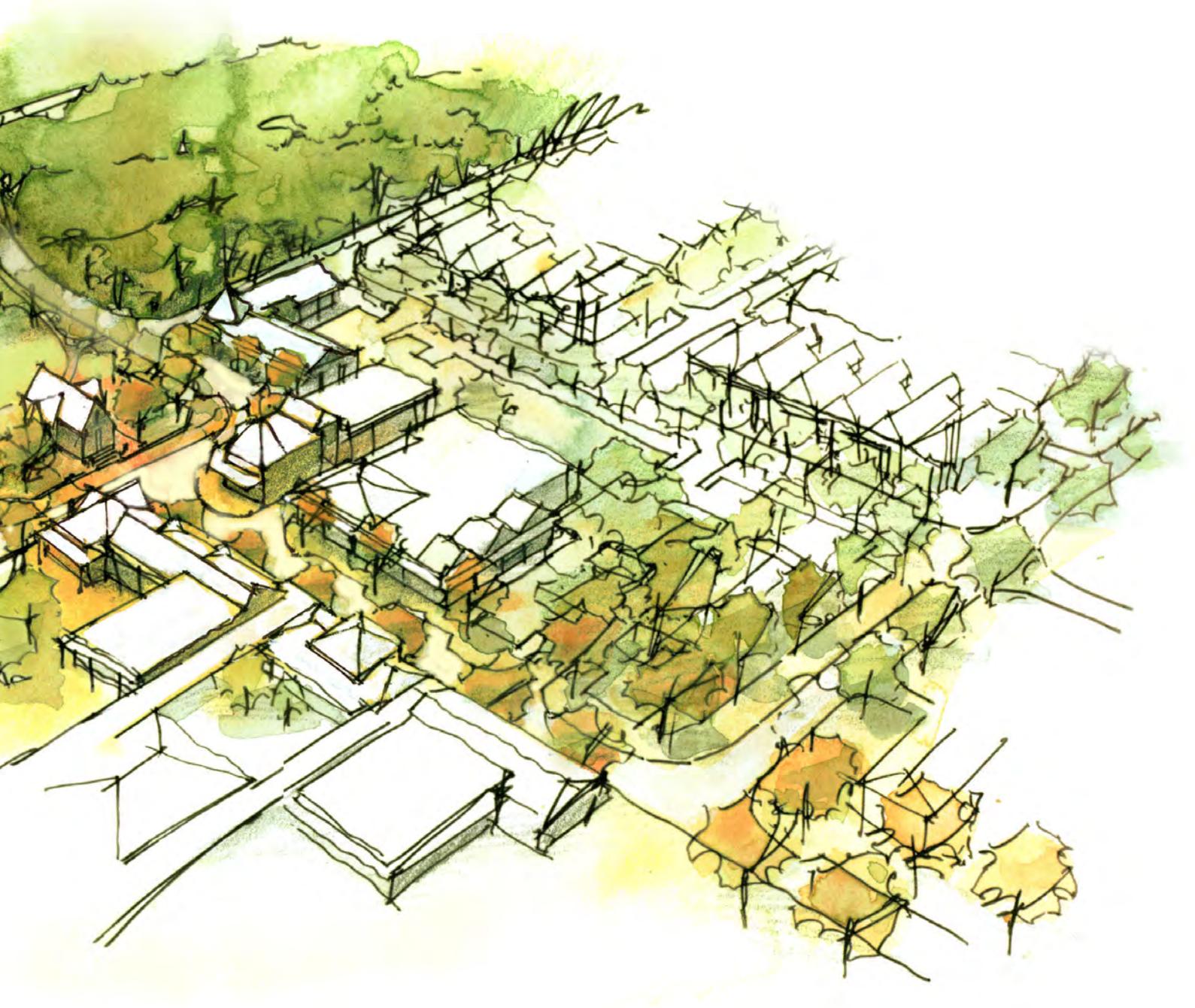

ELLENBROOK
VILLAGE 7B DEVELOPMENT PLAN
SEPTEMBER 2016



TITLE: Ellenbrook Village 7B Development Plan
PROJECT: Ellenbrook
PREPARED FOR: Ellenbrook Management Ltd
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ELLENBROOK - VILLAGE 7B DEVELOPMENT PLAN

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TABLE OF AMENDMENTS

AMENDMENT NO.	SUMMARY OF THE AMENDMENT	DATE APPROVED BY WAPC
1	<ul style="list-style-type: none"> • Amendments to Density Code Plan 	25 May 2016
3	<ul style="list-style-type: none"> • Modifications to densities in Village 7B • Modifications to table 2 – Dwelling & Density Calculations to reflect new densities and lot yields • Modifications to figure 13 to reflect new zonings • Modifications to sections 1 – 10 to reflect updated area may • Insertation of updated maps in Appendix E-H. 	14 December 2016

TABLE OF DENSITY PLANS

DENSITY PLAN NO.	AREA OF DENSITY PLAN APPLICATION AMENDMENT TYPE	DATE ENDORSED BY WAPC

Amendment 3 to Development Plan 18 has been approved by the Western Australian Planning Commission on 14 December 2016.

A handwritten signature in black ink, appearing to be 'P. L.', written over a horizontal line.

Signed by an officer duly authorised by the Western Australian Planning Commission pursuant to Section 16 of the Planning and Development Act 2005

EXECUTIVE SUMMARY – A VISION FOR A COMMUNITY

This Development Plan been prepared to guide development of the second stage of Ellenbrook Village 7, in accordance with the requirements of the City of Swan Local Planning Scheme No. 17.

Ellenbrook Village 7B, comprising approximately 116 hectares, is located directly east of Village 7A and immediately north of The Vines. The Lexia conservation reserve and Maralla Road form the northern boundary of the village and Railway Parade the eastern boundary. The Sawpit Gully conservation reserve runs through the village.

The Development Plan for Village 7B has capacity to accommodate approximately 1,150 lots and 1,300 dwellings for a community of around 3,760 residents.

The design has been guided by an 'Avon Valley' theme. Together with the core Ellenbrook principles that underpin the design

of a modern residential community, the Avon Valley's rural landscape and historic townsites have influenced the layout, and architectural and landscape theme for Village 7B.

The Development Plan design accommodates a variety of residential lot sizes, ranging from approximately 150m² through to in excess of 2,000m². This is to encourage a diversity of households to live in Village 7B, both in design and affordability. This diversity will be further encouraged through design guidelines that will be tailored to achieve specific character within nominated residential precincts. Larger lots are provided on the western periphery of Village 7B to provide a transition of lot sizes from the larger lots located within the adjoining Vines development. Larger lots will also front Maralla Road, as a transition from the rural setting to the north. Smaller lots will be provided in and around the Village Centre and around areas of POS.

The natural drainage lines, remnant vegetation and providing appropriate access to the conservation areas have influenced the design of the open space system.

All future residents will have ready access to the commercial, retail and educational facilities located in the Village Centre and the parkway system linking through the Lexia conservation reserve and Village 6 (Malvern Springs) via the interconnected street network and extensive network of footpaths and cycleways.



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Appendix B	Environmental Assessment
Appendix C	Report on Engineering Aspects
Appendix D	Acoustic Report
Appendix E	Zoning Classification Plan
Appendix F	Density Sites Plan
Appendix G	Village 7B Development Plan
Appendix H	Bushfire Management Plan
Appendix I	Village 8 Development Plan A (AS3959 Design Requirement Plan)

1.0 INTRODUCTION



FIGURE 1 - LOCATION

1.1 LOCATION/LOCAL CONTEXT

The Ellenbrook project is located within the City of Swan, approximately 20km north-east of the Perth CBD and within 10km of the Midland Town Centre.

Village 7B is the northern extent of Ellenbrook. Village 7B is located directly north-east of Village 7A and immediately north of Woburn Park, The Vines and Lot 4 Railway Parade. It is approximately 116 hectares in area and elongated generally in an east-west direction. The Lexia conservation reserve and Maralla Road form the northern boundary of the village and Railway Parade the eastern boundary. Sawpit Gully, a tributary of Ellen Brook, dissects the village.

The surrounding area to the north and east is characterised by rural land uses. Walyunga National Park is located approximately three kilometres east and incorporates the start of the Avon River.

1.2 LAND DESCRIPTION

Village 7B is wholly comprised in one lot, being Lot 9165 on Deposited Plan 59330 - Volume 2697, Folio 882.



FIGURE 2 - LOCAL CONTEXT

1.3 LAND USE/LANDFORM

Village 7B extends over approximately 116 hectares that is predominantly cleared of vegetation. Site surveys have been undertaken to identify opportunities for the retention of significant vegetation where possible.

The village falls from a high point of approximately 33 metres in the west to a low point of approximately 18 metres in the east, adjacent Sawpit Gully. Two natural drainage lines cross through site – Sawpit Gully through the eastern part of the site and a drainage line along part of the southern boundary. An existing dam is located near the south-eastern corner of the village.

1.4 VIEWS

Views are available from within the Village 7B area to the adjacent conservation reserves, including the Lexia Wetlands, and the Darling Range escarpment. The retention of the elevated terrain, where possible, and careful orientation of streets will enable future residents the ability to enjoy the benefit of these views and assist with orientation.



