

Marsfield Common



146 Vimiera Road
Marsfield

Marsfield Common



**REPORT
PREPARED BY**

DKO Architecture

Telephone +61 2 8346 4500

info@dko.com.au

42 Davies St, Surry Hills NSW 2010

ISSUE	DATE	PREPARED BY	REVIEWED BY	COMMENT
P1	17.11.2021	NT	DR	DRAFT - For Review
P2	08.02.2022	NT	DR	FINAL DRAFT - For Review
P3	15.03.2022	NT	GM/DR	FINAL DRAFT - For Review
P4	04.05.2022	AW	-	FINAL DRAFT - For Review
P5	11.05.2022	AW	-	FOR PLANNING SUBMISSION

01 THE SITE

- Proposal
- Location
- Site History
- Existing Character + Condition

02 SITE CONTEXT + ANALYSIS

- Greater Urban Context Analysis
 - Urban Hierarchy, Activity
Nodes, Services + Facilities
- Existing Green Network +
Recreation Assets
- Mobility Network + Permeability
- Ryde LEP 2014 Controls
- Challenges & Strengths
- Site Visibility

03 DESIGN RESPONSE

- Site Approach + Key Drivers
- Vision + Design Principles

04 MASTERPLAN DEVELOPMENT

- Master Plan Development Overview
- Option 1 Seniors Living
- Option 2 Apartments+Attached Houses
- Option 3 Apartments+Detached Houses
- Option 4 Apartments+Detached/
Attached Houses
- Option 5 Preferred Option
- Preferred Option Refinement

05 PROPOSAL

- Illustrative Master Plan
- Environmentally Sustainable Design Initiatives

- Master Plan - Urban Design Strategy

- Master Plan - Built Form Strategy

- Green Network+open space

- Blue Network

- Movement Network

- Loop Road & Central Avenue

Typical Section

- Built Form Typologies

- Tree Retention + Feature Landscaped Area

- Landmark and Key corners

- Setbacks

- Laneways

- Architectural Character Diversity

- Perimeter Interfaces

06 DETAILED STUDIES

- Shadow Analysis



DKO has prepared the following report on behalf of Winston Langley (acting for North Ryde RSL, Eastwood Rugby Club and Vimiera Recreation Grounds Limited) as part of the Planning Proposal submitted to the City of Ryde, for the site known as TG Millner Field.

The report details the design analysis undertaken which has informed the developed master plan for the site. This includes:

- Analysis of the site, its existing condition and character;
- Research and analysis of the site's local context, history and identity;
- Analysis of the surrounding landscape and urban context - what characterises Marsfield;
- Testing and analysis of built form options for the site.

PROPOSAL

In collaboration with Winston Langley, Landform Studios and Ethos Urban, a planning proposal has been prepared which includes the following:

- A new 10,000m² public park which includes a variety of recreation uses and facilities;
- An upgrade of 1,200m² of public domain (footpath) and new internal tree lined public roads;
- Planting of 570 new trees, creating a total site canopy cover of 65%;
- Stormwater management and WSUD integration to control overland flow paths and minimise flood impacts;
- Indicatively 132 dwellings on a variety of lot sizes and with a range of medium density dwelling typologies;
- Differentiated architectural character areas across the site to provide visual diversity.





INTRODUCTION

146 VIMIERA ROAD, MARSFIELD

LOCATION

The site is located at 146-150 Vimiera Road, Marsfield, commonly referred to as TG Millner Field. The site is legally known as Lot 7 DP 104 6532 and is a privately owned property comprised of a sports facility, RSL club and childcare centre.

The site is a trapezoidal-shaped lot which lies between Vimiera Road to the west and Culloden Road to the east. Its frontage along Vimiera Road is 202 metres and it has an area of 6.17 hectares.

The site is located in the suburb of Marsfield, within the Ryde Local Government Area. It is situated approximately 2km from Macquarie Park, 2.5km from Epping Town Centre and 14.5km north-west from the Sydney CBD.

The site is also located in close proximity to the Pembroke Park Reserve and Terrys Creek Corridor, as well as a number of other public open spaces.

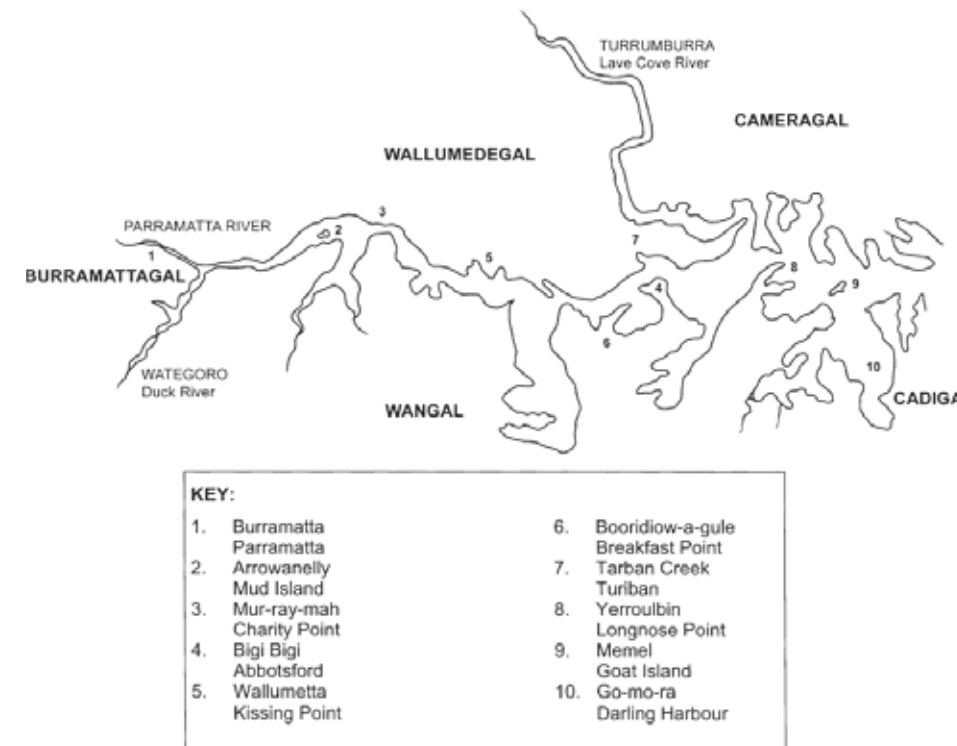


TRADITIONAL WALLUMETTA - VERDANT COUNTRY OF GREEN AND WATER

The site is located on Wallumetta Country which is a clan of the Darug people, of which the Wallumedegal (Wullumattagal or Wallumattagai), were the Traditional Custodians.

For thousands of years, the Wallumedegal lived on, cared for and carefully managed Country's rich environment of river flats, mangrove swamps, creeks and forests.

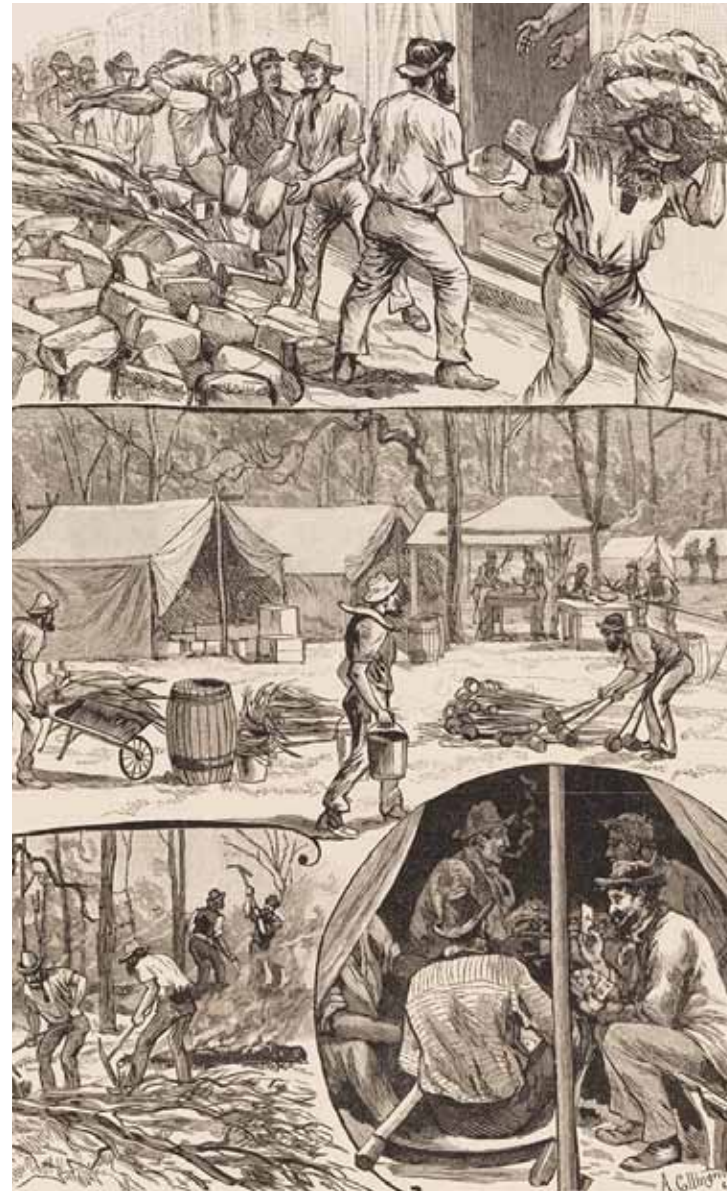
The Wallumedegal were the 'snapper people, with their clan name derived from the word "wallumai", meaning the snapper fish, and "matta", a word associated with place or a place of water. The snapper fish, also the clan's totem, would have been found in abundant numbers in waterways of Country.



EUROPEAN COLONISATION + COMMON LAND

Following colonisation, the area was divided in 1792 into an array of land grants to a group of marines by Governor Arthur Phillip. Called the “Field of Mars”, its name is suspected to be linked to the military background of the land recipients, derived from the Roman God of War, Mars. The area then became the Parish of Field of Mars. The site is located within the area of the Parish which was declared the Field of Mars Common in 1804. The Common was approximately 6000 acres in size, situated along the southern side of the Lane Cove River and was provided in response to the need for land for pastoral grazing. Conceived as a traditional English common, the area was a place collectively used by the local people to obtain resources and support agricultural practices.

Gradually many parts of the Common were associated with illicit activities such as logging and squatting, and in 1874 a proposal was finally approved to subdivide and sell the land. Some sections were reserved for recreation and open space, such as the Field of Mars Wildlife Reserve and the Field of Mars cemetery.

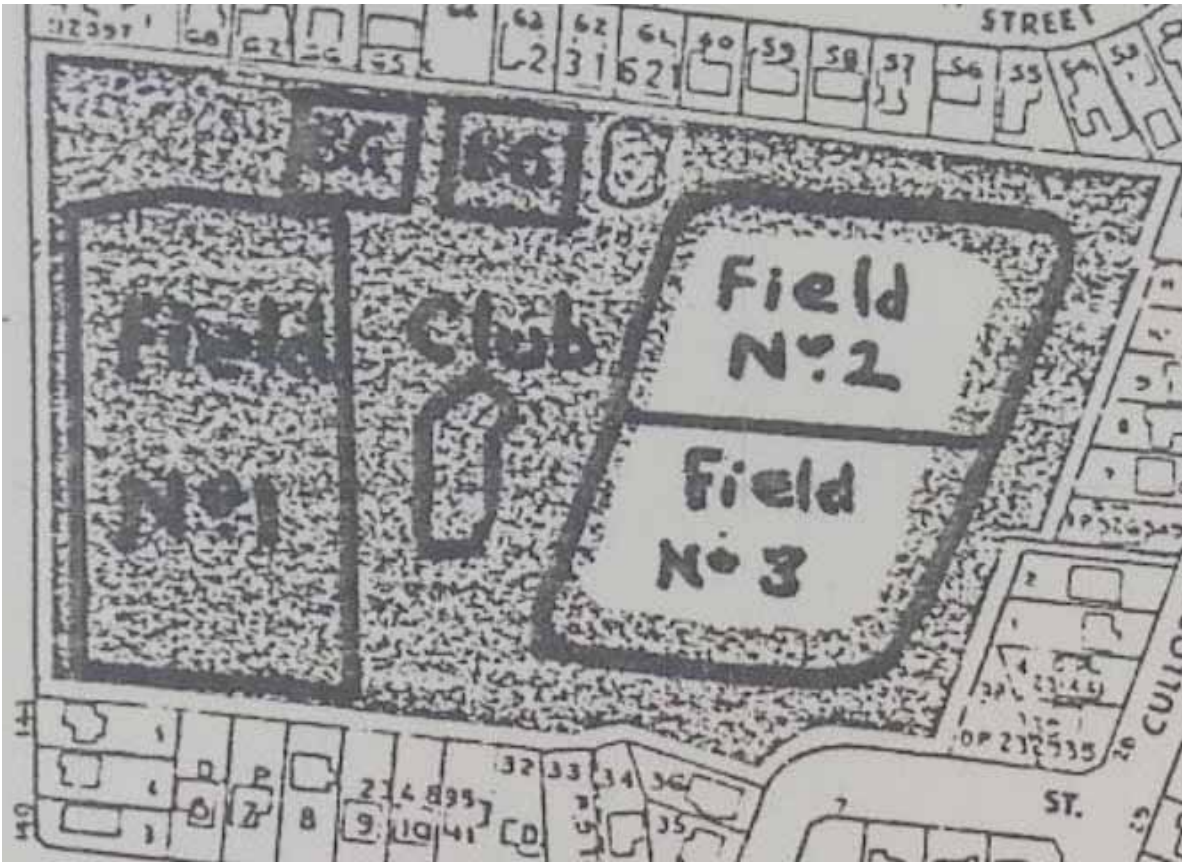


20TH CENTURY + THE ESTABLISHMENT OF A RECREATION LEGACY

In 1892, the Eastwood Young Men’s Institute (YMI) established the first rugby team in the Eastwood district. By the 1920s the sport had gained sufficient popularity to result in Ryde Council levelling the Eastwood playing field, however the ground remained unsuitable as a playing field for several years.

The Vimiera Recreation Grounds, a representative company of Eastwood Rugby Club, purchased four and a half acres of land for the construction of fields at the current TG Millner site. This was made possible by a loan from Thomas George Millner, whom the site was then named after.

The success of the club varied, but they remained popular, with an increase in membership and ongoing recreational use of the site. Through the 1950s improvements were made to the field, and then to accommodate increasing use, the clubhouse facilities were expanded in the 1960s including the bowls club/canteen building to the north.



Despite success in the premiership competition, by the late 1990s, the Eastwood District Rugby Club were facing significant financial challenges. In an attempt to salvage the club, a lease and multiple options of the entire TG Millner complex were granted to North Ryde RSL Community Club Ltd (NRRSL).

The Eastwood Rugby continued to face challenges, contributed to by the shift of the “natural rugby demographic” further north, as identified by studies commissioned by the club. With players and sponsors now located some distance from TG Millner Field, together with the ageing condition of facilities on the site and constraints on developing them, Eastwood Rugby resolved in 2018 to establish a new home at Castle Hill within the 58ha Fred Caterson Reserve sporting precinct.

With the ongoing decline of the club and use of the site, little change or development has occurred since the mid 1990s. The primary western field has continued to serve as the site of senior and competitive matches, and the secondary fields are utilised for both training and parking. In the early 2000s, the RSL established the childcare centre, constructing the necessary facilities on the northern border of the subject site, adjacent to the bowling green.



EXISTING CHARACTER + CONDITION

The site's western boundary fronts Vimiera Road, and is surrounded on all sides by low rise, detached residential properties. A vegetated buffer surrounds the site's perimeter, which includes a number of large, well-established native trees.

The surrounding terrain slopes to the south-west towards Rugby Road and forming part of the catchment area of Terry's Creek. The terrain within the site has been heavily modified.

The more established rugby field fronts Vimiera Road with the grandstand, childcare and RSL club building to the east in the centre of the site. Behind the club, and largely hidden from public view, are two other playing fields at the rear of the site.





1



2



3







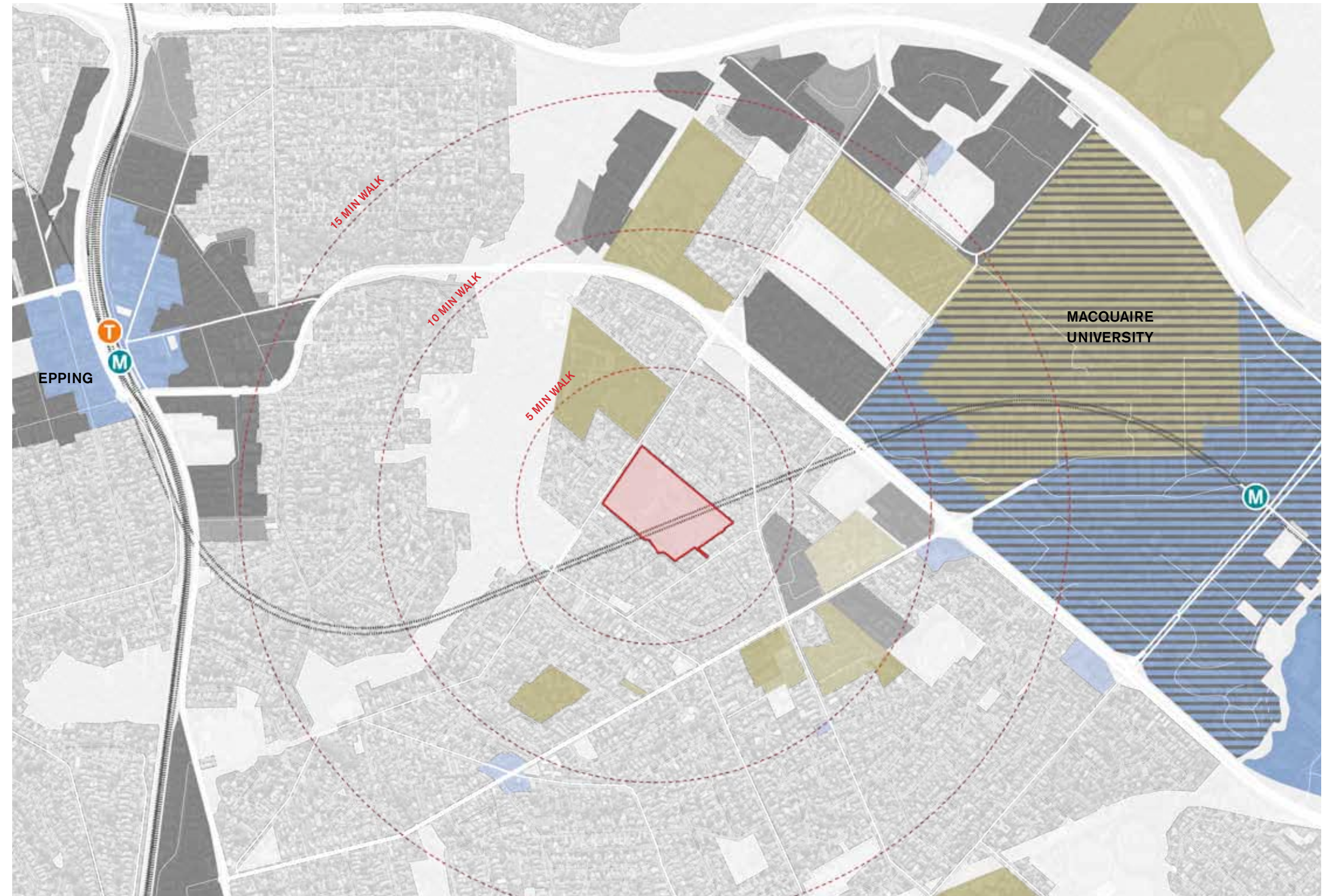


URBAN HIERARCHY, ACTIVITY NODES, SERVICES + FACILITIES

The greater context within which the site is located is predominately comprised of low density residential housing. A number of medium density developments (including student and seniors housing) are scattered in the area, or associated with increasing densities around the commercial, mixed use and local centres, alongside rapidly developing high density residential areas.

