



DURAMANA PRECINCT MASTERPLAN

EGLINTON, BATHURST NSW
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INTRODUCTION

This development will consist of a mix of residential, recreational and community facilities with some commercial and mixed use areas within an integrated village framework. The project will demonstrate how development can be sensitively adapted to environmental constraints while providing sustainable development opportunities.

MASTER PLAN

KEY OUTCOMES OF THIS STRUCTURE PLAN:

- A variety of dwelling types
- A Village Centre
- Riparian Corridors
- Sustainable community development
- Integration with the adjacent rural & urban environment.

THE DEVELOPMENT ALSO ACHIEVES THE FOLLOWING:

- Vision for sustainable new community development.
- Supports transport and other infrastructure initiatives.
- Supports the provision of a local retail (village) centre and community facilities.
- Clear urban structure with good connections to existing and future development in all directions.
- Conservation of biodiversity values and provides a way of integrating them sustainably into the community.
- Water sensitive urban design throughout.
- Enhancement of existing vegetation.
- A mix of housing types with denser housing relating to amenity and proximity to local services and transport.
- Denser housing, mixed use, employment, and community facilities located at the village centre.

SUMMARY – ISSUES & OUTCOMES

THE MAJOR ISSUES AND OUTCOMES ARE SUMMARISED BELOW:

Access

The development proposes access from the Duramana and Freemantle Roads. These roads connect locally and into central Bathurst.



Water Quality Management

Whole of catchment water management regime is proposed where on lot/building detention, on-street (bio-swales) and bio-ribbon edge treatment ponds are proposed to ensure that urban run-off is appropriately cleaned before it finds its way to the River. The object is state of the art water quality management.



Fire Management

The site is not identified in the planning scheme as fire prone, nevertheless, major fires could pose some threat to the development. Consequently, the whole proposal is provided with edge roads for fire truck access and asset protection zones which will be cleared of understorey and managed.



Placemaking

This proposal allows placemaking opportunities within the village. The intention is to create an attractive integrated village with a sense of identity and place. Local places will be created around small squares and parks throughout to facilitate a sense of community.



Streets of Character

The proposal promotes a fairly flat road hierarchy. The access roads off Duramana Road and Freemantle Road are the only roads of higher order which distribute traffic to local streets. No significant traffic volumes should be expected on any local streets.



Housing Diversity

A diverse mix of housing is proposed which is appropriate for a village location. This will find expression in a mixture of townhouses, duplexes, small lot houses and traditional houses appropriate for the Bathurst housing market and will be inclusive of all age, demographic and income groupings.



SITE CONTEXT - BACKGROUND

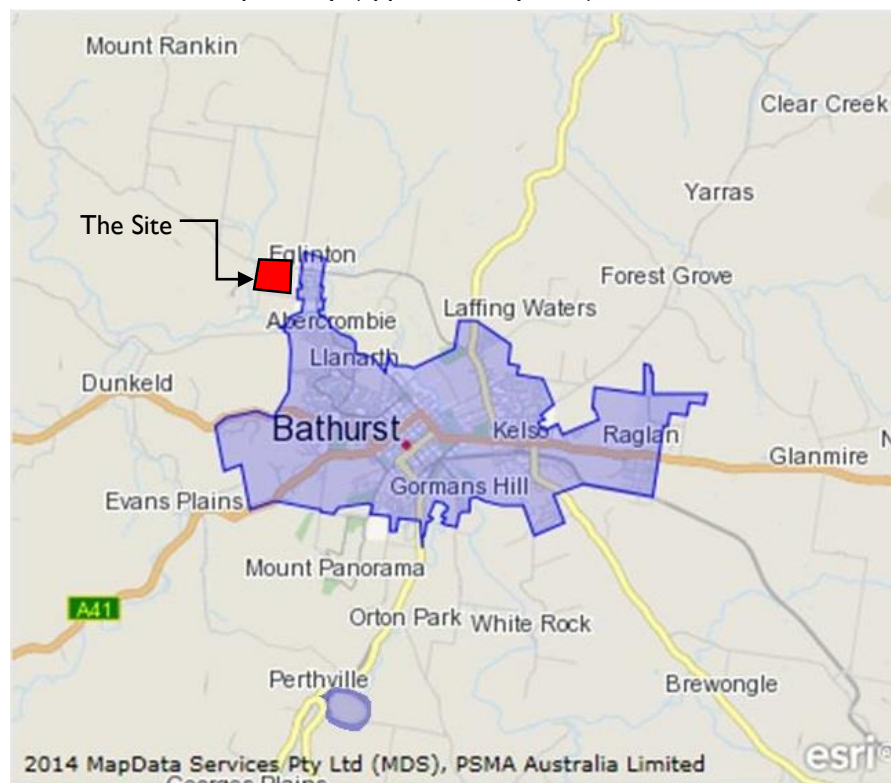
The site is located approximately 5 km North-West of the Bathurst City Centre.

The site has been extensively cleared for grazing purposes.

The site is bounded by:

- Duramana Road in the East.
- Freemantle Road to the South.
- A gentle drainage line to the West and,
- Environmental buffer to the North.

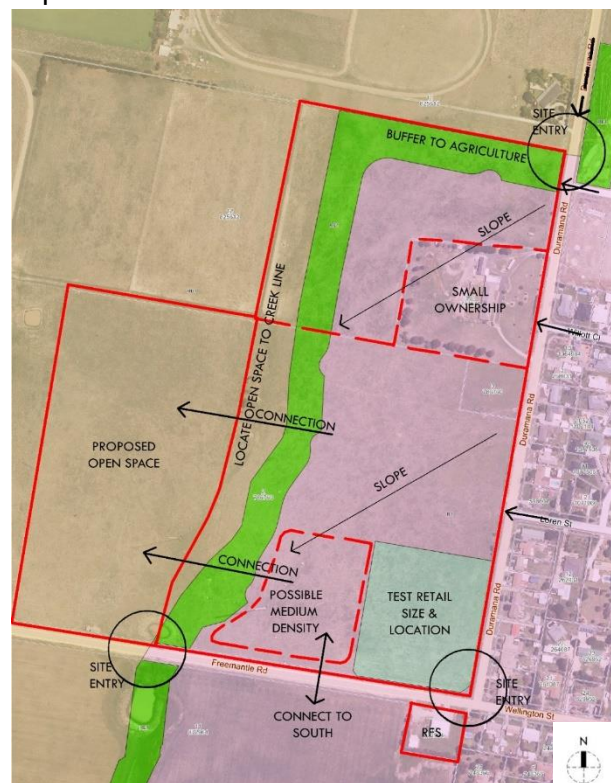
The subject land comprises land in separate holdings, Council owns approximately 20 ha and the balance owned privately (approximately 7 ha).



SITE CHARACTER

The site is influenced by the following landscape and environmental attributes:

- **Regional Park** running North South on the Western side of the site.
- The **Watercourse** which lies to the West of the development site. Most of the site drains to this creek.
- **Development Areas** which will have an outlook to the creek and Council open space. These areas are already cleared for grazing purposes.
- The existing **Homestead**, which is likely to be redeveloped.

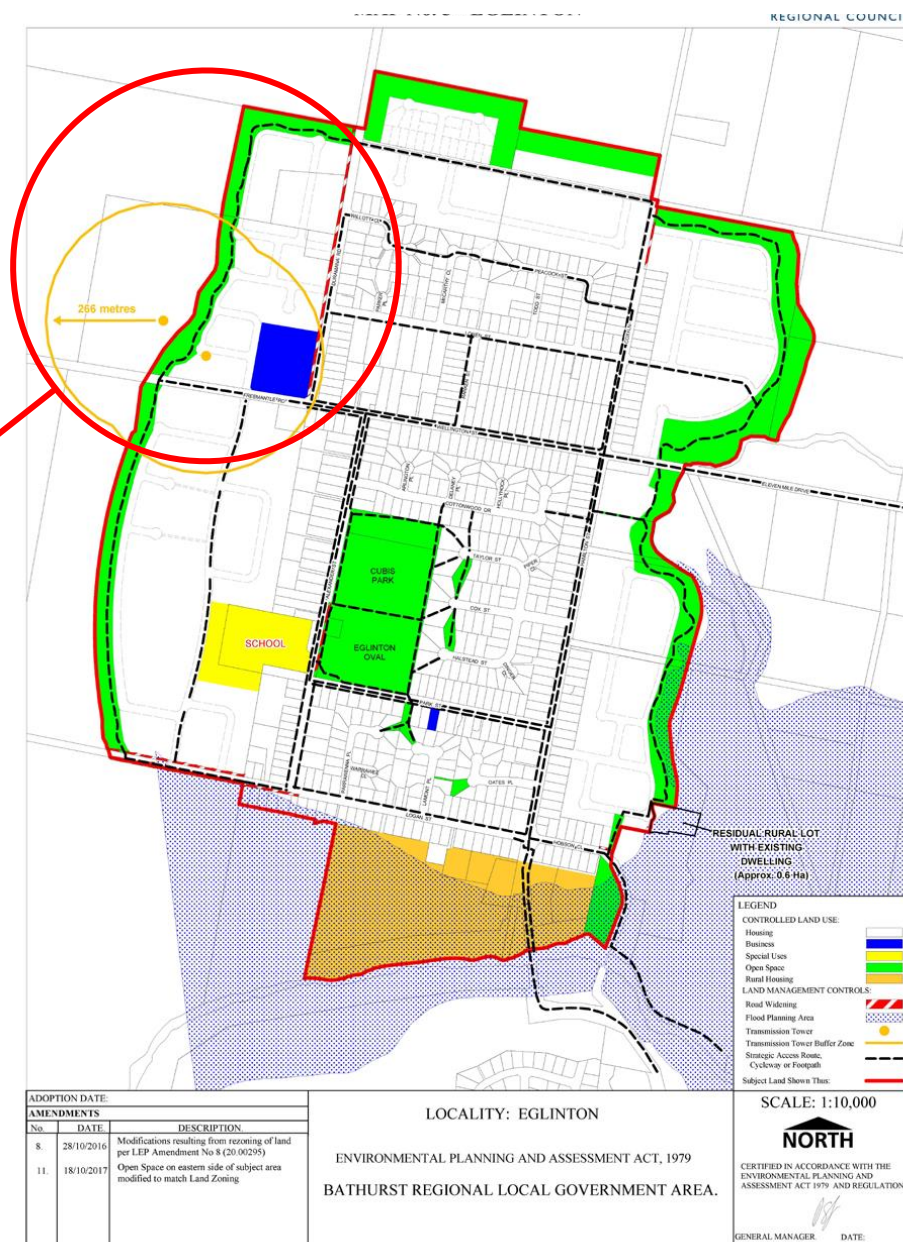
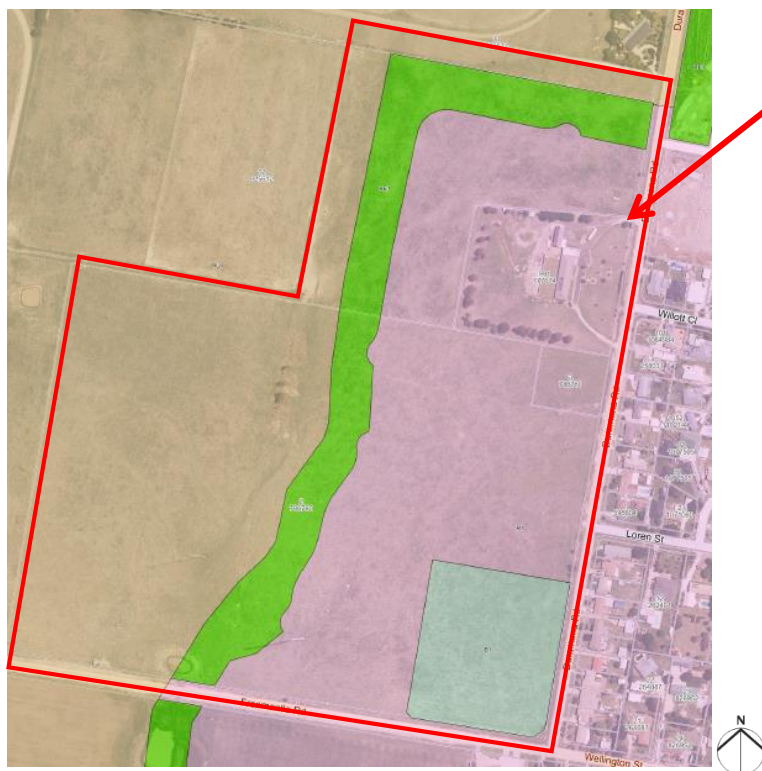


PLANNING HISTORY

The site is affected by the Bathurst Planning Scheme which zones the development site Residential. The land is also affected by a number of other plans and strategies include:

- Eglinton Village Expansion LEP 2005
- Bathurst 2036 Housing Strategy

In relation to future medium density development and commercial development associated with the Village Centre, rezoning of land may be necessary. At the same time amendment of the boundaries and Environmental Corridor will be desirable.



BACKGROUND STUDIES

FLORA

The vegetation of the site is highly modified, and under regular pressure from grazing, with little natural vegetation remaining. The shrub layer has been removed but there are a few remaining native trees.

The site has little value for conservation of native vegetation due to extensive modification for agriculture.

FAUNA

Fauna records for the site are restricted to a small number of bird species. The birds observed are usually associated with open farmland.

A few native species including kangaroos and bats are likely to occur on the site.

Existing mature native trees should be preserved wherever possible, as these provide nesting for a number of bird species. Habitat enhancement of the creeks in the area could also enhance the population of frog species, and provide riparian corridors connecting to the Macquarie River.

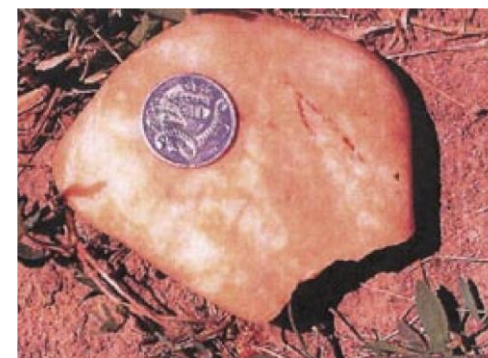
Prior to development, consideration should be given to enhancing habitat by:

- preserving mature habitat trees;
- planting local native trees, shrubs grasses and reeds;
- controlling weeds;
- establishing fauna links through the proposed riparian corridor.
- undertaking a weed eradication program; and
- management practice in accordance with an approved land management plan.

RETAIL

Background studies suggest that a total Retail/Commercial of approximately 3000 sqm including a supermarket of up to 1200 sqm could be required in the medium to long term.

Much of this could be in the form of Mixed-Use Development with Retail/Commercial at street level with one or two floors of shop-top housing above.

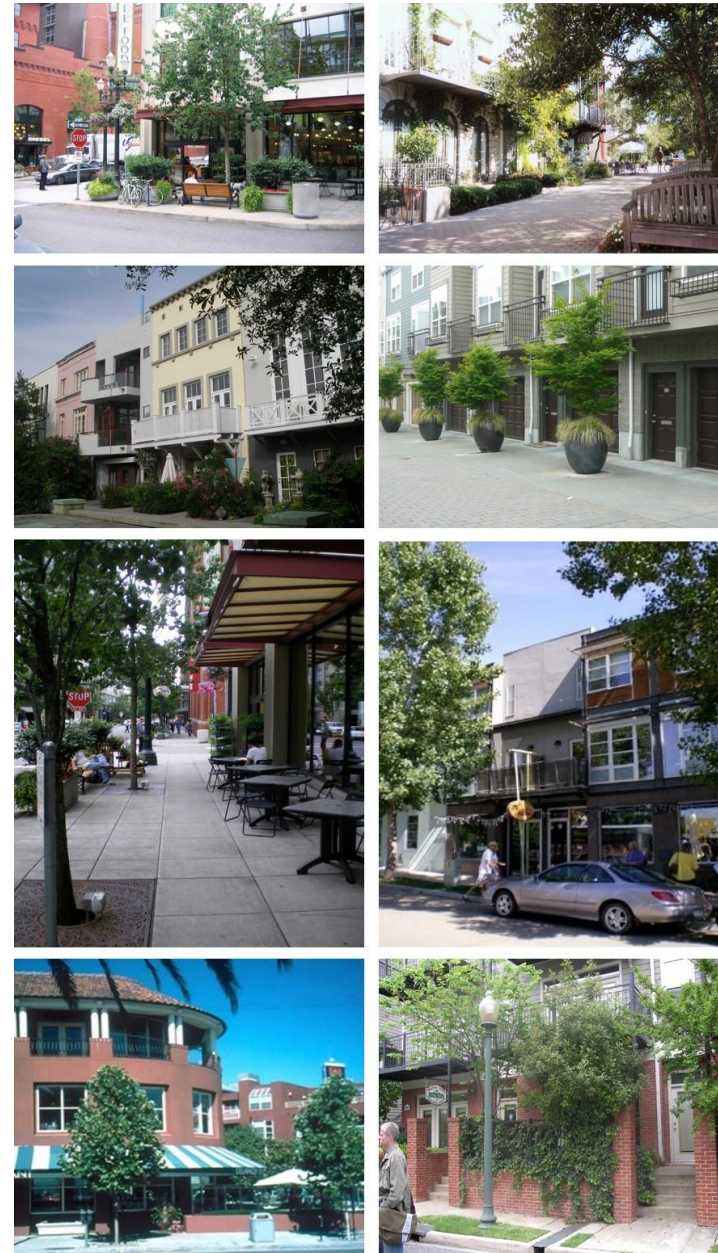


BACKGROUND STUDIES

RESIDENTIAL

There is no specific data which clearly defines market opportunity. However, note the following:

- Minimum subdivision lot size of 900 sqm means that this is what is delivered
- The number of Dual Occupancies (minimum 530 sqm) suggest that there is a market for smaller lots (although house sizes remain large)
- The demographics suggest:
 - increasing number of seniors
 - increasing number of lone person (and 2 person) households
 - increasing numbers of young people
 - There is a prevalence of 3-4 plus bedroom dwellings in newly developed areas
 - This would suggest the need for a more diverse range of housing typologies, particularly to service “downsizers” and “affordable start-ups” ... these would desirably be affordable small houses on small lots
- Thus, consider Medium Density, more diverse product such as small dwellings on small lots, as small dwellings in community title projects, and small apartment developments (3, 4, 6 pac and above) plus mixed-use / shop-top housing in the Village Centre.



MASTER PLAN PRINCIPLES

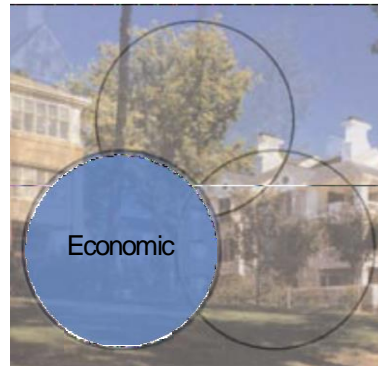


SOCIAL

- Creating a sense of community and belonging
- Creating connections between the past, the present and the future
- Accessible to public transport and local facilities
- Creating a clear street network which is easy to navigate
- Establishing quality streets and spaces
- Ensuring safety and security with passive surveillance and active use of public domain
- Provision of a diversity of housing allowing people to move within the area and providing choice beyond traditional detached housing
- Incorporating open spaces and public domain areas to create a sense of place and to provide a local recreational facilities

THE SUSTAINABLE OUTCOME

The achievement of these Social, Economic and Environmental principles will result in a fully sustainable outcome, otherwise known as the 'Triple Bottom Line'. This relies on the interpretation and implementation of the outlined principles into the creation of a vibrant, diverse and sustainable development that is integrated into its setting and into the existing urban structure.



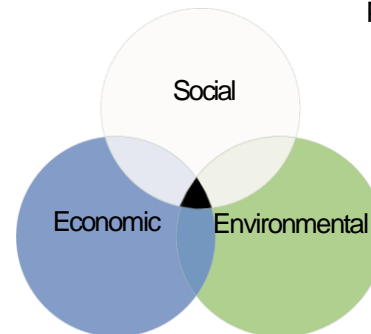
ECONOMIC

- Creating housing choices that are marketable and viable
- Providing a wide range of dwelling options
- Promoting a design which has the opportunity for flexible future uses
- Incorporating denser built forms that allow the efficient use of land
- Considering management and aftercare of public domain
- Providing a standard of building and development that ensures that the area sustains long term economic value



ENVIRONMENTAL

- Incorporating "walkable neighbourhoods" to reduce the usage of private vehicles
- Conserving and protecting existing vegetation where possible
- Incorporating water sensitive urban design and water management solutions that are valuable to the community
- Creating an urban layout and built form that incorporates passive solar design
- Providing a street layout and subdivision pattern that relates to topography and minimises cut and fill
- Encouraging environmentally conscious building practices

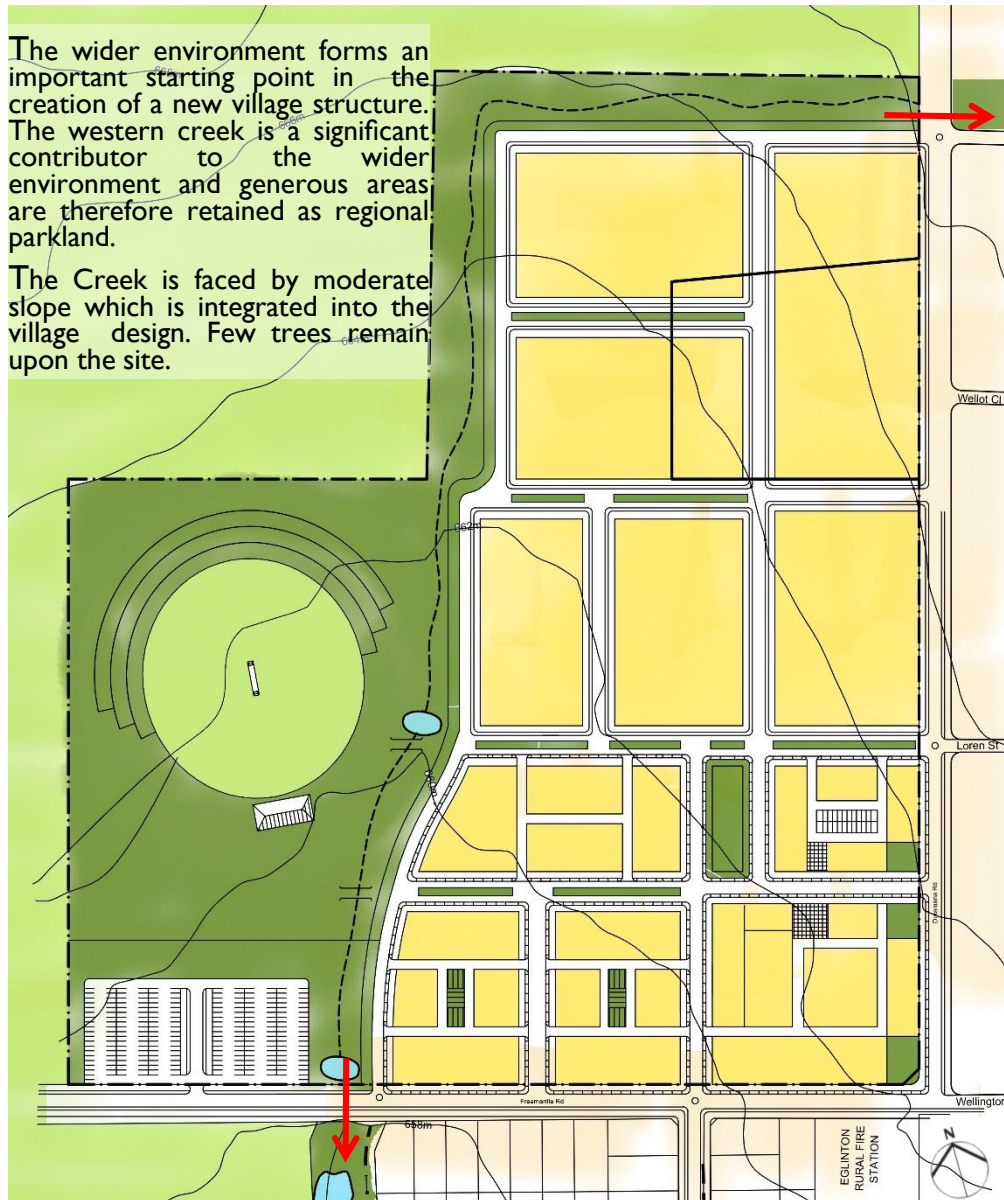


. . . a vibrant, diverse and sustainable development that is integrated into its setting and into the existing structure of the area . . .