FIGURE 3 - LANDFORM



VIEW FROM EASTERN SECTOR OF VILLAGE 7B TO SCARP

1.5 CONSERVATION RESERVES

Extensive conservation areas, which are protected through Metropolitan Region Scheme Parks and Recreation Reservations, surround the northern portion of the Village 7B area and follow Sawpit Gully through the site. West of Sawpit Gully, the northern portion of Village 7B abuts the Lexia Wetlands providing an attractive outlook for residents. A hard edge treatment in the form of a road interface will be provided adjacent to the reservations to provide an appropriate public interface. The proposed road reserve will ensure a 20m cleared zone with perimeter fencing to control public access.



FIGURE 4 - CONSERVATION AREAS



LEXIA CONSERVATION AREA

2.0 DESIGN CONCEPT



2.1 THEME

'Avon Valley' is the theme for Village 7B

A primary objective in the planning of Ellenbrook is to create Villages with a distinctive character and identity with 'central places' which foster a sense of community belonging.

Village 7B is located on the doorstep of the Avon Valley, which provides a picturesque backdrop. Landscape elements of the Avon Valley are found in Village 7B, including rolling pasture, a creekline, remnant bushland and backdrop of the scarp.

Village 7B completes the Ellenbrook New Town project and is located close to the start of the wider Avon Valley region. The Avon Valley region stretches from Brookton in the south to New Norcia in the north and includes the towns of Beverley, Brookton, Goomalling, Northam, York and Toodyay. The wider Avon basin, or 'Avon Arc', also includes the towns of Bindoon and Gingin.

The Avon Valley features a varied landscape of forest, gently rolling hills, rocky outcrops, winding streams, broadacre farming land and historic towns. Situated on the Avon River, York is Western Australia's oldest inland town, settled in 1831.

Together with the core Ellenbrook principles that underpin the design of a modern residential community, the Avon Valley's rural landscape and historic townsites have influenced the layout and architectural theme for Village 7B. Rather than mimicking these settlements, Village 7B will be a contemporary interpretation of the historic theme.

2.1.1 Open Space Structure / Landscape

The open space structure will be based on retaining the natural features of the Village, providing links to the Lexia conservation area and The Vines, and establishing local focal points. This will offer residents and visitors an extensive and interesting car-free network system with wider links to Ellenbrook as a whole.

The juxtaposition of 'working' and 'natural' landscapes that is common in the Avon Valley will be reflected in the mix of formal parks and the retained natural drainage line along the southern boundary of the village. Native vegetation will be retained within areas of public open space and widened road reserves. The existing dam in the east will be retained as a local feature that reflects the theme of Village 7B. A formal 'town square' will be provided in the village centre.

2.1.2 Housing Form

The detailed design guidelines will encourage housing forms that reflect the Avon Valley theme in key areas of Village 7B. There will be a wider range of housing elements in other areas, reflecting the eclectic mix of housing seen in Avon Valley towns away from the main street. The design guidelines will also promote sustainable living features.



FIGURE 5 - PRELIMINARY LINKAGES CONCEPT



2.1.3 Village Centre

The village centre will be the focal point and meeting area for residents and visitors. Located on the central road and adjacent the Sawpit Gully reserve, the village centre will be based on an Avon Valley town main street. Co-location of the primary school, retail/commercial premises, community facilities and the 'town square' will create a destination point easily accessible by pedestrians, cyclists and motorists.

2.1.4 Self Sufficiency

Local employment opportunities in the village centre, and the maturing of the Ellenbrook Town Centre and ultimately the nearby District Centre will enable the residents of Village 7B to enjoy a relatively sustainable existence. As such, Village 7B will be able to offer ready access to the majority of daily needs and employment opportunities during its development phase.

2.2 DESIGN PRINCIPLES/OBJECTIVES

In keeping with the Ellenbrook Joint Venture's overall vision statement, the design approach adopted for Village 7B was defined by and framed around a number of key principles and objectives.

2.2.1 Principles

Village 7B will be a modern community designed to provide housing, recreation and community facilities for approximately 3,760 residents. It will offer a wide choice of housing that caters for varied household types and lifestyles in an attractive environment designed to enhance the natural features of the site.

While signifying a return to the more traditional values of community living, Village 7B will also pursue a leadership role in the more efficient delivery of infrastructure and in the implementation of advanced sustainable environment built form initiatives.

2.2.2 Objectives

- To build a community based upon traditional design principles adapted to the changing demands of our contemporary lifestyles;
- To provide varied housing and services for a range of income groups and household types;
- To achieve integrated community planning and compliance with the City of Swan Community Plan requirements;
- To create an interconnected movement network that minimises total vehicle kilometres travelled and gives priority to pedestrian and cyclist access;
- To employ water sensitive design principles via appropriate stormwater management;
- To reinforce the Village's identity through a unifying landscape, retained natural landforms and unique design elements applied to housing in key areas and core buildings;
- To promote energy efficiency, water conservation and waste management through sustainable Village and building design;
- To emphasise linear parkway trails and linkages to nature that incorporate the retained remnant vegetation;
- To create a landscaping theme based upon the concept of the juxtaposition of 'natural' and 'working' landscapes.

Inspirational design elements will include:

- Enhancing the natural landscape in key 'public domain' locations through formal plantings;
- Density housing adjacent to the village centre, public open space and environmental features;
- Linear public open space;
- Simple yet dramatic architecture for public buildings;
- Colour palette that reflects the Avon theme and complements the natural setting;
- Interconnected street pattern, including links to The Vines;
- Gradation of lot sizes, including larger lots adjacent to The Vines to the south and the rural land north of Maralla Road.

The Village design and built form will promote:

- energy efficiency by promoting walking/cycling and solar oriented housing; and
- water conservation through selective landscaping and drainage management.

Village 7B will be developed and designed to cater for a return to a simple lifestyle, where neighbours know each other and the landscape is respected. The design will seek to create a pattern of streets, lots and open spaces of varying size to compliment the physical attributes of the site in a sustainable manner.



- | | | | | | |
|---|--|----|--|----|---------------------------|
| 1 | country lots | 9 | link to lexia wall | 17 | cafe |
| 2 | threshold | 10 | primary school | 18 | iconic bridge |
| 3 | existing watercourse | 11 | future retail expansion (or group housing) | 19 | memorial gardens |
| 4 | threshold 'orchard' and 'new norcia wall' | 12 | link road to the vines | 20 | mixed use |
| 5 | threshold/entry gardens with community pavillion | 13 | village centre cottages | 21 | tree retention |
| 6 | link to vines | 14 | dress circle | 22 | dam and country pavillion |
| 7 | tree retention | 15 | church/sales office/community building | 23 | wind row |
| 8 | minor square | 16 | village square and picnic grounds to saw-pit gully | | |

