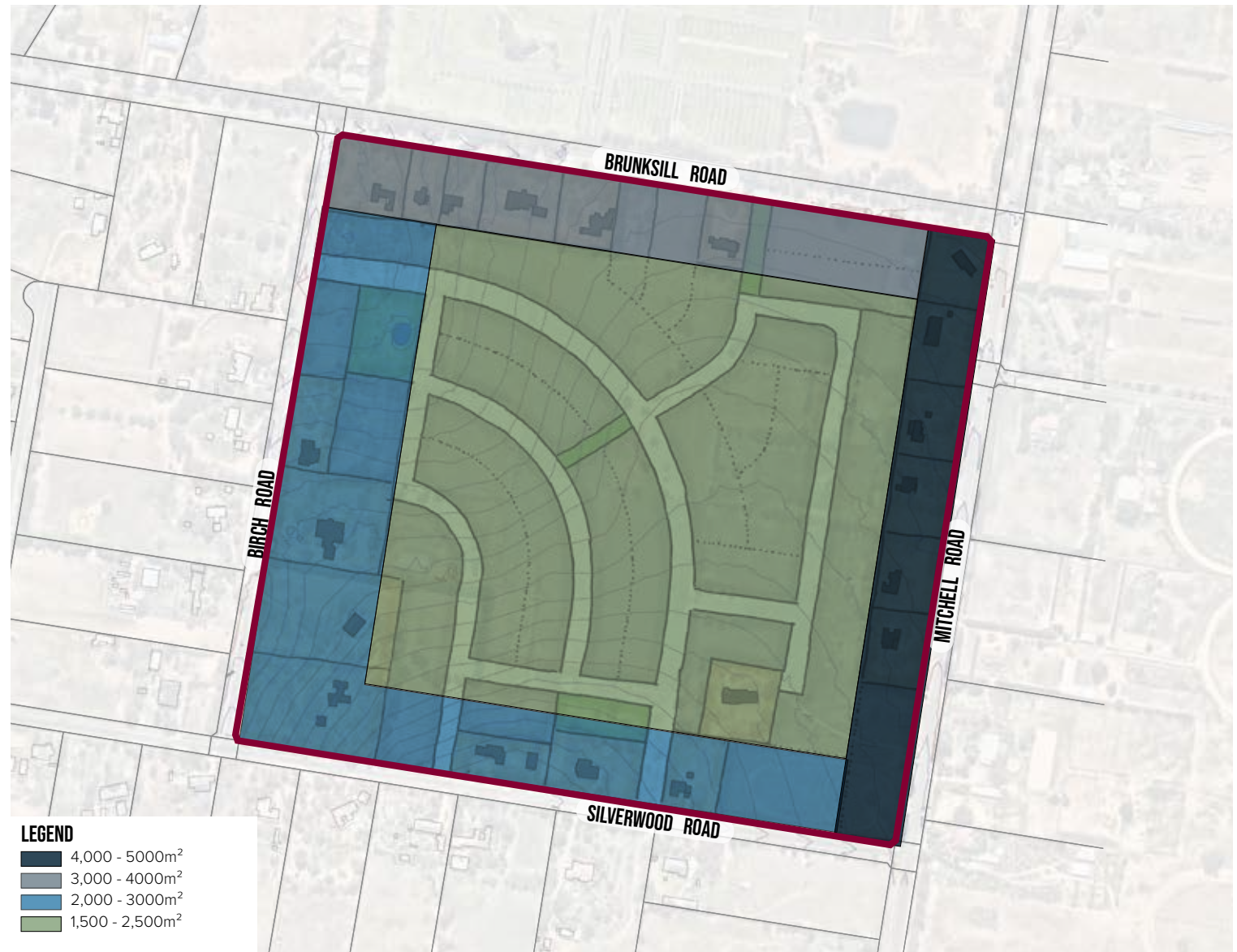
The proposed density allocation is based on the context analysis to retain and enhance the existing character. The minimum lot size will continue to maintain the rural character of the local area by allowing sufficient land size to maintain and enhance natural vegetation communities.

The proposal will continue to achieve the R5 zone objectives by:

- Providing residential housing in a rural setting while preserving, and minimising impacts on, environmentally sensitive locations and scenic quality.
- Ensuring that large residential lots do not hinder the proper and orderly development of urban areas in the future.
- Ensuring that development in the area does not unreasonably increase the demand for public services or public facilities.
- Minimising conflict between land uses within this zone and land uses within adjoining zones by providing the largest lots interfacing with the surrounding area
- Ensuring that the clearing of native vegetation is avoided or minimised as far as is practicable.

The proposal will assist in balancing the supply and type of residential land across the City as there is limited remaining stock of available land to develop at this density.

Additional Development Control Plan provisions may be introduced to guide the approval and establishment of the proposal.