CONNECTED TO THE ENVIRONMENT

The wider environment forms an important starting point in the creation of a new village structure. The western creek is a significant contributor to the wider environment and generous areas are therefore retained as regional parkland.

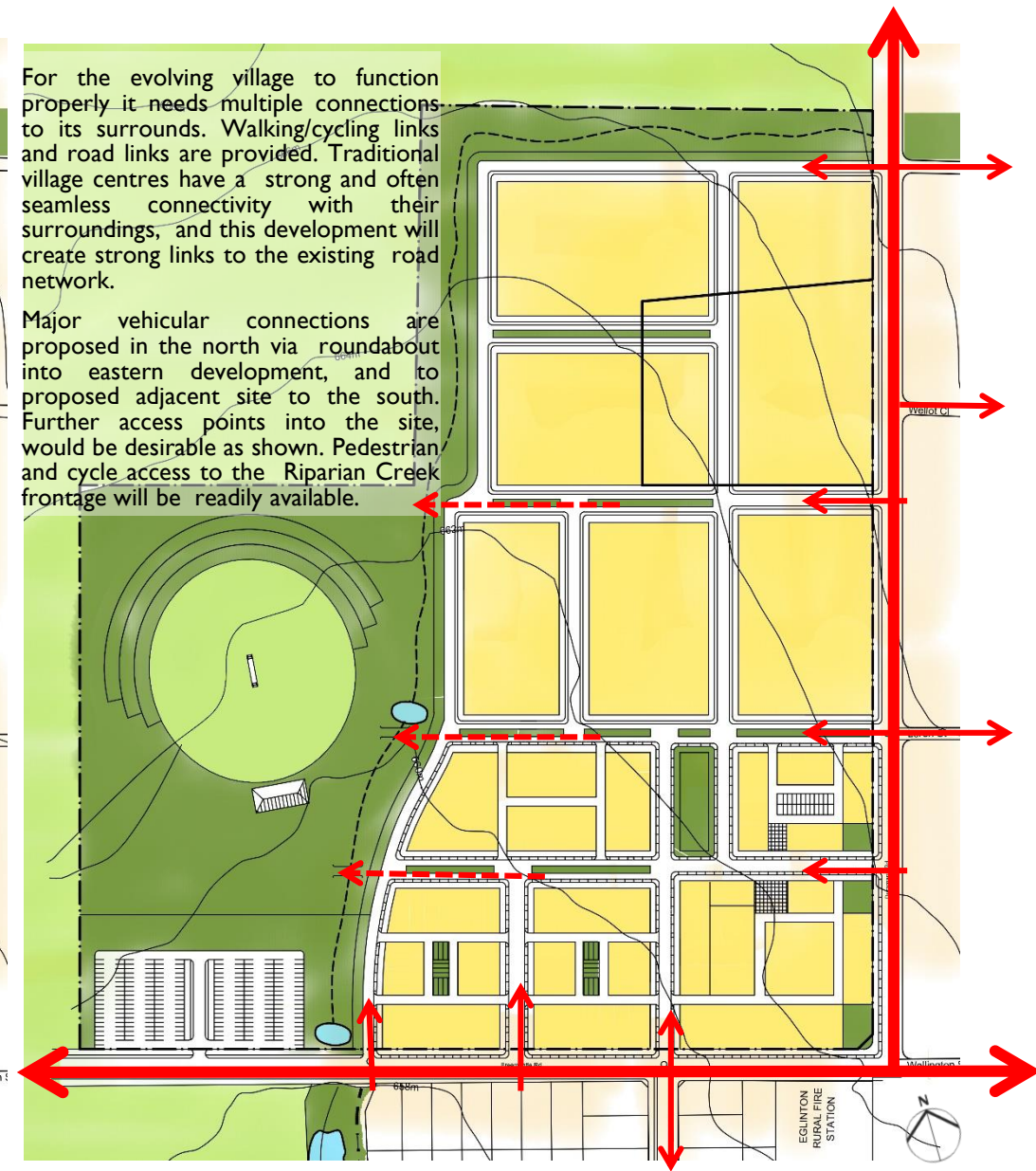
The Creek is faced by moderate slope which is integrated into the village design. Few trees remain upon the site.



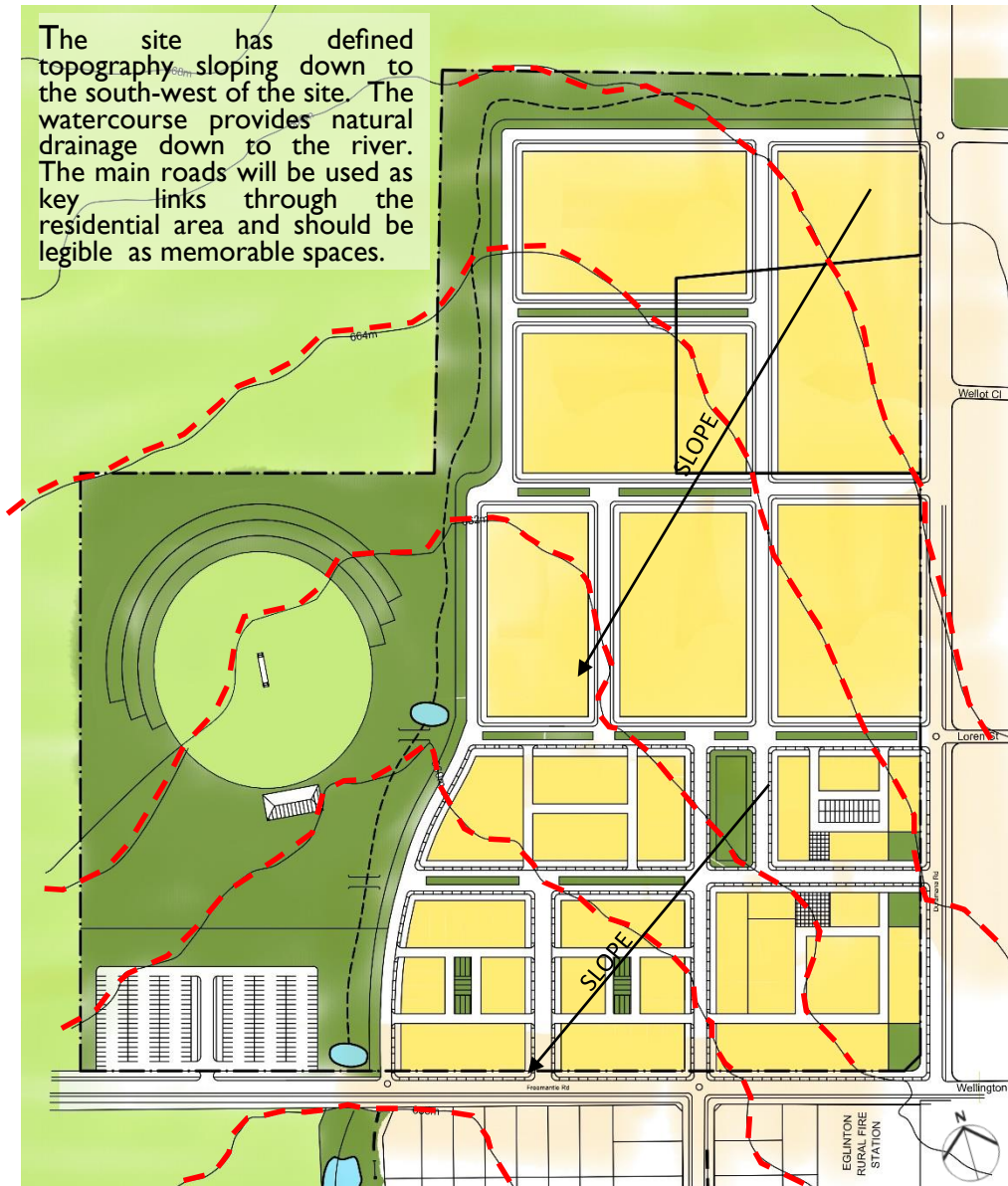
CONNECTED TO THE SURROUNDINGS

For the evolving village to function properly it needs multiple connections to its surrounds. Walking/cycling links and road links are provided. Traditional village centres have a strong and often seamless connectivity with their surroundings, and this development will create strong links to the existing road network.

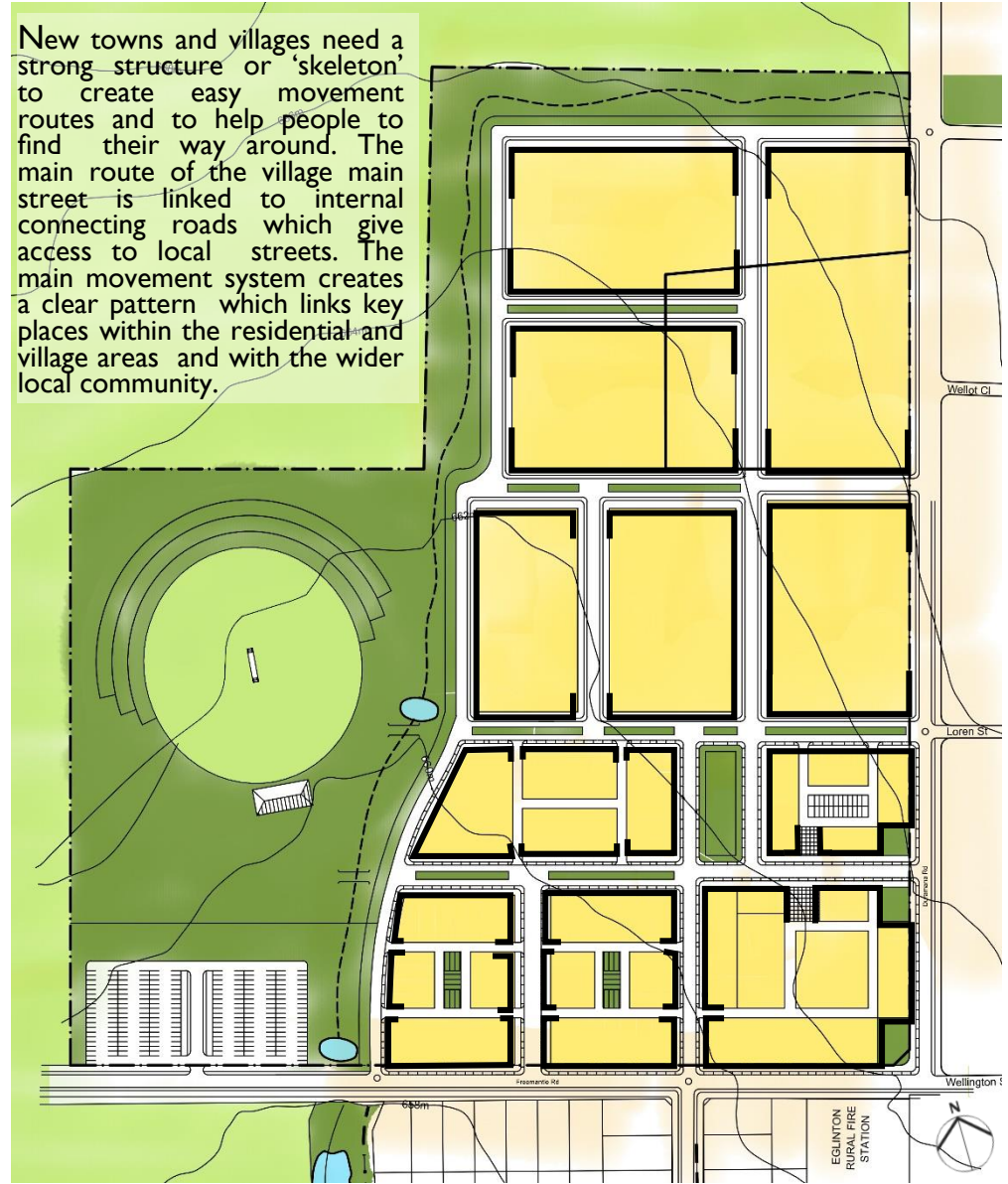
Major vehicular connections are proposed in the north via roundabout into eastern development, and to proposed adjacent site to the south. Further access points into the site, would be desirable as shown. Pedestrian and cycle access to the Riparian Creek frontage will be readily available.



RESPONDING TO TOPOGRAPHY



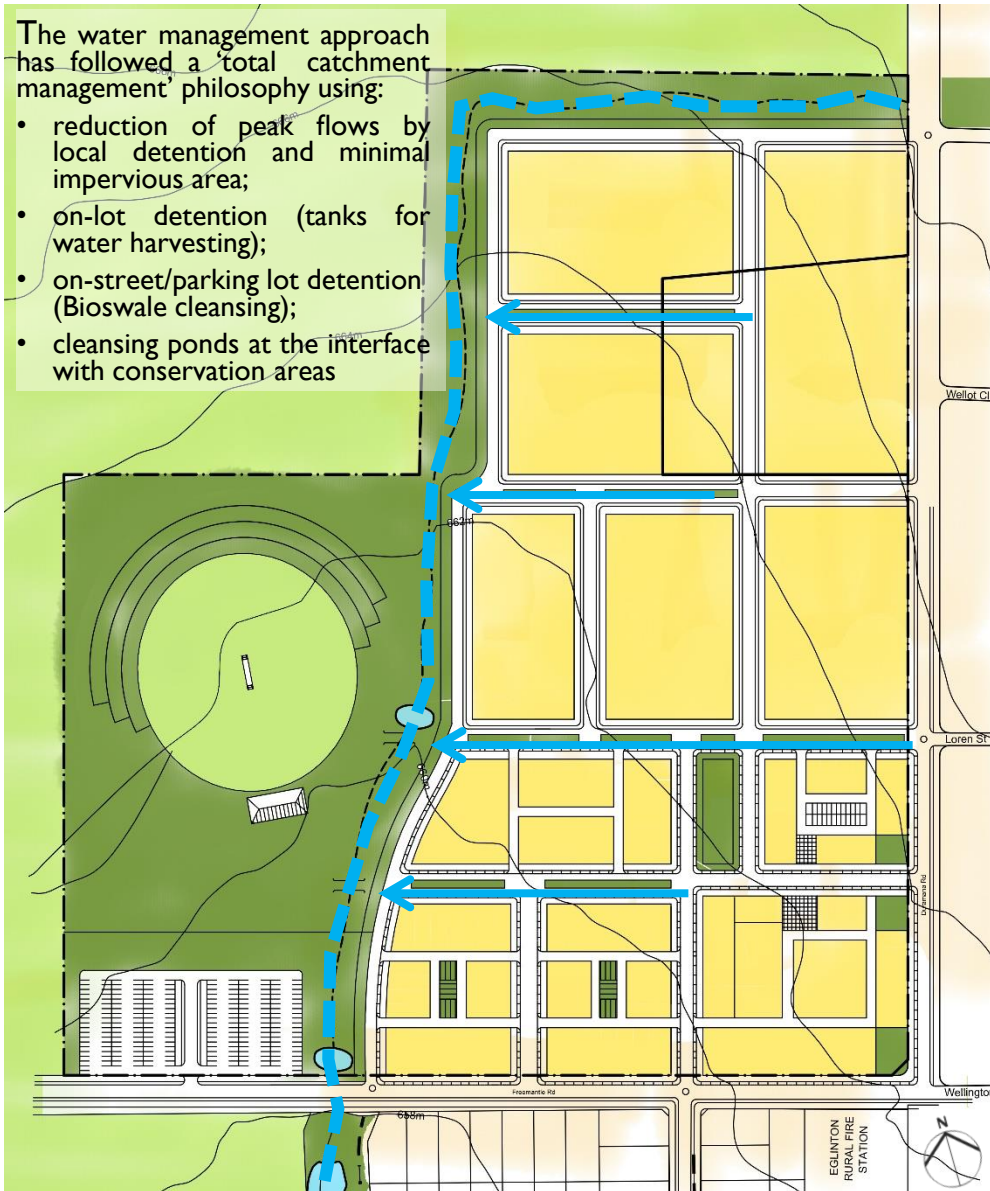
A CLEAR URBAN STRUCTURE



MANAGING WATER

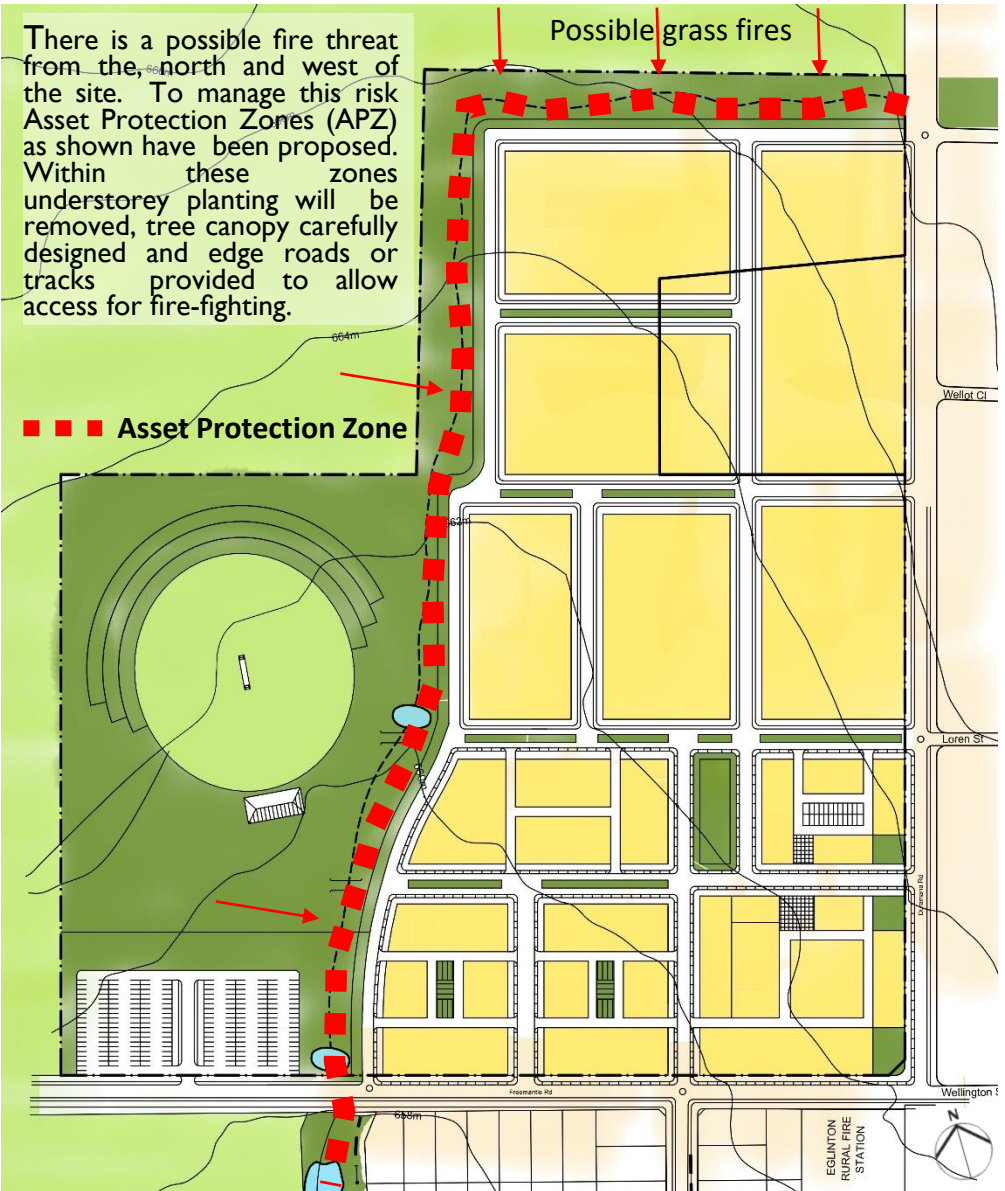
The water management approach has followed a 'total catchment management' philosophy using:

- reduction of peak flows by local detention and minimal impervious area;
- on-lot detention (tanks for water harvesting);
- on-street/parking lot detention (Bioswale cleansing);
- cleansing ponds at the interface with conservation areas



MANAGING FIRE

There is a possible fire threat from the north and west of the site. To manage this risk Asset Protection Zones (APZ) as shown have been proposed. Within these zones understorey planting will be removed, tree canopy carefully designed and edge roads or tracks provided to allow access for fire-fighting.



PROMOTING WALKING

Pedestrian and cycle routes have been located to allow for and encourage easy movement within the residential precinct and to promote linkages to the parks and other environmental attributes.

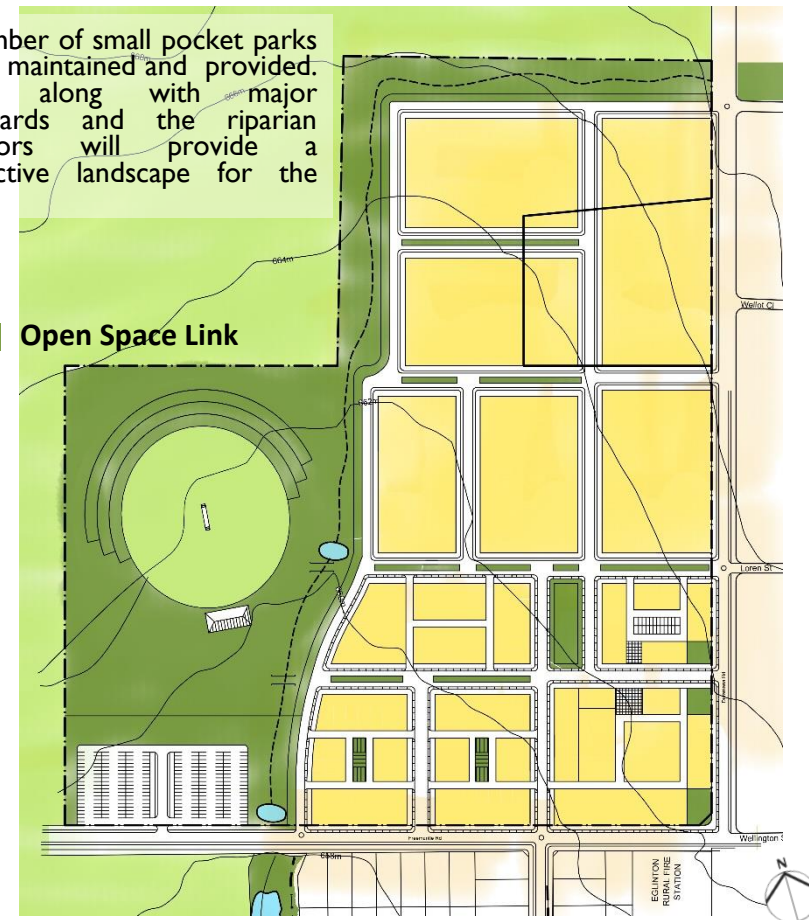
--- Walking Pathways



CONNECTING OPEN SPACES

A number of small pocket parks will be maintained and provided. These along with major boulevards and the riparian corridors will provide a connective landscape for the village.

■ Open Space Link



SPECIAL PLACES



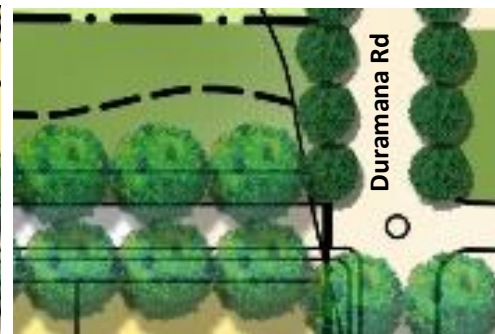
Integral to the Master Plan are a series of special places which form highlights of the Public Domain. These are reference points for the evolving community providing the setting for daily life.

1. Site Entry
2. WSUD Streets
3. Community Garden
4. Central Park / Market Square
5. Village Centre / Public Square
6. Riparian Corridor
7. Public Open Space
8. Entry Parks
9. Community Buildings

SPECIAL PLACES

1. Major Site Entries

These are at the proposed Urban Edge and coincide with drainage crossings of Main Roads (Duramana Rd and Freemantle Rd). The Village entry points will be celebrated with bridge crossings, changing landscape from rural avenue (say Poplar Trees) to urban avenue (say Plane Trees). They will also indicate a reduction in speed from 60km/hr to 50km/hr.