These centres, particularly Macquarie Park, also contain a number of key uses and functions, including education, healthcare, employment, retail/commercial and transport hubs.

-  Subject Site
-  **Commercial Uses**
Commercial Core/Business Park/
Local Centre/Neighbourhood centre
-  **Health and Education Uses**
Education/Research/Place of
worship/hospital+Health
-  **Residential Uses**
High Density Residential/
Medium Density Residential















EXISTING GREEN NETWORK + RECREATION ASSETS

The site is surrounded by significant green amenity and public open space including a range of passive and active recreation facilities and amenities, such as sports fields, off-lease areas, playgrounds and BBQ/picnic facilities.

Within a 10 minute walk, there is a range of different sized and programmed parks, with a number of larger sports and aquatic centres within a 20 minute walk.

The site is in close proximity to Pembroke Park, which is part of a significant ecological bushland corridor running along Terry's Creek, which connects to the Lane Cove River and Lane Cove National Park further north.

-  Fitness
-  Playground/Swings
-  BBQ/Picnic
-  Off-lease dog area
-  Sport field/facility
-  Subject Site
-  Public Recreation
-  Private Recreation
-  National Park/Reserves/Conservation Area
-  Education + Research
-  Place of Worship
-  Hospital/Heath





1. PEMBROKE PARK

~5 minute walk



2. STEWART PARK

~7 minute walk
~10,300m²



3. NUNOOK RESERVE+LYNELL PARK

~7 minute walk
~ 2,100 + 2,300m²



4. PIONEER PARK

~10 minute walk



5. DUNBAR PARK

~15 minute walk



6. ELS HALL PARK

~20 minute walk

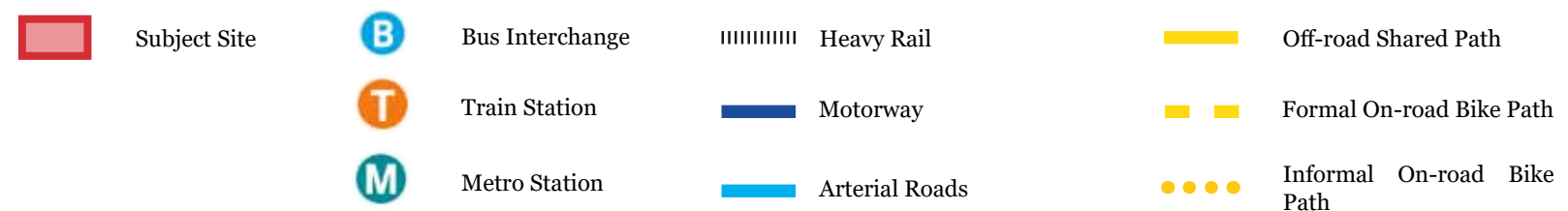
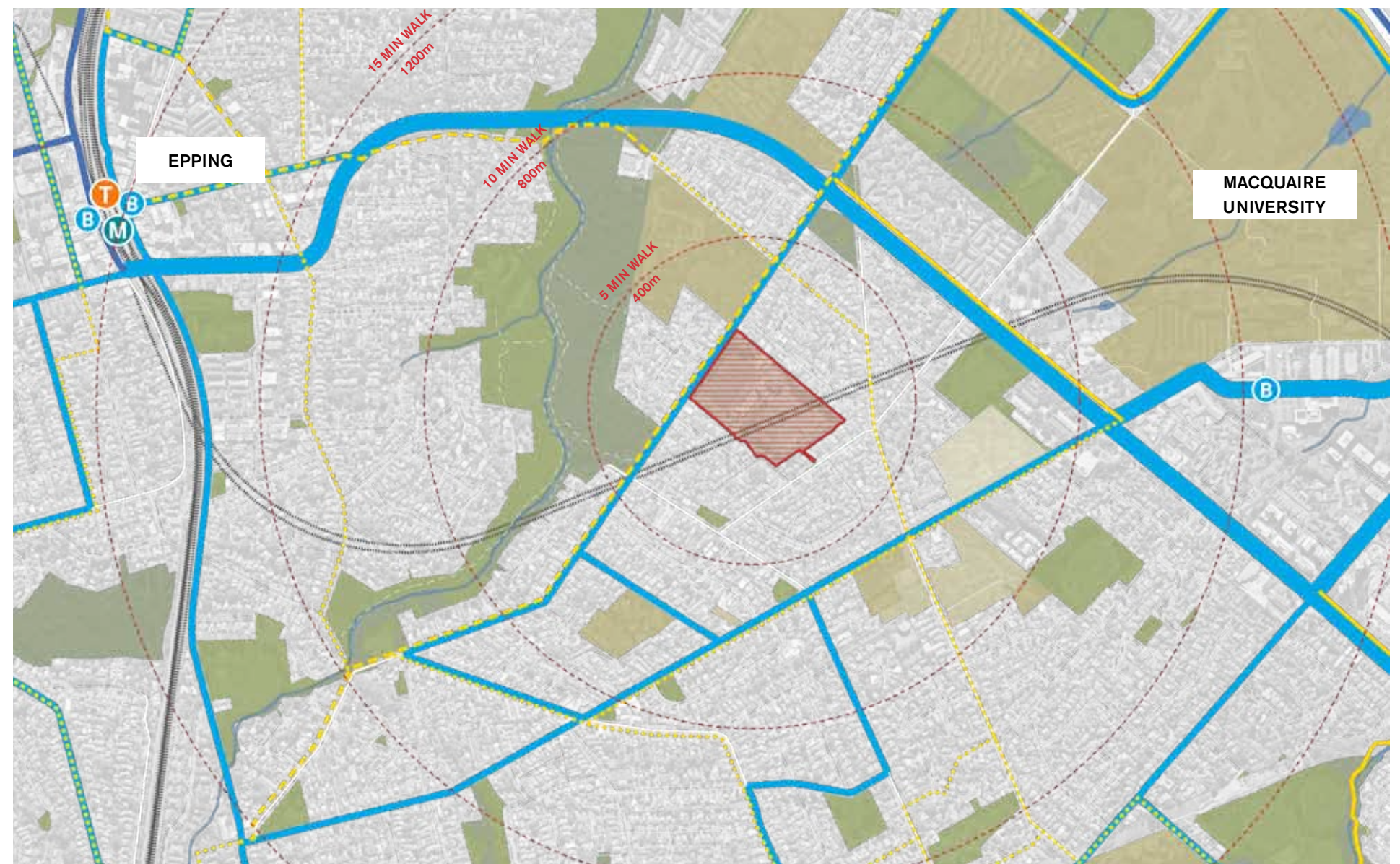
MOBILITY + PERMEABILITY

The site is well located to provide active mobility options, access to public transport and easy vehicular access to residents.

Within a 20 minute walk/5 minute bike ride is everything needed for everyday life, education and employment options, as well access to the network of bushwalking tracks within the Terry's Creek corridor.

A number of bus stops are within a short walk of the site, including stops along Vimiera Road. Epping Road, approximately 400 metres to the north, is a significant corridor for a large number of bus routes. Balaclava Road, approximately 550m south of the site, provides frequent buses to Macquarie University, Macquarie Park and Eastwood Town Centre.

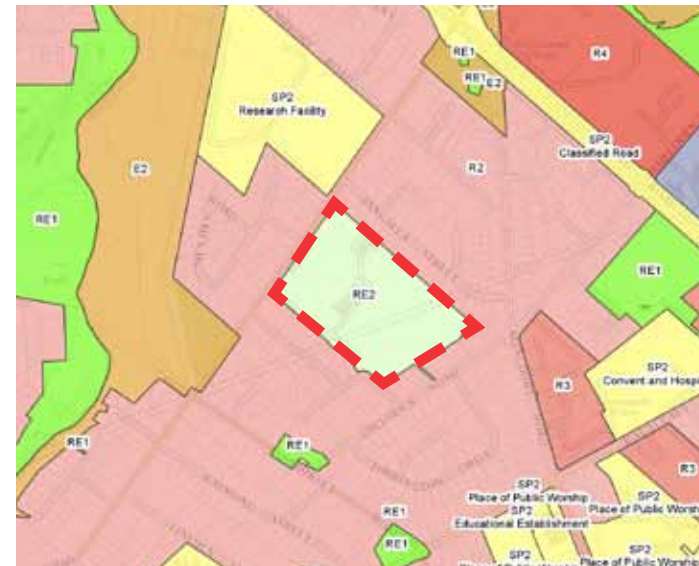
Epping Station and Macquarie University Station are located approximately 1.6km from the site, providing access to a variety of train and metro services including the T9 Northern line, CNN Line, Metro Northwest Line.



LEP MAPS

The site is an island site zoned RE2 - Private Recreation with no building height limit, sitting within an area which is zoned R2 - Low Density with a 9.5m height limit. Although, the site has no FSR it is mostly surrounded by 0.5:1 with some lots with FSRs ranging between 0.6-1.0:1 in the vicinity.

The site and surrounds are partially impacted by a flood planning area.



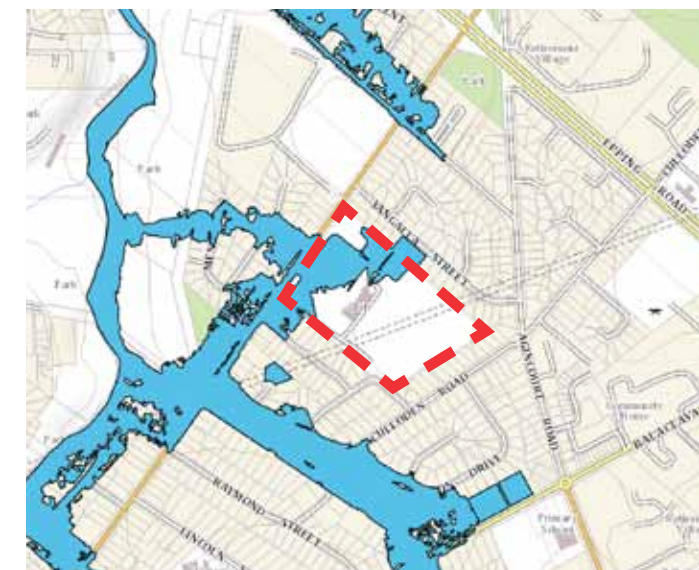
LAND ZONING:
RE2 RECREATIONAL



FSR:
N/A



MAXIMUM HEIGHT:
N/A



FLOOD PLANNING:
**PARTIAL FLOOD
PLANNING AREA**

SITE CHALLENGES

The natural topography of the site has been significantly altered to create level terraces for the existing playing fields, which has resulted in a number of steep level changes within and at the perimeter of the site.

A significant part of the north-western half of the site adjacent to Vimiera Road, the current location of the Number 1 playing Field, is flood affected with a PMF of 0.4-0.6.

The underground tunnel (and associated buffer zone) for the metro line runs under the south-eastern half of the site. Further information about the tunnel is provided in the accompanying report by Wood & Grieve.

The site is surrounded by low-rise, detached residential properties, which will require a sensitive approach in order to mitigate visual and acoustic privacy conflicts and overshadowing.

SITE STRENGTHS

The site is well located, with good access opportunities along the primary frontage on Vimiera Road, as well as a secondary access point from Thelma Street.

Predominantly located along the perimeter of the site, there are a large number of significant and high quality endemic trees, which offer an immediate mature landscape quality, edge buffer and natural character to the site.

- | | |
|-------------------------------------|--|
| Access/Infrastructure Easements | Existing trees - High Priority Retention Value |
| Sensitive Residential Interface | Existing trees - Medium Priority Retention Value |
| Rail Tunnel Corridor First Reserve | Flood Affected Area (PMF 0.4-0.6) |
| Rail Tunnel Corridor Second Reserve | Site Access Opportunity |



SITE VISIBILITY

Due to the topography and existing mature tree canopy in the area around the site (as well as on the site), there is limited visibility into and out of the site from the surrounding streets. The site is also not affected by any public view corridors.

The site's perimeter green buffer particularly filters views into the site, with little to no visibility of the existing built fabric and the rear fields within the site. The significance and effectiveness of the existing mature trees as a visual buffer is demonstrated by the limited visibility of the existing two-storey grandstand structure located along the Vimiera Road boundary due to the adjacent trees.





DESIGN RESPONSE

146 VIMIERA ROAD, MARSFIELD



MARSFIELD COMMON REVITALISES THE REDUNDANT TG MILLNER SITE AND RECONNECTS THE SITE TO THE CONTEMPORARY COMMUNITY WITHIN WHICH IT IS LOCATED – THROUGH NEW NEIGHBOURS, NEW USAGES, NEW OPPORTUNITIES, AND NEW IDEAS.

THE PROPOSAL DELIVERS NEW SITE-APPROPRIATE HOUSING, SPECIFICALLY DESIGNED OPEN AND RECREATIONAL SPACES DEDICATED TO THE LOCAL COMMUNITY, AFFORDABLE HOUSING, A SIGNIFICANTLY INCREASED TREE CANOPY, VEGETATION AND LANDSCAPING, AND DIGITAL INNOVATION ACROSS THE PRECINCT AT A STATE-OF-THE-ART LEVEL.



**ENHANCED QUALITY
OPEN SPACE**



**PART OF AND PROMOTING
COMMUNITY**



**WATER - SENSITIVE
URBAN DESIGN**



**MULTI-
FUNCTIONALITY**



**HOLISTIC
SUSTAINABILITY**



**HOUSING
DIVERSITY**





1. GREEN BUFFER

The proposal of 570 new trees with retention of as many as possible high-value trees on the site, which form a vegetation buffer, will assist in maintaining a screen and thus positive interface with the surrounding low density residential dwellings, and reduce the visual impact of development on the site.



2. CONTEXTUAL SENSITIVITY

Given the surrounding context of the site, the new built form must respond to and reflect the low-rise scale of the surrounding area. Proposed densities should also fit with that of the established context.



3. CONTINUING RECREATION LEGACY

While the privately-owned site has previously played an important role as a private recreation facility in the community, this has diminished significantly over the past 30 years. The Planning Proposal seeks to replace privately owned redundant active open space with contemporary, dedicated and relevant public open space.



4. SITE ACCESS + PERMEABILITY

A new access structure within the site should demonstrate best-practice urban design and contribute to improved access and connectivity of the area which will support activity, mobility and rational vehicular movement. This will contrast with the perpetuated and problematic pattern of cul-de-sacs in the surrounding area, which do not support permeability.





MASTER PLAN DEVELOPMENT

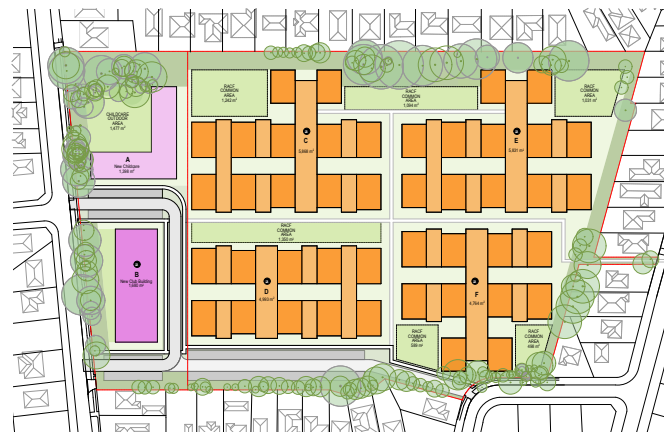
146 VIMIERA ROAD, MARSFIELD

MASTER PLAN OPTIONS

A number of options were considered for the site, having regard to the unique large consolidated landholding, permitted use and comparable redevelopments.

A summary of the main master plan options investigated in more detail is included on the following pages. The included options are:

- Option 1: Seniors Living (Residential Aged Care Facility);
- Option 2: Majority Apartments + green buffer;
- Option 3: Centre Apartments + low density housing perimeter;
- Option 4: Majority Medium Density + park side apartments; and
- Option 5: Low to Medium density.