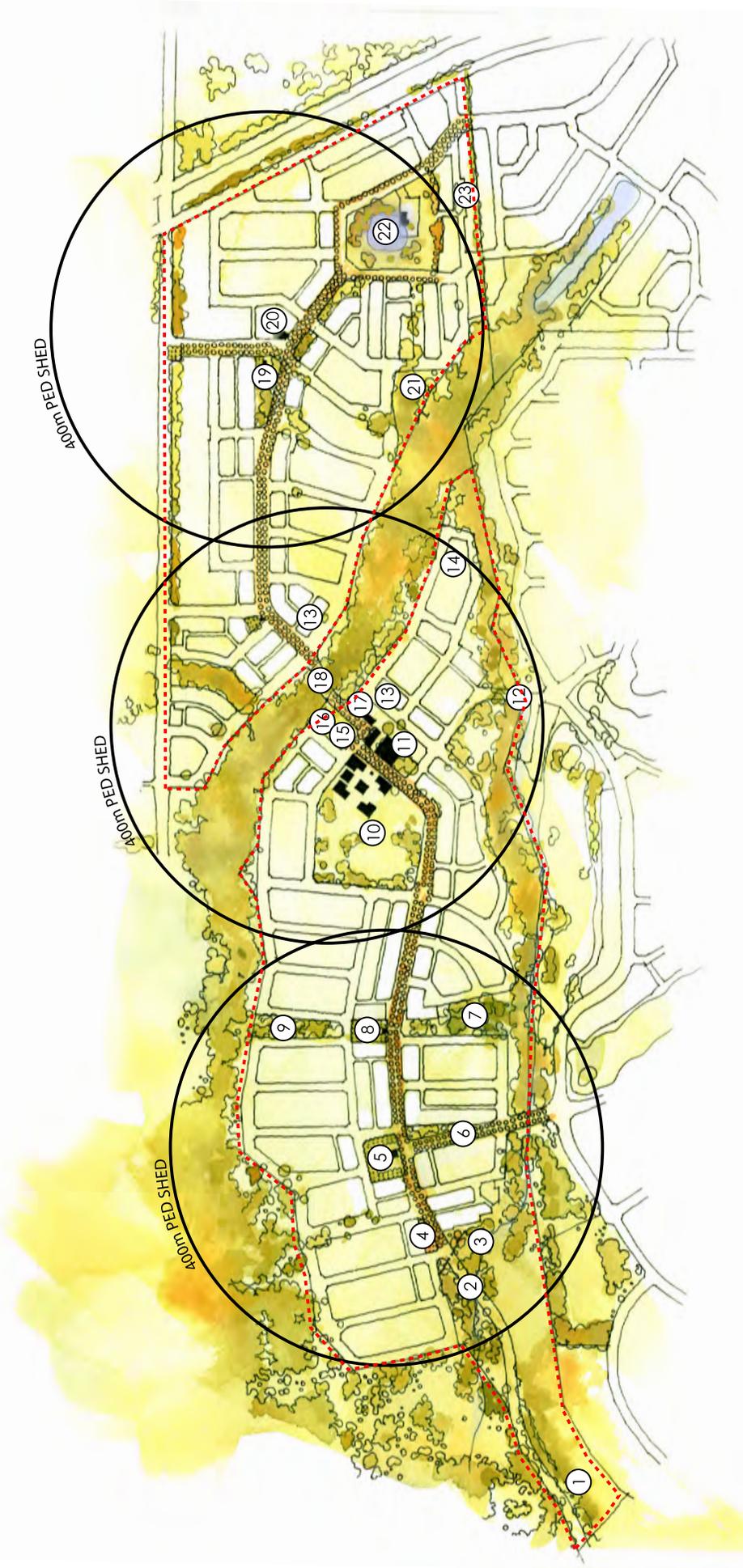
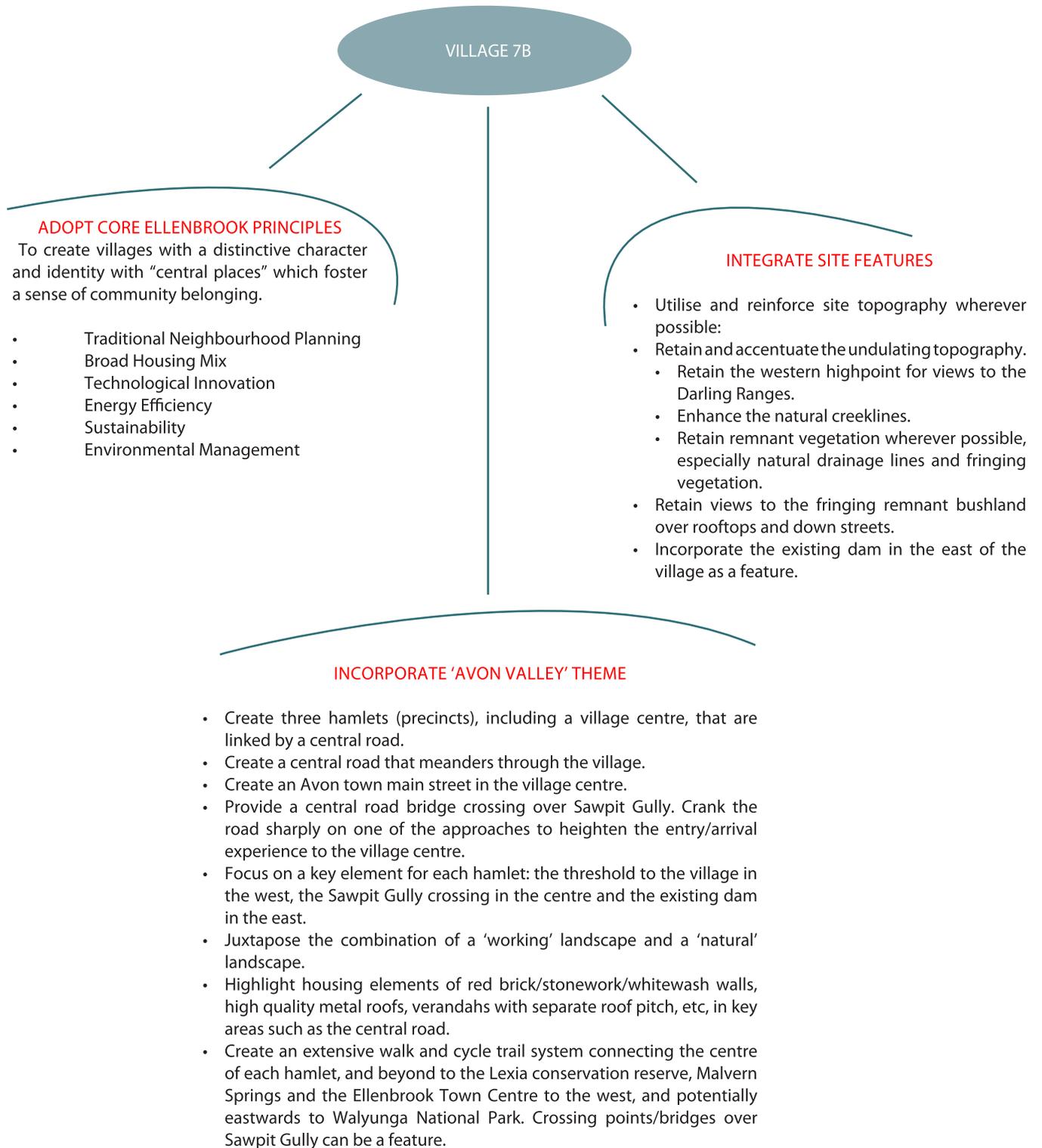


FIGURE 6 - PRELIMINARY DESIGN CONCEPT

FIGURE 7 - VILLAGE 7B DESIGN PRINCIPLES/OBJECTIVES



2.3 PROJECT OVERVIEW

Comprising approximately 116 hectares, Village 7B will accommodate around 1,100 dwellings, a village centre capable of providing 3,500m² to 4,500m² of retail/commercial floorspace, a primary school, community facilities and recreation facilities. It is envisaged the Village will be developed over a three to four year period, following the completion of Village 7A.

2.4 DEVELOPMENT PLAN

The Village 7B Development Plan is the product of the convergence of the locational, landform and landscape features of the site with the design objectives of sustainability, walkability and an identifiable built form.

The existing landform and remnant vegetation within the site and the adjoining land uses, including the Lexia conservation reserve and Sawpit Gully, have influenced the Village design.

The layout of the Development Plan provides for views of the Darling Range escarpment, mature vegetation on the fringes of the Village and within the Sawpit Gully reserve, and internal features such as the dam.

The movement network is designed around the main central road, which is a continuation of The Boulevard that extends from the Ellenbrook Town Centre through Village 7A, and convenient and safe pedestrian/cyclist access to the Lexia conservation area, The Vines and the future development of Lot 4 Railway Parade.

The design has allowed the provision of a diverse range of lot sizes, which will subsequently facilitate a mix of housing types to cater for a wide range of demographics. At the western end of the Village, larger lots are provided as a suitable interface with abutting lots in The Vines to the south. Larger lots are also provided fronting Maralla Road, as a transition from the rural land to the north. Higher densities are located adjacent to areas of high amenity, including the village centre, public open space areas and the adjoining conservation reserves.

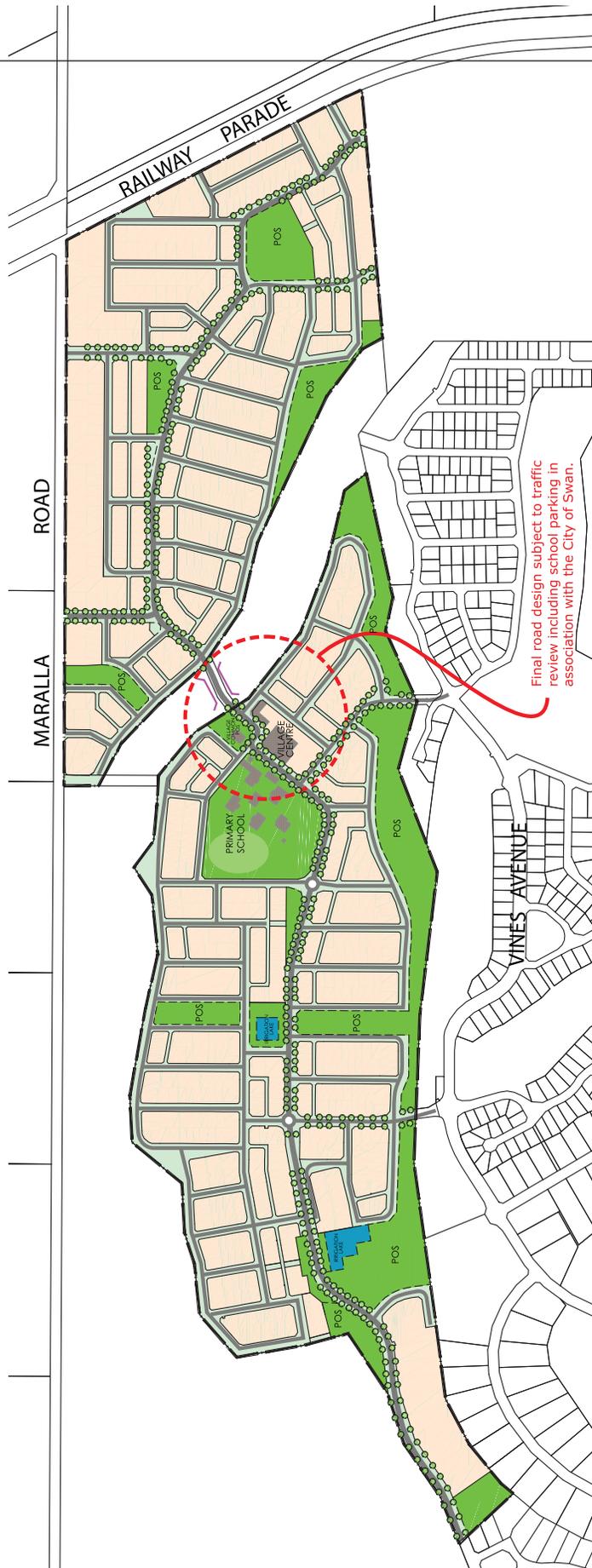


FIGURE 7 - VILLAGE 7B DEVELOPMENT PLAN



3.0 DEVELOPMENT PLAN STRUCTURE

3.1 MOVEMENT NETWORK, ACCESS & CIRCULATION

The primary access to the Village will be the continuation of The Broadway, which provides the main link to the Ellenbrook Town Centre via Village 7A. Maralla Road provides access from the north of the Village. There will be no direct access to Railway Parade at the eastern boundary of the Village, however two road links will be provided to the future development of Lot 4 Railway Parade, including the re-aligned Railway Parade.