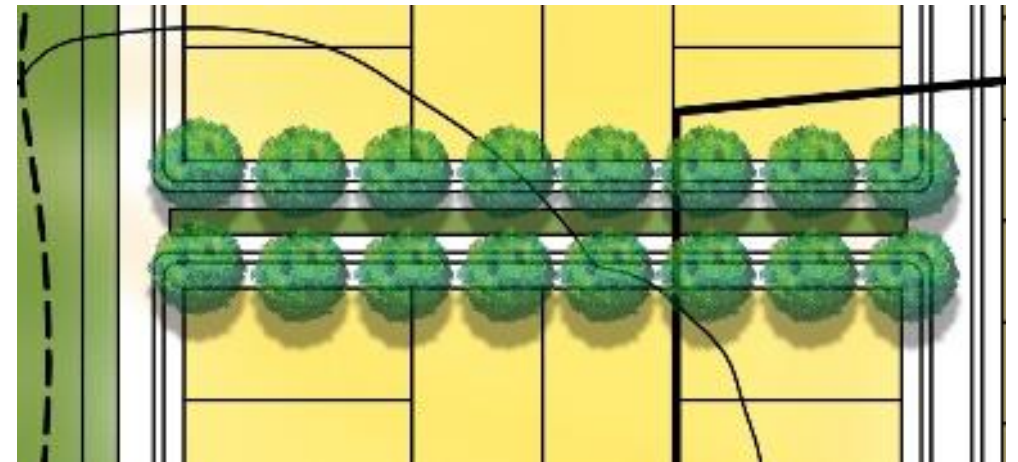
West

North



2. WSUD Streets

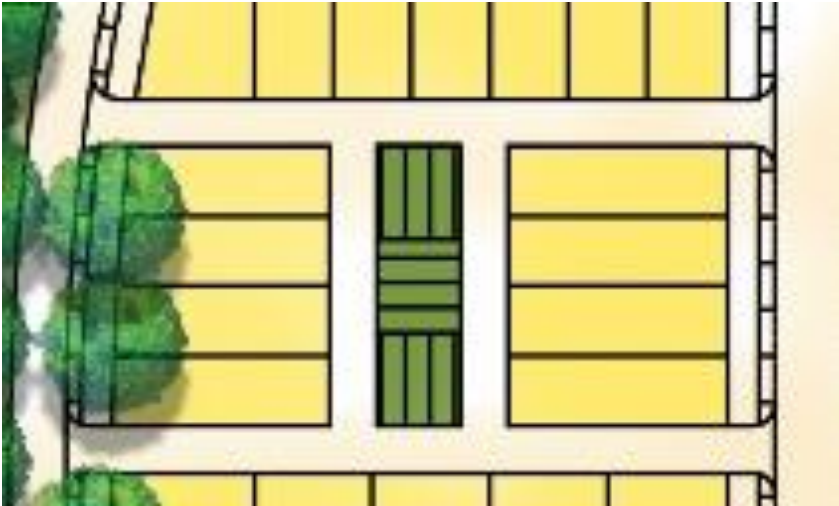
These E-W streets drain towards the western water course. They are designed to include a variety of WSUD treatments along their length including detention basins, rain gardens, water treatment etc.



SPECIAL PLACES

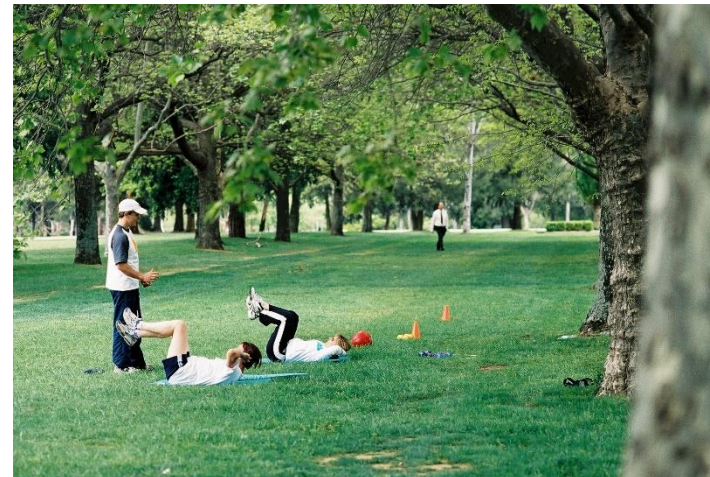
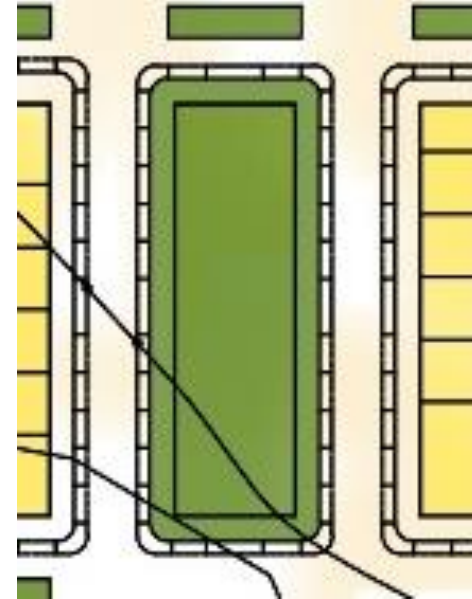
3. Community Garden

This (these) will provide opportunity for local residents to grow their own vegetables.



4. Central Park / Market Square

This Central Park of approximately 1250 sqm functions as a community gathering space, a potential market square and possibly a children's play space. Community buildings (Church and community Hall) may face the ends of this open space.



SPECIAL PLACES

5. Village Centre

The Village Centre is designed around a walkable Main Street. It contains opportunities for the followings:

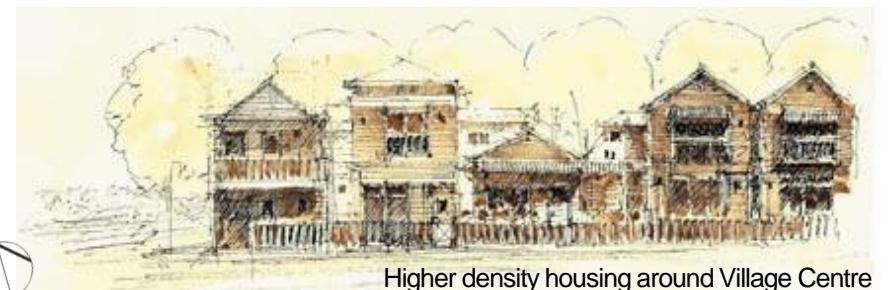
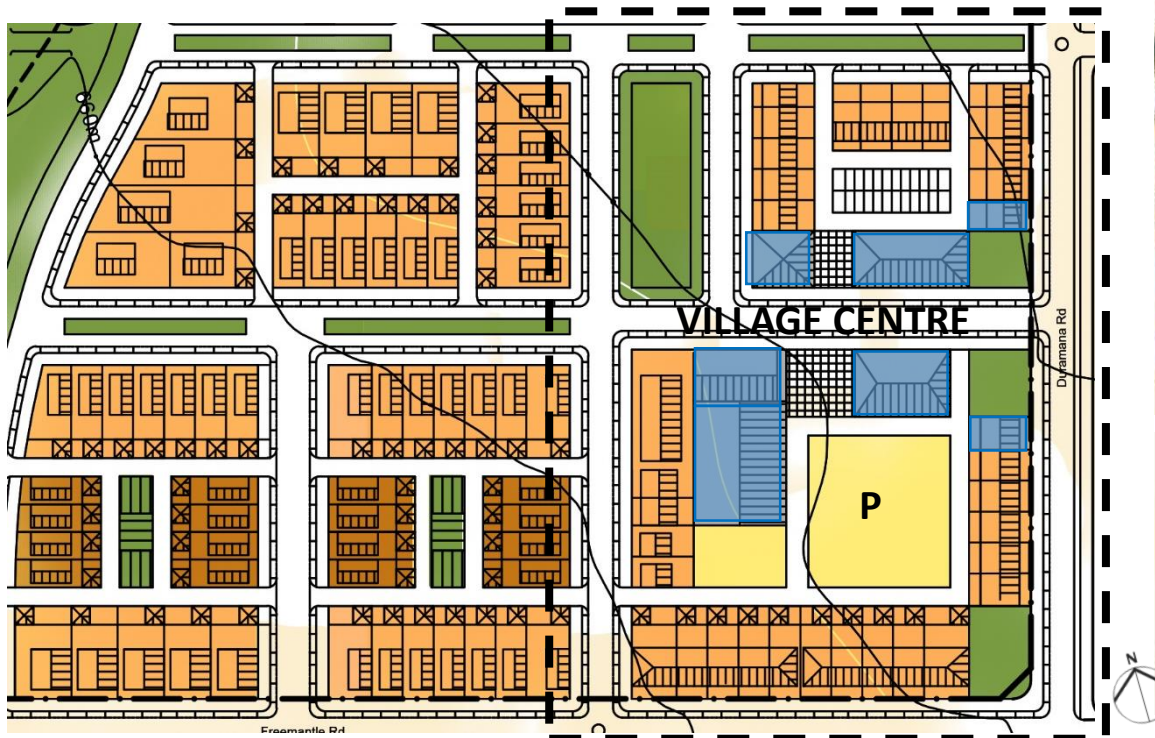
- Supermarket 1600 sqm
- Support Retail 800 sqm
- Local Business 600 sqm
- Community 300 sqm
- Live/Work 800 sqm

Parking is provided on-street and central block to Council specification.

Mixed-Use development / shop-top is encouraged for efficiency.

Small forecourts are provided which are lined with retail and connect Main Street with parking.

Entry Parks are provided at the entry into Main Street from Duramana Road and also at the intersection of Duramana Road and Freemantle Road. These parks signify arrival and are also lined with retail activities.



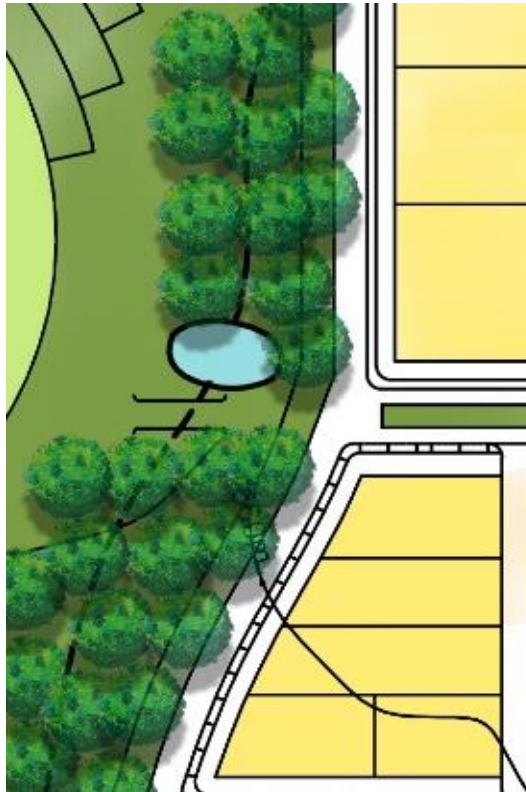
SPECIAL PLACES

6. Riparian Corridor

The western drainage line should desirably be re-established as a Riparian Corridor, replanted with native vegetation and establish an environment capable of supporting some native fauna and flora.

The watercourse may be reconstructed to provide an enhanced WSUD function (including decorative water).

Bridges and crossings connecting the village to the substantial western open space may also have both a WSUD and a decorative/amenity function.



7. Public Open Space

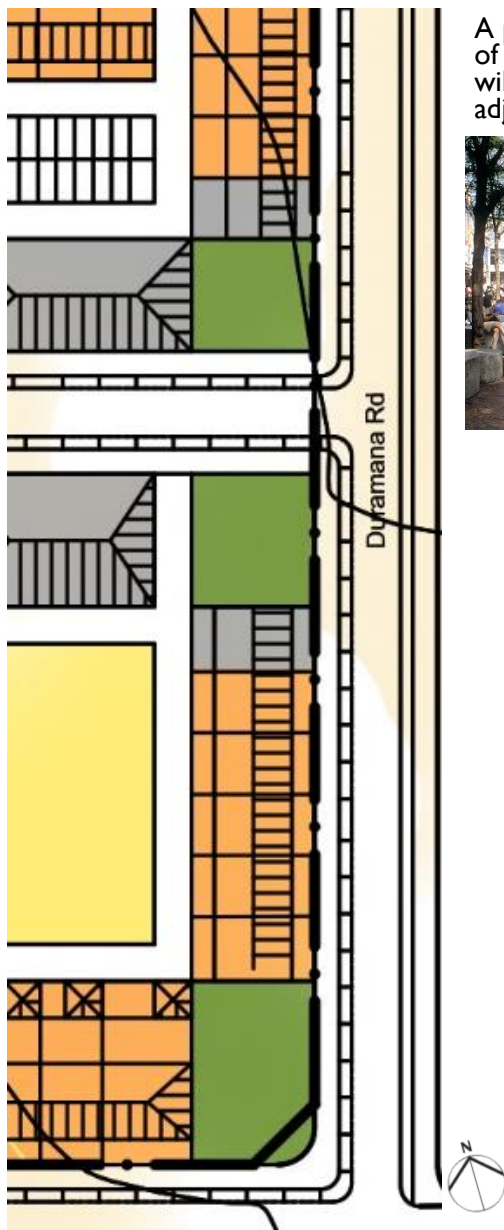
To the west of the drainage line, major Council Open Space is proposed. This may include:

- A major cricket ground / AFL field with terraced seating cut into the slope.
- Netball courts
- Parking for sports and recreational activities.
- A pavilion / changing rooms / community hall.

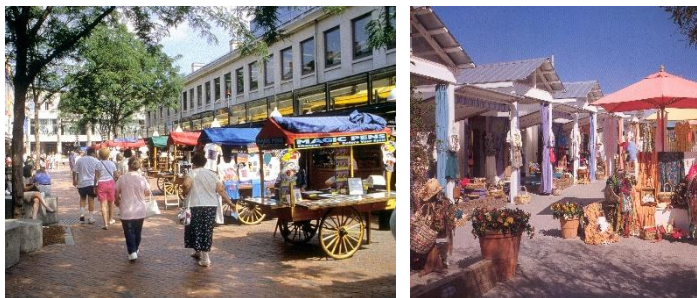


SPECIAL PLACES

8. Entry Parks



A pair of Entry Parks are proposed at the intersection of "Main Street" and Duramana Road. These parks will be urban in character and should be activated by adjacent retail uses.



The Entry Park at the intersection of Duramana and Freemantle Roads will emphasize the village arrival point.



SPECIAL PLACES

8. Local Parks

The designated local parks are designed as an amenity for the immediate residential community. Local parks should be located throughout the village providing easy access from all residences. These parks will promote a sense of civic identity amongst residents and provide informal recreational areas.



The dense avenue canopy of trees will add character to the streetscape and create a strong visual signifier throughout the estate.

9. Community Buildings

The junction of Duramana and Freemantle Roads will be designed as a “Special place”. Vegetation will be planted to emphasise the view.

An icon building may be located at this part of the site and should be designed as an ‘entry’ or landmark to the southern part of the site.

A similar treatment will be provided at the intersection of Duramana and Main street.



SPECIAL PLACES

Making Main Street Work

The following are important points to consider when designing new “Main Street” centres.

- **Traffic** – requires significant access to passing trade. Locate on distributor/collector either fronting or on side/cross street (this becomes “Main Street”).
- **Parking** – on-street parking should be available all day on all streets within the centre
- **Off-Street Parking** – should be adjacent to supermarket and/or other retail and dispersed throughout the centre, but behind “Main Street”.
- **Activation** – retail offer should present to “Main Street” to maximum degree possible. Footpaths should be covered with awnings (or colonnade) and contain street trees, street furniture and outdoor dining/cafes.
- **Built Form/Enclosure** – buildings should generally front the street (except where plaza or court is formed) and be 2-3 storeys high to enclose the street (form outdoor room). Generally additional height will be required to satisfactorily enclose wider streets.
- **Big Box Retail (including supermarket)** – should be set back behind “Main Street”, perhaps accessed off a common, activated forecourt. This forecourt should access a pedestrian path/arcade which connects with the major parking area behind or beside the big box.
- **Transit Relationship** – “Main Street” centres should be well served with public transport with stops on the “Main Street” well located to access retail and employment.
- **Placemaking** – the design of a “Main Street” centre should feature exceptional public domain including:
 - Main street itself as an outdoor room
 - Market Square
 - Town Common
 - Pedestrian connective paths and arcades
- **Walkability / Connectivity** – should be optimised throughout the centre with traffic calmed, multi-modal streets, attractive landscaped footpaths, delightful pedestrian paths, walks, connection and arcades. They should combine to facilitate a one-stop walkable centre.
- **Supporting Employment** – every effort should be made to encourage supporting commercial and cultural development to provide local employment. In this case it should include creative commercial (including office and IT) and cultural pursuits (arts/crafts etc) which might bring some tourism.... and leisure (particularly restaurants, bars, cafes) which could take advantage of the attractive environmental qualities.
- **Residential Diversity** – seek capacity to develop a diversity of housing typologies to meet demographic demand including seniors, downsizers and start-up affordability.

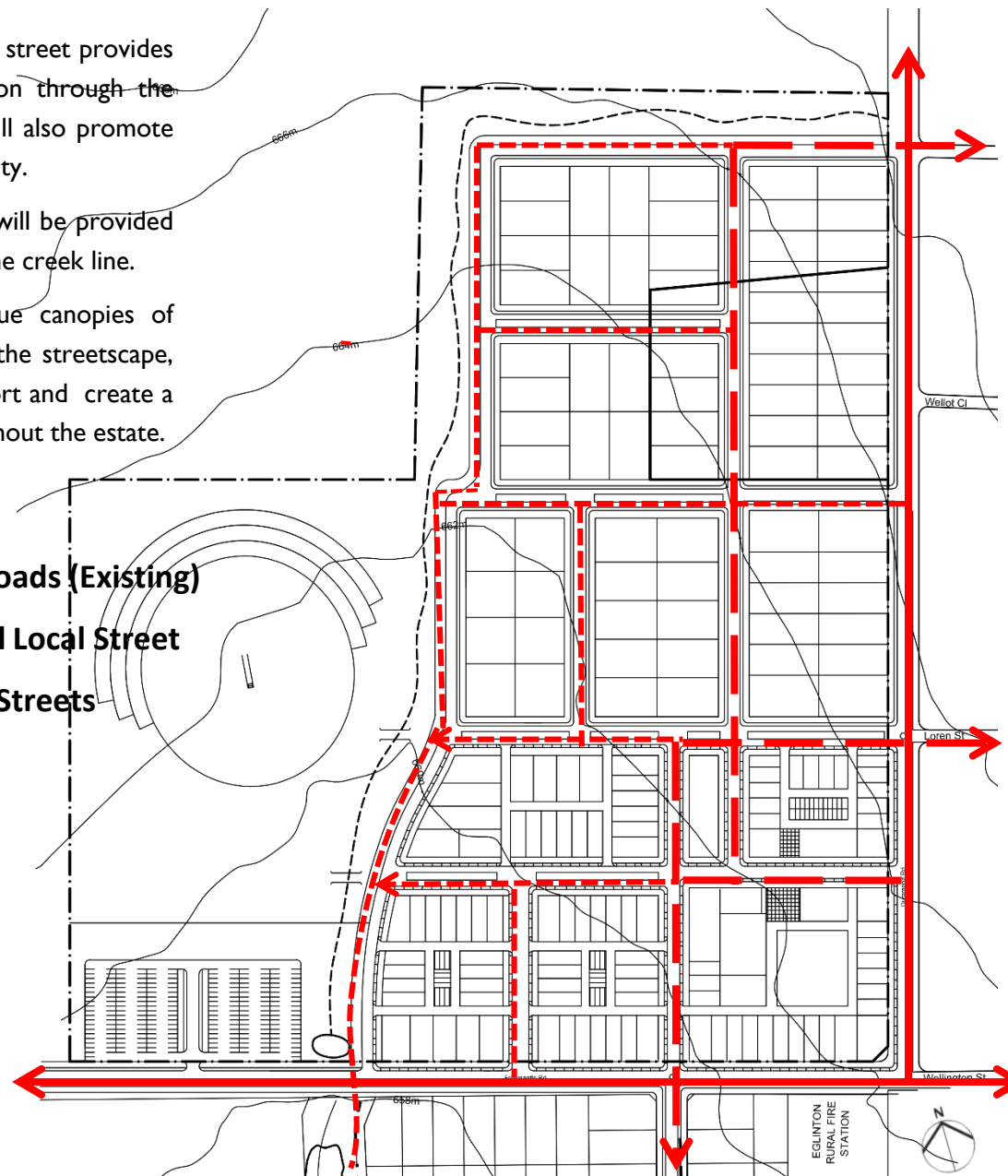
MAIN ROADS / BOULEVARDS

The boulevard and the main street provides the major linear connection through the village and further. They will also promote place-making and civic identity.

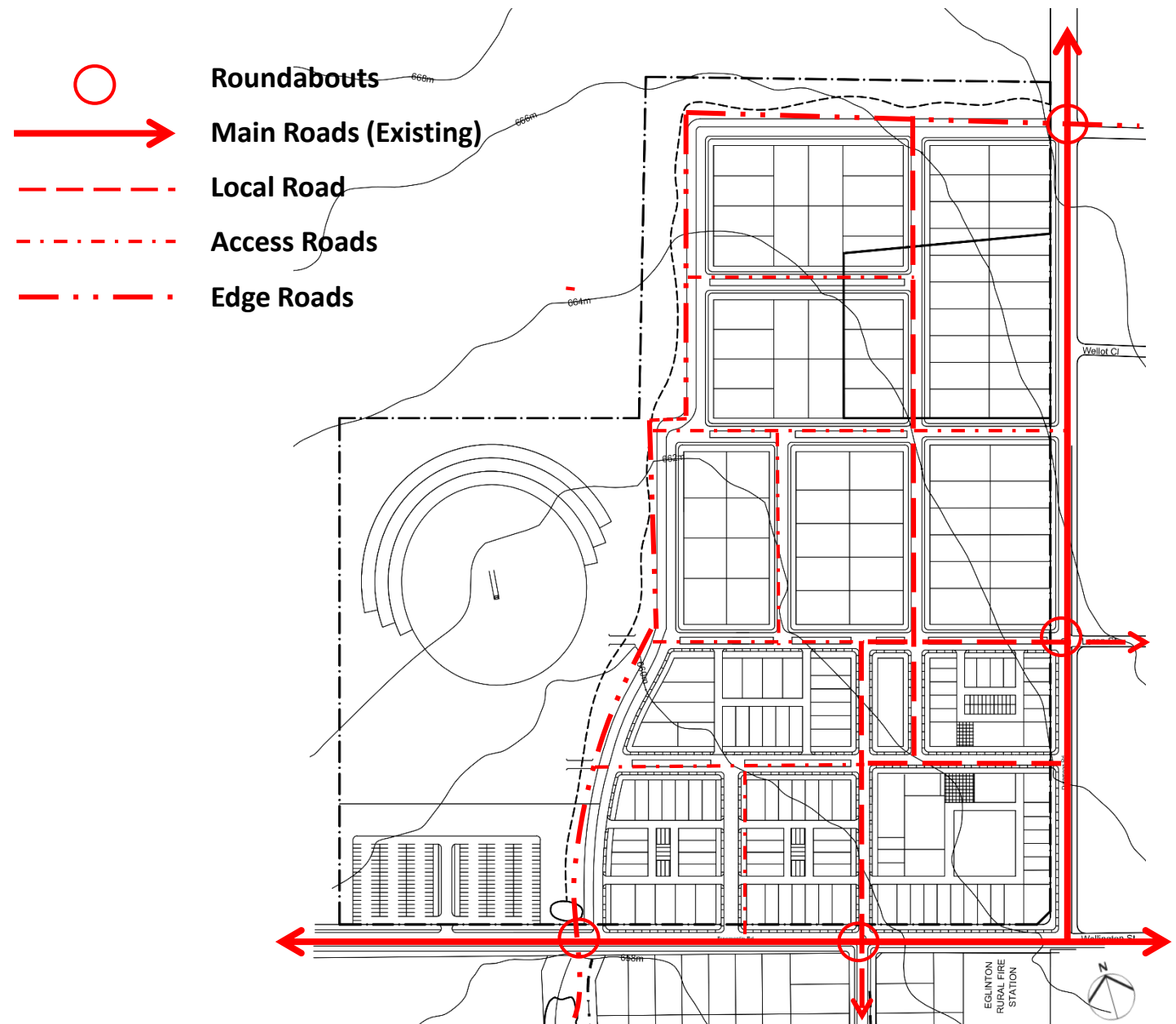
A central median/bio-swale will be provided to E-W streets draining to the creek line.