OPTION 1

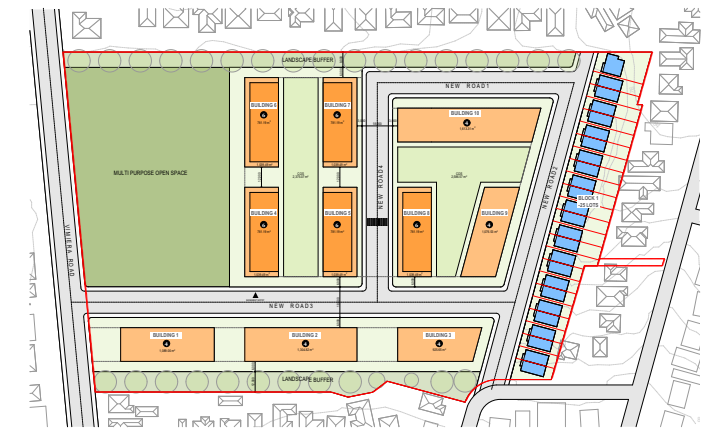
Seniors Living - RACF

Total Dwellings 672

Total GFA 40517m²

Maximum Height 2 Storeys

FSR 0.66:1



OPTION 2

Apartments + Detached Houses

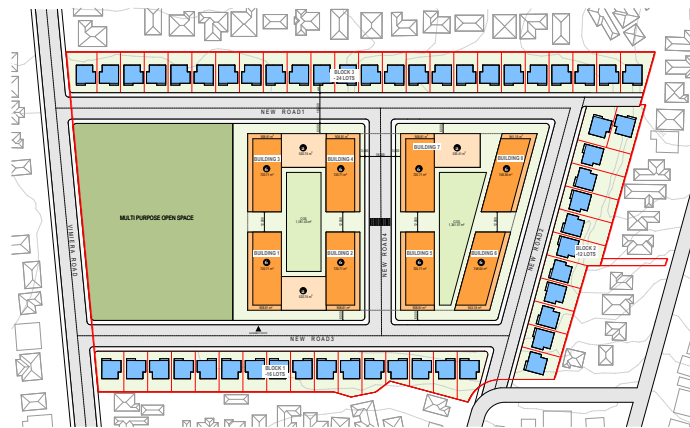
Total Dwellings 536

Total GFA 45,605m²

Maximum Height 6 Storeys

FSR 0.7:1





OPTION 3

Apartments + Detached Houses

Total Dwellings 481

Total GFA 32,731m²

Maximum Height 6 Storeys

FSR 0.53:1



OPTION 4

Apartments + Semi-detached Houses

Total Dwellings 292

Total GFA 45,639m²

Maximum Height 6 Storeys

FSR 0.74:1



OPTION 5

Semi-detached and attached houses

Total Dwellings 146

Total GFA 22,180m²

Maximum Height 9.5m

FSR 0.36:1



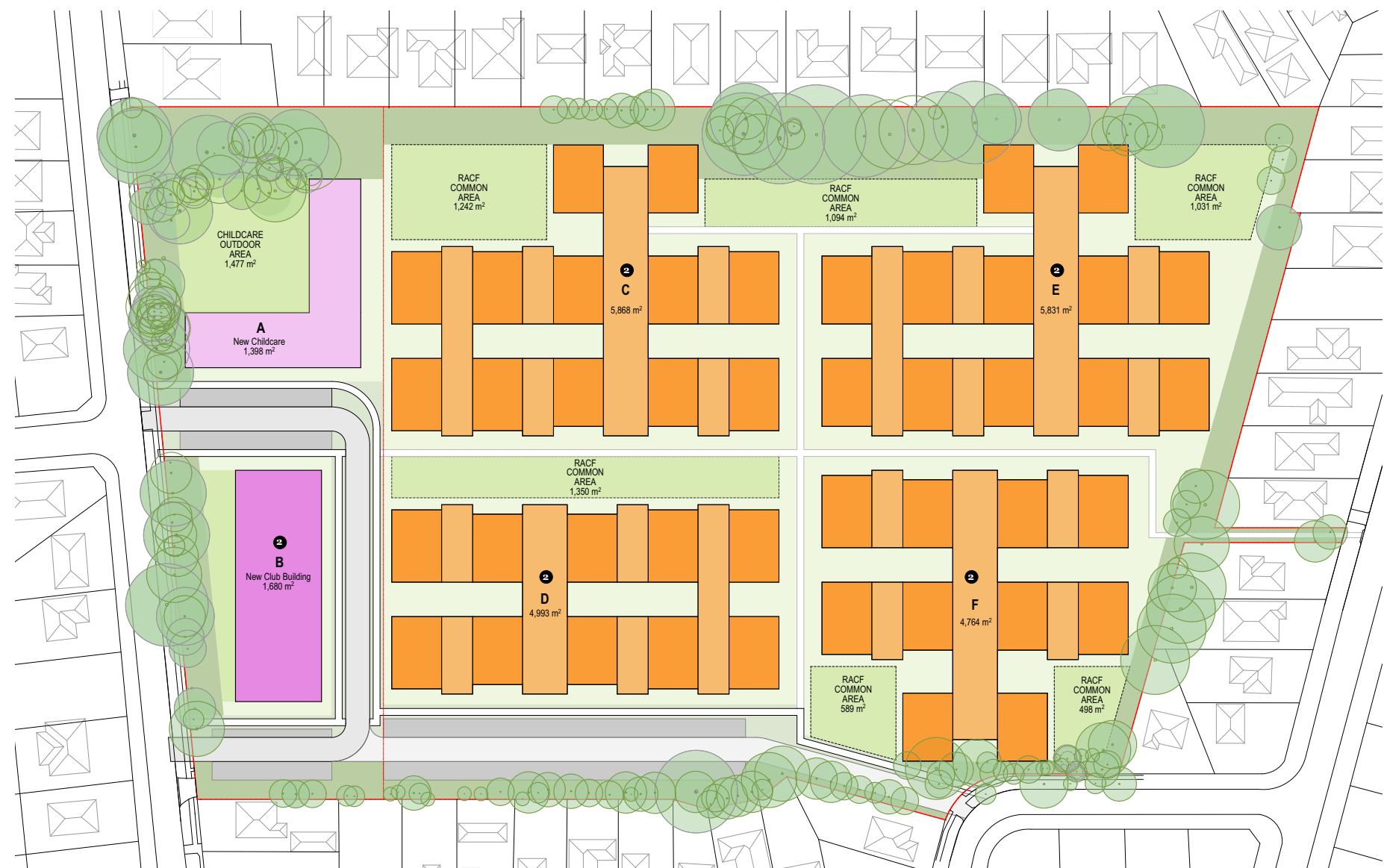
OPTION 1 SENIORS LIVING

COMPONENTS

- Housing SEPP compliant scheme (2 storey Residential Aged Care Facility).
- Retention of club and childcare uses relocated next to Vimiera Road.
- Green landscape perimeter incorporating retention of existing vegetation.
- Loop road off Vimiera Road with a private service road connecting to Thelma Street.

COMMENTS

- No public open space required to be provided.
- Potential community benefit to retain childcare and club uses.
- Landscape buffer has limited usability but provides a good visual screen.
- RACF requires a large footprint which dominates the site.
- Limited opportunity for public through-site connectivity due to requirement for clear and secure boundary for RACF site.
- No variety of dwelling typologies.



OPEN PUBLIC SPACE AREA	0 m ²
TOTAL GFA	40,517 m ²
FSR	0.66:1
TOTAL RACF ROOMS	672
BUILDING HEIGHT	9.5m



OPTION 2 APARTMENTS+ ATTACHED HOUSES

COMPONENTS

- Large public park adjacent to Vimiera Road.
- Green landscape perimeter incorporating retention of existing vegetation.
- 4-6 storey apartments buildings with semi-detached dwellings along the south-east boundary.
- 2 vehicular access points (one from Vimiera Road and one from Thelma Street).

COMMENTS

- Large recreation space.
- Greater public domain requiring more maintenance.
- Landscape buffer has limited usability but provides good visual screen.
- Positioning height at the centre of the site limits overshadowing of open space and existing dwellings.
- Limited transition of height between apartment buildings and the low density and scale of the surrounding area.
- Apartment buildings would provide good edge activation and passive surveillance of park.
- Potential for retention of majority of existing perimeter vegetation.
- Very limited variety of dwelling typologies.



OPEN PUBLIC SPACE AREA	11,739 m ² (+ 2,701 m ² buffer)
TOTAL GFA	45,605 m ²
FSR	0.7:1
TOTAL DWELLINGS	536
DETACHED	1
SEMI-DETACHED	24
ATTACHED	0
APARTMENTS	511
BUILDING HEIGHT	9.5m - 20m (6 storeys)



OPTION 3 APARTMENTS+ DETACHED HOUSES

COMPONENTS

- Large public park adjacent to Vimiera Road.
- Built form perimeter of low-rise detached houses with standard rear setbacks for retention of existing vegetation.
- 4-6 storey apartments at centre of the site.
- 3 vehicular access points (two from Vimiera Road and one from Thelma Street).

COMMENTS

- Positioning height at the centre of the site limits overshadowing of open space and existing dwellings.
- Graduated transition from taller buildings in the centre down to meet the low density and scale of the surrounding area.
- Apartment buildings would provide good edge activation and passive park surveillance.
- Potential for retention of some existing perimeter vegetation.
- Limited variety of dwelling typologies.



OPEN PUBLIC SPACE AREA	9,568 m ²
TOTAL GFA	32,72m ²
FSR	0.53:1
TOTAL DWELLINGS	481
DETACHED	52
SEMI-DETACHED	0
ATTACHED	0
APARTMENTS	429
BUILDING HEIGHT	9.5m - 20m (6 storeys)



OPTION 4 APARTMENTS+ DETACHED/ATTACHED HOUSES

COMPONENTS

- Large public park adjacent to Vimiera Road.
- Built form perimeter of low-rise semi-detached houses with limited rear setbacks for retention of existing vegetation.
- 4-6 storey apartments buildings concentrated at centre of site next to park.
- Central blocks of attached, rear-loaded terrace dwellings.
- 3 vehicular access points (two from Vimiera Road and one from Thelma Street).

COMMENTS

- Positioning height at the centre of the site limits overshadowing of open space and existing dwellings.
- Graduated transition from taller buildings in the centre down to meet the low density and scale of the surrounding area.
- Apartment buildings would provide good edge activation and passive surveillance of park.
- Limited potential for retention of existing perimeter vegetation.
- Excellent variety of dwelling typologies.



OPEN PUBLIC SPACE AREA	9,568 m ²
TOTAL GFA	45,639 m ²
FSR	0.53:1
TOTAL DWELLINGS	292
DETACHED	38
SEMI-DETACHED	48
ATTACHED	30
APARTMENTS	176
BUILDING HEIGHT	9.5m - 20m (6 storeys)



OPTION 5

PREFERRED OPTION

COMPONENTS

- Large public park adjacent to Vimiera Road.
- Built form perimeter of low-rise semi-detached houses with limited rear setbacks for retention of existing vegetation.
- Blocks of attached, rear-loaded terrace dwellings located in centre of site and lining park.
- 3 vehicular access points (two from Vimiera Road and one from Thelma Street).

COMMENTS

- Graduated transition from more dense built form in the centre to meet the low density and scale of the surrounding area.
- Terrace dwellings would provide some edge activation and passive surveillance of the park.
- Limited potential for retention of existing perimeter vegetation.
- Variety of dwelling typologies.



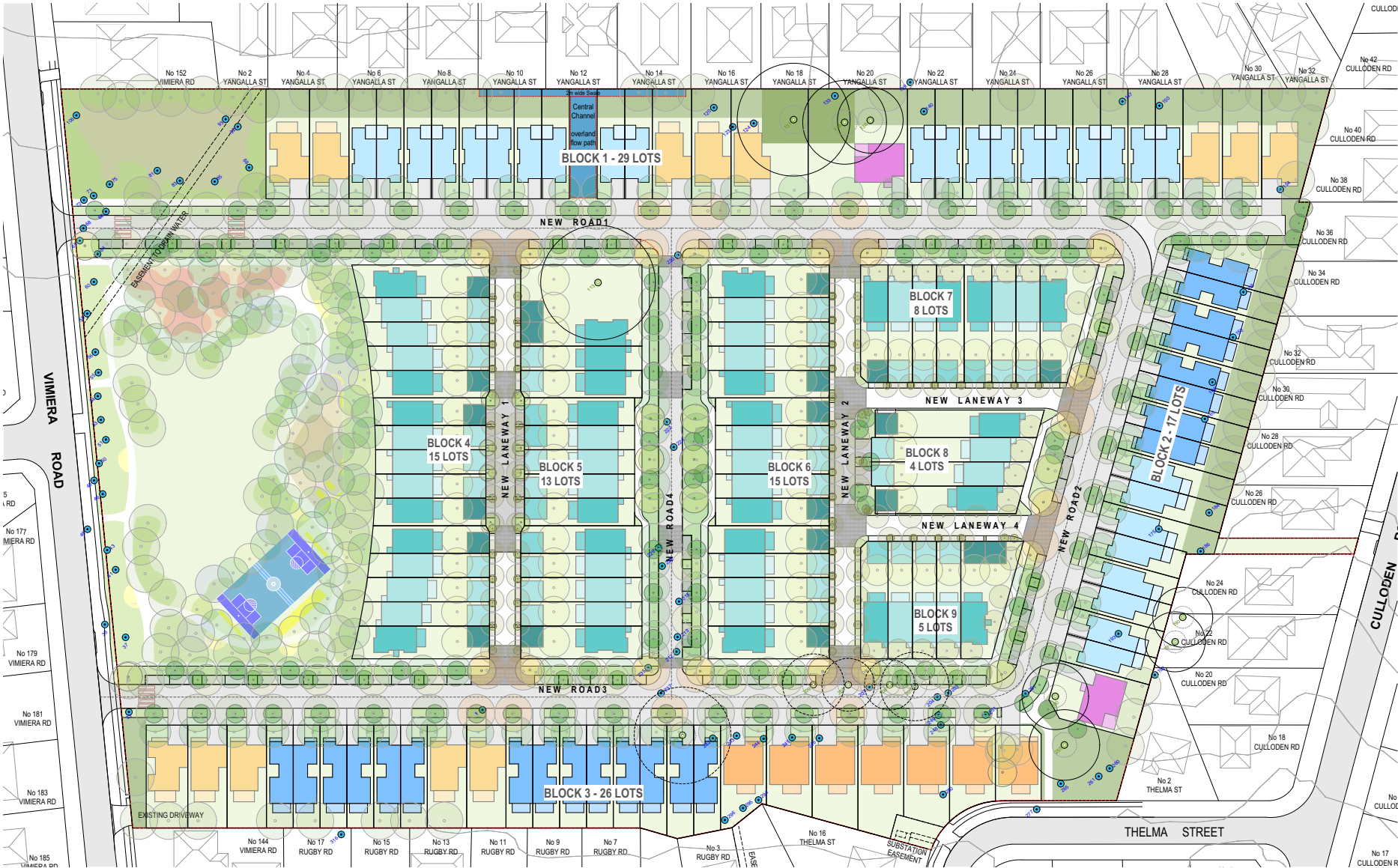
OPEN PUBLIC SPACE AREA	9,684 m ²
TOTAL GFA	22,180 m ²
FSR	0.36:1
TOTAL DWELLINGS	146
DETACHED	38
SEMI-DETACHED	48
ATTACHED	60
APARTMENTS	0
BUILDING HEIGHT	9.5m



PREFERRED OPTION REFINEMENT

DKO has refined the ‘preferred option’ to incorporate input from the consultant team, initial Council feedback and further detailed design analysis. The refined option includes the following:

- A stormwater and flood strategy that responds to the local flooding and drainage context.
- Additional park area and increased perimeter setbacks to retain more existing trees.
- Curved edge between park and adjacent terraces to reduce visual dominance of built form.
- Rationalisation of internal street and laneway layout.



OPEN PUBLIC SPACE AREA	10,000 m ²
TOTAL GFA	19,600 m ²
FSR	0.32:1
TOTAL DWELLINGS	132
DETACHED	22
SEMI-DETACHED	50
ATTACHED	60
APARTMENTS	0
BUILDING HEIGHT	9.5m





PROPOSED MASTER PLAN

The resulting master plan, which forms the basis of the Planning Proposal, includes the following:

- A 10,000m² public park with a variety of recreation uses and facilities.
- A new internal tree lined public road connecting to Vimiera Road, with an additional pedestrian-only access from Thelma Street.
- 570 new trees, with a total canopy cover of 65%
- Stormwater strategy and WSUD integration to minimise flood impacts and improve water quality.
- Indicatively 132 medium density dwellings with a variety of lot sizes and dwelling typologies.
- Differentiated architectural character areas across the site to provide visual diversity.







At the core of DKO's design philosophy lies a commitment to an urban architecture that serves people, respects place and stands the test of time. We strive to promote industry best practices and drive sustainable outcomes, as demonstrated by a number of our projects receiving sustainability awards and our practice's Carbon Neutral certification. We keep up to date with emerging sustainable technologies and innovations while also supporting behavioural changes that promote greener living.

We also recognise that Aboriginal and Torres Strait Islander peoples have long espoused the cultural, social, economic and environmental benefits embedded in the holistic relationship of Caring for Country.

The vision for Marsfield Common is underpinned by the intention to create an exemplar project that connects people to the community and to place, and supports resilience. Proposed sustainability initiatives will support small footprint living for residents both within individual homes and the public domain. There is a key drive for Marsfield Common to go above and beyond base level sustainability compliance, underpinned by a target for dwellings to achieve a 7-star NatHERS rating.

In addition to and as part of the sustainability initiatives, the consultant team has considered the projects that form part of the Federal Government's \$50 million Smart Cities and Suburbs Program. The intent is to work with Council, the community and the State Government to deliver a world-best practice digital outcome for a residential infill site of this nature. As a further commitment to delivering a smart place, the proponent has signed-on to the State Government's Smart Places Customer Charter.



COMMUNITY + INDIVIDUAL WELLBEING

Promote health + active mobility

Community at the core

Connection to and responsibility of the environment

Diverse community + housing affordability

Marsfield Common will foster a strong community of people and support healthy living in terms of physical, emotional and social wellness. The proposed public park and engaging streets will act as community connectors and support a sense of belonging. The strong landscape character of the site also places people in close proximity and connection to nature.