Two road links will be provided to The Vines. These will require the extension of existing road reserves within The Vines to complete the connections, as there are currently no road reserves that extend to the boundary of Village 7B. The only road that extends north from The Vines ends at the Sawpit Gully reservation, however this is not considered the best location for a vehicle crossing given it is one of the widest sections of the reserve, at the convergence of two drainage lines. There is an opportunity for a less-intrusive pedestrian crossing at this point.

A bridge crossing will be provided over a narrower section of the Sawpit Gully reserve, so the main central road (The Broadway extension) can connect the two sides the Village. Sawpit Gully is an A Class Reserve under the management of the Department for Planning and Infrastructure. Portion of the A class reserve will therefore require de-vesting to facilitate the bridge, subject to approval of a Development Plan that endorses the principle of this crossing.

The internal movement network is based upon interconnected streets which provide direct and shared vehicular, pedestrian and cycle access. The streets will be tree lined to reflect the Avon Valley theme of the Village, enhance the streetscape and provide shade for pedestrians.

Rear laneways will be used adjacent to the main central road (The Broadway extension), POS areas and near the Village Centre to provide vehicular access to garages at the rear of lots, thereby reducing traffic movements on frontage streets. Coupled with reduced front house setbacks, the incorporation of laneways will encourage greater community interaction on frontage streets and in the linear parkway.

Hike and bike trails will encourage controlled access to the 'natural' environment of the drainage lines and remnant vegetation, linking into the wider network throughout Ellenbrook. There is the opportunity to link into the Lexia and Swan Coastal Plain hiking trails and for a potential link to Walyunga National Park to the east, where the Avon River starts.

Ample motor bike parking will be provided at the central squares for the motor cycle/scooter clubs to gather before touring the Avon Valley.



FIGURE 8 - ACCESS/LINKAGES & MOVEMENT NETWORK



3.2 VILLAGE CENTRE

The Village Centre will provide the primary focus for community activities and interaction and bring to the village a sense of permanency that is lacking in conventional suburban areas. It will comprise, inter alia:

- Primary school (public)
- Retail and commercial uses
- Village square
- Community building
- Mixed use/density housing
- Sales office

The central location of the village centre will bring most of the daily needs of the less mobile residents, including the aged, parents and children giving them independence of access. The concentration of civic, educational and commercial facilities will also obviate the need to drive from one use to another, as is commonplace in conventionally designed estates.

The Development Plan proposes an interconnected street pattern and parkways that will provide direct access connections and alternative route choice for accessing the Centre for vehicles and pedestrians/cyclists.

The streets surrounding the village square will be 'pedestrian friendly' through the application of design techniques that promote a slow vehicular speed environment and through the appropriate application of road treatments.

The Village Centre will be of a human scale, incorporating proportioned buildings sited close to the street, wide pedestrian pavements, shade protection, public art and tree planting. The design of the village centre will provide opportunities for mixed use development and incorporate inherent flexibility to enable land uses to evolve over time.

The village square will be developed as a simple space that has the ability to accommodate a range of community activities. These activities will be complemented by the adjoining community building. The grouping of uses near the village square will attract residents and visitors to this area and enable this space to become the centrepiece of the community and a major node for informal interaction.

Consistent with the City of Swan 'Commercial Centres Strategy', the Village Centre provides for up to 4,500m² of retail/commercial floorspace. In addition, a commercial/mixed use site is provided overlooking the eastern POS area containing the existing dam in the east of the Village.



FIGURE 9 -VILLAGE CENTRE RENDER CONCEPT

FIGURE 10 -VILLAGE CENTRE LAYOUT



- ① 1. Main Street
- 2. Sawpit Gully
- 3. Village Square
- 4. Community Building
- 5. Bridge
- 6. Main Street Retail / Commercial
- 7. Primary School

3.3 PUBLIC OPEN SPACE NETWORK

The natural drainage lines, remnant vegetation and providing adequate access to the conservation areas have influenced the design of the open space system.

The linear area of POS along the southern boundary allows for the protection of a natural drainage line (a multiple use wetland) and associated vegetation while providing an ideal environment for a walk trail (passive recreation). A north-south linear park system provides a link between the southern drainage line and the Lexia conservation area to the north.

The existing dam in the east of the Village will be retained as a local feature and focal point. Widened road reserves will link with this and other local parks to create a chain of drainage swales and POS areas that can accommodate both passive and active recreation.

The primary school oval will provide another form of active recreation area. In addition, the Chardonnay Park oval in The Vines abuts the southern boundary of Village 7B.

A formal 'town square' area of POS is provided in the Village Centre, adjacent Sawpit Gully. This will include a church-like community building/structure that could be used for weddings and as a community gathering space. Picnic facilities could also be provided in this area close to the creek.

The POS areas are strategically sited for ease of access and to provide local amenity for nearby residential lots. A primary design objective is to ensure all residents are within a 5 to 10 minute walk of an open space area. The table below provides an analysis of the public open space to be developed in Village 7B in terms of recreation use (passive/active) and whether the space performs a drainage function.



FIGURE 11 - PUBLIC OPEN SPACE / DRAINAGE



EXISTING DAM

The intent and function for each of the proposed POS areas are described below.

1. This liner POS area follows the natural drainage line along the southern boundary of the village between the Lexia and Sawpit Gully conservation reserves. It will contain remnant trees, walking and cycle paths linking into the hike and bike trail for the wider Ellenbrook area, seating for passive use and grassed areas that are available for more active uses.
2. This liner POS area follows the natural drainage line along the southern boundary of the village between the Lexia and Sawpit Gully conservation reserves. It will contain remnant trees, walking and cycle paths linking into the hike and bike trail for the wider Ellenbrook area, seating for passive use and grassed areas that are available for more active uses.
3. The northern portion of the north-south trail linking to the Lexia conservation area with opportunities for active areas.
4. The central square of the north-south liner POS trail an active and passive function. The periphery of the reserve will be improved with trees and seating.
5. This passive POS will provide a high quality amenity for the surrounding residential lots, as well as an attractive interface between the adjoining rear loaded lots and neighbourhood connector.
6. This liner POS area follows the natural drainage line along the southern boundary of the village between the Lexia and Sawpit Gully conservation reserves. It will contain remnant trees, walking and cycle paths linking into the hike and bike trail for the wider Ellenbrook area, seating for passive use and grassed areas that are available for more active uses. The north-south portion of POS is the southern portion of the linear POS trail between Lexia conservation reserve to the north and the southern natural drainage line.
7. This is the formal 'town square' located in the Village Centre. A passive area that will include a community building, possibly a church-like structure.
8. This POS area comprises a creekline that is a tributary of Sawpit Gully and will incorporate natural and formal drainage.
9. This liner POS area follows the natural drainage line along the southern boundary of the village between the Lexia and Sawpit Gully conservation reserves. It will contain remnant trees, walking and cycle paths linking into the hike and bike trail for the wider Ellenbrook area, seating for passive use and grassed areas that are available for more active uses.
10. This passive area of POS will provide a local focal point, and incorporate a drainage swale as part of the chain of swales that includes POS areas 9 and 10 and the widened road reserves between.
11. This area of POS adjacent Sawpit Gully incorporates remnant vegetation and drainage basins, with opportunities for active recreation spaces.
12. This POS area contains the existing dam and will provide a focal point for the eastern sector of the Village.

The Development Plan provides a POS provision of approximately 15% of the gross subdivisible area and as such is in excess of the prescribed 10% provision. This is a result of retaining areas of natural drainage and vegetation and making up for the minor shortfall in Village 7A.