The proposed dense avenue canopies of trees will add character to the streetscape, improve microclimate comfort and create a strong visual signifier throughout the estate.

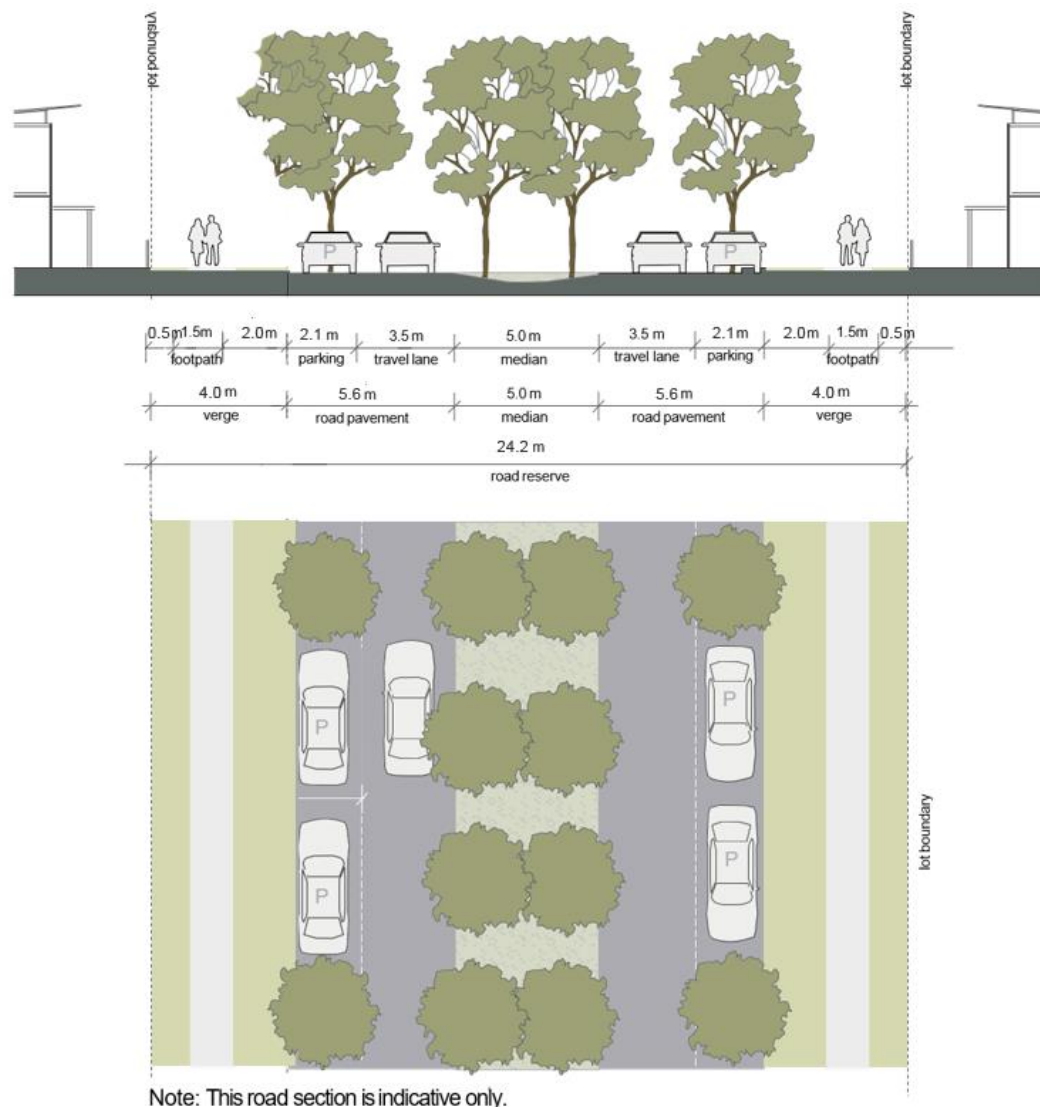
-  **Main Roads (Existing)**
-  **Internal Local Street**
-  **Access Streets**



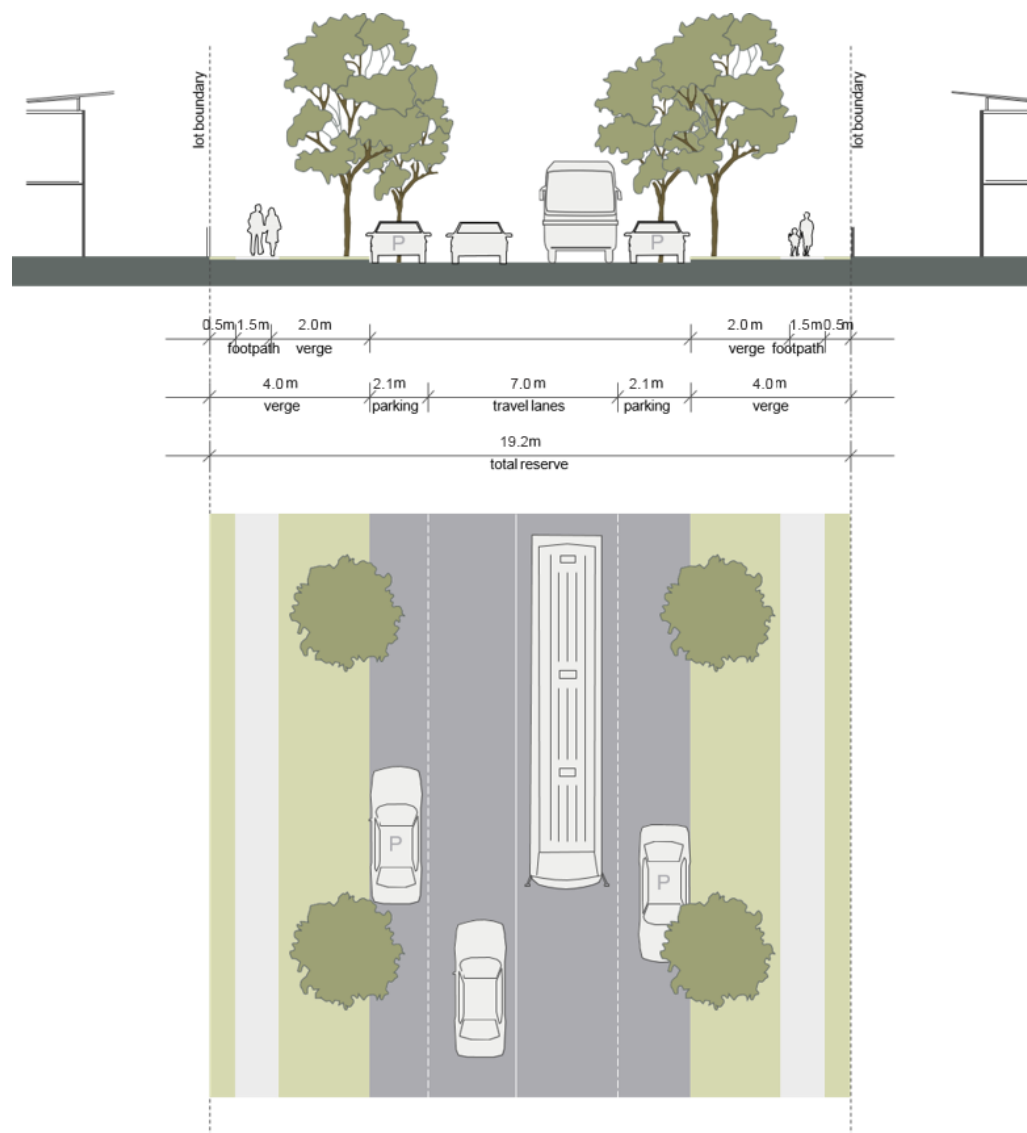
STREETS OF CHARACTER



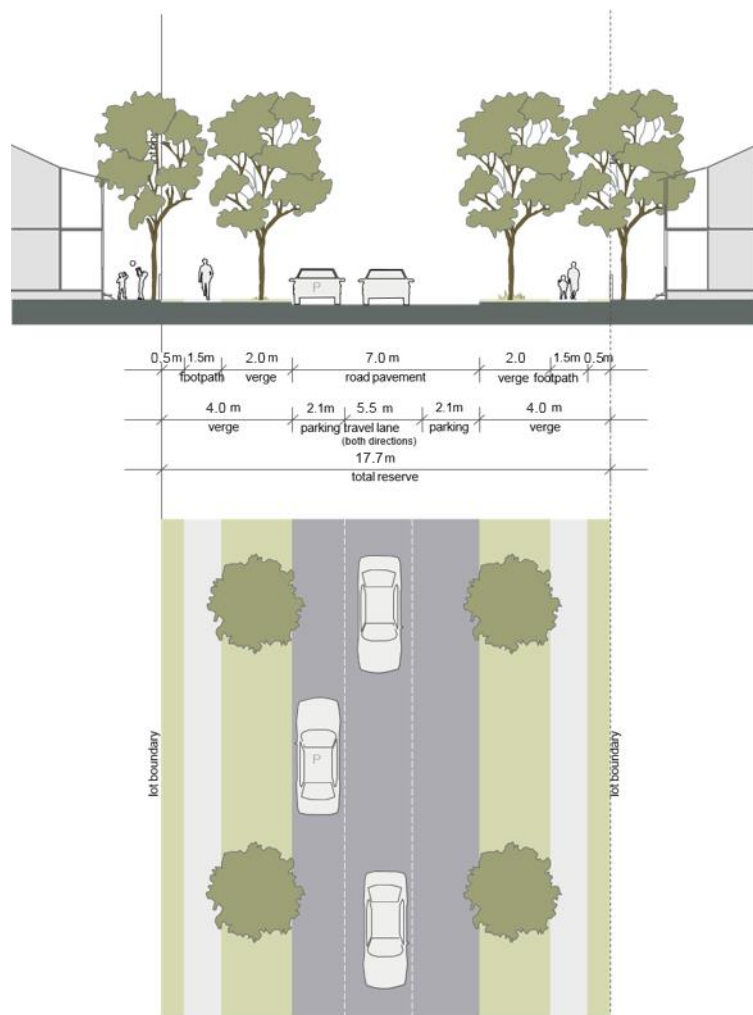
24M BIO-SWALE BOULEVARD



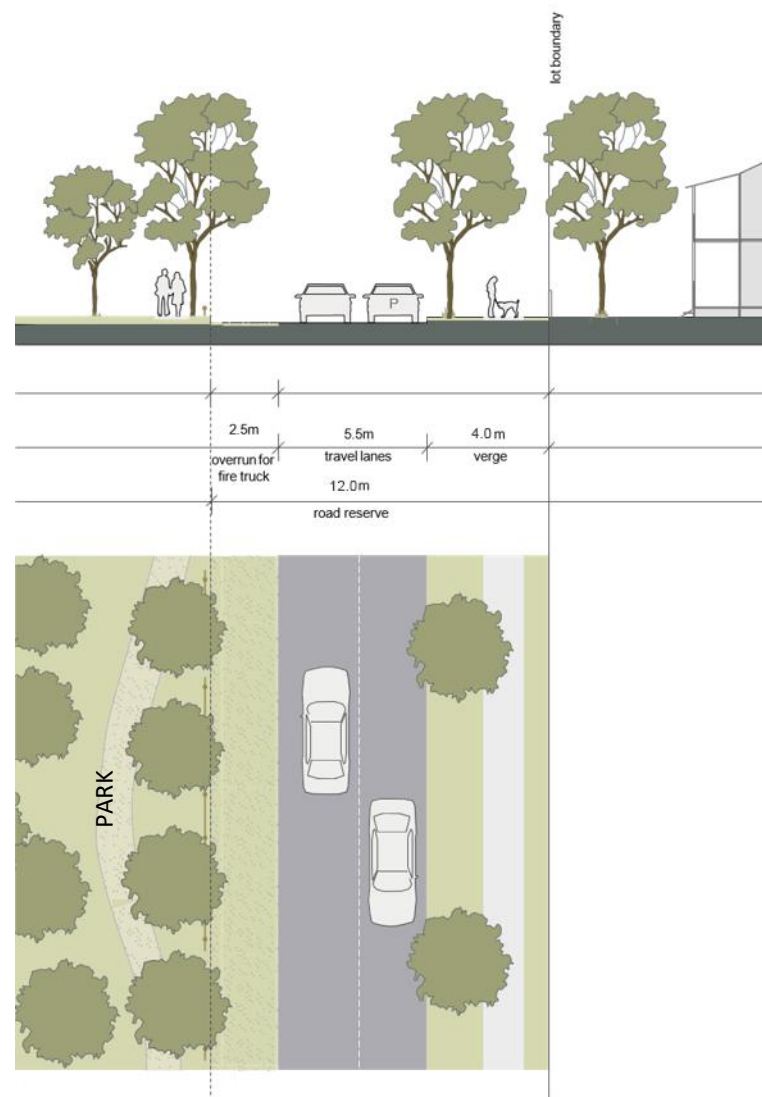
20M MAIN ROAD / BOULEVARD



18M LOCAL STREET



12.0M PARK EDGE ROAD



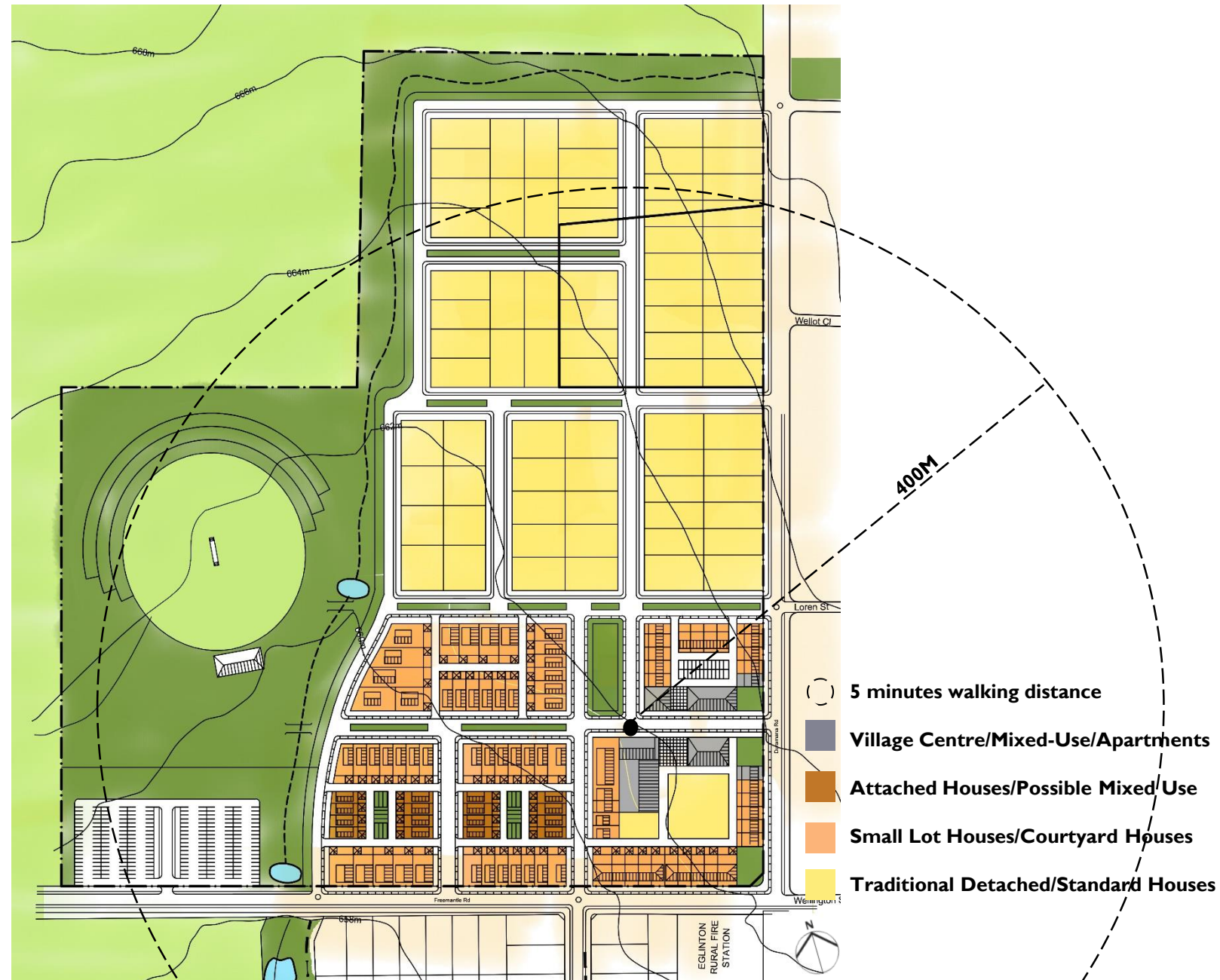
HOUSING CHOICE

Creating a diversity of housing throughout the Village will allow people to have choice of type and cost of housing. This means that people can move homes within the community over their life cycle and that there are affordable choices of housing at all stages of their lives.

A diverse range of houses (mixed-use buildings, townhouses, courtyard homes and traditional cottages), will all have accessible and useable private areas. There will be a coherent housing vernacular, with high quality streetscapes which allow all housing types to fit together comfortably.

The plan shows a possible distribution of housing types from apartments and townhouses through to detached dwellings with the general principle of highest density at highest amenity / highest accessibility. These typologies are described on the pages overleaf.

The dwelling yield based on development area (including roads and local open spaces) will be in the range from 8 to 35 dwellings per hectare. (in the order of 150-200 dwellings)



HOUSING TYPOLOGY

Shop-Top Housing

These area located in the village centre and may be 2-3 storey mixed-use apartment buildings or a 2-3 storey terrace with retail/commercial at ground level.



MIXED USE/APARTMENTS



Attached Houses: 6 -10m Frontage Lots

These provide for terrace and small lot courtyard housing forms generally with north facing (good solar access) courts and with rear lane car access. These are zero lot line on one or both boundaries. These may also contain ancillary dwellings over garages.



ATTACHED HOUSES



Small Lot Housing: 10-15m Frontage Lots

This type comprises courtyard housing suitable for free standing small family housing. This is a flexible and efficient housing form which allows for a separate house on lots comparable to those in traditional Bathurst.

These may also contain small apartments (3 pac/4 pac).



SMALL LOT/COURTYARD HOUSES



Traditional Detached: 15m and Larger Frontage Lots

These are free standing dwellings which comprise the general village "frame". Larger lots will give flexibility in dwelling design on steeper slopes. These lots are suitable for various orientations to accommodate solar access to private open space.



TRADITIONAL DETACHED/STANDARD HOUSES



DELIVERY STRATEGY

Delivery of small mixed-use village centre and associated medium density housing can be problematic, particularly in rural areas because:

- Innovators may be scarce
- Local developers/builders are risk averse
- Rate of growth is slow and development needs to be incremental.
- Financers are ultra conservative.

In this case, there are a number of opportunities which could facilitate this delivery. This will include:

- Council ownership of land (could possibly joint venture)
- There is a general acceptance throughout Council and the community that this is a much needed project.

PROPOSITION

Thus it is proposed that:

- A “Project Manager” be appointed
- The project should be “Workshopped” with the local development community (developers, architects, builders, financers, etc)
- A “Delivery Strategy” should be clearly articulated and costed.
- Model retail mixed-use and residential typologies should be developed and marketed via a “Display Village”.
- Further building (mixed-use and dwellings) should be marketed and developed.

For example:

It should be possible when developing the southern access road off Freemantle Road, to develop a small number of housing typologies which would represent the range of medium density typologies desirable in the market.

These could then be used as a “Display Village” to market (pre-sell) further units and to attract builder/developer/financier for construction. As an incentive Council could delay land settlement until dwellings were complete, thereby reducing risk and reducing costs (Sales tax).

I believe that local small scale investors may well hold the key to getting a project like this up and running.

ACHIEVEMENT OF STRUCTURE PLAN PRINCIPLES

Social Principles	Command	Comments
Creating an urban focus for the wider community	√	Residential and mixed uses complete the centre, and contain urban highlights
Establishing a series of special place with meaning	√	Special places created throughout the site
Creating a sense of community and belonging	√	Design will deliver a strong 'sense of place' and create a clear identity
Fostering social interaction	√	Local parks, meeting opportunities, quality public domain, streets, village centre
Creating connections to the past and site history	√	
Clear and easy connections to transport and facilities	√	Good links to local and sub-regional centres
Creating a clear and comprehensible street movement system which allows for choice of routes	√	Grid based street system allows for a choice of routes and easy way finding
Establishing quality streets and spaces	√	Generous street reserves, local and town parks, pedestrian / cycle focussed design
Ensuring safety and security with passive surveillance and active use of public domain - 'safety by design approach'	√	Streets and spaces overlooked by building frontages
Allowing improved access to education facilities ie primary school	√	Links enhanced to local education facilities
Promoting health through making walkable communities	√	Easy access to walking and cycling routes
Wide housing range allowing people to move within the area and provides choice beyond standard detached housing	√	Housing types cover a wide variety of sizes and forms
Incorporating extensive and diverse parkland areas that create a strong sense of place, a community focus and allow for a range of leisure and recreational opportunities	√	Extensive parkland areas ranging from formal to informal, and active to passive
Parking and street design to calm traffic and protect pedestrians - 'streets not roads'	√	Use of trees indented into parking bays, on street parking and appropriate road widths
Economic Principles		
Providing development which complements existing areas	√	Development will allow the site to become a multifunctional village
Social equity underpinning the Master Plan	√	Predominant development is housing but of diverse type
Paying for infrastructure and conservation through appropriate levels of development	√	Development at higher densities allows for establishment of a special public domain
Social equity underpinning the Master Plan	√	Urban structure and development types allows for a democracy of movement and a wide market
Creating housing types that are marketable and viable	√	Range of housing will appeal to many market segments
Creating a wide variety and choice of housing	√	Significant component of varied size dwellings including studios above garages, and small lot houses
Promoting a flexible range of housing types to allow for a variety of uses, particularly home based work	√	Mixed use buildings, ground level apartments/townhouses adaptable for commercial use
Incorporating denser housing forms which allow for more efficient use of land and create a compact centre	√	Density focussed on important nodes and around open spaces
Activating the street with commercial uses at ground level where demand is expected and allowing vertical mixing of uses	√	Mixed use buildings at Village Centre
Considering management and aftercare of public domain	√	Public Domain designed with management as a key consideration
Providing a level of building regulation and control which ensures that the vision is delivered with respect to the private domain, and that the area sustains long term economic value	√	Implementation controls and mechanisms established
Environmental Principles		
Conservation and enhancement of riparian corridors	√	Landscape corridors created
Creating connections to the external environment, particularly riparian corridors	√	High quality existing vegetation conserved wherever practicable
Improving air quality through ensuring denser development around public transport	√	Development density increases with proximity to Village centre and transport
Conserving and protecting biodiversity and quality vegetation within the context of creating a new community	√	Existing vegetation areas retained within open spaces/parks wherever possible
Incorporating water sensitive urban design and water management solutions that add value to the community	√	Use of bio-swales, water tanks, pollution control ponding
Creating human habitats that promote healthy lifestyles	√	Design represents a balance of nature and urbanity
Urban structuring/layout and housing design that promotes passive solar design	√	
Street layouts and subdivision pattern that relates to topography and minimises cut and fill	√	Layout follows topography allowing drainage and views to open spaces
Environmentally conscious building practices	√	Commitment to sustainable building practices written into controls

APPENDIX 1

APPENDIX 1
EBD WORKSHOP REPORT

BATHURST

10 & 11 DECEMBER 2018

EBD Workshop Report, Bathurst

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APPENDIX 1

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1 BACKGROUND

1.1 THE BRIEF

1.1.1 Scope of Works

The Scope of Works for the project includes the following:

A. Prepare a Key Directions report to determine:

- i. An appropriate minimum lot size that could apply to this greenfield site and surrounding residential areas, particularly in light of the Neighbourhood Activity Centre being part of the study area, and
- ii. If a different minimum lot size is identified than currently permitted under the LEP, identify an appropriate precinct where the different lot size should be applied, and
- iii. Whether medium density housing, and what form it should take, is appropriate for some or all of the study area within the context of Eglinton and its low-density residential development.
- iv. The Key Directions Report is to support and lay the foundations for the Master Plan. The report also needs to address, at a minimum:
 - The economic policy context of Eglinton and Bathurst
 - Demographic and housing trends of Eglinton and
 - Preliminary housing market assessment.