The varied housing typologies will encourage the creation of a diverse and inclusive community. Greater housing choice and dwellings designed to have lower ongoing costs can support affordability and, thus, emotional well-being by reducing housing stress.

Encouraging the use of active mobility will support health and well being. Bike parking will be integrated into the public domain at key access points on the site and the street design creates a high-quality pedestrian-friendly environment. The proposed varied play areas and the sports and leisure courts will also promote physical activity.

Physical health and wellbeing would also be supported by the potential to include and promote productive gardens in the communal and private open spaces which will allow residents to grow their own produce.



LANDSCAPE

Urban agriculture + community gardens

Water management

Heat island effect mitigation

Urban biodiversity



The target of planting 570 new trees on the site (to achieve a canopy cover of 65%) in combination with the incorporation of extensive soft landscaping will work to shade, absorb and reflect heat. This mitigates the heat island effect reducing additional energy requirements to cool dwellings and creates a cooler, more comfortable public domain.

The key strategy to protect and retain existing pockets of endemic vegetation on the site, in addition to further planting of endemic species will also support urban biodiversity and the preservation and improvement of fauna habitat.

The proposed sensitive stormwater management system includes WSUD elements along all streets and elsewhere in the public domain. These create permeable surfaces to recharge groundwater and improve water quality by filtering stormwater. This will mitigate impacts to local-groundwater dependent ecosystems as well as support the viability of landscaping across the site.



BUILDING DESIGN + TECHNOLOGY

Passive solar and ventilation design

Materiality

Waste management

On-site energy generation + resource efficiency

Green transport



Marsfield Common dwellings will be designed to be high-quality and resource-efficient, minimising costs to the community's residents, and the environment.

This will be achieved by including passive design elements like shading, glazing positioning, and ventilation. Incorporating light coloured roofs will help mitigate the urban heat island effect and reduce cooling costs. All dwellings will include water tanks and solar panels.

Sustainable materiality will also be investigated to further reduce the initial and on-going environmental footprint of dwellings. The use of recycled and low embodied energy material choices will be explored, as well as analysis of material durability and maintenance.

Additional sustainable technologies which will be investigated include environmental sensors and monitoring; electric vehicle chargers including the potential for share cars charged using 100% renewable energy; and smart electrical, waste and water fixtures and elements.










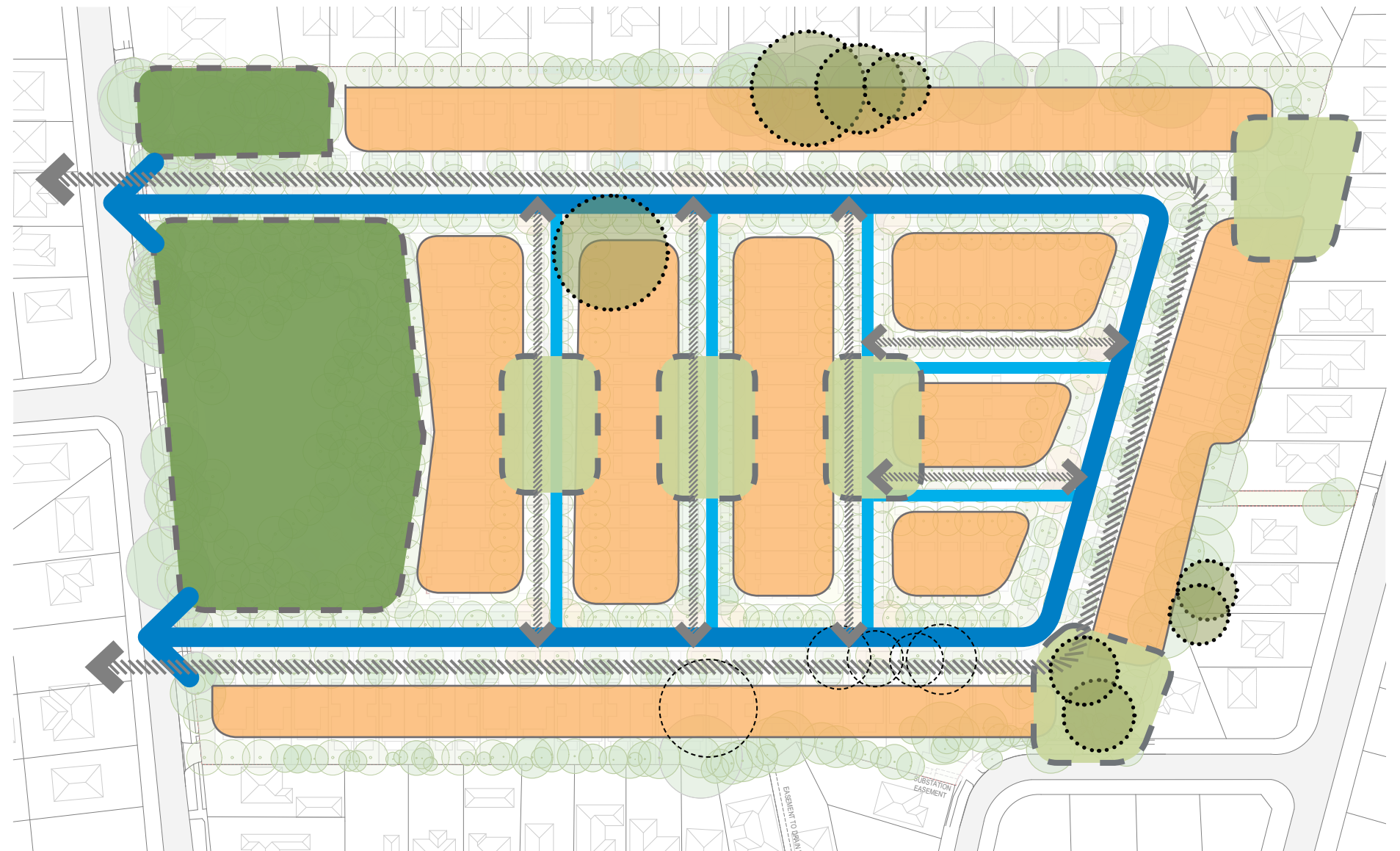


MASTER PLAN OVERALL URBAN DESIGN STRATEGY

The proposed master plan is established by the layering of a number of landscape, built form and infrastructure components, which together deliver an integrated and high quality outcome for the site.

The overall strategy is to have a well interfaced urban park connected via a central loop road. With breakout spaces and and sufficient seperation amongst built forms.

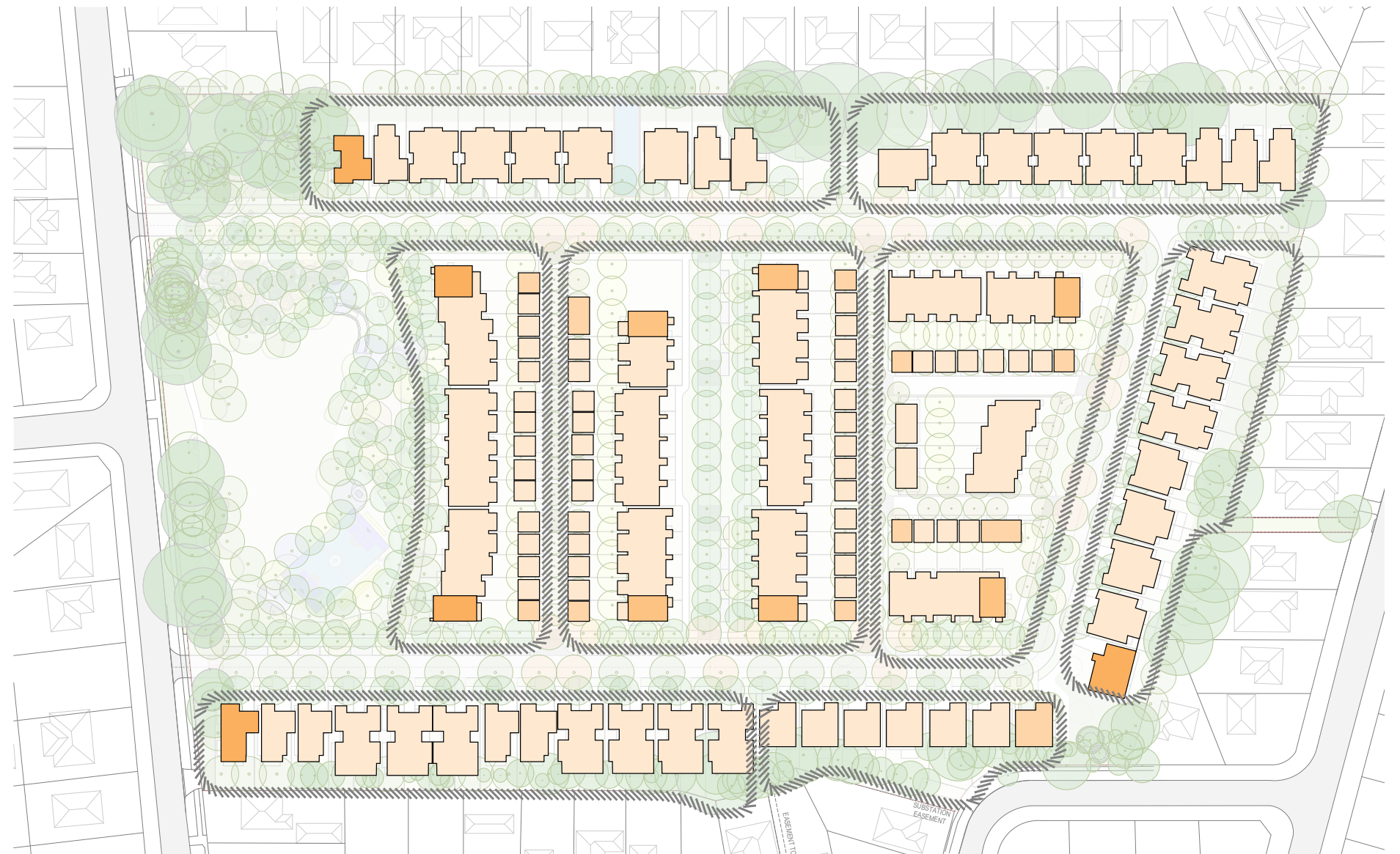
-  Pedestrian Access
-  Vehicular Access
-  Lots
-  Green Pockets
-  Open Space



MASTER PLAN OVERALL BUILT FORM STRATEGY

The built-form strategy revolves around diversity. The proposal includes seven different types of typologies; offering options in scale, bedrooms and amenities. The architecture is characterised by five unique precincts responding and characterising the urban fabric. Also providing diversity in the streetscape will be articulation of heights and roof forms. It is proposed that significant corners will be pronounced and landmark corners to have dual frontage with bold architectural elements.

- /// Architectural Precincts
- Built Form
- Landmark Corners/Dual Frontage





GREEN NETWORK LANDSCAPE + OPEN SPACE

The master plan includes an exemplar public domain and landscape network offering various uses and functions. The site is anchored by the significant new public park located along Vimiera Road, which continues the site's legacy of providing important recreation amenities and a community gathering point.

Tree-lined streets with generous landscape verges create a series of green corridors through the site, contributing to achieving an overall 65% canopy cover.

Further detail of the proposed Public Domain Framework and Park Design is outlined in the accompanying report by Landform Studios.







BLUE NETWORK WATER MANAGEMENT

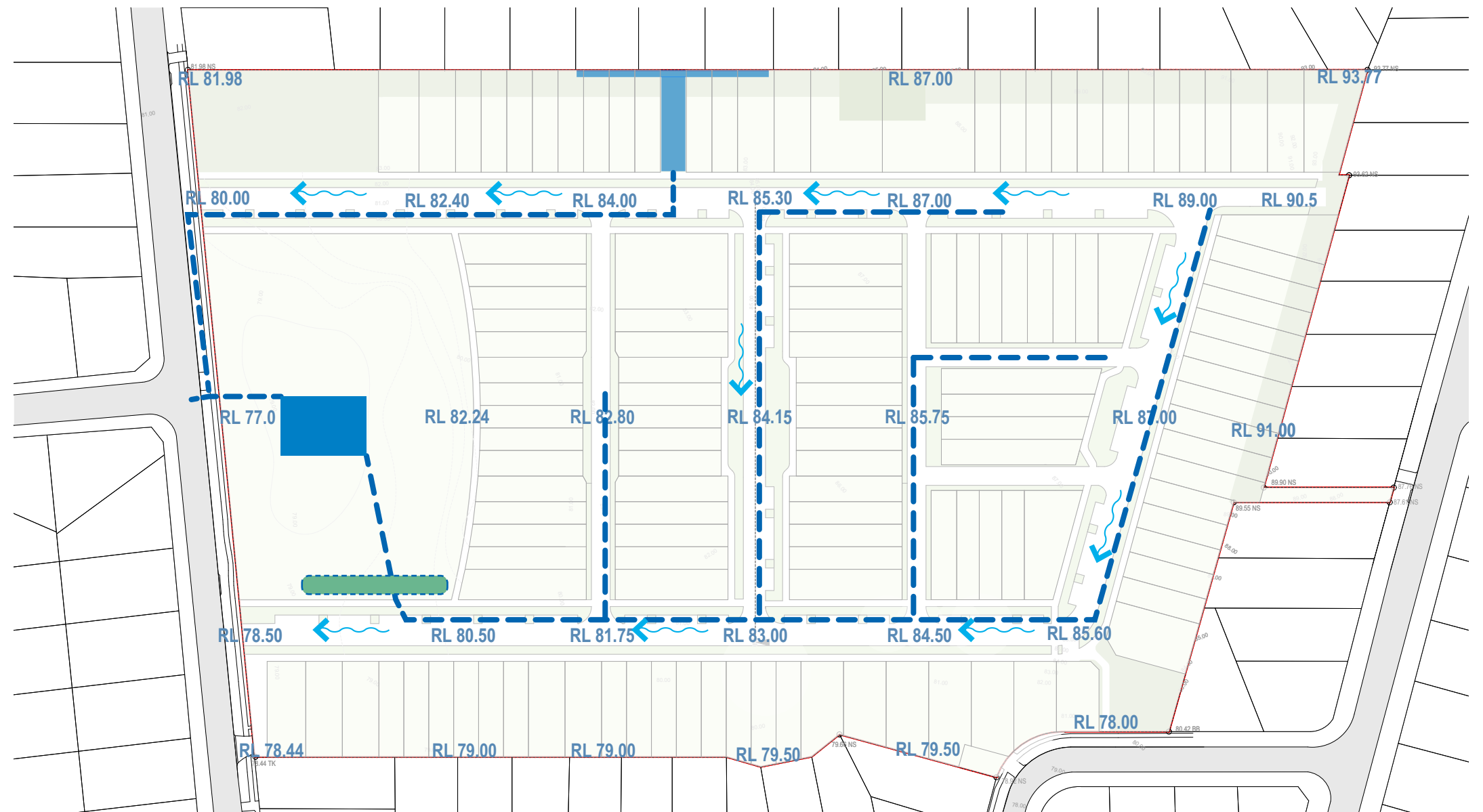
An adaptable stormwater management and design strategy that is integrated into the public domain is proposed for the site. This multifunctional blue-green infrastructure responds to local flooding and improves water quality.

Elements of the strategy include:

- Green streets with WSUD;
- Underground OSD tank;
- Bioretention filters;
- An overland flow path; and
- Piped stormwater network.

Further detail of the water management strategy is provided in the Stormwater Servicing report prepared by Northrop Engineers.