ELLENBROOK VILLAGE 7B DEVELOPMENT PLAN

PUBLIC OPEN SPACE SCHEDULE

Site Area			
Deductions			
Primary School Site		4.0	
Village Centre		0.86	
Total			4.86ha
Gross Subdivisible Area (GSA)			
Public Open Space requirement @10% of GSA			11.14ha
Public Open Space Contribution			
May comprise:			
Minimum 80% Unrestricted Public Open Space		8.91	
Maximum 20% Restricted Public Open Space		2.23	11.14ha
Unrestricted Public Open Space Sites (8.91ha required)			
1	0.7105		
2	2.3433		
3	0.6710		
4	0.3422		
5	0.2608		
6	4.5700		
7	0.3320		
8	0.6087		
9	1.7736		
10	0.4882		
11	1.2748		
12	1.7123		
Minus 1 in 1 year storm volume			-0.6150ha
Restricted Public Open Space Sites (2.23ha maximum)			
Total restricted use public open space contribution (less than 20% of total POS)		1.4345	
Drainage area in POS (subject to inundation greater than 1 year ARI rainfall interval but more frequently than 5 year ARI rainfall event – i.e. between 1 and 5 year rainfall event)		minus 0.6150	
Artificial water body (irrigation lake)		0.4300	
Total Public Open Space Provision		15.0%	16.71ha
POS Oversupply			5.57ha

TABLE 1 - PUBLIC OPEN SPACE SCHEDULE

3.4 PEDESTRIAN/CYCLE NETWORK

The pedestrian/cycle network for Village 7B is shown on the adjacent plan. The network is designed to provide direct and safe access as one moves through the Village to access the POS areas and the adjoining Villages and town centre.

As a minimum, a pedestrian footpath will be provided on one side of most streets to provide safe pedestrian movement and encourage community interaction.

The provision of dual use paths coincides with roads that would contain traffic volumes high enough to warrant separation of cyclist movement from vehicular traffic and in accordance with WA Planning Commission policy requirements. The remaining component of the cycle network constitutes local subdivisional roads carrying low traffic volumes that are appropriate for shared use by motorists and cyclists.

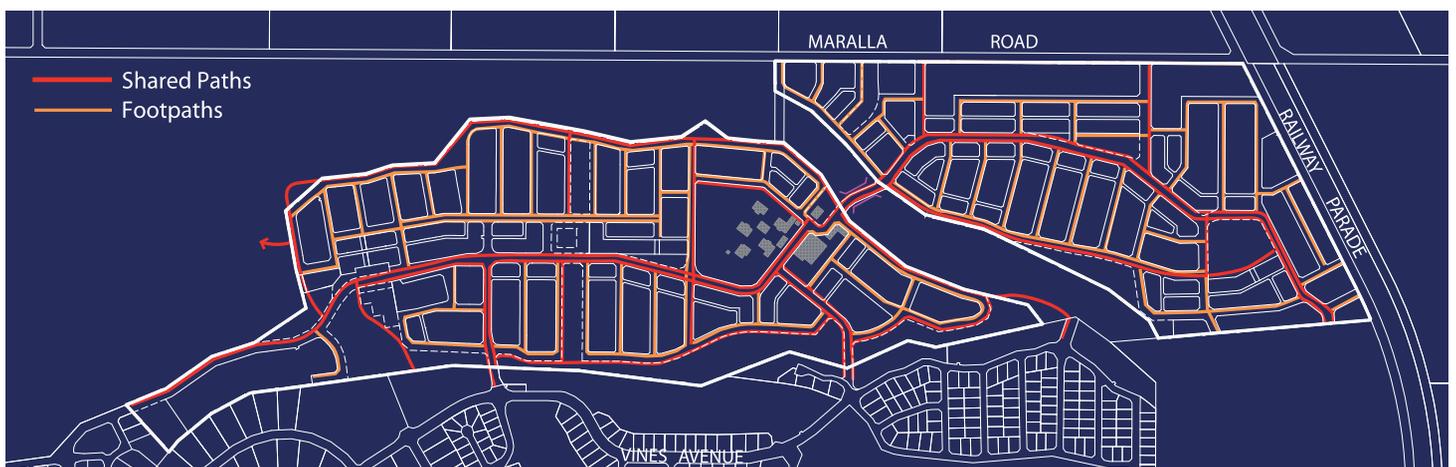


FIGURE 12 - PEDESTRIAN/CYCLE NETWORK



3.5 HOUSING THEME/GUIDELINES

The detailed design guidelines will incorporate Avon Valley theme elements in certain areas. This will include referencing the materials and finishes that are seen in the Avon region, together with common roof types including verandahs. The guidelines will also promote sustainable living features. A broad range of lot and housing types will be encouraged in Village 7B.

The detailed design guidelines will reinforce the Avon Valley theme by incorporating characteristic building elements in key areas. In particular, the main central road will be the focus of the Avon Valley theme. The housing styles of the Avon Valley will be reflected in the use of:

- red brick (cream brick will not be permitted),
- brickwork patterns,
- stonework or white wash walls,
- high quality metal roofs (grey), and
- front verandahs with separate roofs and higher pitching plates.

There will be a wider range of housing elements in other areas, reflecting the eclectic mix of housing seen in Avon Valley towns away from the main street. For example, framed materials could be emphasised on the northern edge fronting the retained bushland, rather than the brick houses emphasised on the central road. This reflects the 'one off' corrugated iron lifestyle homes seen around York, as opposed to the brick cottages of the town's main street.

A selected palette of shingled roof tiles could be available in dress circle areas, like the grand houses in Gingin. More flexibility in materials and colours will be allowed in other areas. A variety of details and 'odd' touches (like low gates with decorative metalwork/bent wire and tube) will be encouraged throughout the village, reflecting the eclectic mix of the Avon Valley.

Most lots fronting the central road will be rear loaded. Throughout the village, compact lots with wide frontages will allow for trees in the gaps between houses.



3.6 RESIDENTIAL LOT YIELD & MIX

Australians have become more discerning and selective in their preferred choice of urban environment for living, working, learning and recreating. The role and function of the home is now more varied than at any time in Australian history. Accordingly, Village 7B has been designed to offer a range of lots and facilities to satisfy a diversity of lifestyles and associated demands.

A diverse range of lot and housing types will be provided within Village 7B. Village 7B, while catering for first homebuyers with an affordable cottage and traditional lot product, will also be well suited to the second and third homebuyer given its parkway setting and proximity to the Town Centre and District Centre. Large housing lots provide a transition to The Vines to the south and the rural setting to the north. Smaller lots are provided close to the Village Centre and areas of POS.

Provided adjacent is a summary of projected dwelling yield and population forecasts for Village 7B.

Table 2 - Dwelling & Density Calculations

R CODE	LOTS	%	DWELLINGS	%
R5	10	1%	10	1%
R10	28	2%	28	2%
R12.5	14	1%	14	1%
R17.5	31	2%	31	2%
R20	159	13%	159	12%
R25	444	35%	444	33%
R30	367	29%	465	35%
R35	49	4%	53	4%
R40	92	7%	108	8%
R60 (Narrow Lot Innovation Precinct)	25	2%	32	2%
TOTAL	1265	%100	1344	%100

Net Dwelling Density/ha - 24 dw/ha (roads excluded)
Estimated population - 4,068 (assumes occupancy rate of 2.9)

Section 3.3.2(c) of the City of Swan's 'Neighbourhood Planning Policy' requires an average net density of 22 dwellings per hectare over the entire structure plan (Development Plan) area in new urban areas. The Village 7B Development Plan meets this density requirement.



FIGURE 13 - RESIDENTIAL DENSITIES

R5
 R10
 R20
 R25
 R30
 R40
 R60
 R60 Narrow Lot Innovation Precinct*

* Minimum lot size is 145m²
 Development is to be in accordance with the R60 provisions of the Residential Design Codes unless otherwise varied by a council approved Detailed Area Plan.

4.0 STATUTORY PLANNING

4.1 ZONING/PLANNING APPROVAL PROCESS

The Ellenbrook project and specifically Village 7B are zoned 'Urban' under the Metropolitan Region Scheme (MRS). In this context the Urban zone is a generalised zoning category which may include residential, retail, community services, local open space and related activities. The planning process undertaken to facilitate development of land for urban purposes is described below.

Following the rezoning of the Ellenbrook project to 'Urban' under the MRS, the City of Swan Town TPS No. 9 was amended to rezone the Ellenbrook landholdings, including Village 7B, to 'Special Purpose - Ellenbrook'. The recently gazetted LPS No. 17 amended Ellenbrook's zoning to 'Special Use Zone - Ellenbrook'. This zoning establishes a two tiered strategic planning framework for the implementation of urban development. Subdivision and development at Ellenbrook is proceeding in accordance with this staged approval process, which embodies the following:

- Structure Plan; and
- Development Plan.

A Structure Plan has been prepared and approved for Ellenbrook which provides the broad structure for future development at Ellenbrook. This Development Plan represents the next step in the strategic planning process with the objective to refine proposals in the Structure Plan affecting the subject land and to guide development. LPS No. 17 also accommodates the preparation, approval and enforcement of site specific Detailed Area Plans. The Detailed Area Plans are prepared on a per lot basis, where warranted, to enhance and expand upon the planning proposals or the provisions contained within a Structure Plan or Development Plan.

4.2 DEVELOPMENT CONTROL

In accordance with Clause 4 of the 'Special Use Zone - Ellenbrook' development control and land use permissibility for Village 7B will be based upon the Zoning Table of the City of Swan LPS No. 17 in conjunction with the Zoning Classification Plan as contained in this Development Plan.