B. Review the initial concept subdivision layout and determine whether further refinements are required to reflect:

- i. The local real estate market conditions and the need for housing choice
- ii. NSW Legislation context including, but not limited to, biodiversity
- iii. Contemporary subdivision and urban design
- iv. Contemporary water sensitive urban design and stormwater disposal
- v. Infrastructure capacity (particularly roads, sewer and water)
- vi. Identify appropriate pedestrian and cycle linkages to open space, the Eglinton Public School and the Neighbourhood Activity Centre. Identify how high quality urban design can be achieved for the future housing.
- vii.

C. Neighbourhood Activity Centre

The identified role of the Eglinton Neighbourhood Activity Centre is to provide for most daily and a range of weekly purchase requirements.

- i. Develop a specific master plan for a 2 hectare (minimum) Neighbourhood Activity Centre. Refer to Section 7.2.5 of the Bathurst CBD & Bulky Goods Business Development Strategy (2011) for the recommendations of the NAC.
- ii. Develop a road and footpath network to connect with the surrounding low and medium density housing and open space;
- iii. The Neighbourhood Activity Centre master plan should include the following elements as a minimum:
 - Small supermarket with floor area range of 500 - 1200sqm.
 - Specialty stores.
 - Views and visual character.
 - Appropriate lighting.

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- Car parking.
 - Public safety.
 - Pedestrian and cycle access and circulation.
 - Public transport linkages
 - 'Smart City' infrastructure.
 - Special parking consideration for items such as EV charging, car/ride share.
 - Allocation of land proposed as part of the Neighbourhood Activity Centre for complementary land uses such as child care centres and the like.
- iv. Identify suitable development standards that can be incorporated into Council's Planning controls to achieve a functional Neighbourhood Activity Centre.

D. Open Space and drainage line

The rural residual area is to be developed into a mix of active and passive recreational uses to cater for the broader community. The successful consultant is to make specific recommendations for the open space area in terms of community, recreation, sporting and open space infrastructure, taking into consideration the recommendations of the Bathurst 2040 Open Space Strategy and Council discussions. The Consultant is also to develop a landscape plan for the drainage line (zoned RE1) on the western side of the residential land.

E. Urban design

In developing the master plan, it should reflect contemporary urban design principles for subdivisions including:

- i. Flexibility to accommodate future changes in usage patterns.
- ii. Water Sensitive Urban Design (WSUD) and post-development stormwater management.
- iii. Crime Protection through Environmental Design (CPTED).
- iv. Protection of biodiversity and other environmental sensitivities.
- v. Minimising the environmental footprint.
- vi. Road and footpath/cycleway layout and network connections.
- vii. Public safety.
- viii. Amenity requirements.
- ix. Minimisation of maintenance costs.
- x. Provision of open space and recreation facilities.

F. The master plan is to also include indicative finished ground levels for roads and development sites.

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EBD Workshop Report, Bathurst

1.2 THE SITE / SITE ANALYSIS

The site comprises approximately 2.7 ha bounded by Duramana Road in the east, Freemantle Road in the south, a drainage line in the west and a property boundary/buffer zone in the north. (See Figure 1.1 and Figure 1.2)

The site is in 3 ownerships and should be designed to enable development in either an integrated or separate manner.

Surrounding development comprises:

- Recent residential development to the east predominantly 900m² lots but with numerous dual occupancies
- Rural / agricultural land to the north and northwest
- Proposed Council major open space area to the west across the drainage line
- Proposed residential development (900m² lots) and RFS building to the south.

The following constraints must be considered:

- Noise (and other) issues associated with the proximity of agricultural uses to the north/northwest.
- Drainage issues down the western boundary and the precise location of the western extent of development.
- Connections with Loren, Willot and northernmost road off Duramana and connection with proposed collector road into southern precinct at Freemantle Road.
- Capacity to develop as a whole integrated site or in separate parcels.
- Potential traffic implications at corner of Freemantle and Duramana with RFS emergency vehicles.
- Need to slow vehicles approaching the site on rural roads (Freemantle/ Duramana).
- Frontages to Duramana should take cognisance of existing (predominantly 900m, 20 plus metre frontages) lots fronting Duramana Road.

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Figure 1.1: The Site - A Photo/Topography

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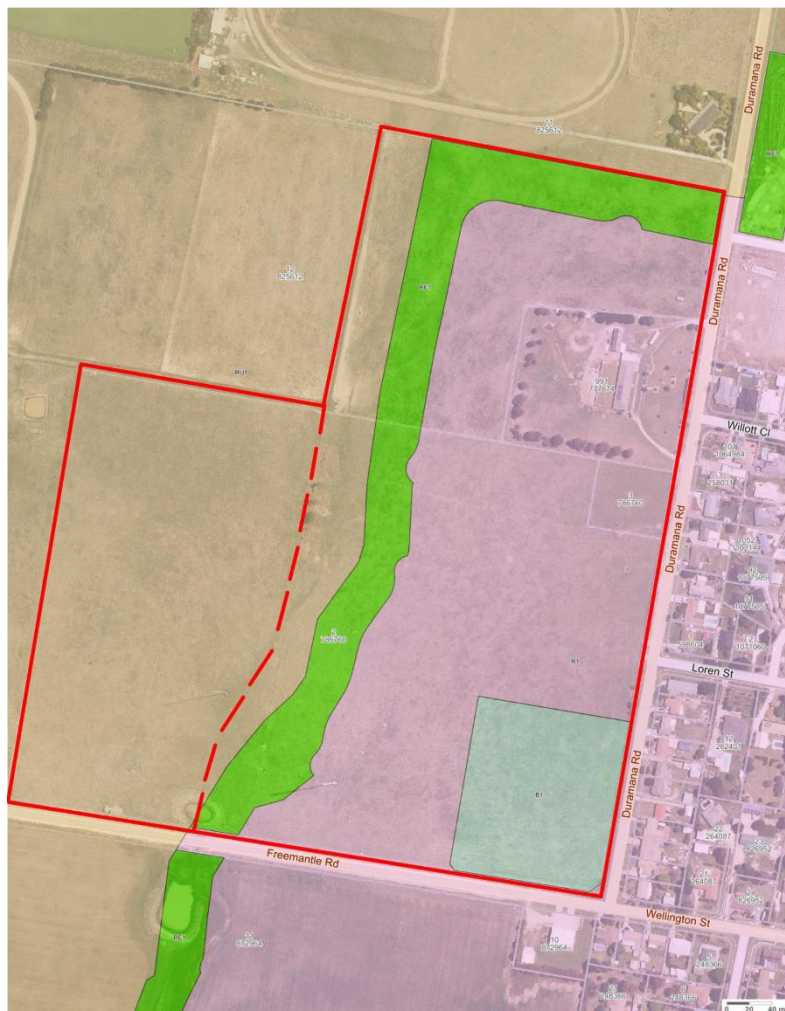


Figure 2.2: The Site – National Zoning

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2 THE EBD WORKSHOP PROCESS

2.1 EBD WORKSHOP

The EBD Workshop approach involves a communal approach to design with mixed groups of Consultants, Council Officers, Stakeholders and residents representatives working together to state and resolve design issues. The workshop format allows a rapid generation and testing of design options over an intensive period (2 days in this case).

The EBD program is attached below and the results are included in the following pages.

2.2 DAY 1

1.	9:30	<ul style="list-style-type: none"> Project Introduction Introduction to Workshop Discussion Constraints of Opportunities <p>This session to be attended by core workshop team of key stakeholders/resident representatives etc.</p>	Council KFG/AAUD All
	11:00	Morning Tea	
2.	11:30	<ul style="list-style-type: none"> Site Analysis Drawing Concept Structure Options 	Core Core
		Lunch	
3.	2:00	<ul style="list-style-type: none"> Site Analysis Drawing 	Core
	3:30	Afternoon Tea	
4.	2:00	<ul style="list-style-type: none"> Group Presentation/Discussion/Preferred Option. 	Core
	5:00	Close	

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2.3 DAY 2

1.	9:00	<ul style="list-style-type: none"> Review Day 1 Village Centre Options 	Core
	11:00	Morning Tea	
2.	11:30	<ul style="list-style-type: none"> Test Village Options 	Core
		Lunch	
3.	2:00	<ul style="list-style-type: none"> Develop preferred Village Centre Options Detail Preferred structure Plan 	Core Core
4.	4:00	<ul style="list-style-type: none"> Pick up/Exhibit Plans 	
5.	4:30	<ul style="list-style-type: none"> Presentation to Stakeholders Discussion Vision Statement Outstanding Issues 	Stakeholders
	6:00	This final session attended by Consultants, Council, Stakeholders (including Residents & others)	

It is expected that:

Session 1 – Day 1

Will be attended by Consultants/Council, other stakeholders (including PTA/school, resident representatives, real estate, business and others).

Session 2, 3, 4 – Day 1

Will be attended by Core Design Group comprising Consultants, Council & major stakeholders' representatives (up to 5-6)

Session 1, 2, 3, 4 – Day 2

Will be as above Core Group

Session 5 – Day 2

Will be attended by Consultants, Council, Stakeholder Groups & residents.

Note that residents/Stakeholders may visit the workshop at any time view progress and discussions with consultants (Depending on availability).

Note that the Concept Plans produced in this workshop will be collected into a summary report and will be available on Council's website.

A Public Exhibition will be held after Christmas Holidays for the General public. Consultants will be available on 'Information Days' for discussion.

EBD Workshop Report, Bathurst

3 URBAN DESIGN “TOWNMAKING” PRINCIPLES

The following principles have been tested over a number of years by AAUD in terms of “urban improvement” to suburban and retail village design.

Principle 1 – Links with surroundings (context) and the past (heritage).

Principle 2 – Responding to the site (in terms of conservation, recreation, and drainage/WSUD).

Principle 3 – A clear Urban Structure which will assist with placemaking and wayfinding.

Principle 4 – Creating Special Places, providing village, market square, activated street frontages and public engagement.

Principle 5 – Create an active and alive village centre. Activate the streets, facilitate walkability, and provide pedestrian shelter and climatic comfort.

Principle 6 – Create a Rational Street Hierarchy.

Principle 7 – Create an Integrated Landscape Network which connects public domain elements of streets, parks, drainage reserves, conservation areas etc.

Principle 8 – Provide local parks within easy walking distances of all residences.

Principle 9 – Village Centres – create entry statements, arrival points which create placemaking for the village.

Principle 10 – Riparian Corridors – seek to create riparian corridors with drainage lines which create wildlife habitat and corridors as well as WSUD functions and open space opportunities (walking and cycle trails etc.).

Principle 11 – Safe Streets – create multi-modal streets which are safe for pedestrians, vehicles, cycles and others. Protect footpaths from moving vehicles.

Principle 12 – Housing Choice – provide housing diversity that provides appropriate choice for all stages of the life cycle and for all income groups.

Principle 13 – Quality Homes and Gardens – structure lots and streets to activate walkable streets and encourage community engagement. Consider front fences, verandah, gardens and relationship to walkable streets.

Principle 14 – Improved Streetscapes – plant large growing, climatic comforting tree species in streets (verges and roads) to improve street safety and walkability

Principle 15 – Implementing the Vision – prepare implementation strategies to ensure the “Vision” can be delivered. Clearly define roles and responsibilities of public and private sectors in the delivery process.

APPENDIX 1

EBD Workshop Report, Bathurst

4 CONSTRAINTS AND OPPORTUNITIES

The consultant team has been briefed by Council, has visited the site and in Session 1 of the EBD Workshop sought to clarify all constraints and opportunities which relate to the site.

These are set out below and illustrated in Figure 4.1

The first session of the EBD Workshop comprised a project briefing by Council, a discussion of Town making Principles by the consultants and then an interactive discussion to elucidate constraints and opportunities for the site.

Constraints and Opportunities

1. Location of retail area is critical to functioning of the village centre. Issues include:
 - Size of retail TBC
 - Viability
 - Non-compete with Bathurst TC
 - Certain preliminary assumptions to be made which can be adjusted and amended as the design evolves.
2. Traffic approaching from western Fremantle to be controlled / slowed (and from Duramana North).
3. Traffic bridge links to be considered
4. Pedestrian access ways are of critical importance;
 - How do pedestrians connect to site
 - How do they approach the site
 - Investigate multiple access routes
5. How do we attract people into the retail centre?
6. Passive recreation space provisions within the centre and surrounds
7. Link between shopping and open space – connections very important
8. Car parking to be considered – on-street car parking, mostly 45/60% in Bathurst
9. Staging for retail – how do we start small – what are the first tenants?
10. Environmental issues:
 - Water
 - Sewer
 - Hi- sewer output
 - Note; Pump station in Eglington
11. Location of retail in terms of pedestrian safety and traffic.
12. Serviceability – staging / sewer staging
13. What are the draw card features??
14. Affordability and cost effectiveness – something that can be designed and implemented
15. Sense of pride in Eglington, something that reflects Bathurst
 - Activity
 - Spirit
 - Sense of place / authenticity
 - Design of subdivision
 - Make it deliverable
16. How will the development tie into the existing and proposed infrastructure
17. Lots sizes / demand – larger lot sizes in demand (1,000m²), 450m² TBC

EBD Workshop Report, Bathurst

18. Key development issues:

- Stormwater / drainage
- Water sensitive Urban Design – water treatment
- Waste and garbage servicing?
- Looking over back wall – considerations – privacy
- Commercial opportunities could include dentist, doctor, accountant

19. Participant Concern: Investigate

- Priority to pedestrians
- Interface with Rural
- Dust / chemicals
- Agricultural conflict
- Noise, chemicals, working hours
- How are the edges (periphery resolved)

Note: water sensitive urban design raised again as an issue

20. Participant Urban Design Issues

- Aim; different approach to development is the priority
- Community feel
- Country feel
- Integrate to existing subdivision
- Relationship to school and Cubis Park
- Relationship to school
- Sense of entry / place

21. Lot Size: Issues discussed

- Housing choice
- Consider options
- 900m² is the current minimum lot size
- Dual occupations at 450m² occur regularly
- Large yards / gardens for storage / trades
- \$\$\$ differential between 2B Unit and 3 B house not great enough to drag people across to apartments or smaller lots (Review)
- NS orientation raised
- Solar access to living areas
- Block width (22m – 20m min) desirable.

APPENDIX 1

EBD Workshop Report, Bathurst

Key Constraints and opportunities Summary

Constraints

- Connection to 219 lot subdivision street network
- Connection to open space corridor and proposed cycle ways and adjacent subdivision network (including streets)
- Landscape exclusion zone adjacent to farmland
- Town Centre location to be closer to geographical centre of Eglington
- Functional considerations:
 - Distance from existing school and connectivity implications
 - Speed of vehicular approach to be considered (i.e street design and vehicular controls)
 - Intersections
 - Population (existing and forecast and implications on retail area)
 - Local builder ability to build?
- Resistance to change, to explore different urban ideas from local interest groups

Opportunities

- Desire for Bathurst Council to make an impact by exploring new design approaches and driving alternative urban design models.
- Desire by Bathurst council to work towards design excellence.
- Positive engagement and reaction by stakeholders.
- Proximity of future sports precinct and ability to draw community into the proposed town centre.
- Opportunity for new approach to water sensitive urban design and services provisions.
- Opportunity to create walkable street, pedestrian friendly streets and cycle ways.
- Opportunity to set a bench mark for a new design approach and methodology for community engagement.
- Opportunity to explore new housing typologies, including density, design (including solar access, location of garage etc).

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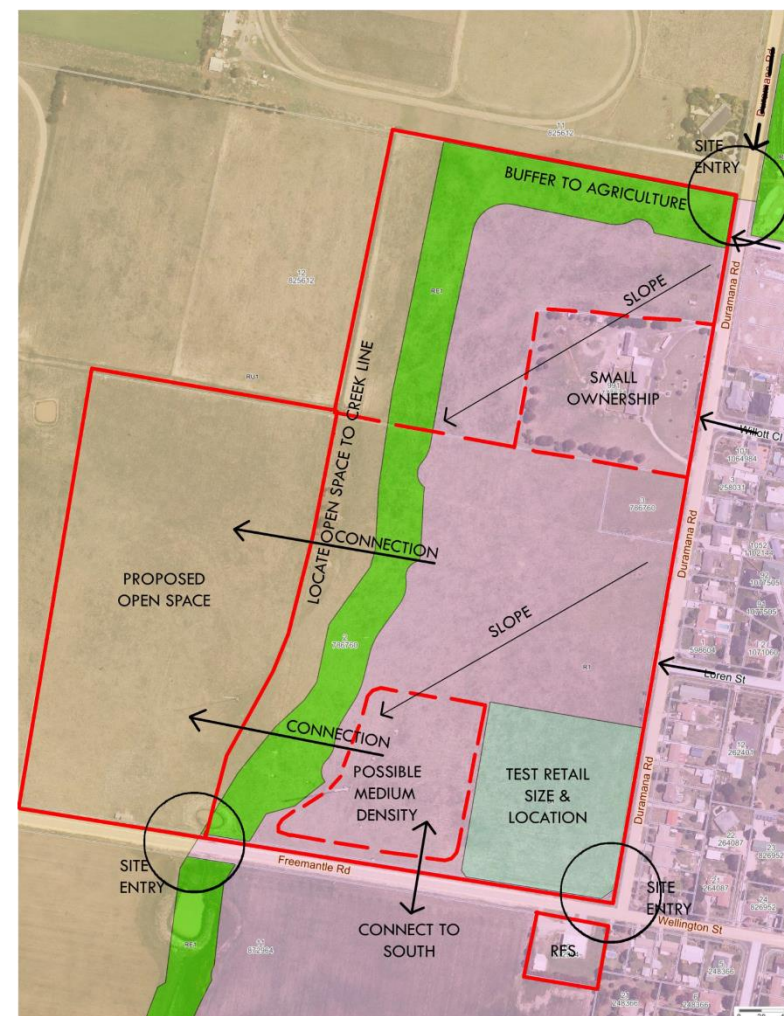


Figure 4.1: Constraints & Opportunities

APPENDIX 1

EBD Workshop Report, Bathurst

5 MASTER PLANNING

5.1 CONCEPT MASTERPLAN (SESSION 2)

Two studios were run concurrently across three tables with the intent of engaging directly with users and stakeholders.

An opportunity was given to the user groups to make design input on various options, by sketching, either independently, or with guidance, thereby conveying what the stakeholders saw as critical issues affecting the site and the community.

User Group 1

The central focus of this group was efficient Master Planning of the northern portion of the site for large traditional lot subdivision (900 m²) and the possible design of the Village Centre at (or near) the intersection of Duramana and Freemantle Road.

User Group 2

The central focus of the discussion of this group was the location of the town centre in closer proximity to the sports fields and in particular the connection of any proposed new town centre to the DA approved 219 lot subdivision to the South of the site.

User Group 3

The central focus of this discussion group was the commitment to a sense of arrival, and the ability to draw users through the site and ease of wayfinding.

Master Planning UG1

The desire to create an effective and efficient subdivision pattern to encompass the 3 x Land ownerships was of major concern. There were a number of ways of doing this but only one provided the high level of flexibility required.

A conceptual design of the Village Centre in the Southern corner of the site (Duramana/Freemantle) seemed like it would work very well, although the Centre was thought to be oversized (to be tested).

EBD Workshop Report, Bathurst

5.2 CONCEPT MASTERPLAN (SESSION 2)

This Workshop session comprised an attempt to quickly prepare a Masterplan for the whole site which could accommodate a mix of 900m² lots, some smaller lots and sites for medium density development and a notional layout for the Village Centre (as located on Zoning Plan) (see Figure 5.1 & Figure 5.2).

Figure 5.1 & Figure 5.2 both provide an attractive and economic layout for the northern large lot (900m²) part of the site.

The Village Centre for these options fronts both Freemantle and Duramana Roads (as secondary frontages) and creates "Main Street" retail options generally running from Duramana and parallel to Freemantle.

These two options provide substantial at grade carparks internally and could also provide angled parking on "Main Street" if required. The supermarket (about 1,500m²) is located on the northern side of the "Main Street" adjacent to parking area and set behind main street shops and accessed by a pedestrian walkway connecting the "Main Street" with the carpark.

Strengths

- Clearly located at intersection of Freemantle and Duramana
- Ready vehicular access from both streets (roundabouts if needed)
- Potential to create small parks and pedestrian walks
- Capacity for 900m² blocks to the north
- Capacity to connect with N-S road in adjacent subdivision to the south
- Good connections to Park to West
- Draws amenity from drainage reserve

Weaknesses

- Limited solar access to some lots due to E-W roads required by land ownership and site dimensions
- Direct connection to southern and eastern subdivisions is possible but not guaranteed
- The size of retail centre appears rather too large and needs review
- Some open parking areas (to north) are fronted by residential (poor amenity).

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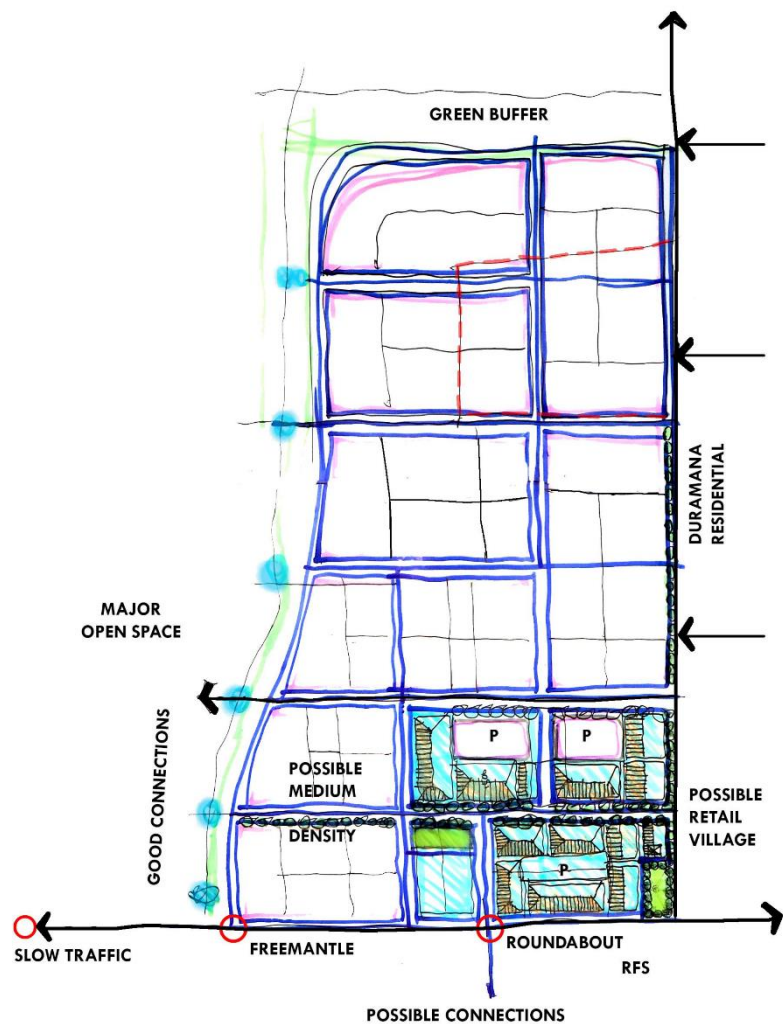


Figure 5.1: Draft Concept Masterplan (Session 2)

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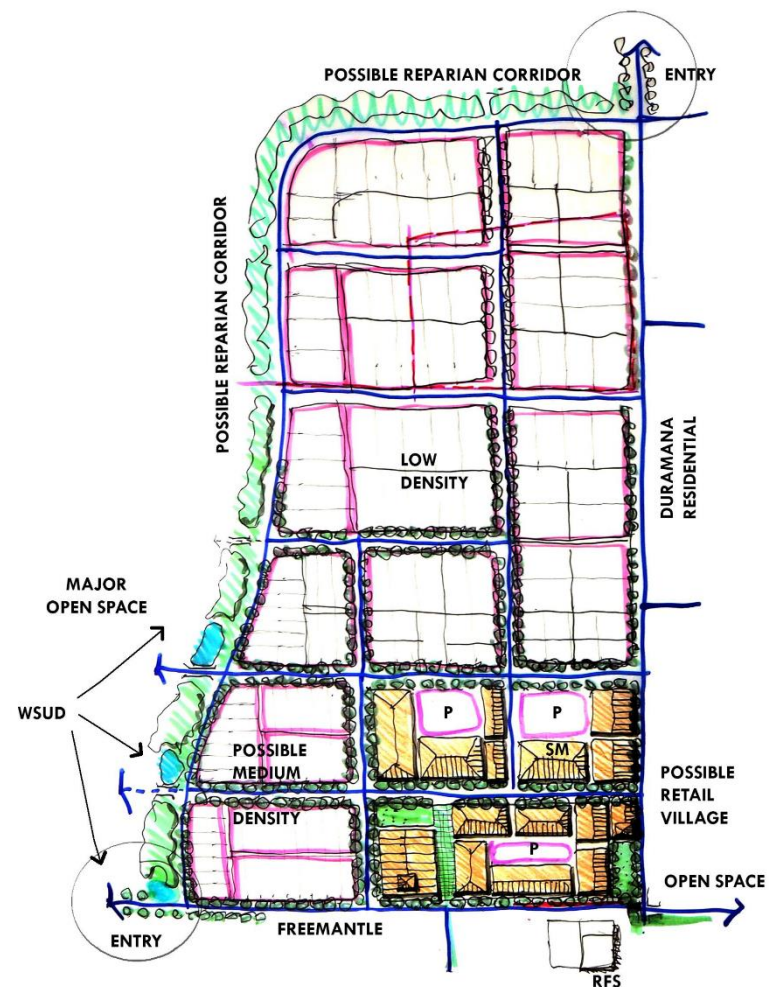


Figure 5.2: Draft Concept Masterplan (Session 2)

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User Group 2

The central focus of the discussion of this group was the location of the town centre in closer proximity to the sports fields and in particular the connection of any proposed new town centre to the DA approved 219 lot subdivision to the South of the site.