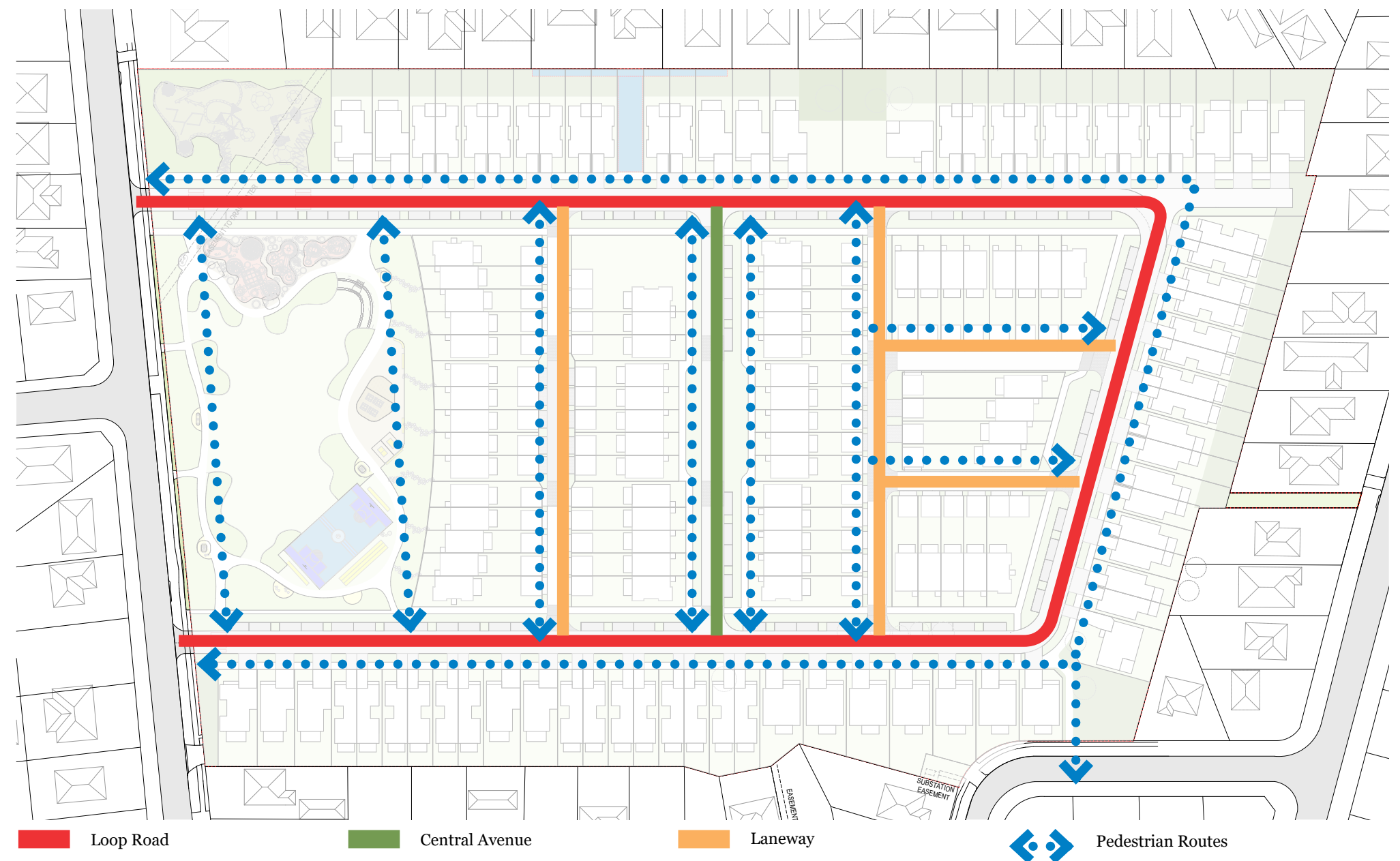
-  OSD Tank
-  Bio-retention
-  Underground pipe
-  Flow path



MOVEMENT NETWORK ACCESS + MOBILITY

The master plan incorporates a hierarchy of high quality, multifunctional roads, streets and laneways, enabling vehicular and active mobility movement through and around the site. The new access network connects the site into the existing context and promotes local permeability. The movement network has been developed to provide:

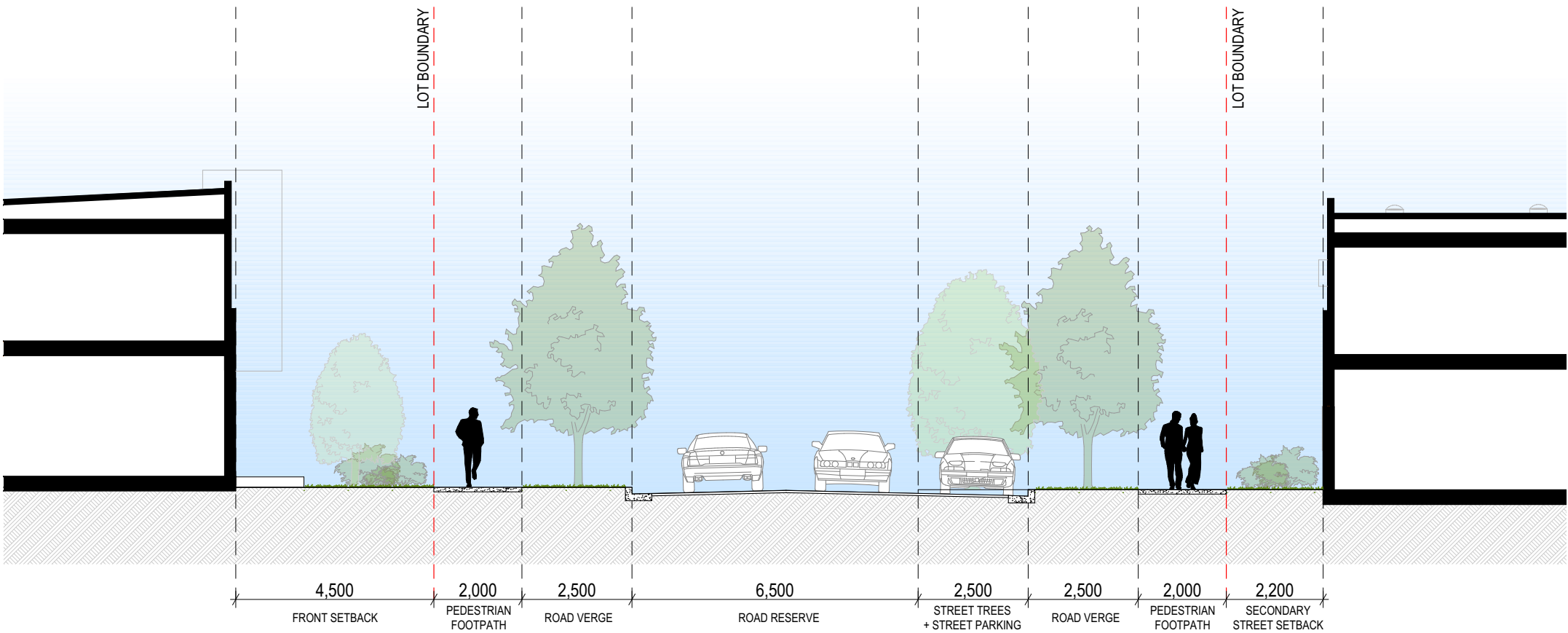
- A high quality public domain;
- A safe pedestrian environment and highly walkable place;
- Zones for generous street tree and verge planting to mitigate the urban heat island effect
- Opportunities for WSUD and sustainable management of water flows;
- On-street parking in suitable locations; and
- Safe and efficient movement of vehicles around the site.



LOOP ROAD

The loop road is a clearly defined main circulation loop around the site, which is intended to be dedicated to Council as a public road, with 2 access points from Vimiera Road.

Parallel parking bays and street trees are provided on the southern side of the loop road while the northern side contains a large landscaped verge with street tree planting. The eastern loop combines these two elements.

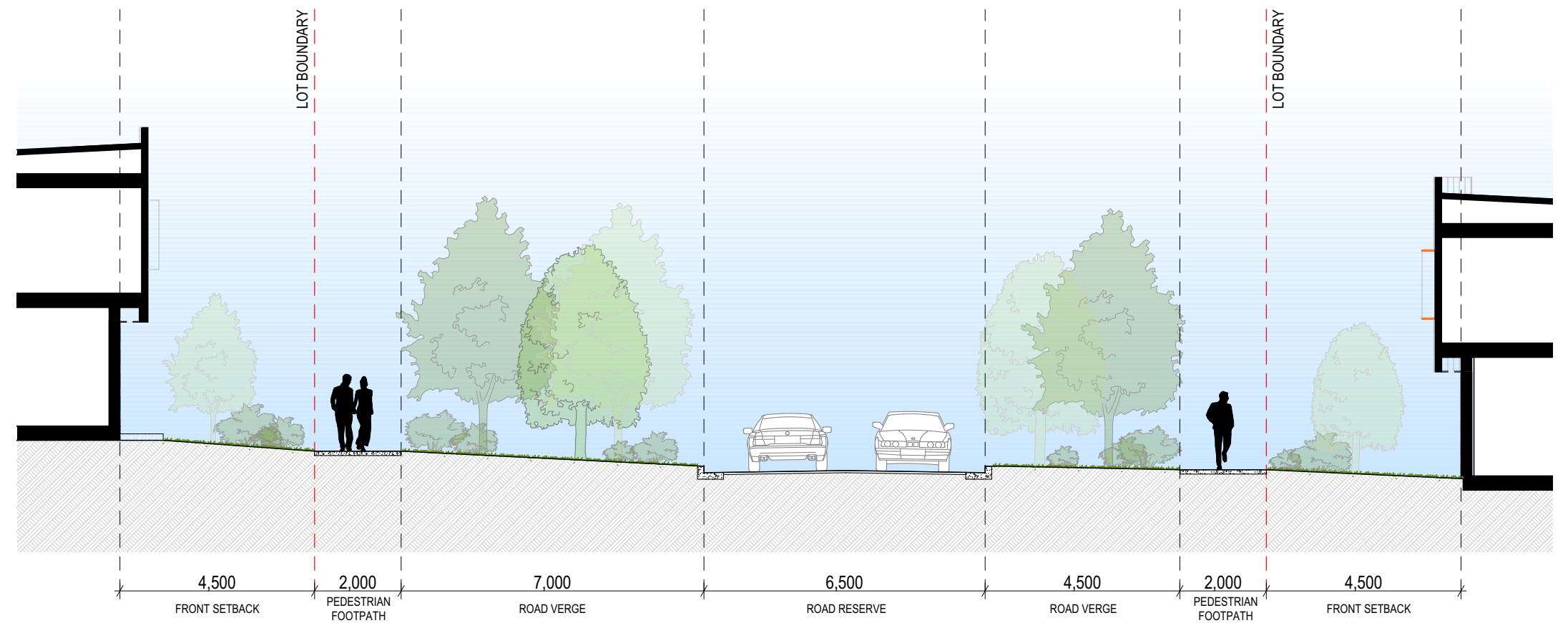


TYPICAL LOOP ROAD SECTION

CENTRAL AVENUE

The Central Avenue provides a secondary access for pedestrian and vehicles between the Loop Road.

The Central Avenue is similar in make-up to the loop road but includes a widened verge at the centre for more significant tree planting.

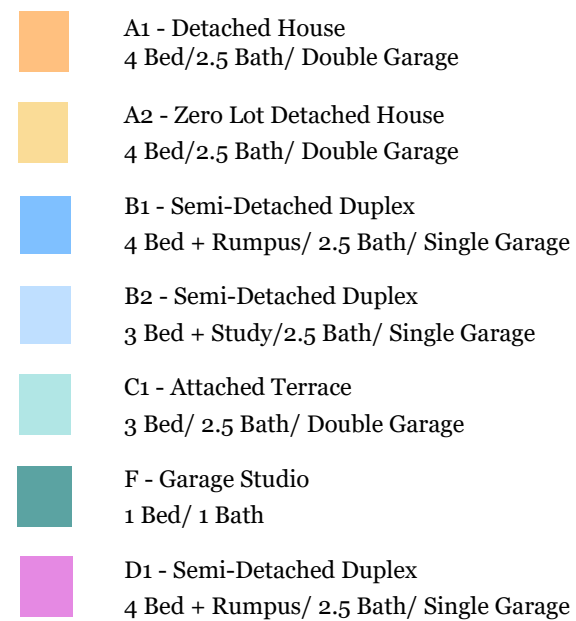


CENTRAL AVENUE SECTION

BUILT FORM TYPOLOGIES

Based on the principle of providing housing diversity, the master plan incorporates a variety of low and medium density dwelling typologies, which differ in size, built form and price.

This will foster the development of a diverse community, comprised of a number of different household kinds, and meet the gap in the market between apartments and stand alone houses to better cater for smaller households such as downsizers and young families.







TREE RETENTION + OPEN SPACE

A range of medium to high value trees have been retained throughout the master plan in significant locations to increase amenity to the precinct.

The master plan incorporates a hierarchy of passive and impassive landscaped open space throughout the site. These different spaces include the following:

- Public park
- Green boulevard street
- Laneway landscaping
- Pocket park
- Terminating green pocket parks

-  Public Open Space
-  Feature Landscape Areas
-  Retained High Retention Trees
-  Removed High Retention Trees



LANDMARK AND KEY CORNERS

The built form of the master plan is proposed to be 2 storeys throughout with the potential addition of a third storey to key corner houses in accordance with Council officer's initial urban design feedback.

It is also proposed that significant corner houses will require dual frontages to address both streets.

- 2 Storey
- 2 Storey Garage
- Potential 3 Storey
- Dual Frontage



SETBACKS

The proposed rear setbacks are 4m for ground floor and a larger 6m for the first floor. This is to provide ample space for the landscape buffer to interface with the surrounding low-density residential dwellings. The stepped nature also provides visual interest and reduce built-form massing.



- 4m Ground Floor Rear Setback
- 6m First Floor Rear Setback



LANEWAYS

Laneways will be differentiated from other roads by changes in material at the threshold of the laneways.

The length of laneways will also be broken up with varying garage separation, and the inclusion of landscaped areas.

Studios over garages are proposed in order to provide safety by passive surveillance.



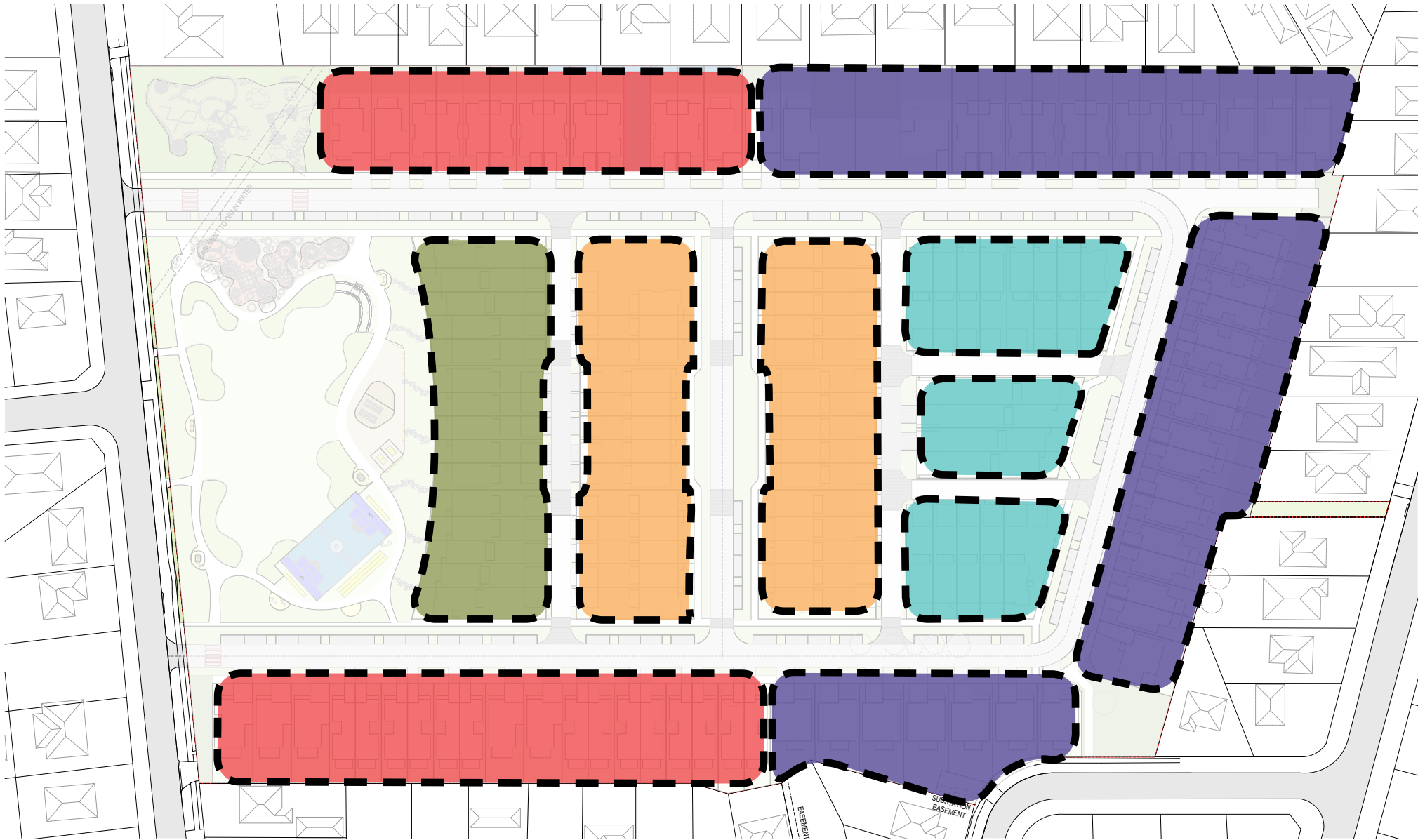
ARCHITECTURAL CHARACTER DIVERSITY

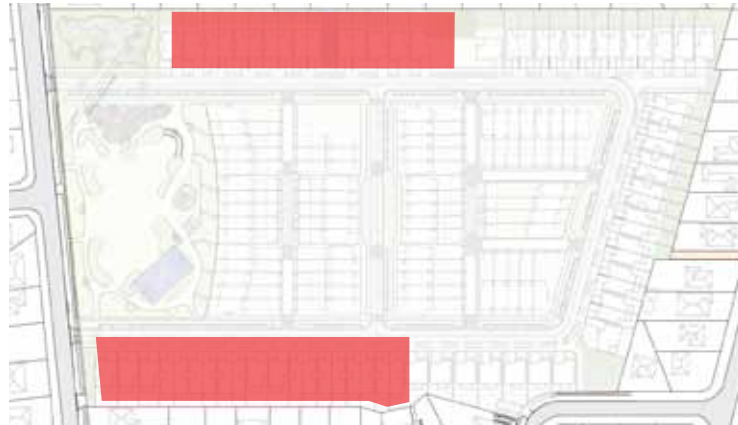
An integrated master plan approach to the site creates the opportunity to deliver a holistic, well designed development which will deliver a high quality built form outcome.

The master plan incorporates a number of differentiated architectural character areas across the site to provide visual diversity, and create a sense of identity for each portion and stage of the development.

The intention for this is to reflect the mix of architectural characters, sizes and forms which exist in neighbourhoods that naturally develop over time, and goes against the status quo “cookie cutter” approach of extensively replicated built form, as often seen in generic subdivisions.

- Entry Boulevarde
- Parkside
- Avenue Terraces
- Loop Road Terraces
- Contemporary Dwellings





ENTRY BOULEVARDE

- Simplified Architectural form.
- Solid Brick Base with lightweight upper level.
- Use of screening can be minimised.





PARKSIDE

- Expansive Glazing with balcony to face the park.
- Bold portals to define the architecture.
- Sensitive design to interface with nature.