The Zoning Classification Plan depicts the location of the various land use activities within Village 7B. As noted on the plan, no further fragmentation of lots for development in excess of the R20 standards will be permitted except where nominated on Detailed Area Plans or the Density Sites Plan as adopted by Council.



The following uses are 'D' within the Special Purpose - Village Centre Zone:

- | | | | |
|---------------------------|------------------------------------|-------------------|---------------------------|
| Car Park | Dwelling Aged or Dependent Persons | Health Studio | Recreation Private |
| Child Care | Dwelling Grouped | Lunch Bar | Restaurant |
| Civic Building | Dwelling Multiple | Medical Centre | Shop |
| Club Premises | Educational Establishment | Museum | Any Other Uses Not Listed |
| Consulting Rooms | Funeral Parlour | Office: General | |
| Consulting Rooms: Grouped | Health Centre | Public Amusement | |
| Cultural Use | | Recreation Public | |

FIGURE 14 - ZONING CLASSIFICATION PLAN

4.3 ABORIGINAL HERITAGE ACT 1972

In 1994, the then Minister for Aboriginal Affairs granted consent to Ellenbrook Management Pty Ltd to utilise land on which two archaeological sites occur for the purpose of urbanisation, under Section 18 of the Aboriginal Heritage Act 1972. This consent, however, does not include any development of, or impact on, Sawpit Gully nor within a buffer 30 metres either side of the creek. A further Section 18 approval is required for a bridge across Sawpit Gully.

4.4 SAWPIT GULLY CROSSING

Sawpit Gully is an A Class Reserve for the conservation of flora and fauna, under the management of the Department for Planning and Infrastructure. Portion of the A class reserve will require de-vesting to facilitate the road crossing, subject to prior approval of a Development Plan that endorses the principle of the crossing.

4.5 PRIVATE ROAD CLOSURE

Village 7B includes an existing private road reserve, which runs north-south from Maralla Road just to the west of Sawpit Gully. An application has been made to the City of Swan to permanently close the portion of the private road reserve located within Lot 9500. This application is being held in abeyance pending approval of the Development Plan.

4.6 FREIGHT RAIL

A freight rail line is located to the east of Village 7B, separated from the site by the Railway Parade road reserve. The draft Statement of Planning Policy for Road and Rail Transport Noise (May 2005) identifies acceptable noise levels for sensitive uses.

Herring Storer Acoustics (HSA) was commissioned to measure noise and vibration levels caused by the freight rail line adjacent to Village 7B. Their report appears at Appendix D. HSA concludes that, based on the measurements carried out and an analysis of train noise and vibration, noise and ground vibration from passing trains will comply with the appropriate criteria and no amelioration is required.

4.7 ELLENBROOK SPEEDWAY

Ellenbrook Speedway is located approximately 400 metres east of Village 7B, separated from the site by the freight rail and the Railway Parade road reserve.

HSA has measured noise from the speedway, as included in Appendix D of this Development Plan. The following annotation is included on the Development Plan:

“All lots created within the 45dB contour as detailed in Appendix C of the Herring Storer (acoustic) report shall be required to have notifications on title alerting prospective purchasers of the proximity of the Ellenbrook Speedway and potential exposure to noise emissions which may, on occasion, exceed the Environmental Protection (Noise) Regulations 1997”.

5.0 TRAFFIC/ROAD PLANNING

A traffic report for Village 7B has been prepared by Sinclair Knight Merz – Traffic Engineers and appears at Appendix A. The projected traffic volumes in the Village are shown in the report and incorporate both internal and external vehicle movements. The resultant volumes are considered acceptable for the proposed residential development. The proposed road network will adequately accommodate the projected volumes of traffic and provide good accessibility and permeability throughout the Village. The report also provides details on; traffic management, road design, public transport routes and the pedestrian/cycle network.





6.0 SUSTAINABILITY

6.1 INTRODUCTION

The Western Australian State Sustainability Strategy (SSS) was released in September 2003. The purpose of the Strategy is to establish a framework for the development and implementation of initiatives that reflect the principles of sustainability. The primary goal of the Strategy for the creation of new communities is to "... plan and provide settlements that reduce the ecological footprint and enhance quality of life at the same time."

The Strategy outlines objectives and strategies to ensure new communities embrace sustainability including:

- the integration of land use and balancing transport;
- the reduction and management of waste; and
- sustainable energy, built form and natural resources.

The existing statutory and policy planning framework operating under this overarching strategy, including in particular Liveable Neighbourhoods, gives guidance for Village 7B in regard to appropriate land use, transport and infrastructure, and the protection of natural resources.

The project team in conjunction with Ellenbrook Management are currently researching and preparing reports that will allow for the implementation of the following sustainability initiatives in the Village 7B development;

- Housing Design Guidelines;
- Sustainable Housing Report and Recommendations;
- Water Conservation Strategy for POS landscaping/front yards of dwellings; and
- Water Management Strategy - stormwater disposal/swales etc.

The Development Plan allows for the orientation of lots at subdivision stage to facilitate dwelling designs that enjoy the benefits of passive solar access. The majority of lots will have their long axes within the range 20° from the N/S and E/W alignments to take advantage of winter solar access and summer sun deflection.



6.2 SUSTAINABILITY PRINCIPLES

The Development Plan promotes an urban settlement focussed on an enhanced natural landscape with good access to recreation opportunities, community facilities and services and the Town Centre. Described below are the sustainability principles inherent in the Development Plan design.

6.2.1 Urban Structure

The urban structure expressed in the Development Plan embraces many of the principles set out in Western Australia's leading urban planning initiative - Liveable Neighbourhoods (WAPC 2007). This document is aimed at fostering sustainable community development through eight key elements of community design and development.

Key initiatives proposed for Village 7B, that are consistent with Liveable Neighbourhoods, include: mixed use development; a choice of quality density housing; a walkable movement network; accessible parks and community facilities; appropriate lot layout and orientation; and stormwater management.

6.2.2 Transport Alternatives

The range of lot sizes and building form, together with the permeable and legible movement system whereby all elements of the Village are within approximately a 10 minute walk, will contribute to an environment that is highly conducive to walking and cycling.

To entrench walking and cycling as an integral part of the culture and lifestyle a dual use path and/or footpath will be provided on every street and all streets will have good surveillance, shady trees and offer stimulating local character.

Furthermore, regular public transport services and a planned future transit connection to the Town Centre will promote access using public transport.

The availability of viable alternatives to private motorised transport, will translate to reduced total kilometres travelled and significant annual reductions in carbon gas emissions and cost savings per household.

Access for all people, including people with disabilities and those without access

to a motor vehicle, will foster an inclusive community. Reducing car dependency through urban design and community infrastructure will also enable people to be more physically active and healthier.

6.2.3 Affordable Housing

Housing affordability has declined in Perth in recent years with increasing land and building costs. Village 7B, like the other Villages at Ellenbrook, will incorporate a proportion of public housing and privately owned affordable housing.

The creation of a diverse range of lot sizes will enable home builders to provide alternative forms of housing which will be affordable in nature. This housing will provide the opportunity for first home buyers to enter the property market.

Low income households will be able to live in an environment supported by essential infrastructure, public transport and local employment opportunities in the Village Centre and expanding Town Centre. The cumulative effect will be a socially inclusive and diverse community.

6.2.4 Building Design

Design Guidelines and Detailed Area Plans will be used for defined housing precincts to control the quality of the built form and promote sustainable practices, including buildings oriented and designed for passive solar access, recycled materials, breezeways and surveillance of public areas.

6.2.5 Safety

Open spaces will have surveillance, lighting and appropriate landscaping to enable safe community access and use.

A comprehensive network of pathways will be provided to ensure safe access for pedestrians and cyclists and streets will be designed to incite a slow speed environment.

6.2.6 Landscape & Open Space Systems

The public realm will be a central focus of Village 7B and contribute to its distinctive character and identity. It will feature a linear park system incorporating highly accessible spaces that will comprise of remnant vegetation and a low maintenance landscape with water sensitive design

principles.

The opportunity also exists to incorporate alternative stormwater drainage design (i.e. swale drains) into the streetscape with linkages to the open space network.

6.2.7 Local Identity

The Development Plan is configured to allow the defining qualities of the former landscape of the site to permeate the design.

Landscaping treatments, public art and building design will all contribute to identity and place association.

The residents will be provided with a rich assortment of experiences, originating with the open spaces of the adjoining Lexia Wetlands through to urban spaces focussed on the Village Centre.

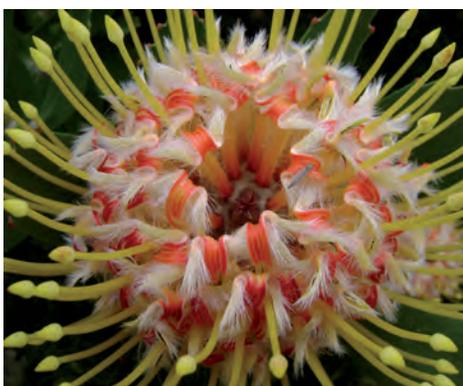
6.2.8 Inclusive Community

The Village will be built in accordance with sustainable practices and incorporate a flexible design that is capable of accommodating the needs of all members of the community, including parent groups, young people and the elderly.