User Group 3

The central focus of this discussion group was the commitment to a sense of arrival, and the ability to draw users through the site and ease of wayfinding.

The main discussion points considered included the following:

User Group 2

User Group 2 quickly developed an option where the town centre was to be located away from the South east corner of the site and closer to the proposed sports playing fields while being centred on Loren Street.

The aim was to twofold:

- Activate the proposed playing fields with a town centre, thereby extending the high street towards the town centre for community events and festivals.
- Connecting the town centre to the DA approved sub-division at the open space cycleway / pedestrian link. This would allow the town centre to merge into the landscape
- Centering the town centre within the precinct.

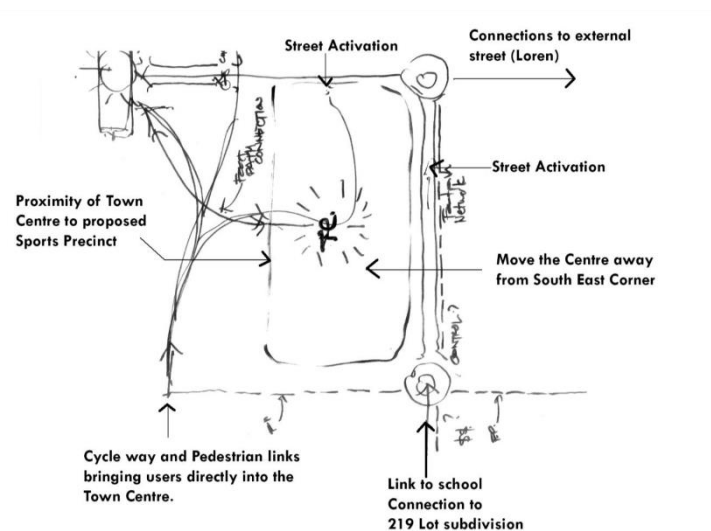


Figure 5.3: Town Centre Opportunities

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User Group 3

User Group 3 was predominantly focused on creating and designing a sense of entry to the precinct which would achieve two objectives:

- The first objective was to allow users within the Eglinton area ease of access to and circulation into the site and town centre with ease.
- The second objective was to convey a sense of place / gateway, via a park or public space feature.

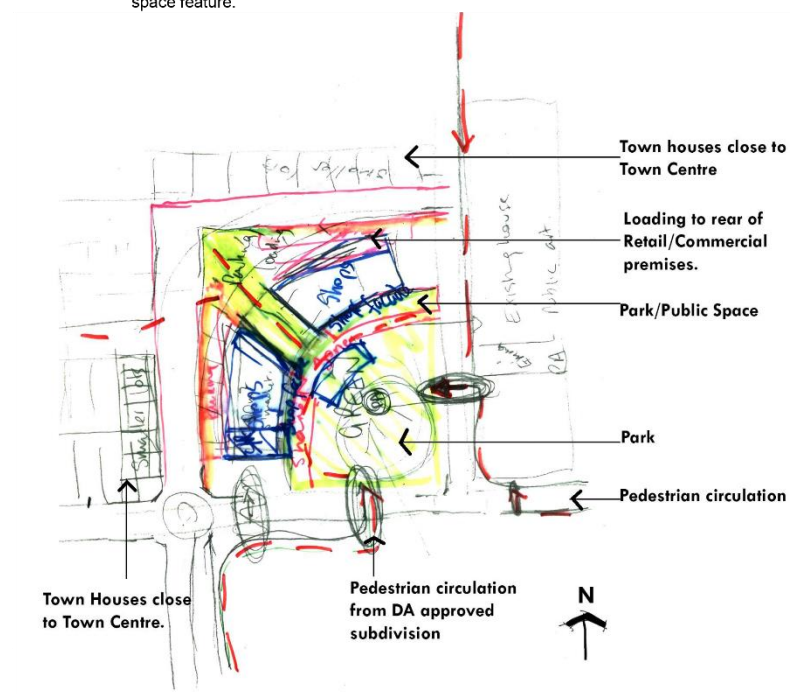


Figure 5.4: Celebrate Entry

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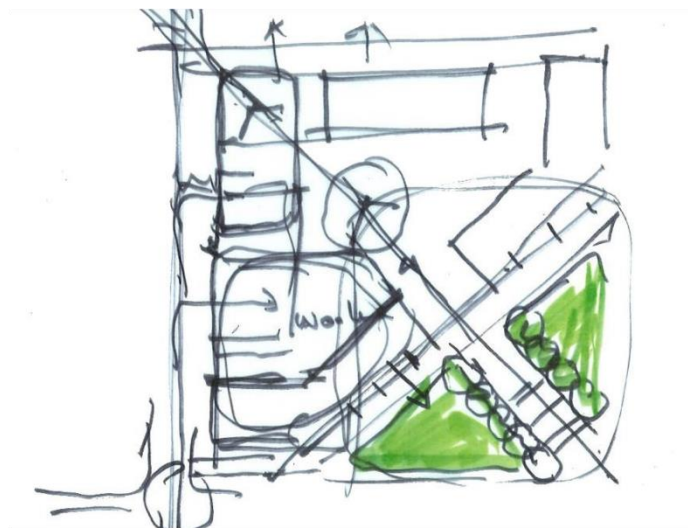


Figure 5.5: Alternative Corner Entry

Figures 5.6, 5.7 and 5.8

These sketches describe in further detail the development of the User group 3 concept with the high street connecting to Loren Street and the development of street sections indicating the opportunity for additional height, setbacks and identity.

Both options have a range of strengths and weaknesses, however it was decided to develop the user group 3 option in further detail.

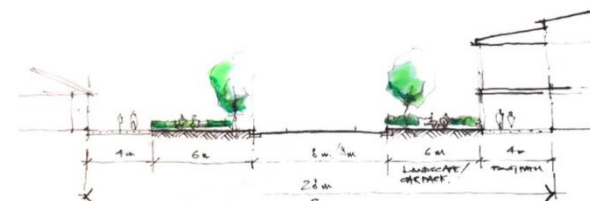
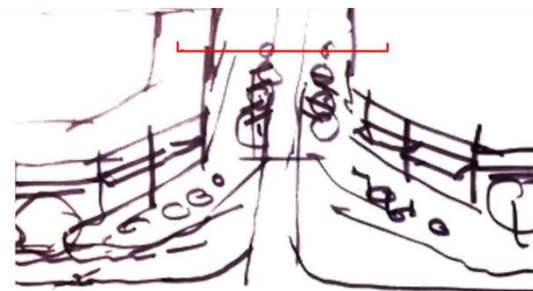
Strengths

- Connection to Loren Street
- Ease of connection to sports precinct
- Strong high street concept
- Opportunity for rear lane vehicular servicing and loading / unloading without impacting on the high street
- Bathurst Character
- Stagable development opportunity

Weaknesses

- Smaller town centre
- Weaker presence and identity

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Main Street Section Indicates potential verandah, colonnade/walkways, angled parking areas with occasional Landscaped Buildouts and two moving Lanes.

Figure 5.6: High Street Entry

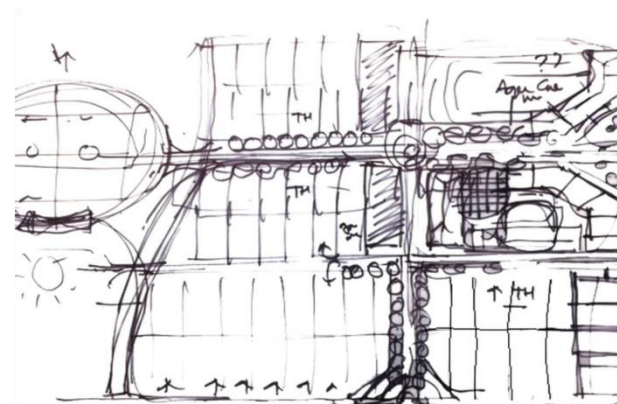


Figure 5.7: Link between High Street & Sports Precinct

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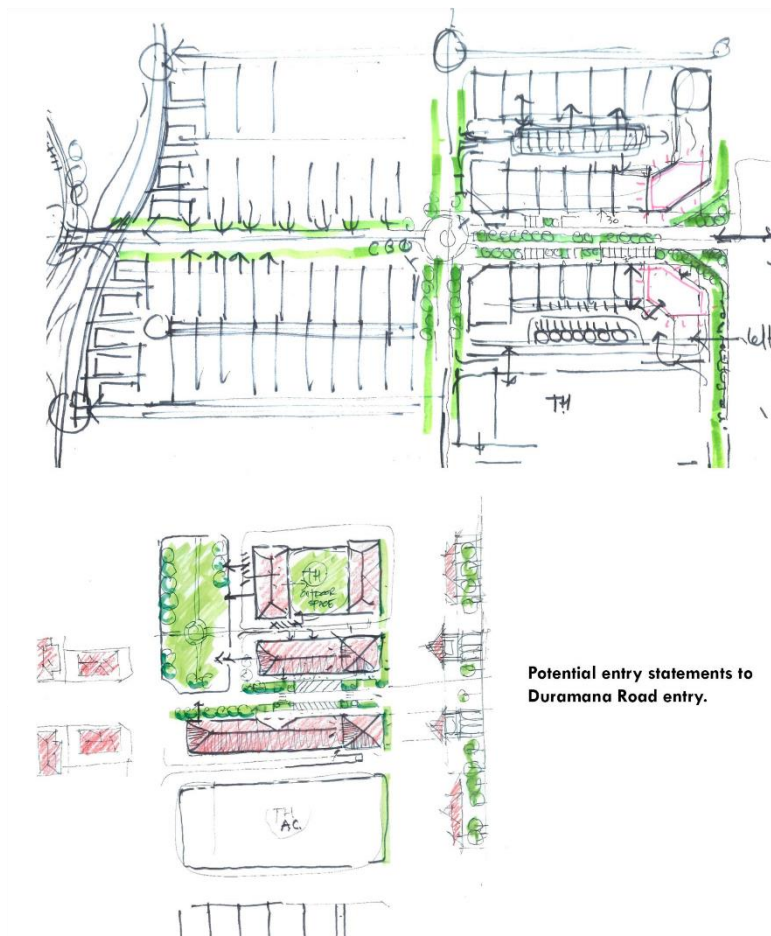


Figure 5.8: High Street Concept Plan

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5.3 CONCEPT MASTERPLAN (SESSION 3 & 4)

Figures 5.9 – 5.12

These figures address the Village Centre, the inclusion of a central village green, town park or market square (about 4,000m²) at the armature of NS and EW roads as well as the possible structuring and distribution of parking areas and the provision of medium density to the west of the village centre (with high amenity and access to open space).

Strengths

- As above plus;
- Reduced retail component and increased medium density
- Potential Civic Hall
- Potential to bring Village Park / market square into the village and further reduce retail.

Weaknesses

Block to Freemantle Road is a little narrow to provide internal block parking and rear access to Freemantle frontage (to reduce impact on RFS).

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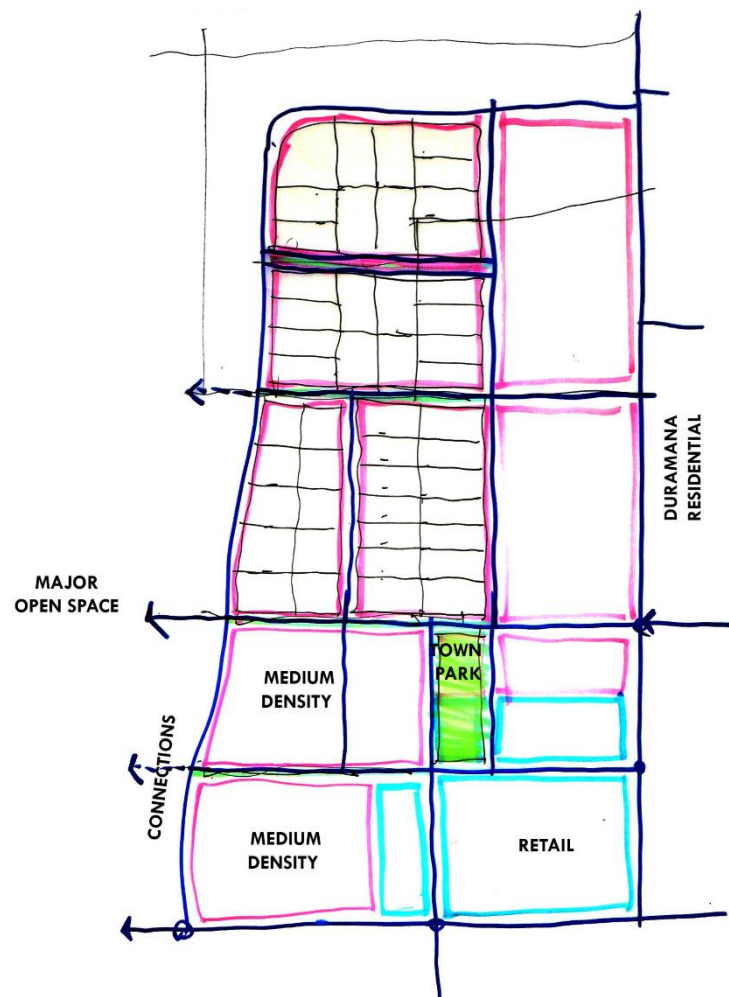


Figure 5.9: Land Uses - Central Park (Session 3)

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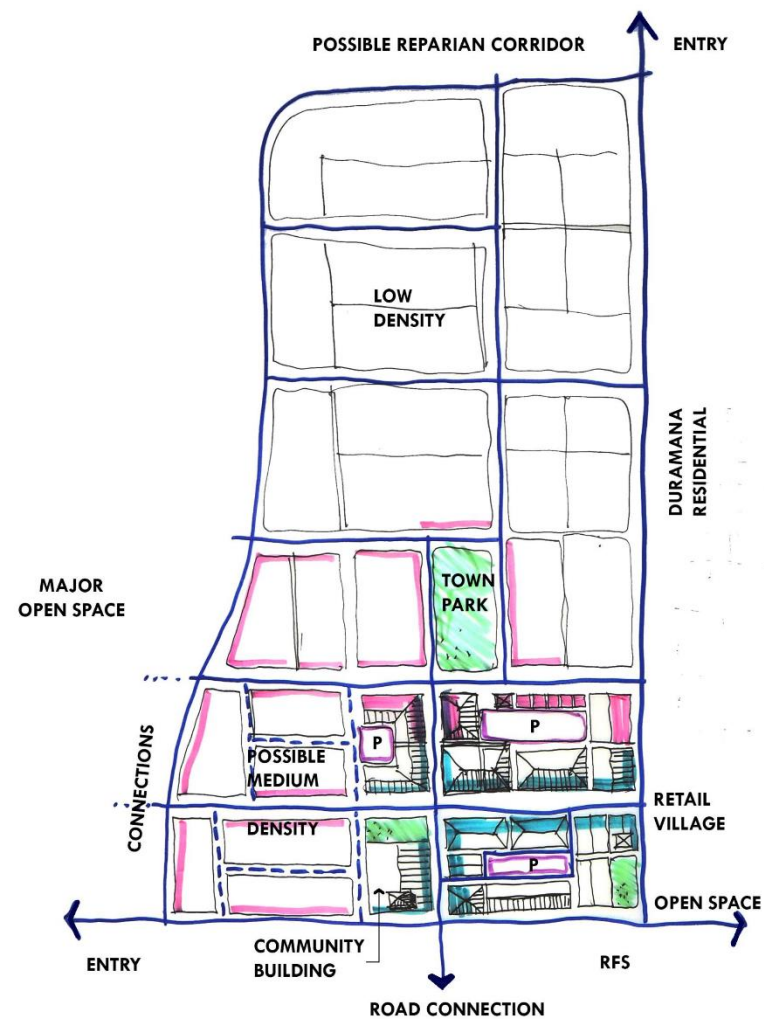


Figure 5.10: Concept Masterplan (Reduced Retail Core)

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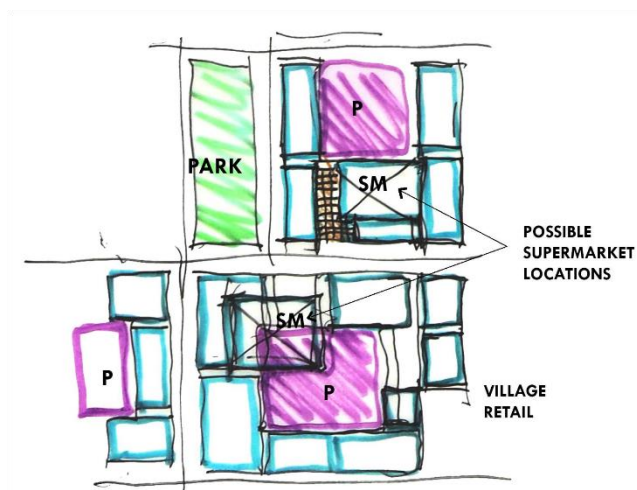


Figure 5.11: Supermarket Options

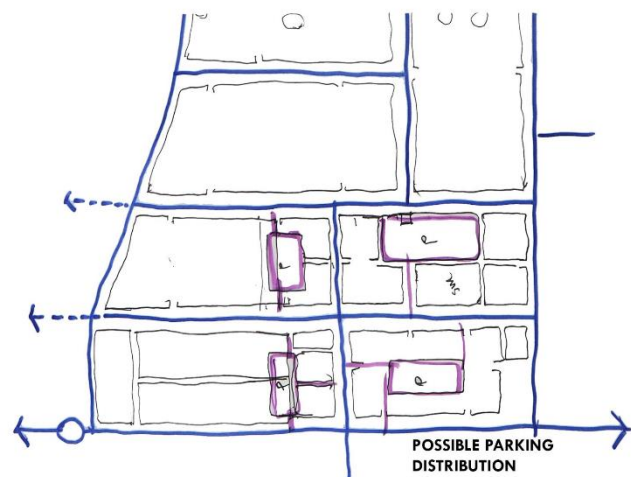


Figure 5.12: Possible Parking Distribution

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Figures 5.13, 5.14 & 5.15

Incorporate a WSUD system (possibly median rain-gardens) treating storm water as it drains west towards the watercourse. Further treatment and detention will of course be provided within the watercourse/drainage/open space area.

The slight widening of the first block adjacent to Freemantle Road enables improved internal block parking.

Strengths

- Direct connection via roundabouts to Loren Street at Duramana and new proposed N-S street to the proposed southern development
- Central park proposed for passive, active and festive occasions
- Ample parking
- Potential for flexibility and diversity
- Potential strong WSUD system

Weaknesses

- As above some solar access issues to northern section
- Still possible over-supply of retail space

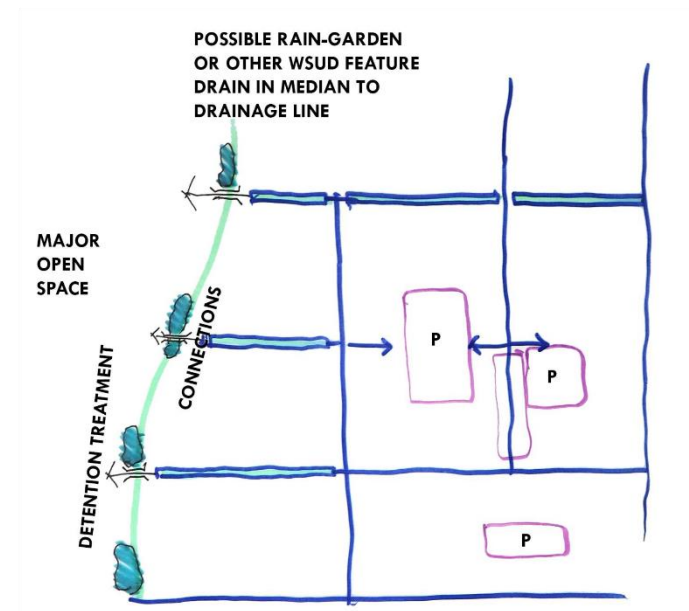


Figure 5.13: Possible WSUD & Parking

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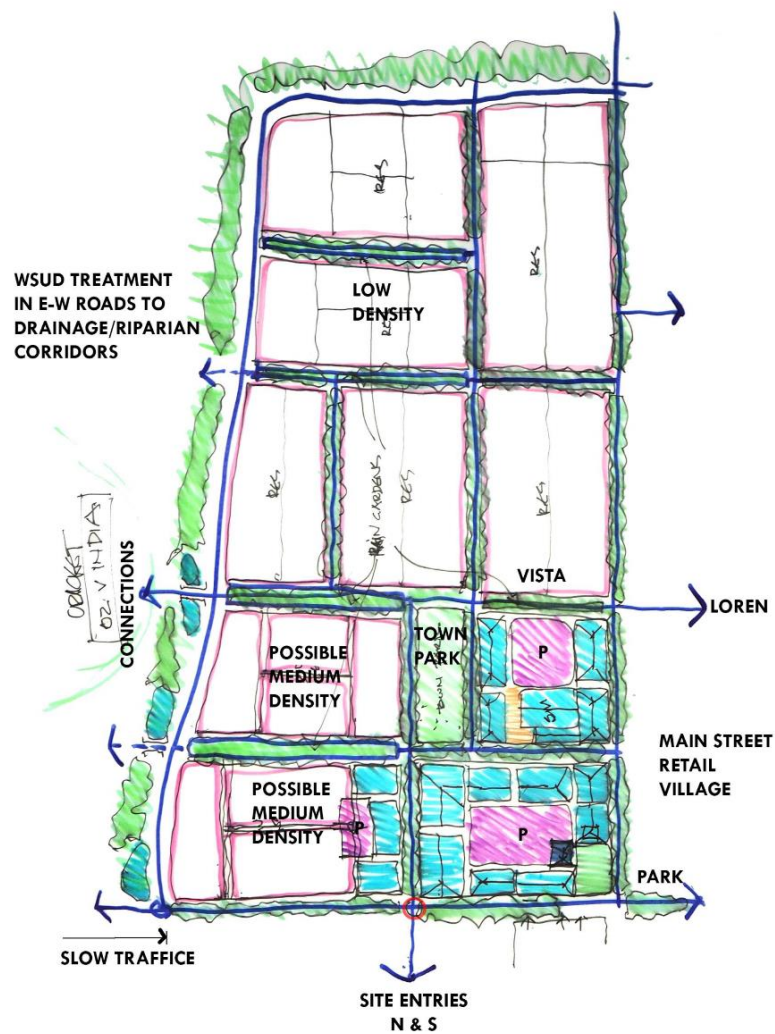


Figure 5.14: Masterplan with WSUD & Parking Upgrades

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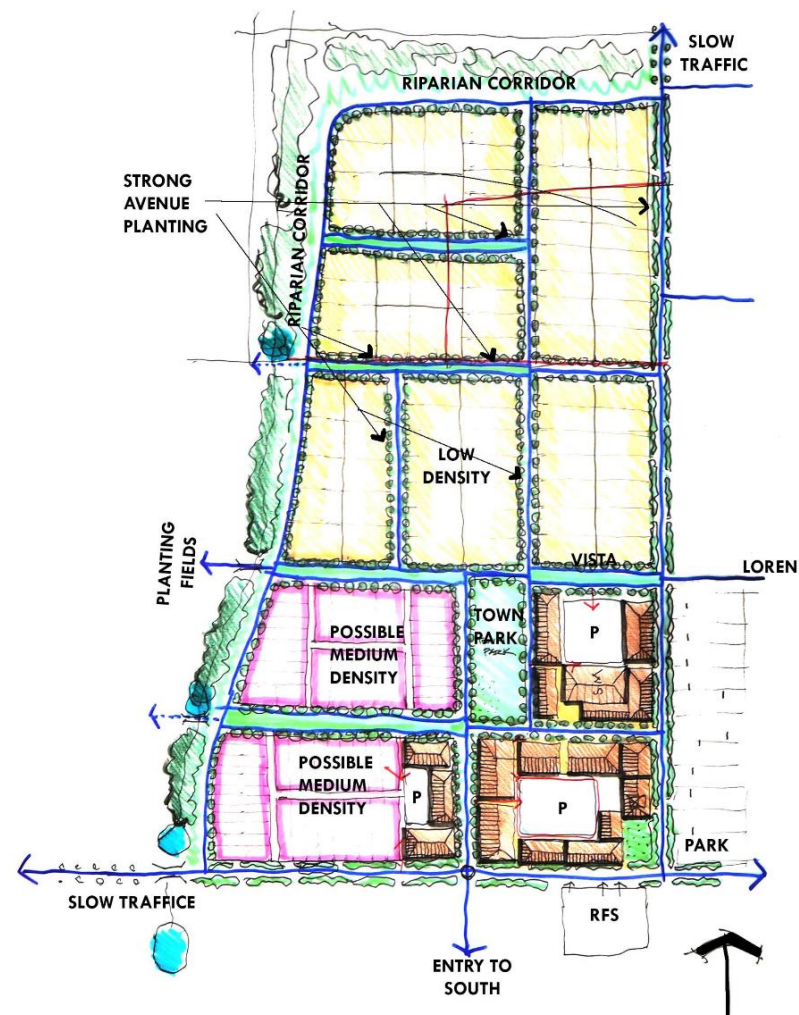


Figure 5.15: Revised Concept Masterplan

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Figure 5.16

This diagram seeks to substantially reduce the potential area of retail commercial to a more realistic level (6,000m² rather than 12,000m²) and convert some of the previous retail/commercial to townhouses or similar density residential.