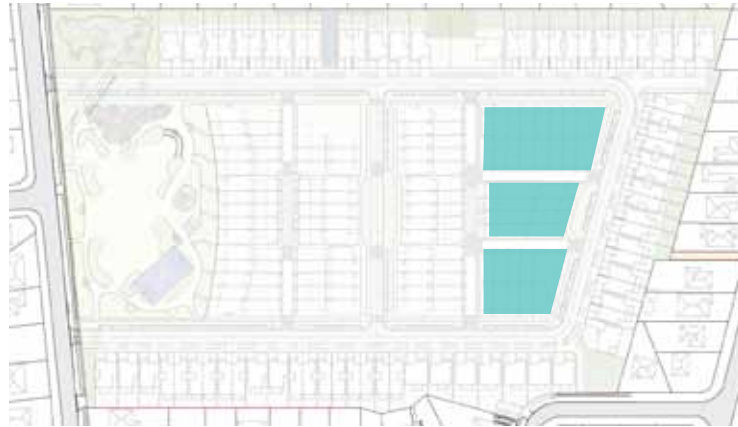




AVENUE TERRACES

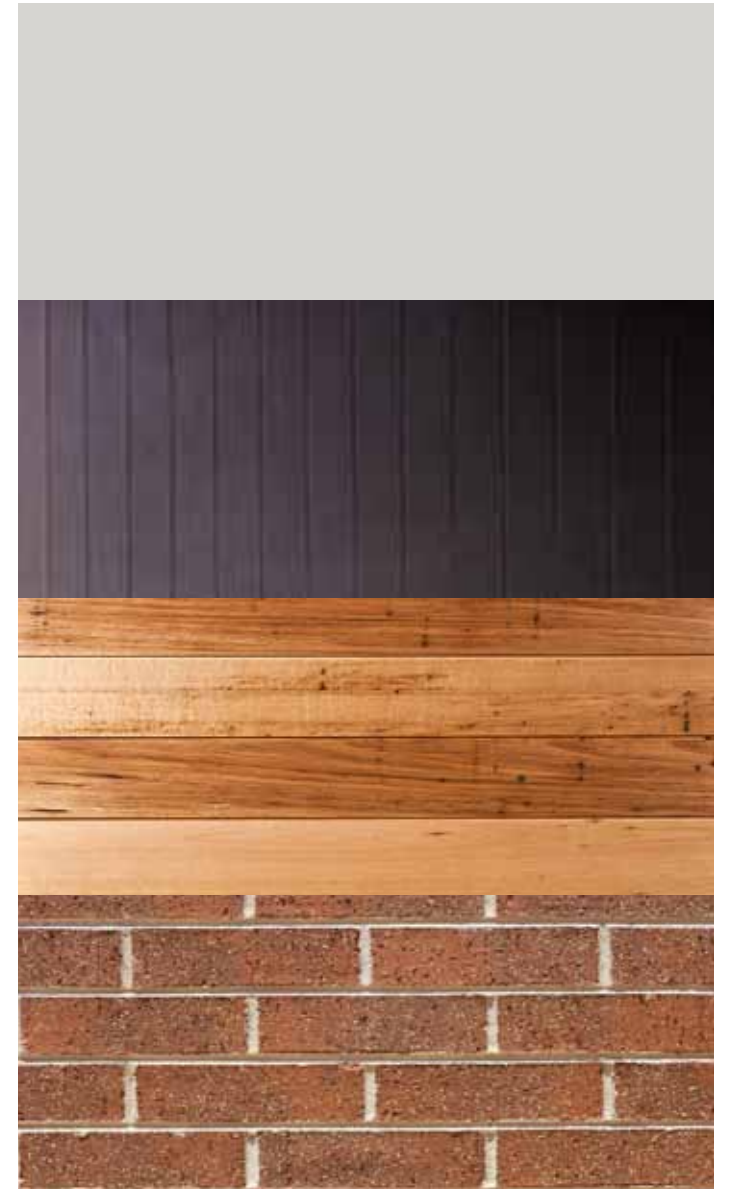
- Minimalist architectural form.
- Extruded first floor.
- Screening to provide privacy.
- Use of bold colours to accentuate form.





LOOP ROAD TERRACES

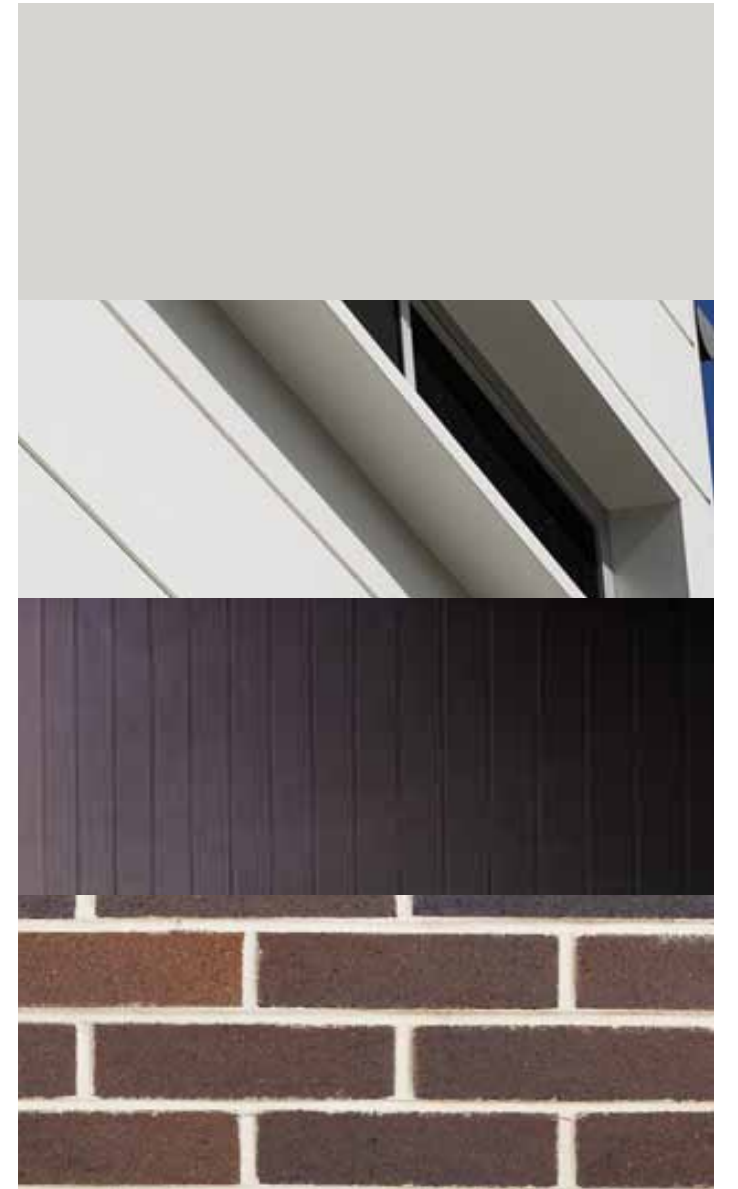
- Simplified Architectural form.
- Solid Brick Base with lightweight upper level.
- Use of natural colour variations.





CONTEMPORARY DWELLINGS

- Larger lot dwellings with form variation.
- Use of neutral colours with brick base.
- Varied setbacks to break-up bulk.

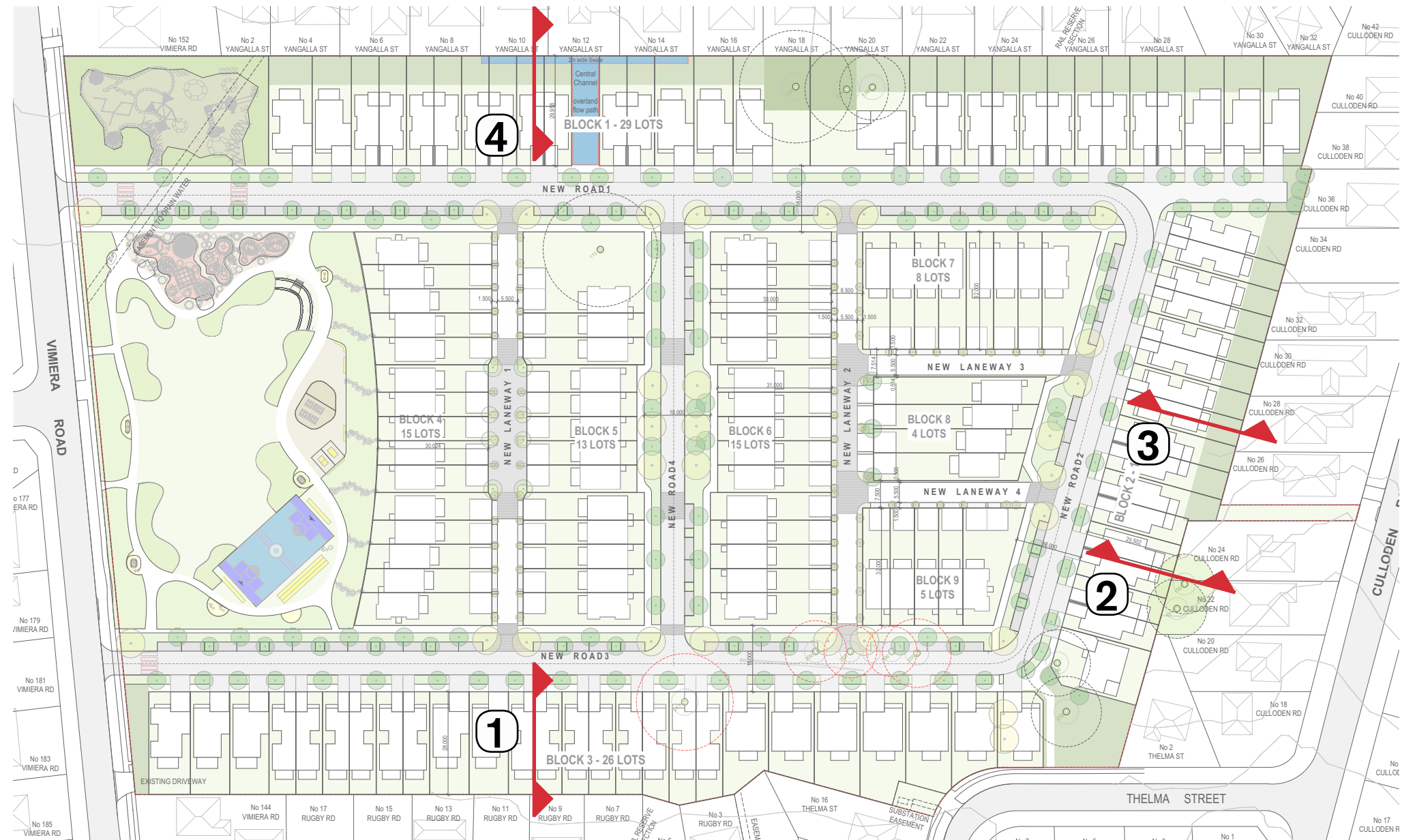


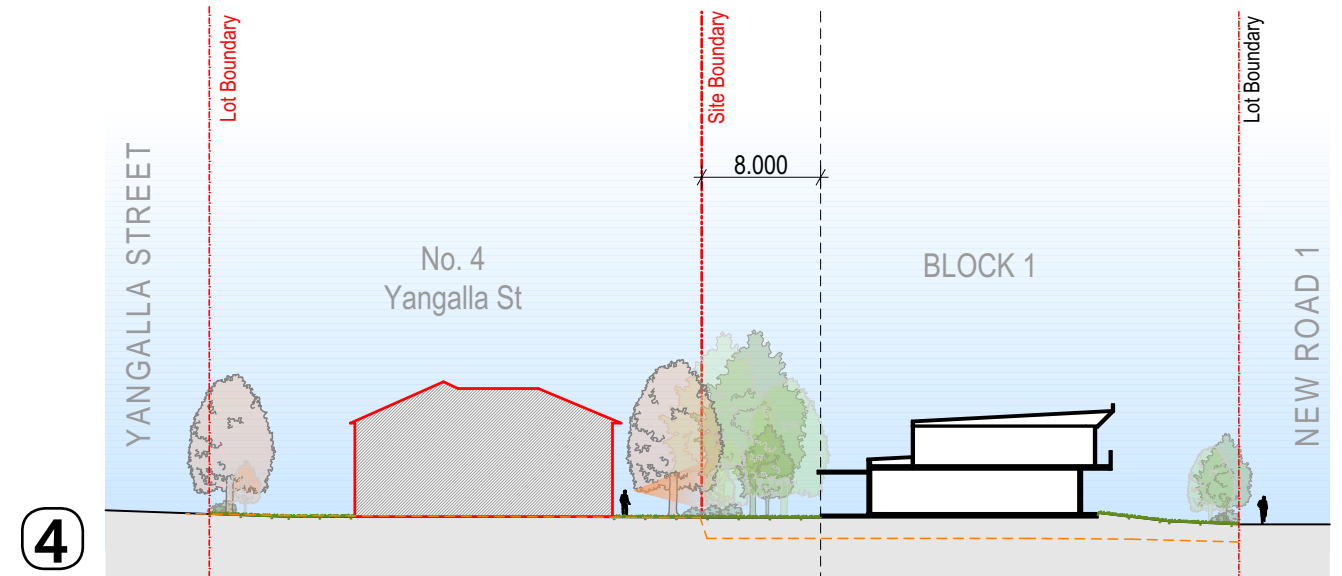
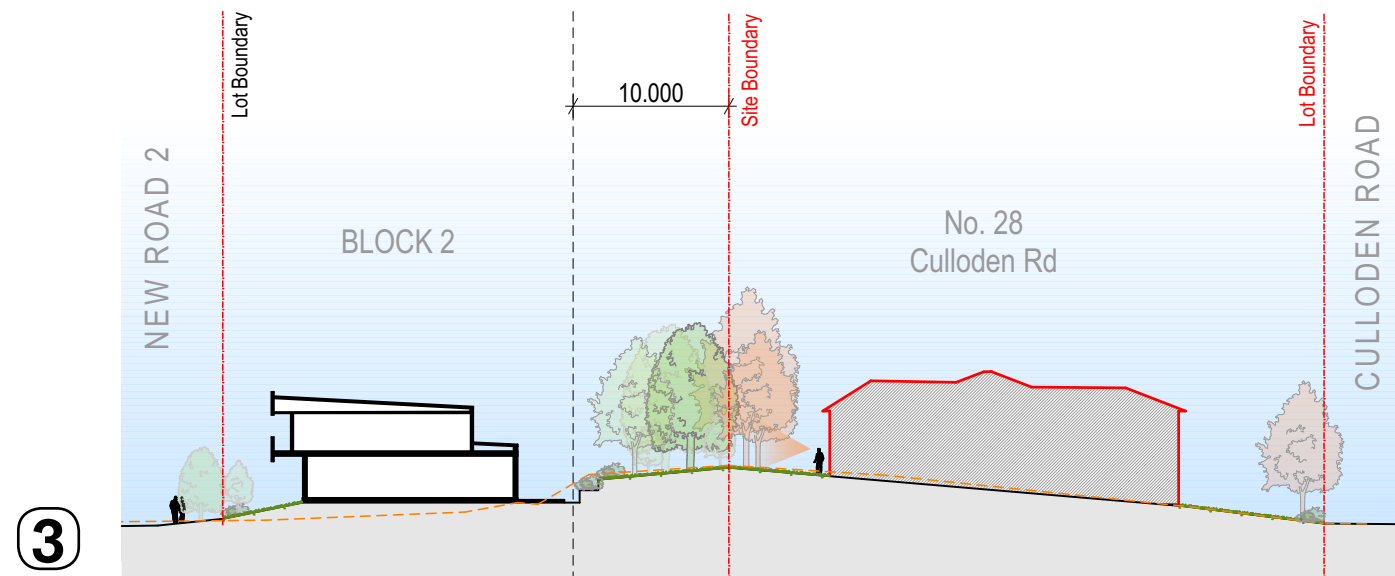
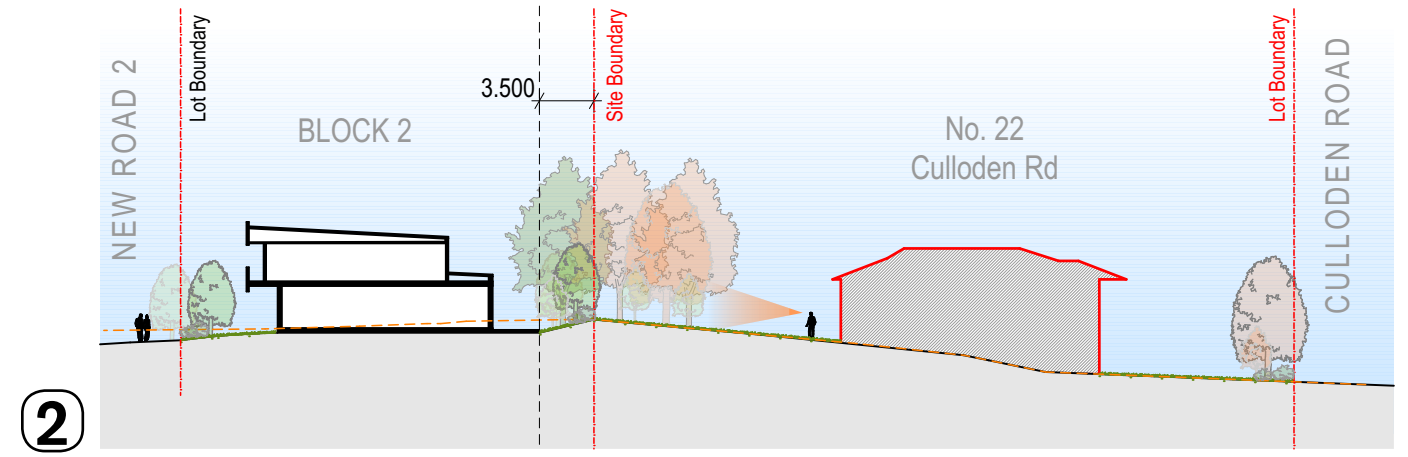
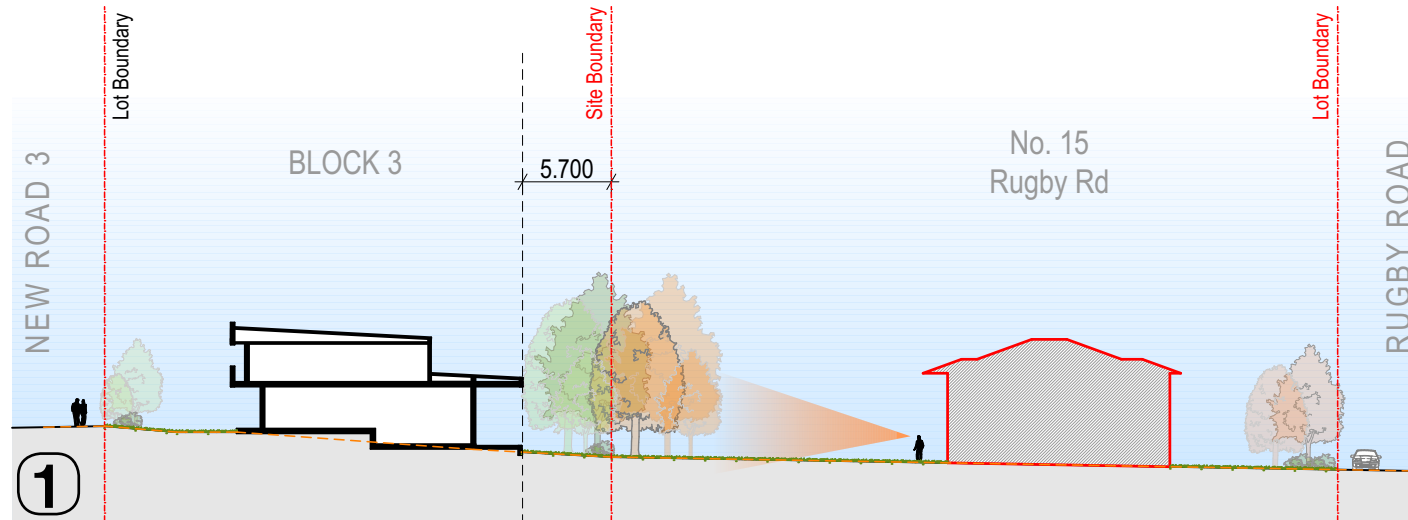
PERIMETER INTERFACES + TREATMENT

In order to blend the site's development sensitively into the surrounding low-rise context, the interfaces and treatment of the site's perimeter will be carefully designed to mitigate overlooking and privacy conflicts.