The walkability of Village 7B and emphasis on the public realm will be imperative to creating opportunities for planned and unplanned interaction and promoting social cohesion.



7.0 ENVIRONMENT



- groundwater recharge; and
- Evaluation of the monitoring data, including comparative evaluation of data from nearby Water Authority bores, in order to revise and update the interim water level criteria for the Lexia Wetlands (established as condition of environmental approval for the Ellenbrook project).

7.2 DRAINAGE & NUTRIENT MANAGEMENT PROGRAM

Following approval of the PER, a number of conditions were set by the Environmental Protection Authority. One condition required more detailed drainage and nutrient management work to be undertaken. A Drainage and Nutrient Management Program was prepared for the northern catchment of Ellenbrook and is being implemented.



7.1 ENVIRONMENTAL STUDIES

A number of detailed environmental studies have been conducted over the Ellenbrook project area including the Public Environmental Review (PER) assessed by the Environmental Authority in 1992. As a result of this assessment a major conservation area of approximately 600ha was established and reserved to the north and west of Village 7B. On the basis of the conservation outcomes achieved within the reserved area, the balance of the land (i.e. Village 7B) has been approved for urban development subject to the management of groundwater, drainage and nutrient export. Ongoing environmental studies include protection of the Lexia Wetlands and associated conservation areas, and involve the following:

- Routine monitoring of shallow groundwater levels in the vicinity of the wetlands, and water levels in the wetlands, predominantly during the winter – spring period of

7.3 ENVIRONMENTAL MANAGEMENT

An environmental management report has been prepared by RPS consultants and appears at Appendix B. The report provides details on the physical and biological environment within Village 7B and confirms the implementation of the Development Plan, as proposed, accords with the environmental assessment of the overall Ellenbrook project and approvals issued by the Minister for the Environment.

7.4 BUSHFIRE MANAGEMENT

A Bushfire Management Plan (BMP) has been prepared to address the requirements for bushfire preparedness and bushfire damage mitigation (Appendix H).

To ensure compliance with 'Planning for Bushfire Protection Guidelines' (WAPC, 2010), the risk and threat of retained vegetation has been assessed and a Bushfire Attack Level has been assigned through the BMP. To ensure protection of human lives and assets in accordance with the policy, a range of measures are necessary. These include mandatory setbacks and building design standards.

Mandatory setbacks and building design standards as stipulated in the BMP will be implemented through a notification on the certificate of title requiring compliance with the Detailed Area Plan for the affected lots. The Detailed Area Plan will refer directly to the BMP and the relevant clause.

The BMP also outlines a range of mitigation strategies, namely:

- Hazard management;
- Bush fire risk management (advise to home owners, etc);
- Appropriate road layout and service provision;
- Public education and community awareness;
- Fire safer areas; and
- Ongoing assessment of fire management strategies.

Please note that the BAL ratings for Stage 1 of the subject Development Plan were approved by the City of Swan at their Ordinary Council Meeting of 16 January 2013 as Village 8 Development Plan A. Please refer to Appendix I for the stamped approved plan.

For more detailed assessment please refer to the Bushfire Management Plan contained in Appendix H.

8.0 LANDSCAPE

The objectives of the landscape are:

- To create an identifiable sense of place through the creation of a distinctive and legible landscape character;
- To create an environmentally appropriate landscape;
- To bring a 'Village' atmosphere to urban life;
- To retain and enhance remnant vegetation where possible; and
- To integrate the landscape within water sensitive design principles.

The philosophy behind the landscape planning and design approach for Village 7B derives from the character of the nearby established towns of the Avon Valley, being the first inland settlements in Western Australia. The planning, architecture and landscape history of these towns become the underlying influence that characterises the layout and architectural and landscape vernacular of Village 7B.

The landscape element that both links the Avon Valley town sites together and has been the major influence in their planning and evolving character is the Avon River. Sawpit Gully in

Village 7B can be utilised to achieve similar perceptions, appreciations and attributes of the Avon Valley town sites. Avon Valley towns are generally typified by a long, single main street that often runs parallel to and one or two street blocks back from the river, such that the river, with its fringing native vegetation of mostly eucalypts, provides a well defined edge and visual backdrop to the village centre. The main streets are quite urban in character, well-defined by one and two storey buildings with verandas and balconies, however the built form is not continuous, and the intrusion of well-vegetated landscape pockets, often including mature trees, lends a more intimate, rural character to the village centres. Bridge crossings define the entry or exit thresholds to all Avon Valley towns, and the transition from more formal "urban" to informal "rural" often occurs near the bridge crossings. The rural landscape, dominated by pastures with sheep and cattle and production orchards set within a rolling landscape well vegetated in groves of eucalypts, is typical on the fringes of the Avon Valley towns.

The heavily wooded Sawpit Gully physically and visually divides Village 7B into two, providing

scope to develop two or three smaller, more intimate villages linked by a common theme, rather than a single larger village. This sense of intimacy will be reinforced by the visual enclosure of the western cell by the heavily wooded southern creekline and Lexia Wetland/Sawpit Gully to the north. The eastern cell, while visually contained along its south-eastern boundary by Sawpit Gully, has a more open aspect to the Darling Ranges to the east, providing the strong sense of connection to the Avon Valley which commences less than 3km east of Village 7B.

A key landscape theme, drawing inspiration from the Avon Valley landscape, will be the juxtaposition of a 'working' or 'production' landscape and a 'natural' landscape. The Village design will highlight the remnant vegetation fringing the site and along the natural drainage corridors and will incorporate other existing trees/vegetation as feature elements where possible. The landscape concept will combine both formal and informal plantings, featuring cultivated/modified landscapes set in a natural landscape, as occurs in the Avon Valley.



The Village will contain a mix of remnant vegetation, planted specimens of local, WA and Australian species, and introduced exotic highlight species including trees associated with rural properties and country towns, which may include Jacarandas, rosemary, lavender and fruit trees. 'Fruiting' trees could be planted within the first few metres of front yards, to create a working landscape. This approach reinforces the theme evident in the Avon Valley of a cultivated or modified landscape set within a natural landscape. Key considerations in the selection of tree species will be the retention of fauna and minimising the potential for contamination of the nearby conservation reserves. The exotic range will be drawn from species that are tolerant of the local site conditions and are low water users, supporting the overriding principle of a sustainable, low maintenance landscape. Wherever practical drainage will be integrated within the broader landscape to provide passive irrigation and created damplands.

A background of tall trees, predominantly Eucalypts, will provide a sense of containment and a 'rural town' feel, a distinctive characteristic of Avon Valley towns. The existing dense woodland of Eucalypts along the two drainage corridors support this approach.

A key feature of the proposals is the central spine road that will connect the three villages or hamlets. This road will have a distinctive feel, varying in character as one journeys through the villages from west to east. The road reserve will vary in width, allowing scope for the road to split around clumps of trees, pinch down between groves of trees, and become more formal and urban as it passes through village centres, lined with avenues of exotic trees.

White-trunked Avon Valley gums, such as the Wandoo, are proposed as a dominant species along the spine road, planted in impressive groves and clusters. Exotic species, such as Jacarandas and fruiting trees typical of the Avon Valley, will be interspersed amongst this planting, and become the dominant species in the two western village centres. At the eastern termination of the spine road, where it approaches the existing lake, Melaleucas will be introduced as a dominant tree species, to reinforce the existing character of the dam.

In internal roads, predominantly native trees will be used, with a combination of exotic trees and native trees used in front gardens, to reflect a character that is prevalent in Avon Valley towns. The streets of the urban cells will be designed to have tree planting selected and located for solar access to the buildings, wind reduction and aesthetics.

The landscape treatment of the streets will reinforce the hierarchy of roads. Species, planting types and verge treatments will create a diverse range of experiences and integrate drainage within the landscape. Verge and median swales will manage surface drainage while providing opportunities for passive irrigation to the landscape. At several locations north-south 'bush boulevards' will provide a strong visual and physical link to the remnant vegetation bordering the Village.

Elements of formality in the design of key areas (both hard and soft landscape) will highlight a cultivated landscape imposed on the natural landscape, as seen in rural towns with memorial parks, churches, grand homesteads and village greens. At key locations, such as the entry thresholds to villages, plantings will be formalised like the orchards or olive groves of the Avon Valley.

Trees, pastures and sheep are a constant in the background of the Avon Valley. These elements can be used to create a sense of 'place'. The Village landscape will employ whimsical interpretations through organic road layouts in some locations, tree planting in clumps and strands, and sheep sculptures. 'Farm' elements can logically cluster around the existing dam in the eastern hamlet.

Landscape detailing will be robust and simple to reflect a rural town character. For example, simple detailing such as red asphalt paths, fixed crushed gravel paving, low Toodyay stone walls, wrought iron gates and fences and so on may be used in the village centre. This simple palette of materials and colours in the village centres will reflect the 'calmness' of a rural town, rather than the 'busyness' and urbanity of the Ellenbrook Town Centre.

Landscaping will play an important role in the urban setting. Variable street setbacks will create landscape pockets, often with large trees, and interruptions to the built form to reflect a 'rural town' character. Clumps of planting between tight buildings, as seen in York, will provide an 'Avon' feel main street, rather than a continuous urban wall.