Strengths

- More realistic amount of retail/commercial
- Excellent integration Main Street with central park
- Rear loaded townhouses to ensure no vehicular conflict with RFS
- Adequate and appropriate parking

Weaknesses

- Less commercial visibility to Freemantle Road



Figure 5.16: Reduced Retail Area

Reduced Retail area with rear parking courts (and some on-street parking) with supermarket on south side of street and town houses (rear loaded, facing Freemantle Road).

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Figure 5.17

Retail is located directly off Duramana at Loren Street intersection.

The retail fronts a "Main Street" which can be either serviced by angled on-street parking or rear parking lots.

Medium density development is proposed on Freemantle Road (rear accessed) opposite the RFS.

A mix of low-medium development typologies can be integrated between Freemantle / The Village Centre and the N-S drainage corridor

Strengths

- Appropriate retail area
- Potential for early residential development prior to retail village
- Direct access from intersection of Loren and Duramana to retail with vista to major Open Space Reserve

Weaknesses

- No direct retail visibility from Freemantle
- Further distant from residential areas to south and southeast.

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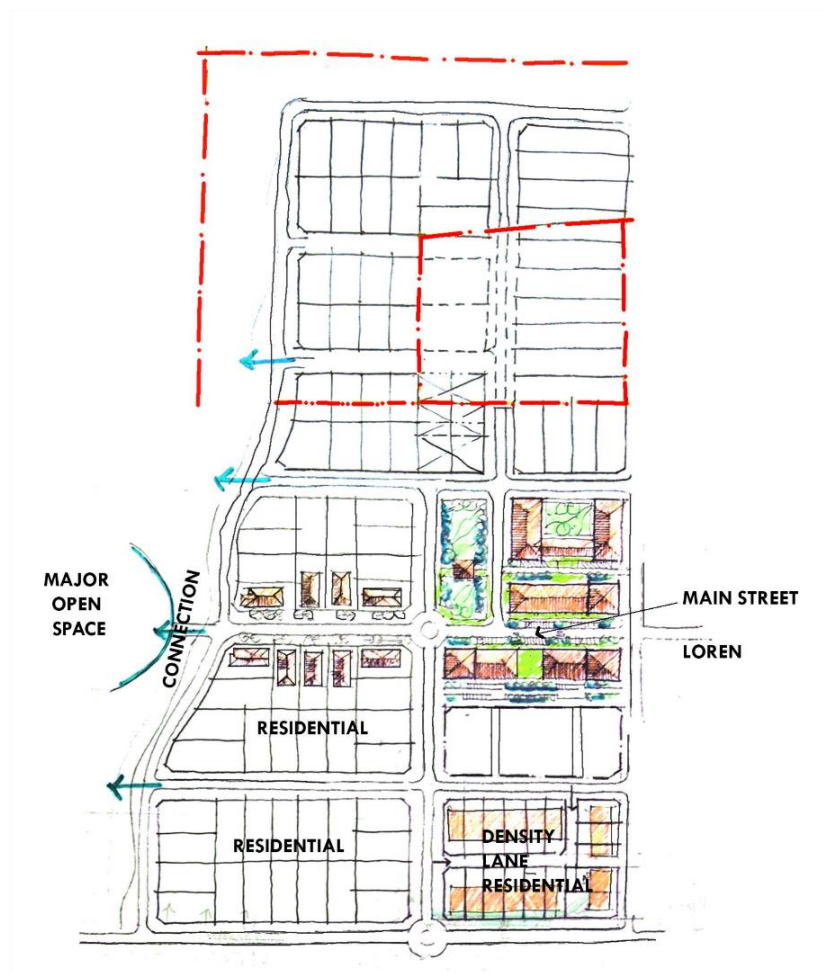


Figure 5.17: Village Centre Masterplan Northern Location

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5.4 CONCEPT MASTERPLAN (SESSION 4)

Session 3 & 4 focused predominantly on the development of the user Group 3 option.

The South-East corner concept design was relinquished in favour of a connection to Loren Street with a landscaped presence defining the high street.

The aim was to provide a sense of entry and identify the new precinct.

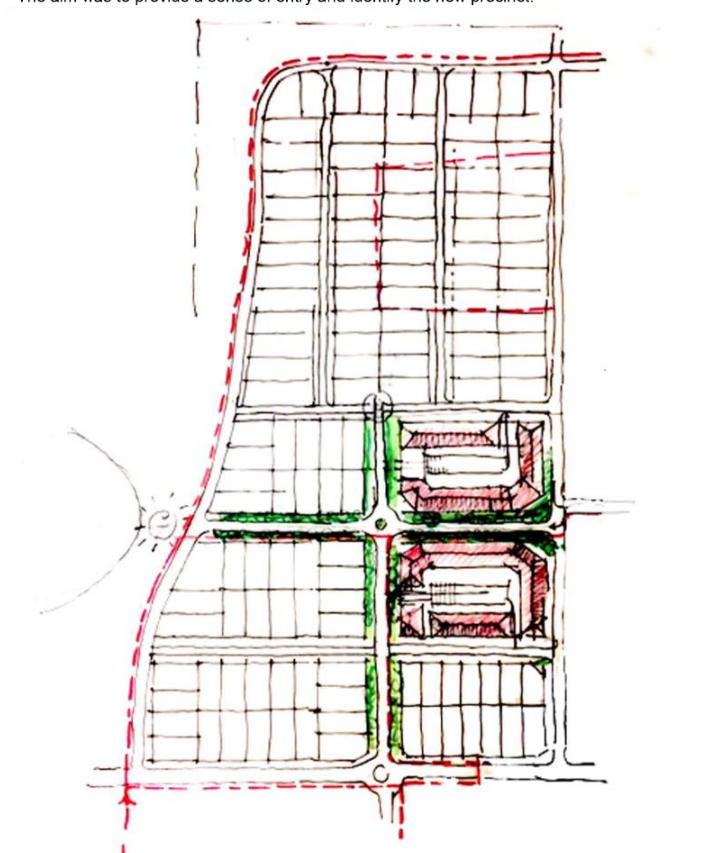


Figure 5.18: High Street and Preliminary Grid Layout

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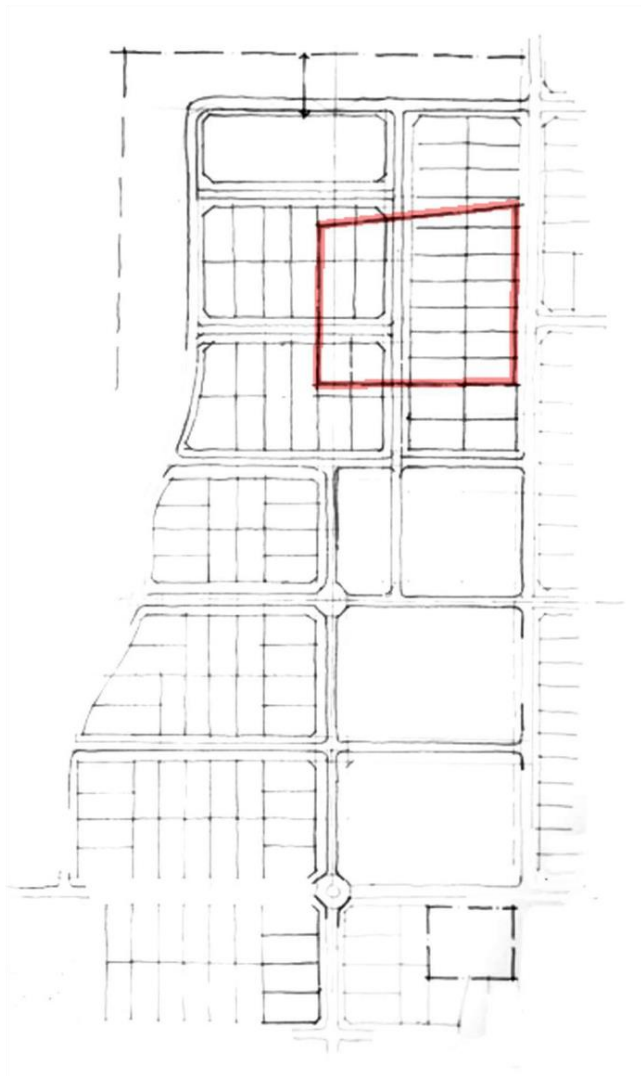


Figure 5.19: Developed Grid

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Figure 5.20: Developed Masterplan Concept

Figure J is the consolidation of User Group 3 ideas and workshop strategies into a final development masterplan concept including a rationalisation of the street grid to sit land ownership constraints.

Lots are predominantly 900m² with denser activity concentrated around the high street and town centre.

This option also considers future flexibility for a child care and possible aged care / seniors living near the town centre.

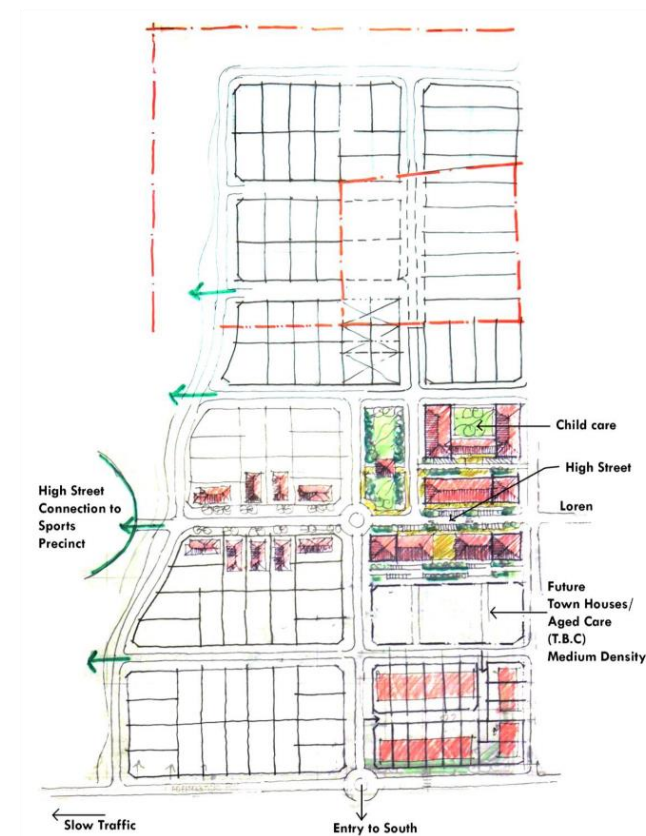


Figure 5.20: Developed Masterplan

APPENDIX 1

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6 CONCLUSIONS / OPTIONS

The EBD testing process has revealed a number of truths pertaining to the subject site. These include:

- The retail village would be desirably located at the intersection of Freemantle and Duramana Roads in order to optimise accessibility by motor vehicle, cycle and pedestrian.
- This intersection should be celebrated in some way to state the significance of this location.
- Access to the site and the Village should connect with access road to the south and at least one to the east (Loren).
- Traffic should be calmed when arriving from the north and west with entry statements, landscaping, traffic calming devices etc.
- The northern part of the site can be subdivided into large traditional lots (900m²) in an efficient and effective manner.
- A 50m buffer can be provided to surrounding rural/agricultural land for privacy and noise abatement purposes.
- This buffer is not necessary where the adjacent land use is proposed public open space.
- The western creek-line should be used to provide WSUD drainage works which will provide detention and water quality treatment.
- Access should be provided from the subject site to the open space area for pedestrians, cyclists and motor vehicles. The Village Centre should be readily connected to the open space area for economic purposes.
- Care must be taken to ensure that development of the site is compatible with surrounding development (residential to the south across Freemantle Road and RFS on Freemantle opposite the intersection with Duramana Road and with residential facing Duramana Road).
- Larger lots (900m²) are appropriate at the northern part of the site, the retail village is most appropriate in the central to south eastern sector of the site and medium density development of some form could be provided to the south and southwest of the site.
- Strong Street planting should be provided to all streets for local amenity and climatic comfort purposes.
- Village retail/commercial should be based around an E-W "Main Street" running from Duramana Road to and across the watercourse to the open space area.
- Main Street angled parking and central block parking courts should provide Village parking to the required level.
- A combined Town Park, market square, village green should be provided (in the order of 3000-4000m²).
- Active frontages should be provided to all retail streets (i.e. activate retail / commercial and residential frontages). All parking and servicing should be from the rear from service lanes.
- Advanced WSUD should be incorporated into E-W streets (as well as into creek-line open space).

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7 QUESTIONS / QUERIES / FURTHER INVESTIGATIONS

The following issues may well require further investigation:

- **Retail demand.** The approximate floor space for retail/commercial use needs to be confirmed. The area zoned seems somewhat excessive.
- **Vehicle traffic.** The daily traffic volumes on Freemantle and Duramana need to be confirmed to assist with retail demand and to establish safety regimes within and adjacent to the study area. Traffic calming mechanisms should be investigated.
- **WSUD mechanisms.** These should be considered on-site, on-street and on-creek. A variety of appropriate mechanisms should be considered.
- **Entry points.** Entries from the north and the west need to be carefully considered in terms of landscape, drainage, intersection connections and building form.
- **Housing typologies.** Much has been made of the 900m² minimum lot size. There is a strong belief that this is appropriate. Nevertheless, many corner lots are subdivided into dual occupancies which indicates that there is a market for something smaller. We will present information on small lots and appropriate medium density housing for discussion.
- **Parking.** There is a need to provide appropriate on and off-street parking, once retail/commercial floor space is ascertained.

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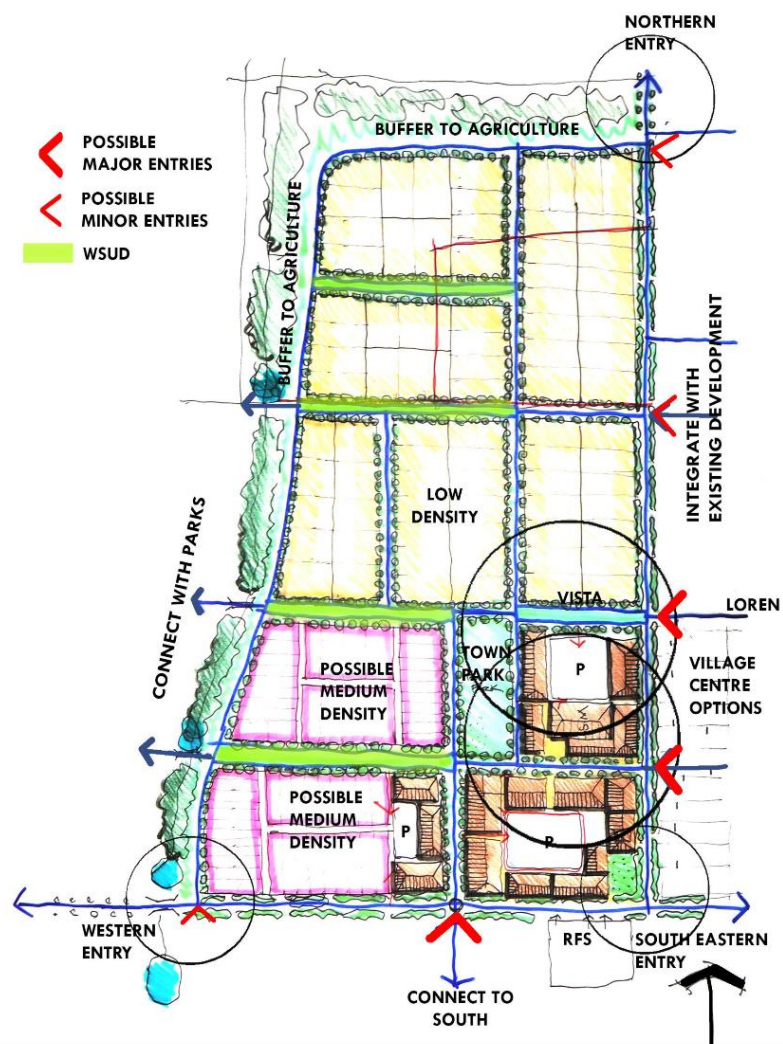


Figure 1: Further Design Considerations

APPENDIX 2

APPENDIX 2
DURAMANA ROAD PRECINCT
EGLINTON, BATHURST

**A Case for Medium Density
Housing**

7th February, 2019

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Duramana Precinct Masterplan, Bathurst

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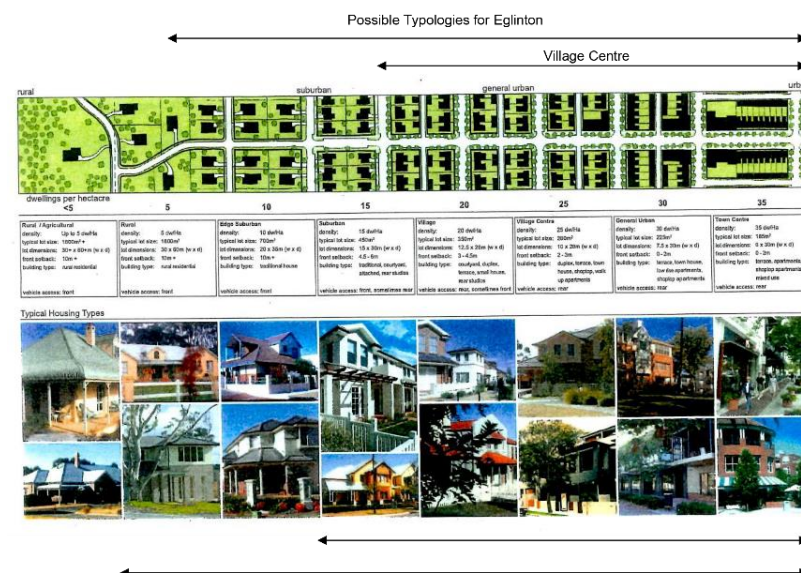
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1 DURAMANA ROAD PRECINCT

1.1 THE CASE FOR MEDIUM DENSITY DEVELOPMENT SCOPE OF WORKS

Council have requested in their brief for the Duramana Precinct that some investigation be carried out regarding increased density. This is that investigation. The following topics should be discussed:

- Council Policy
- Market
- Location
- Amenity
- Appropriate density and typology
- Zoning
- Transition



The Eglinton village could well provide typologies from about 5-10 du/ha to perhaps 30-35 du/ha (in the Village Centre

Figure 1: Residential Transect

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Duramana Precinct Masterplan, Bathurst

1.2 MEDIUM DENSITY DEVELOPMENT

Council Policy

There are a variety of existing and evolving Council policies which apply to this site. These include the following:

Existing Zonings:

- Residential (R1) which permits predominantly residential development with a minimum lot size of 900m² (530m² absolute minimum)
- Business Zone (B1) which permits retail, business, residential, apartments, mixed use and others
- Council's Housing Strategy recommends among other things:
 - Increase living densities and lot yields in appropriate locations
 - Maintain existing open space and plan for new open space
 - Improve accessibility and walkability in CBD and NAC's and increase housing stock in proximity
 - Encourage higher density living and lot yields on greenfield sites
 - Manage change
 - Encourage Masterplanning
 - Encourage development of high quality Urban Design principles to manage increased densities and change from old to new
 - Offset increase in densities with higher design standards (sustainability, accessibility, affordability etc.



Figure 2: Duplex and Townhouses

Duramana Precinct Masterplan, Bathurst

1.3 EGLINTON TODAY

(From "Housing Strategy")

Eglington is primarily detached dwellings mostly 3 or more bedrooms and an average household size of 2.9 persons. It is dominated by family households with only 14.4% representing lone person households, yet 12.3% of the population is over 65. 75% of households have 2 or more motor vehicles.

It should be noted overall that:

- Household size continues to decline (in occupancy)
- Bathurst population growth is consistent
- Median age of the population is increasing
- Separate detached housing dominates the housing market
- Most households are family households

There is a disparity between the provision of 4+ bedroom dwellings (higher than average) and the trend towards smaller households (lone and 2 person households).

Within Bathurst approximately 4% of all new dwelling approvals represent Medium Density Housing (3.2% in Eglington). However, most of this is Dual Occupancy and is generally 3-4 bedroom of similar floor area to detached dwellings. It could be argued that 3-4 bedroom detached dwellings on minimum lots of 530m² do not really qualify as Medium Density.

Supply and Demand

The minimum lot size in this area is 900m² with 530m² for Dual Occupancy.

This feeds the larger end of the market ... the anecdotal statement that the market wants 900m² lots is unable to be sustained because:

- Smaller lots are not permissible
- Where they are (as Dual Occupancy) they are in high demand

This suggests that a wider Medium Density market is being poorly served and supply is not fulfilling the needs of the changing market.

Current Density Controls

Bathurst is dominated by low density development at approximately 7.5du/ha.

Residential units are generally permitted except in specific locations; however the density controls are not as viable as Dual Occupancies.



Figure 3: Small Lot Housing

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1.4 COMMUNITY VISION

The key messages from the “Housing Strategy” Consultation process were:

Amenity and Liveability

- maintain rural feel
- engage community
- protect existing character
- provide public / private open space
- improve connectivity
- provide appropriate infrastructure

Housing Choice

- improve choice
- encourage quality design
- improve affordability

Housing Density

- plan for density increases (close to shops/services)

Sustainability

- reduce sprawl
- improve connectivity to shops/services and transport/walkability
- encourage sustainable housing

Infrastructure

Sewerage reticulation is generally not a major issue, merely one of staging.

Note that the issues of Housing Choice, Housing Density and Sustainability are poorly addressed at the moment.