This will be achieved with the provision of varied and generous rear setbacks which will provide good separation between new and existing dwellings. This setback will also allow for the retention and planting of trees and vegetation to act as a further filter.

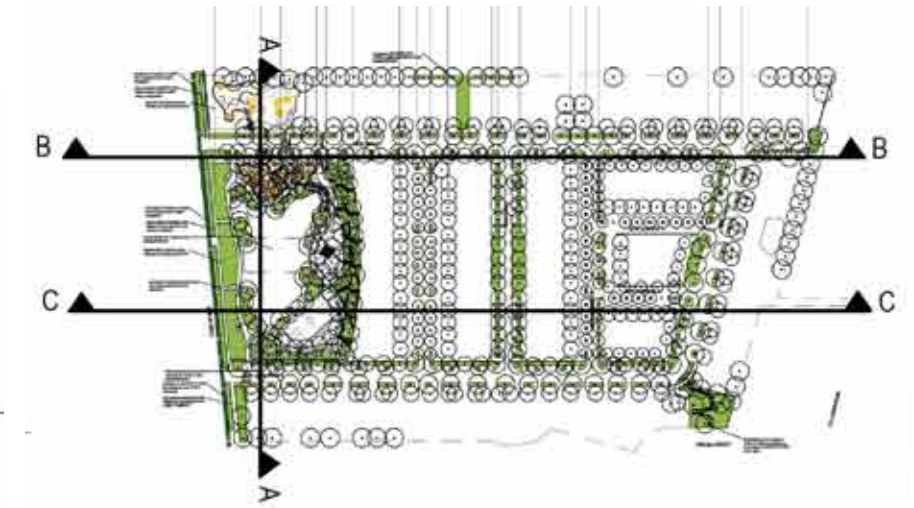
The built form will also be carefully designed with the levels of the site, and will step down in floor level where necessary.







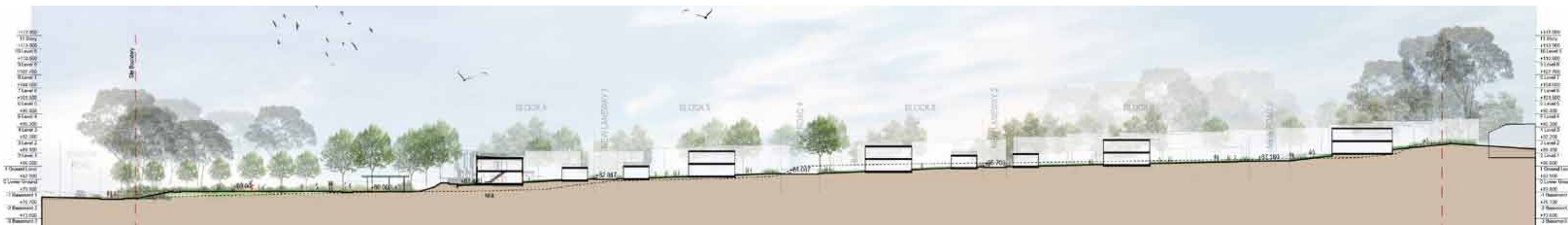
SECTION A



KEY PLAN



SECTION B



SECTION C





DETAILED STUDIES

146 VIMIERA ROAD, MARSFIELD

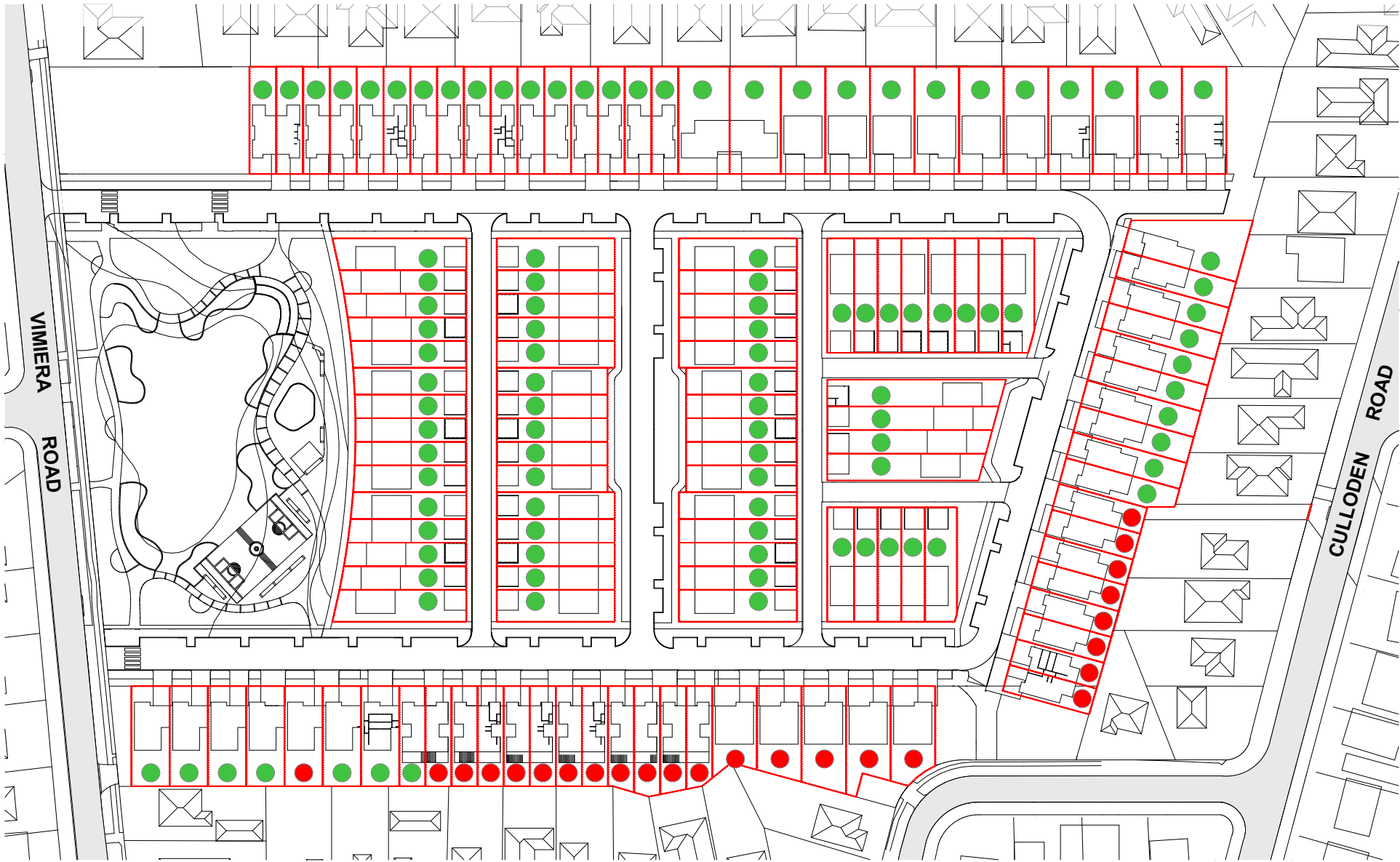
SHADOW ANALYSIS

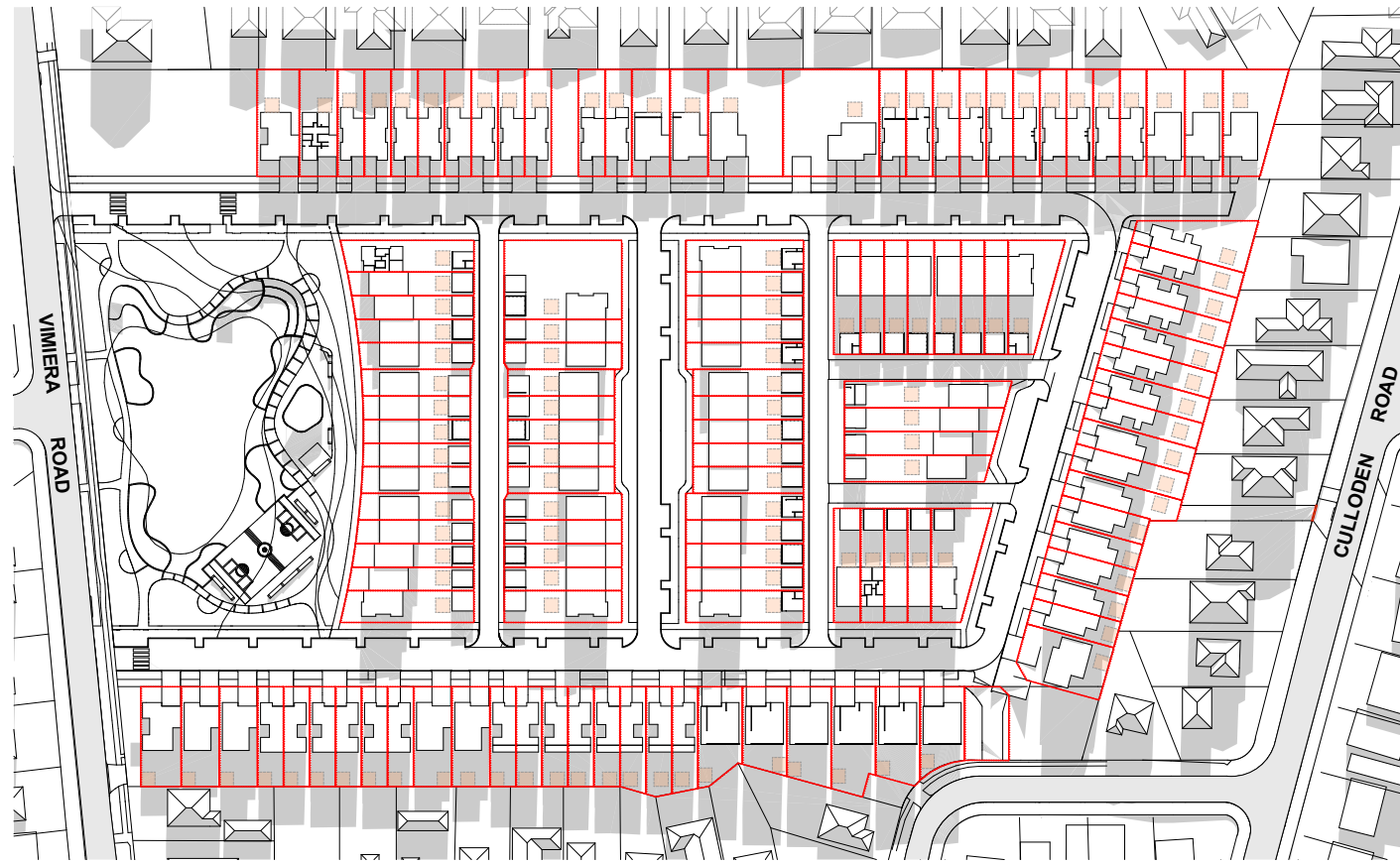
A high level shadow analysis of the master plan has been completed to understand any potential overshadowing impact of surrounding dwellings and associated private open spaces.

The shadow study demonstrates that the impact on surrounding dwellings and private open spaces is negligible. A small amount of overshadowing occurs to dwellings along the eastern and southern boundaries, but all of these properties receive a minimum of 3 hours solar access. Adjacent dwellings to the north overshadow their own rear open space but are not further impacted by the master plan.

Further detailed shadow analysis to determine both the impact on existing dwellings, and the solar access of proposed dwellings will be completed with future detailed planning applications, based on finalised subdivision, dwelling and site level design.

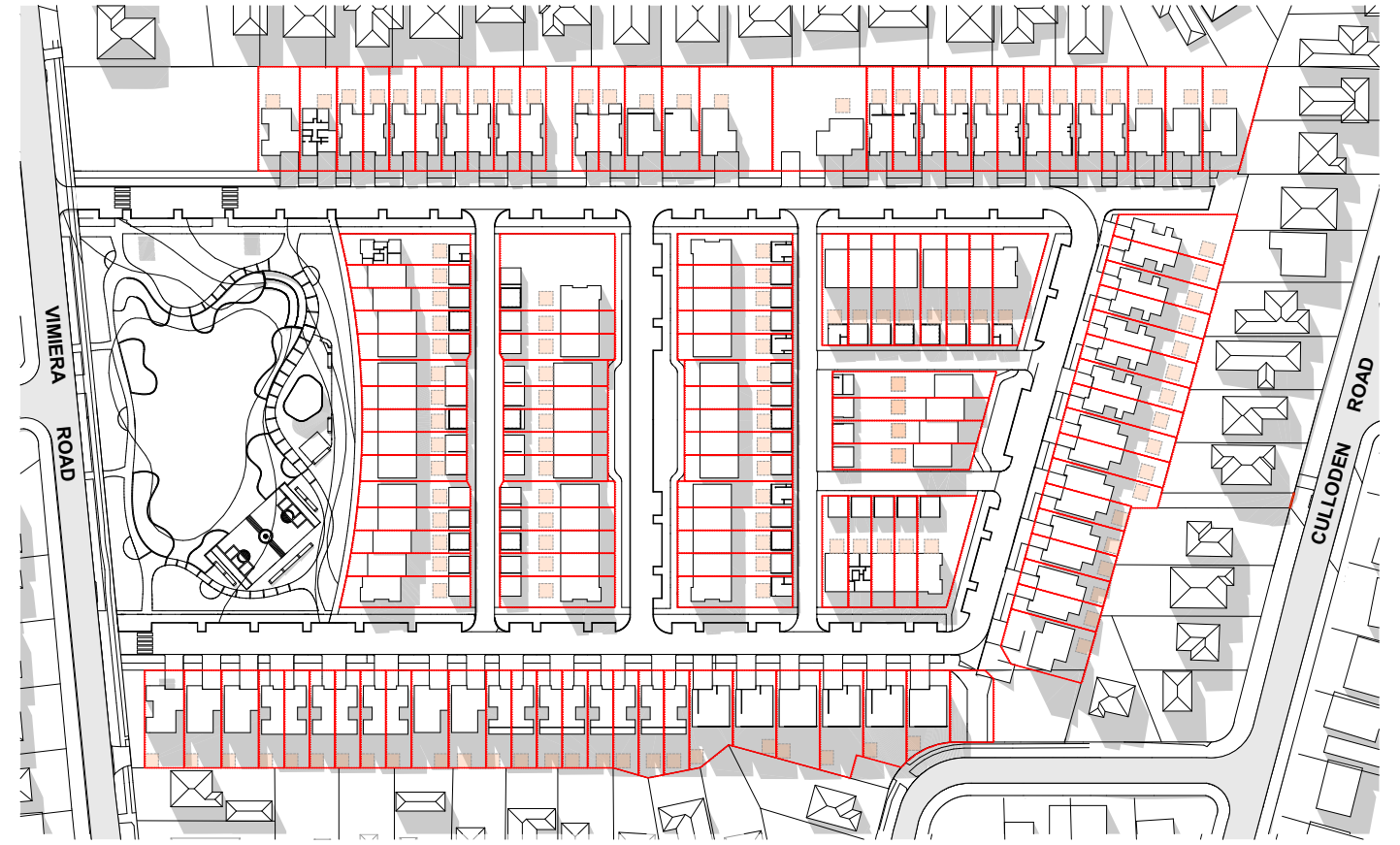
70% of dwellings acheive at least 3 hours of sunlight between 9am and 3pm at the Winter Solstice (21 June) to at least 50% of the Principal Private Open Space.