DESIGN PRINCIPLES

SITE ACCESS & ROAD LAYOUT

The layout has been designed as a response to the natural land form and environmental features. The roads follow the existing contours to reduce the amount of earthworks required.

Primary vehicle site access is along Birch and Silverwood Roads as road access is limited along Brunskill and Mitchell Roads.

The roads have been aligned to capture the hydrology from storm events, with swales proposed along the Primary Entry Road to assist with storm water events.

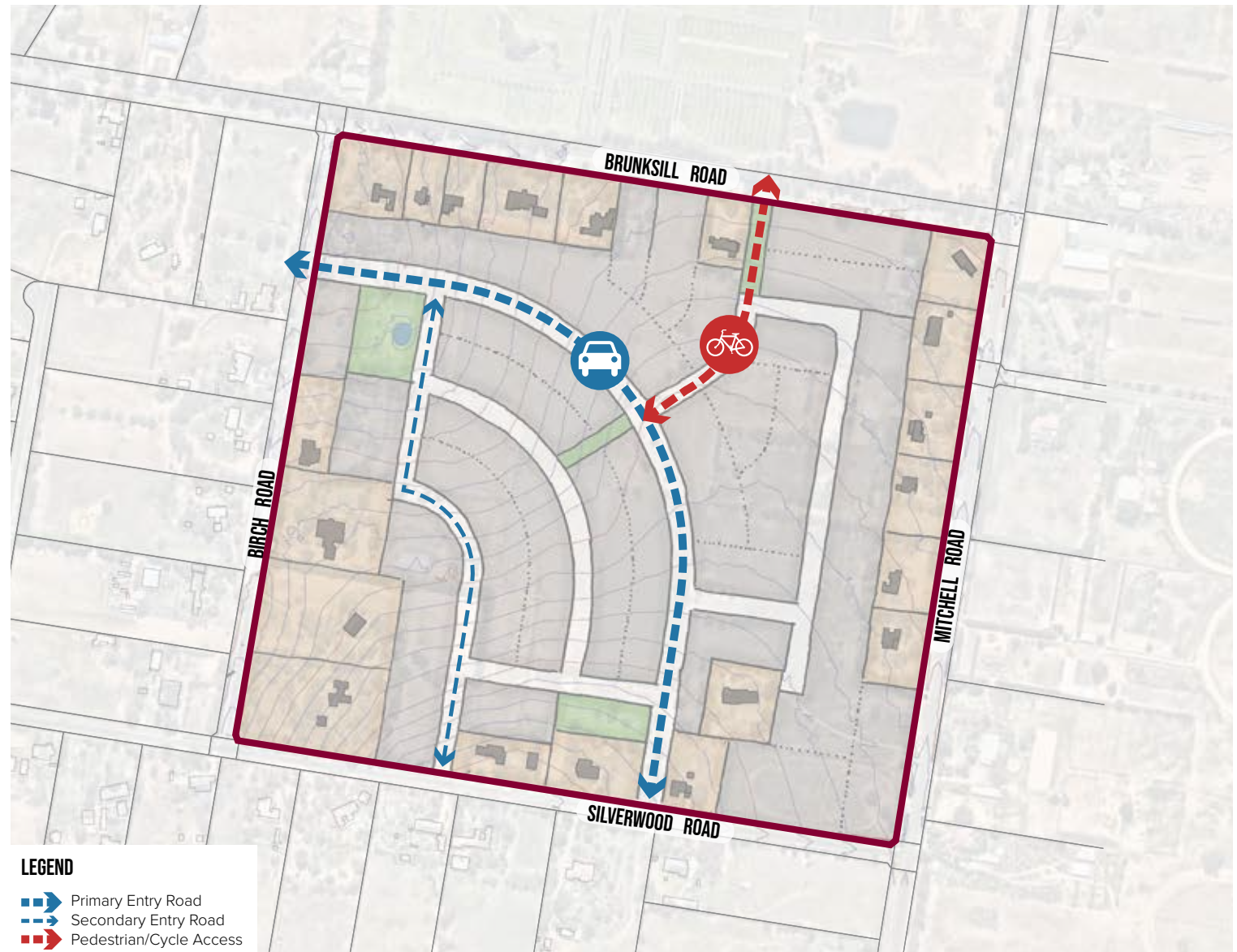
Green links are to include footpaths to ensure permeability through the precinct.

ROAD RESERVE




The Primary Entry Road will be to the WWCC standard for a rural road reserve of 23m, and is to include a swale to one side.

All other streets are to be 20m road reserve (6m verge / 8m road [1m shoulder + 6m carriageway + 1m shoulder] / 6m verge).

All streets are to include a footpath of at least 1.5m to one side.



LEGEND

-  Primary Entry Road
-  Secondary Entry Road
-  Pedestrian/Cycle Access

DESIGN PRINCIPLES

OPEN SPACE

The site is within close distance to existing open space including the parkland common and creek/parkland corridor. An additional two parks are proposed within the development, capturing the natural views and features.