Duramana Precinct Masterplan, Bathurst

1.5 STRATEGY FOR GROWTH AND CHANGE FOR EGLINTON

Actions recommended in “Housing Strategy”

- Encourage Masterplan for NAC and surrounding subdivision
- Identify appropriate densities, lot size and lot yield
- Investigate amendments to Planning Instruments to enable density improvements
- Investigate affordability, sustainability, accessibility and aging in place potential
- Consider landowner requests to enable higher density
- Establish development principles that achieve:
 - appropriate higher density housing or smaller lot sizes (including mixed-use)
 - provide adequate transition between higher and lower densities
 - provide mix of lot sizes

Summary

The growth strategies proposed in the “Housing Strategy” seek to:

- Increase living densities and lot yields
- Maintain existing open space and add new open space
- Improve accessibility and walkability
- Encourage higher density living and lot yields
- Manage changes from old to new
- Ensure quality access and possible public transport
- Encourage Masterplanning
- Encourage quality Urban Design
- Offset density increase with enhanced design standards (affordability, sustainability, aging in place etc)



Figure 4: Townhouses / small corner lots

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1.6 THE MARKET

There is no specific data which clearly defines market opportunity. However, note the following:

- Minimum subdivision lot size of 900m² means that this is what is delivered
- The number of Dual Occupancies (minimum 530m²) suggest that there is a market for smaller lots (although house sizes remain large)
- The demographics suggest:
 - increasing number of seniors
 - increasing number of lone person (and 2 person) households
 - increasing numbers of young people
- This would suggest the need for a more diverse range of housing typologies, particularly to service “downsizers” and “affordable start-ups” ... these would desirably be affordable small houses on small lots
- There is a prevalence of 3-4 plus bedroom dwellings in newly developed areas
- Thus, consider Medium Density, more diverse product both as small dwellings on small lots, as small dwellings in community title projects, and small apartment developments (3, 4, 6 pac and above) plus mixed-use / shop-top housing in the Village Centre



Figure 5: Small Lots, Duplex and Attached (Terrace) Housing

1.7 LOCATION

This more diverse Medium Density product should be clustered adjacent to the Village Centre in the following manner:

- Along Fremantle Road south and west of Village Centre
- West of Village Centre towards open space
- Within the Village Centre as shop top and apartment mixed-use development

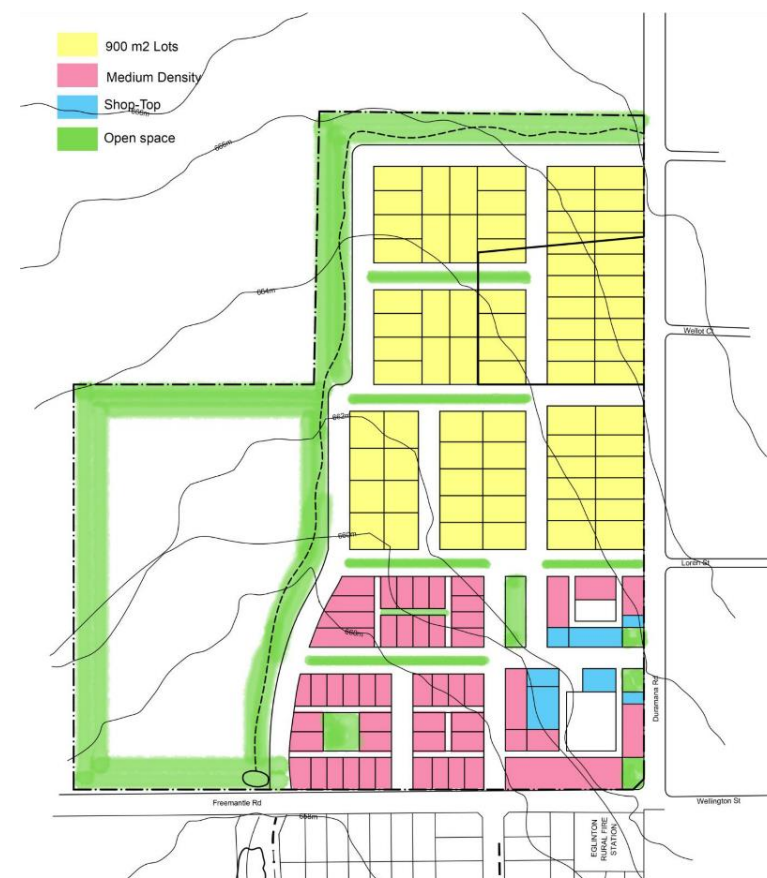


Figure 6: Duramana Precinct - Medium Density and Mixed-Used Location

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1.8 QUANTUM OF MEDIUM DENSITY

As there is very little Medium Density development elsewhere in Bathurst (except in traditional CBD centre, which has a splendid diversity and quality) then some care should be taken with supply.

Whilst a diverse range of Medium Density should be encouraged a degree of flexibility is desirable.

The "Variable Block" concept as set out below provides a suitable degree of flexibility with potential lots from 150m² – 450m² and provision of micro-dwellings on micro-lots, small houses on small lots, a mix of duplex, townhouse and apartment types.

This process is readily adaptable to the market.

The "Variable Block" is as below. Approximately 66m x 152m which can readily be subdivided into 15x30m lots (450m²) with rear lanes or alternatively subdivided in whole or part to accommodate a diversity of smaller lots (150m², 180², 225m², 300m² etc) to accommodate micro dwellings, terraces, duplexes and small dwellings.

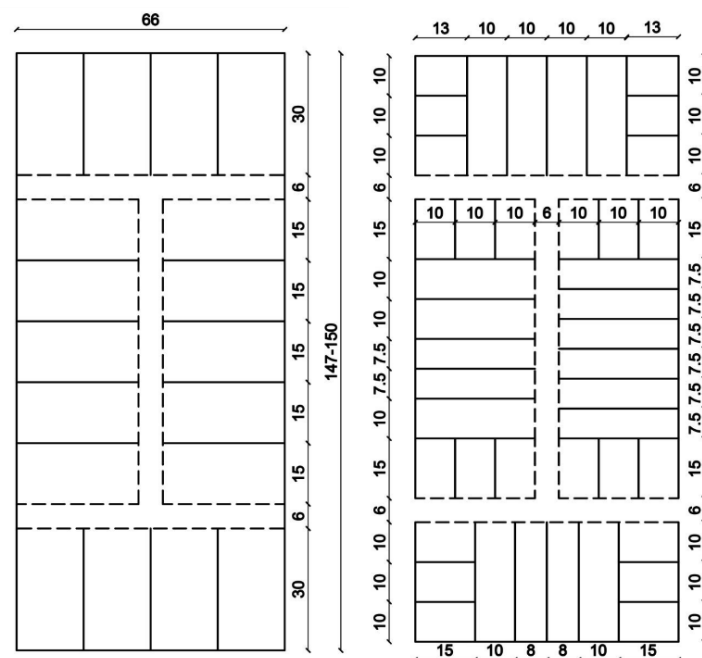


Figure 8: Typical "Variable Block"

Figure 7: Densified Option

Below are two examples of how the "Variable Block" might be further subdivided and developed to achieve a diversity of Medium Density housing typologies.



Figure 9: Possible "Variable Block" Development types and "Pocket Neighbourhood"

APPENDIX 2

The "Variable Block" is applied below (Figure 10 & Figure 11) to the subject site.

Figure 10 illustrates how Medium Density may be accommodated using mixed-use, shop-top and apartments in the Village Core of 15m frontage (450-500m²) lots extending west to the open space.

Figure 11 demonstrates a more dense, more diverse subdivision which includes shop-top / mixed-use and apartments in the Village Core and a diversity of small lots and more dense Medium Density to the west comprising townhouses / terraces, duplexes, small lots (300-450m²).

The precise mix will be subject to further market analysis and market testing.



Figure 10: Sample Medium Density Housing (450m² lots and apartments / mixed-use)



Figure 11: Medium Density - Possible Mix of Building Typologies

1.9 POSSIBLE ZONINGS

The existing zoning in Eglinton includes:

- Residential (R1)
- Business Zone (B4)

These provide for large lots (900m² houses / 3-4+ bedroom) and for Dual Occupancy (generally on corner lots (minimum 530m²).

- An appropriate zoning might include:
- Retain existing (R1) over northern part of the site
- Consider B4 (mixed-use local centre) over the proposed Village Centre
- Consider Medium Density Residential around the Village Centre as shown extending from Fremantle Road to about Loren Street and from Village Centre to the Riparian Corridor. This could either be a Medium Density Residential Zone (probably a new zone as no existing zones seem appropriate or a further inclusion in the B4 zone perhaps as indicated in DCP outside the core mixed-use area.

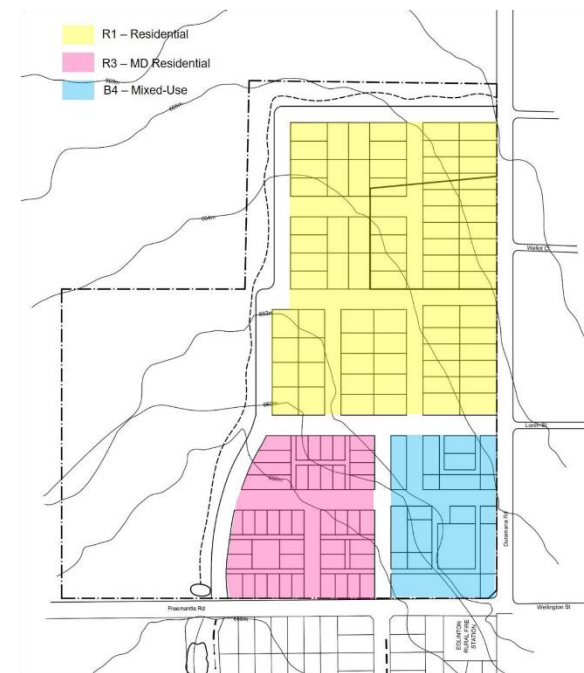


Figure 12: Possible Zoning

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Duramana Precinct Masterplan, Bathurst

1.10 SPACE APPROPRIATE TYPOLOGIES

Appropriate typologies may be drawn from those shown below in Table 1.

Table 1

Typology	Lot Size m ²	Frontage Metre	Garage	Storeys	Title	Comment
Small house	450	15	F/R	1-2	Torrens	?
Zero lot	300	10	R	2	Torrens	
Very small	300	10	R	2	Torrens	
Duplex	225	7.5	R	2	Torrens	
Terrace	225-180	7.5-6	R	2	Torrens	
Micro	180-100	10	R/F	1-2	?	
3 pac+3	300 (100)	10	R	2	Strata	?
4 pac+4/6	?	?	R	2-3	Strata	
6 pac+6/9	?	?	R	2-3	Strata	



Small Lot Housing



Terrace Housing



Shop Top Housing



Shop Top Housing



Terrace Housing



Zero Lot Housing

Figure 13: Typologies

Duramana Precinct Masterplan, Bathurst

1.11 TRANSITION

Council is concerned about the "transition" from Medium Density /Village Centre to large lot / traditional subdivision (single storey 3-4+ bedrooms on 900m²).

The Village Centre could go as high as 3 storeys (2 storeys of shop top or apartment on GF retail / commercial).

This can transition via 2 storey Medium Density (terrace, small lot, micro-lot or apartments) to 1 and 2 storey cottage lots (450-600m²) to the existing (900m² single storey 3-4 bedroom+). Such transitions are perfectly comfortable.

Note that there may also be a case for 2-3 storey Village Centre / Medium Density to front Fremantle Road and the southern part of Duramana Road.

The northern part of the site fronting Duramana should be developed as single storey large houses as per the eastern side.

The Medium Density typologies can extend from the Village Centre to the Riparian Corridor/open space to take advantage of the amenity offered.



Figure 14: Street Engagement - Verandahs / Front Fence / Hedges



Figure 15: Transition from interim residential to business / commercial

APPENDIX 2

It should be noted that such transitions can be further assisted by:

- Strong Street landscaping comprising large canopied deciduous trees which will:
 - soften and screen building scale
 - provide unifying feature
 - improve climate comfort (summer shade/winter sun)
- careful treatment between public/private interface comprising:
 - front fence / hedges / gardens
 - Front verandah to accrete the street and integrate facades.



Mixed-Use / Shop top Apartments (2-3 storey)



Terrace / Attached Dwellings (2 storey)



Duplex Dwellings (2 storey)



Small storey Cottage (1 storey)

Figure 16: Shows Transition from Apartments (2-3 storey) to Cottages (single storey)



Figure 17: Projecting Verandah / Street Treatment



Figure 18: Possible Fence Types

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1.12 OPEN SPACE

Council policy seeks to retain, enhance and expand open space areas. The proposal seeks to do this in the following ways:

- Strongly landscaped streets (in verges and buildouts)
- Creation of "Riparian Corridors" which follows the drainage line down the western boundary of the site and creates passive open space, environmental corridor, drainage treatment and public pathways for pedestrians, cyclists and possible pony trails.
- Creation of small entry parks to Village Centre as shown.
- Creation of central "Town Park" / "Market Square" as focus for the Village Centre.
- Creation of central E-W medians (approximately 5m) which can fulfil drainage functions as well as landscape functions.
- Possible private / communal open spaces which can connect and/or integrate with public domain.



Figure 19: Possible Public Domain Landscape

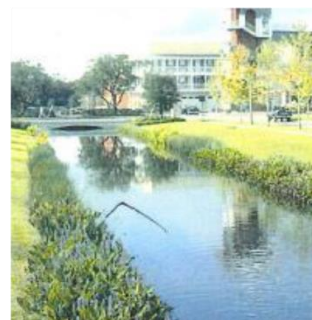


Figure 20: Possible WSUD Treatment



Figure 21: Possible Riparian Corridor

1.13 CONCLUSIONS

This brief report suggests that there is an untapped market for more dense dwellings particularly to service downsizers and start-ups / affordable.

It notes that current planning controls prevent this from happening.

It proposes that an area in and around the Village Centre in the Duramana Precinct of Eglinton should enable a mix of Medium Density housing to service this demand.

It suggests that the "Variable Block" approach be taken which can facilitate a range of Medium Density in the Village Centre of the S-W sector of the site.

It proposes a general block layout which can be sub-divided as 450m², or further subdivided into 300 m² small lots and/or 225m² lots for attached housing, as well as lots suited to strata apartments and/or mixed-use/shop top dwellings.

It is contended that with excellent street planting, careful arrangement of buildings heights and careful treatments of public / private interface front fences, front gardens and front verandahs a successful and attractive transition can be realised between this new Medium Density and the existing large lot development (900m²).

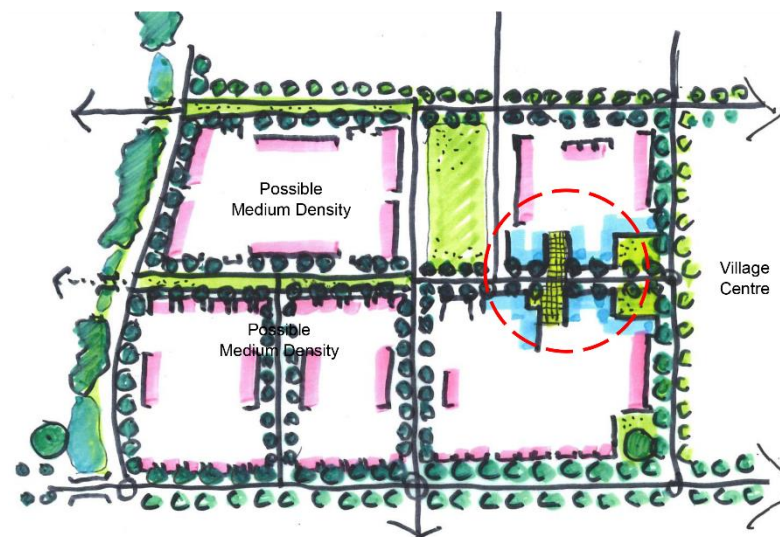


Figure 22: Possible Medium Density Concept

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- Creation of small entry parks to Village Centre as shown.
- Creation of central "Town Park" / "Market Square" as focus for the Village Centre.
- Creation of central E-W medians (approximately 5m) which can fulfil drainage functions as well as landscape functions.
- Possible private / communal open spaces which can connect and/or integrate with public domain.



Figure 19: Possible Public Domain Landscape



Figure 20: Possible WSUD Treatment



Figure 21: Possible Riparian Corridor

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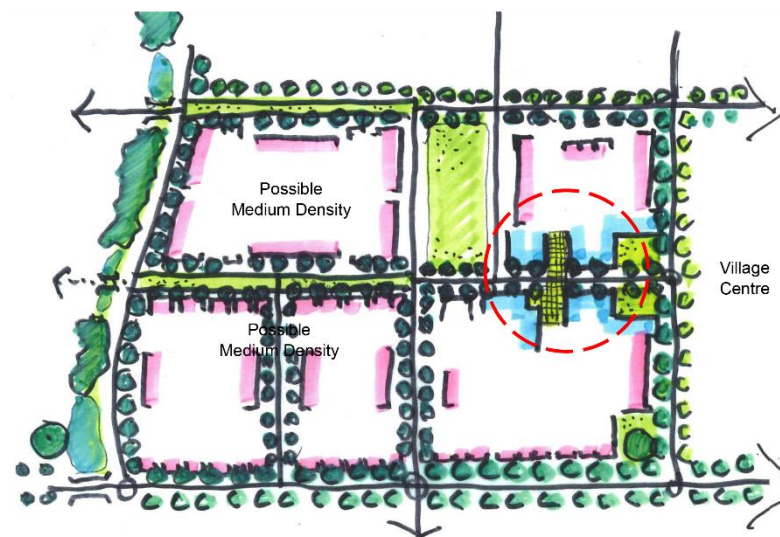
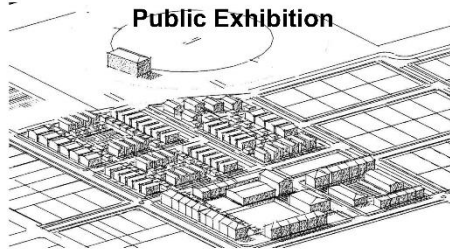


Figure 22: Possible Medium Density Concept

APPENDIX 3

APPENDIX 3 DURAMANA ROAD PRECINCT EGLINTON, BATHURST Public Exhibition



HOW TO HAVE YOUR SAY...

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The Site – A Photo/Topography

Background

1. Retail

Background study suggest that a total Retail/Commercial of about 3000 sqm including a supermarket of up to 1200 sqm could be required in the medium to long term. Much of this could be in the form of Mixed-Use Development with Retail/Commercial at street level with one or two floors of shop-top housing above.

2. Residential

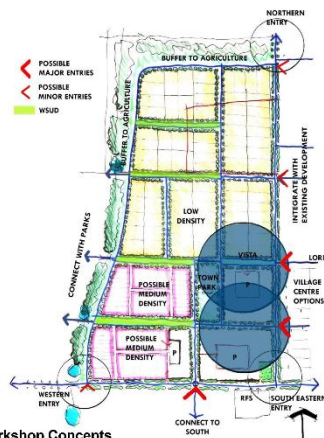
There is no specific data which clearly defines market opportunity. However, note the following:

- Minimum subdivision lot size of 900 sqm means that this is what is delivered
- The number of Dual Occupancies suggest that there is a market for smaller lots (although house sizes remain large)
- The demographics suggest:
 - increasing number of seniors
 - increasing number of lone person (and 2 person) households
 - increasing numbers of young people
 - This would suggest the need for a more diverse range of housing typologies, particularly to service "downsizers" and "affordable start-ups" ... these would desirably be affordable small houses on small lots
 - There is a prevalence of 3-4 plus bedroom dwellings in newly developed areas
- Thus, consider Medium Density, more diverse product both as small dwellings on small lots, as small dwellings in community title projects, and small apartment developments (3, 4, 6 pac and above) plus mixed-use / shop-top housing in the Village Centre.

Enquiry by Design Workshop

An EBD Workshop was held late last year (10 & 11 December 2018). The conclusions of this workshop is illustrated below:

- Northern part of the site was designed for 900 sqm lots.
- Village Centre to be located at one of the location shown below.
- Possibility of smaller lots and medium density (to suit downsizing seniors and start-up affordable housing) to be explored in S-W corner.



Workshop Concepts

Residential Types

This more diverse Medium Density product should be clustered adjacent to the Village Centre in the following manner:

- Along Fremantle Road south and west of Village Centre
- West of Village Centre towards open space
- Within the Village Centre as shop top and apartment mixed-use development



Medium Density and Mixed-Used Potential

Density

Traditional Detached: 20m and Larger Frontage Lots

These are free standing dwellings which comprise the general village "frame". Larger lots will give flexibility in dwelling design. These lots are suitable for various orientations to accommodate solar access to private open space.



Small Lot Housing: 10-15m Frontage Lots

This type comprises courtyard housing suitable for free standing small family housing. This is a flexible and efficient housing form which allows for a separate house on lots comparable to those in Bathurst older centre. These may also contain small apartments (3 pac/4 pac).



Attached Houses: 6-10m Frontage Lots

These provide for terrace and small lot courtyard housing forms generally with north facing (good solar access) courts and with rear lane car access. These are zero lot line on one or both boundaries. These may also contain ancillary dwellings over garages.

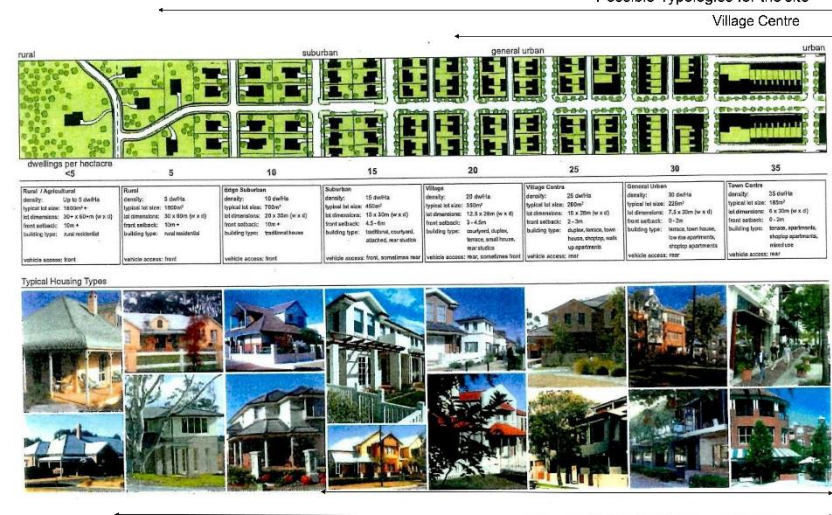


Mixed Use/Apartments

These are located in the Village Centre and may be 2-3 storey apartment buildings or a 2-3 storey terrace with retail/commercial at ground level.



Possible Typologies for the site



The Eglinton village could well provide typologies from about 5-10 du/ha to perhaps 30-35 du/ha (in the Village Centre)
Residential Transect

APPENDIX 3

Village Centre – Optional Locations (SWOT)

OPTION A

Strengths

- Clearly located at intersection of Freemantle and Duramana
- Ready vehicular access from both streets (roundabouts if needed)
- Potential to create small parks and pedestrian walks
- Capacity for 900m² blocks to the north
- Capacity to connect with N-S road in adjacent subdivision to the south
- Good connections to Park to West
- Drains amenity from drainage reserve
- Central park proposed for passive, active and festive occasions
- Ample parking
- Potential for flexibility and diversity
- Potential strong WSUD system
- Excellent integration Main Street with central park

Weaknesses

- Limited solar access to some lots due to E-W roads required by land ownership and site dimensions
- Poor less commercial visibility to Freemantle Road



A: Main Street



C: Rain Garden Street

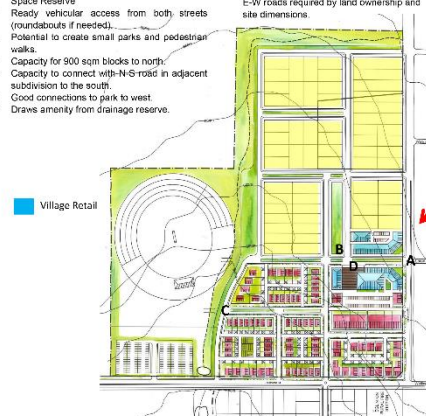
OPTION B

Strengths

- Appropriate retail area
- Potential for early residential development prior to retail village
- Direct access from intersection of Loren and Duramana to retail with vista to major Open Space Reserve
- Ready vehicular access from both streets (roundabouts if needed)
- Potential to create small parks and pedestrian walks
- Capacity for 900 sqm blocks to north
- Capacity to connect with N-S road in adjacent subdivision to the south
- Good connections to park to west
- Drains amenity from drainage reserve

Weaknesses

- No direct retail visibility from Freemantle Road
- Further distant from residential area to south and southeast
- Limited solar access to some lots due to E-W roads required by land ownership and site dimensions



B: Church from Park



D: Public Square

Streets of Character

E-W Rain Garden Medians

TREE SPECIES LIST

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