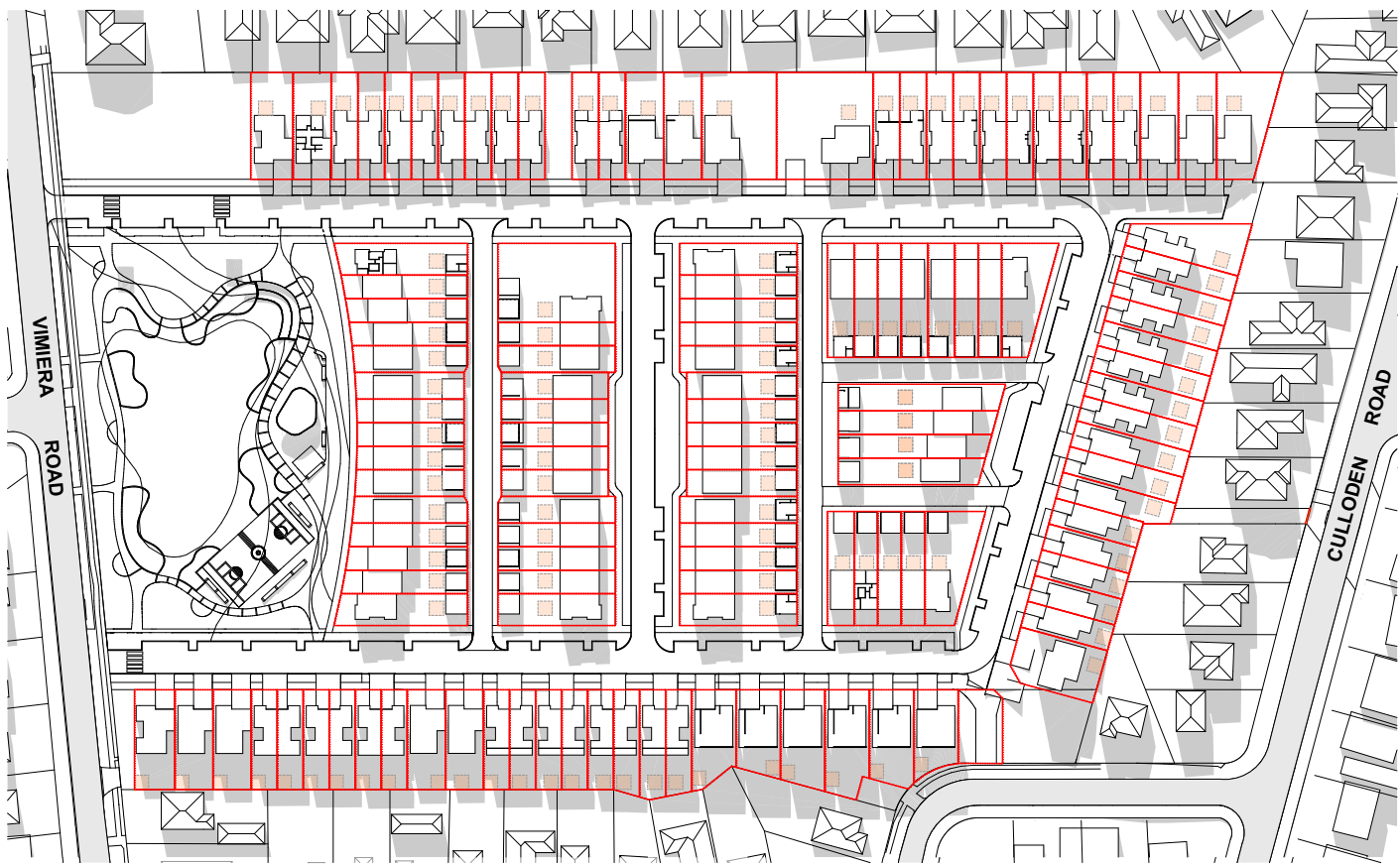
June 21 - 9am

1:2000



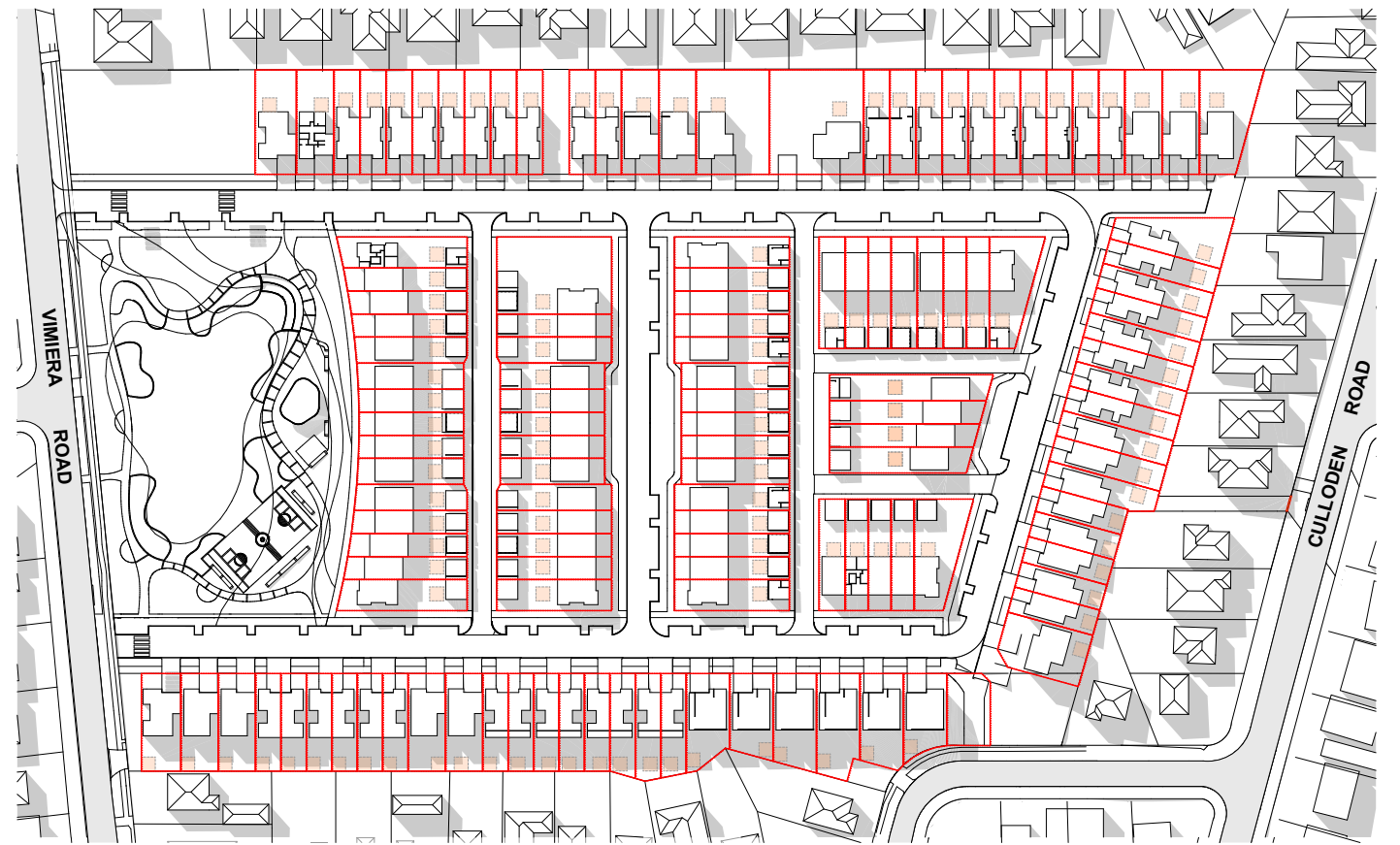
June 21 - 11am

1:2000



June 21 - 10am

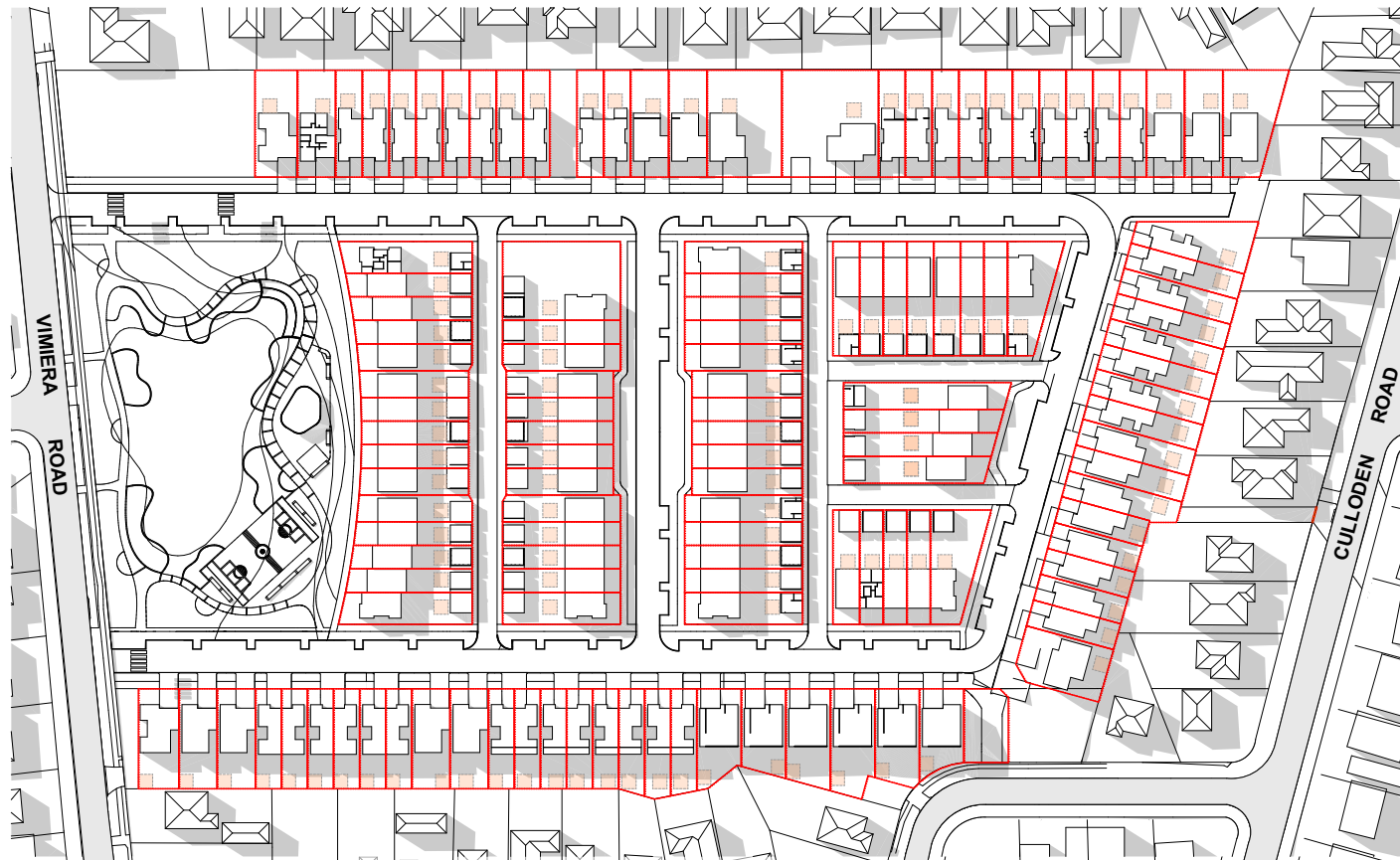
1:2000



June 21 - 12pm

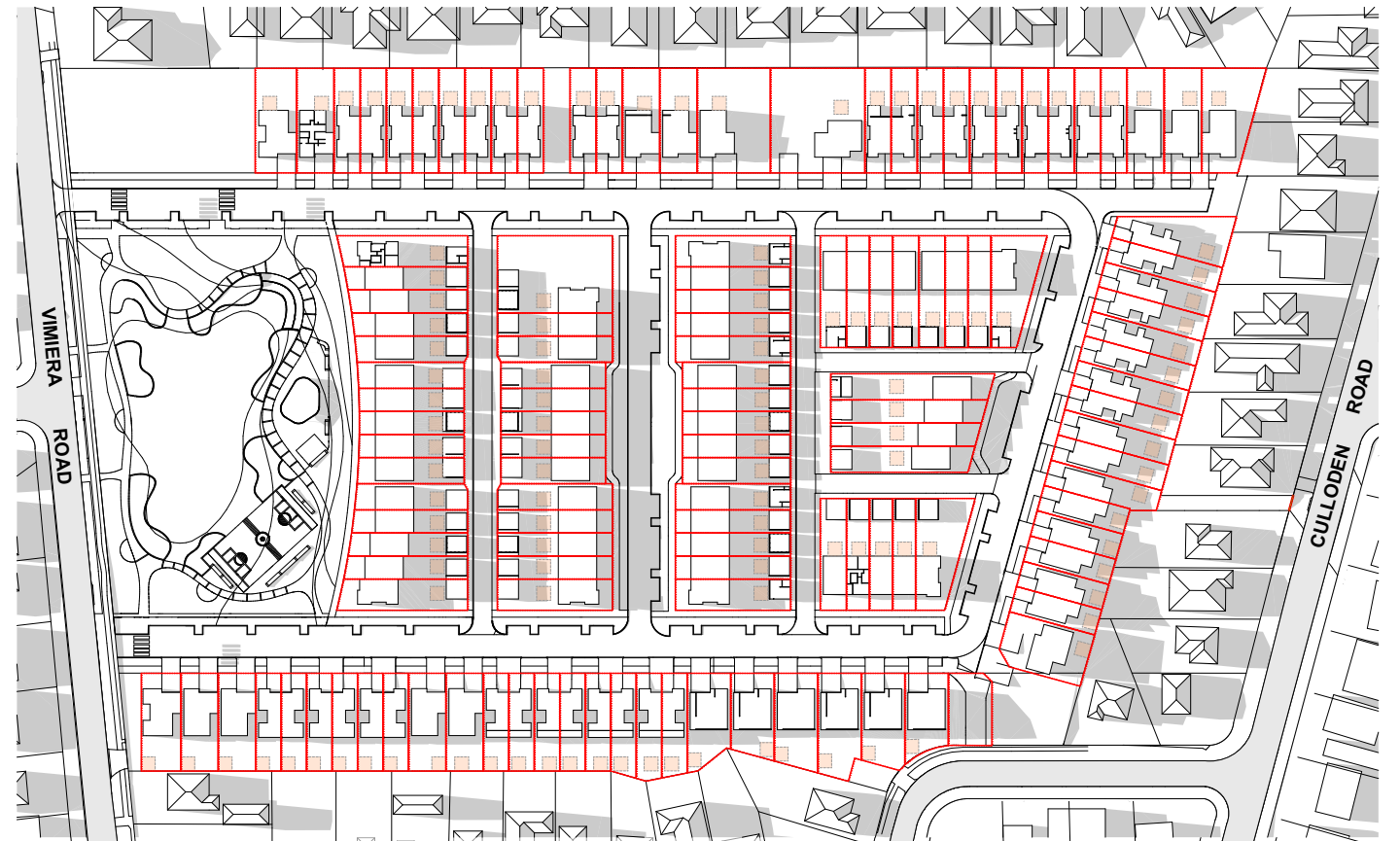
1:2000





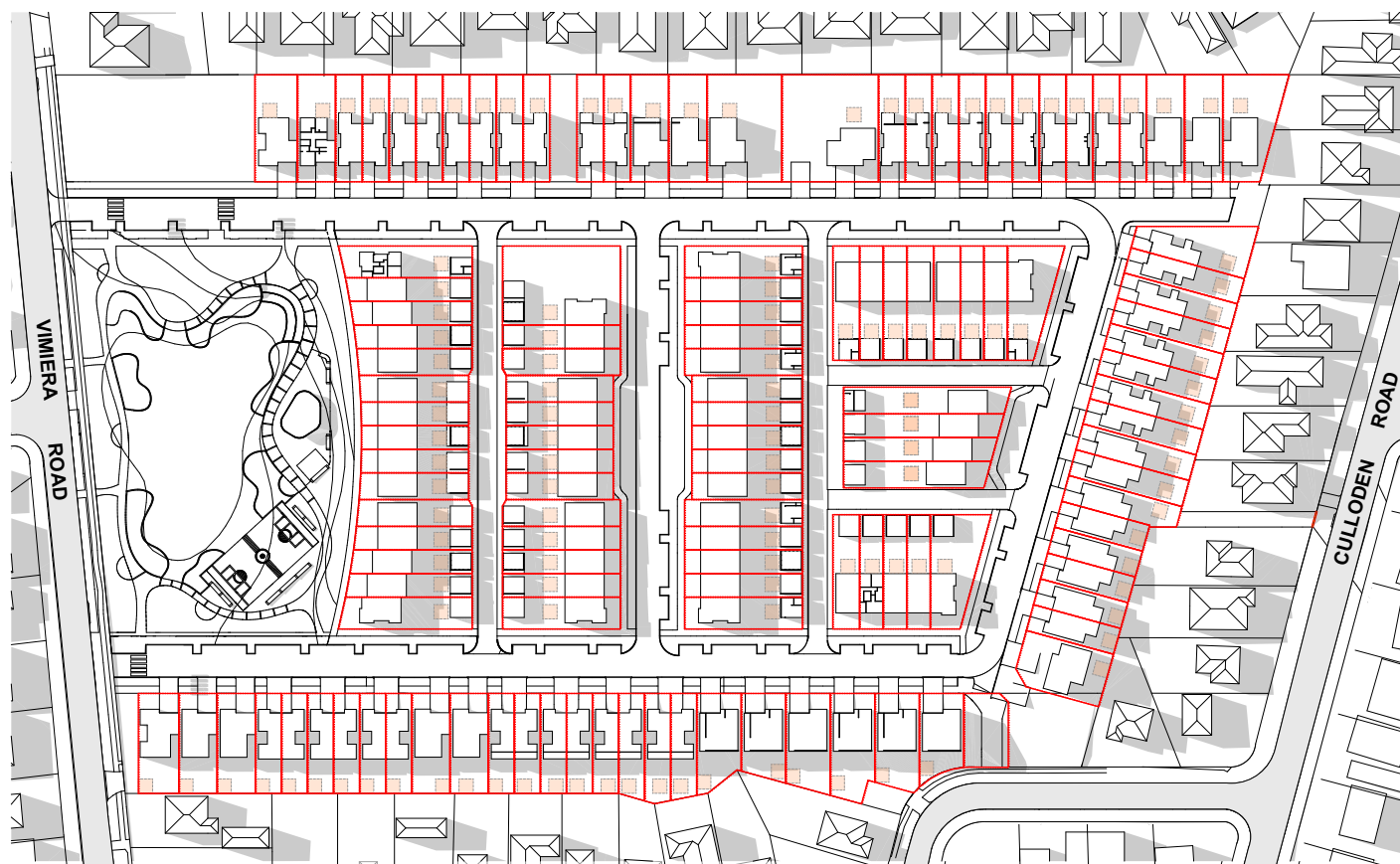
June 21 - 1pm

1:2000



June 21 - 3pm

1:2000



June 21 - 2pm

1:2000



DKO