Wherever possible, existing vegetation will be retained to ensure existing biodiversity corridors are maintained.

The site is within 500m of Rawlings Park and can take advantage of the additional amenities provided there. Silverwood and Brunsill Roads provide convenient pedestrian/cycle access to Rawlings Park.

PASSIVE OPEN SPACE

The open space near Birch Road will include the existing dam and can be used for water capture and passive recreation.

PLAYGROUND

The playground is located at the highpoint of the site and will have views around the local context. The hilltop park can provide playground opportunities, with the potential for 'nature play' that involves more natural play equipment (e.g rock formations to climb on) versus traditional structure play.



DESIGN PRINCIPLES

PEDESTRIAN / CYCLE LINKAGES

The permeable layout has been designed in a manner to provide convenient pedestrian and cycle access to Brunskill and Silverwood Roads, allowing access to the existing broader path network.

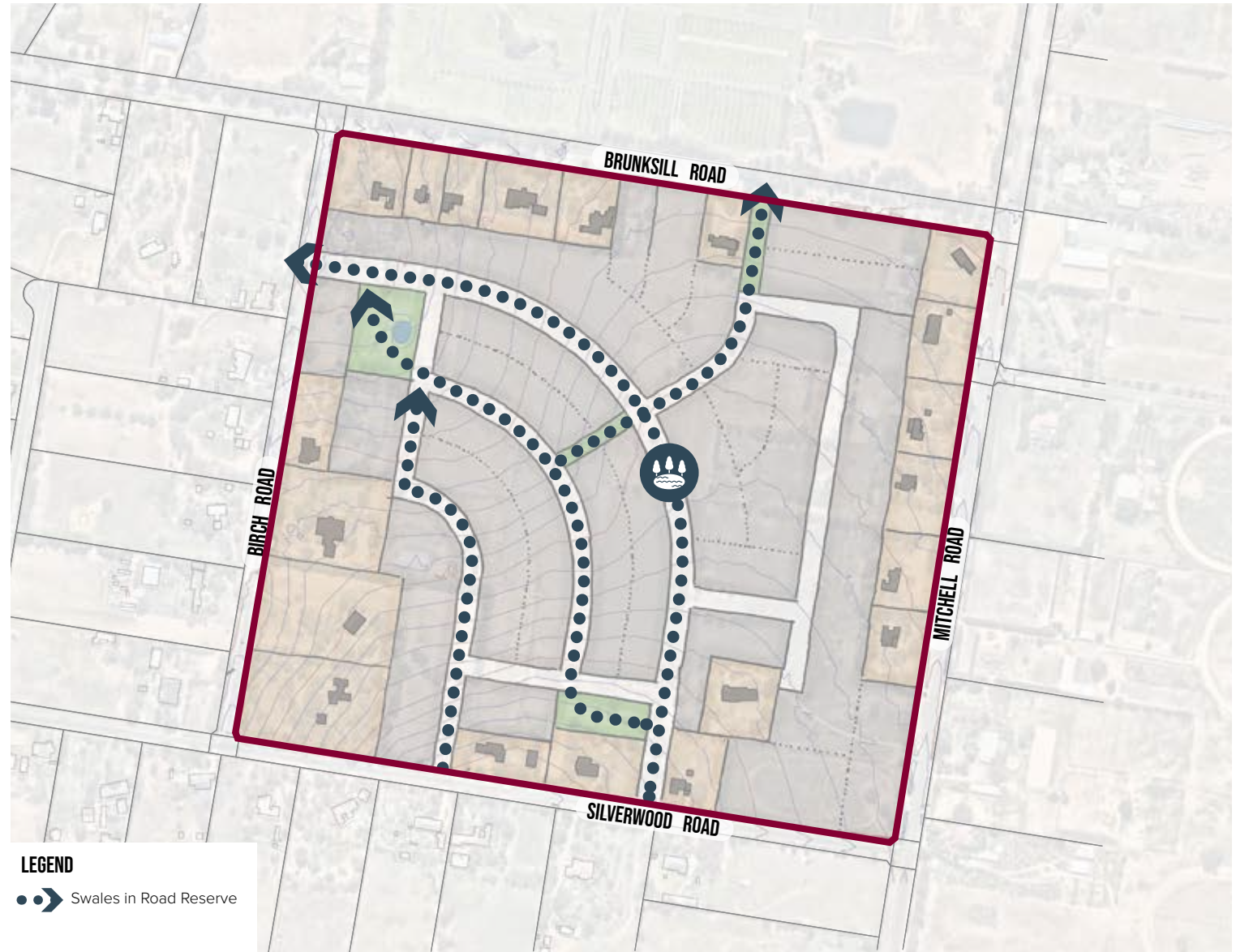
The layout connects the two proposed open spaces along multiple streets, with green links from Brunskill Road and the central entry road increasing permeability within the site.