Community buildings/structures in key locations will interpret the civic and farm buildings of the Avon Valley. Random stone (possibly Toodyay stone) may be used for feature walling/fencing throughout the Village.

Hike and bike trails will encourage controlled access to the 'natural' environment of the drainage lines and remnant vegetation, linking into the wider network throughout Ellenbrook. There is the opportunity to link into the Lexia and Swan Coastal Plain hiking trails and for a

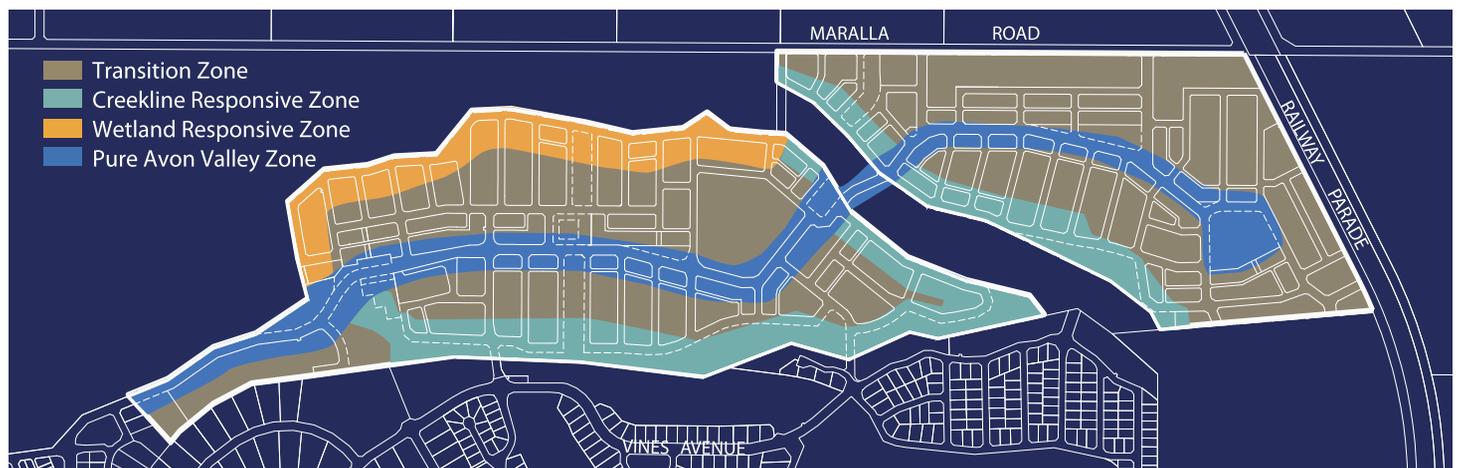


FIGURE 15 - LANDSCAPE DESIGN



potential link to Walyunga National Park to the east, where the Avon River starts.

Different landscape response zones have been identified for the Village, as follows:

- 'Pure Avon Valley Zone' following the central spine road.
- 'Wetland Responsive Zone' along Lexia conservation reserve boundary to the north.
- Creekline Responsive Zone along Sawpit Gully and the southern boundary of the Village.
- Transition Zone across the balance of the Village.

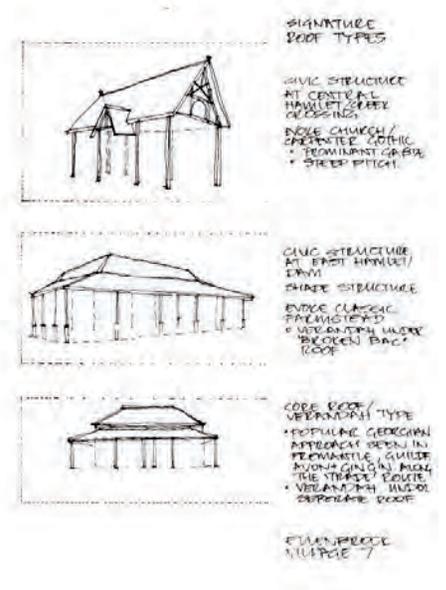
Plant species selection will vary according to these zones, with a combination of culturally responsive exotic species and native species used in the 'Pure Avon Valley Zone', and predominantly indigenous and appropriate native species used in the 'Wetland' and 'Creekline Responsive Zones'. The 'Transition Zone' will incorporate a mix of species from the other zones.

The plan provides a series of linking linear spaces consisting of public open space areas and wide road reserves. They will create shady corridors that carry informal walking and cycling routes around the community linking other park activity spaces.

Bridges, both pedestrian and vehicular, will be signature elements of the village, as in Avon Valley towns. For example, an informal pedestrian crossing could be provided in the form of stepping stones or a 'natural' causeway next to the main vehicular bridge in the central hamlet.

Each of the three hamlets will focus around a key element, being the 'threshold' in the west, the bridge crossing in the centre and the existing dam in the east. The treatment of community buildings/structures in public open space will vary in each hamlet to reflect the sub-themes. The western threshold will be inspired from the 'walled' orchard feel of New Norcia. The centre hamlet will include an open civic structure that reflects the 'Carpenter Gothic' Church style seen in the Avon region. The eastern structure will reflect a farmhouse.

The landscaping provided within public open space reserves will be maintained by Ellenbrook Management Ltd for a period of two years, unless otherwise negotiated with the City of Swan. Responsibility for maintenance will be handed to the City of Swan after this period.



9.0 ENGINEERING SERVICES & INFRASTRUCTURE



A comprehensive Engineering Services Report has been prepared by Cossill & Webley – Consulting Engineers and appears at Appendix C. This report provides details on the following engineering components relating to the Development Plan and provision of services:

- The provision of a reticulated water supply and sewerage disposal.
- The provision of public utility services i.e. underground reticulated electricity supply, telephone and natural gas supplies.
- Drainage strategy, based upon the approved Drainage and Nutrient Management Programme.
- The required road network to service the development.

9.1 TELECOMMUNICATIONS

Ellenbrook is now serviced by the Telstra Velocity Network, which is the most advanced fibre optic link to the home solution. The implementation of the Velocity Network provides for the technology/information needs for future residents of Village 7B and will facilitate local business development.



10.0 DEVELOPMENT STAGING

The development of Village 7B will roughly follow the indicative staging layout depicted in Figure 16. The proposed stages are a response to current market trends, which at the time of writing demand approximately 30 to 50 new lots a month. With this in mind, it is difficult to predict completion time frames for the proposed stages, as construction progress will continue to respond to changes in market trends and demands.

The layout of the proposed staging represents the logical progression of the provision of key service infrastructure, which will be constructed as part of the civil construction works. The staging can be described as generally moving from west to east across the site, with Sawpit Gully being bridged between Stage 12 and Stage 13.

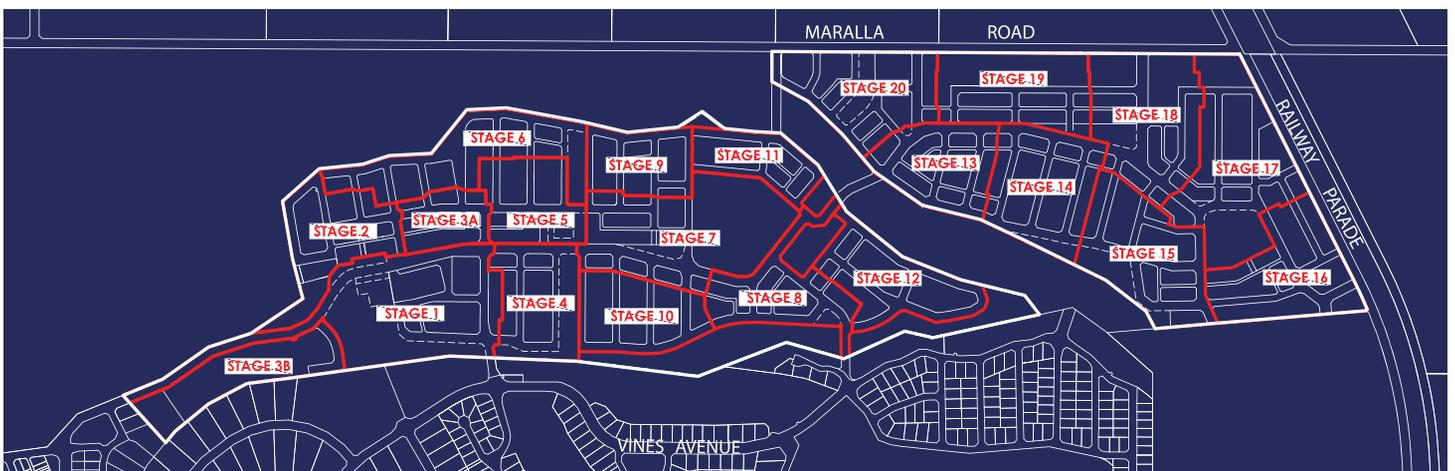


FIGURE 16 - STAGING PLAN

NOTE:

1. Subdivision is to be in accordance with this Staging Plan.
2. Subdivision of Stage 8 is Conditional on the excision of the land within Reserve No. 48221 for the purpose of the provision of a road; and
3. Subdivision of Stage 13 is conditioned on the excision of the proposed road connection over Sawpit Gully (Reserve No. 46875) for the purposes of the provision of a road.