DESIGN PRINCIPLES

WATER SENSITIVE URBAN DESIGN

Swales will be located within key road reserves to allow overland flow to easily flow downhill. The swales will reduce the size of a detention basin at the low point of the site prior to discharging off-site.



LEGEND

•➔ Swales in Road Reserve







DESIGN PRINCIPLES

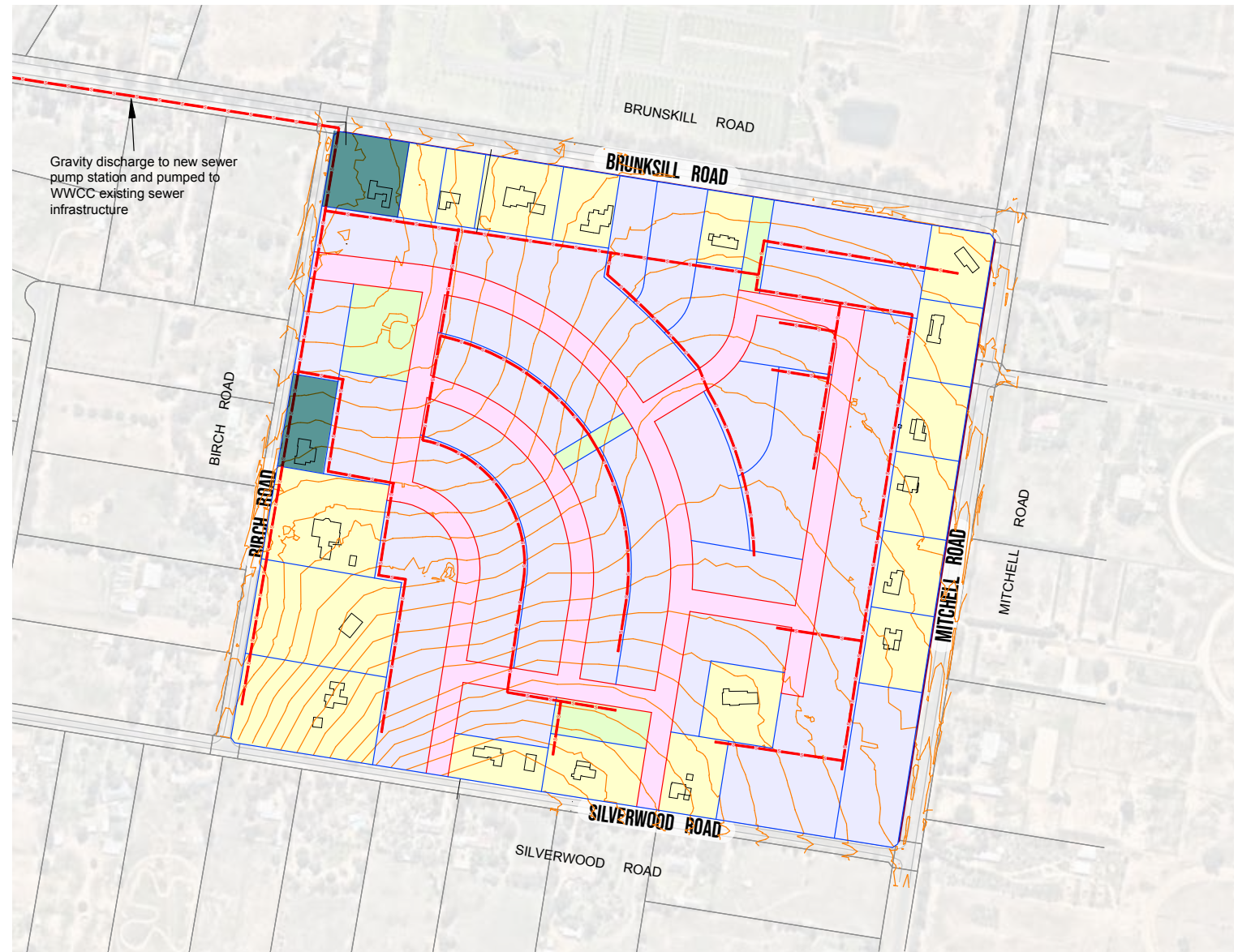
SEWER

Existing dwellings that are connected to onsite effluent and existing pressure sewer reticulation will continue to access these services up until an augmented gravity network has been installed with appropriate connectivity arrangements.

There are only two dwellings currently connected to on-site effluent systems.

Legend

-  Existing Dwellings to be retained
-  Proposed Lots
-  Proposed Roads
-  Proposed Parks / Landscape Areas
-  Proposed Gravity Sewer
-  Dwellings connected to on-site effluent systems



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