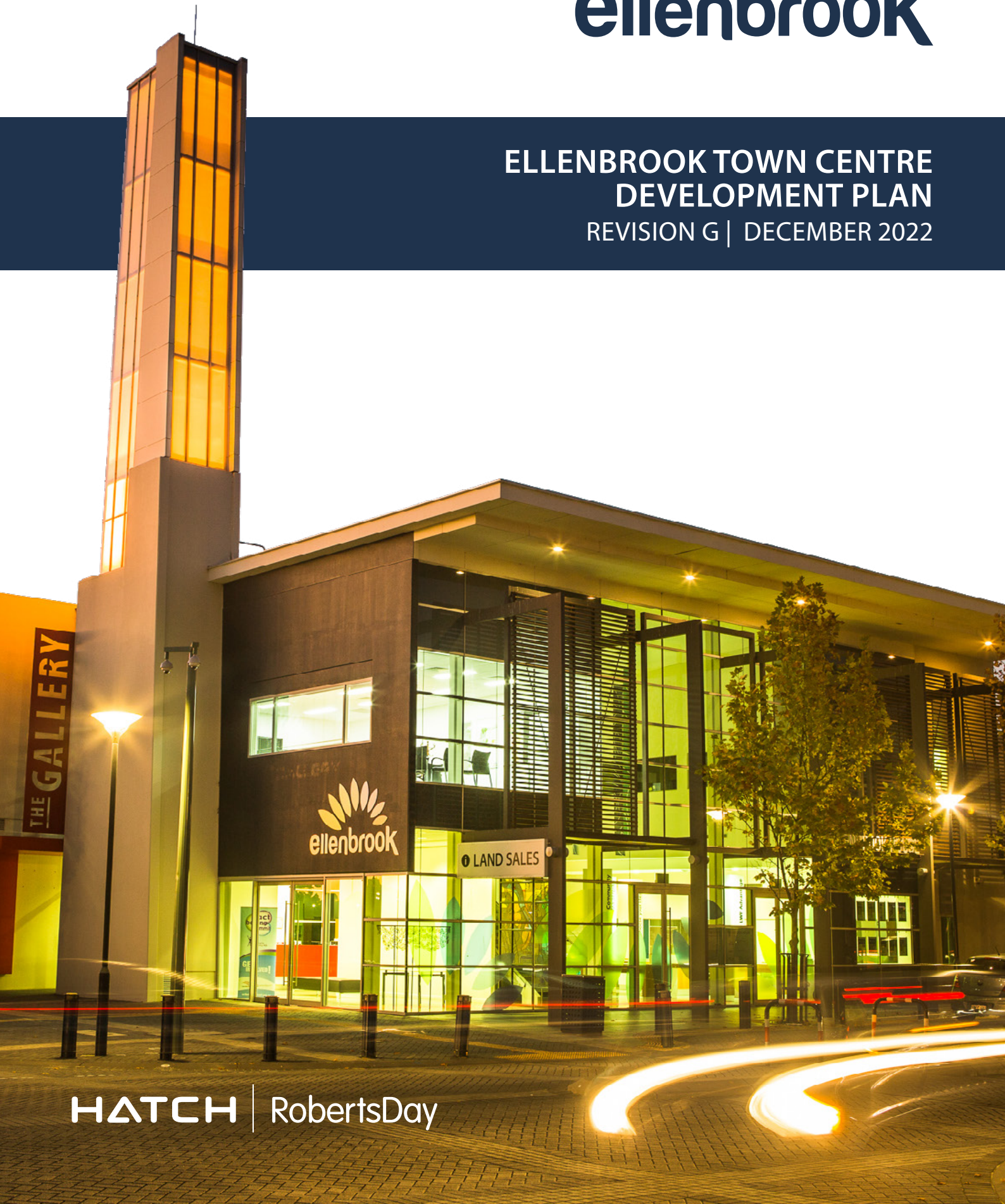




**ELLENBROOK TOWN CENTRE  
DEVELOPMENT PLAN**  
REVISION G | DECEMBER 2022





# ELLENBROOK TOWN CENTRE DEVELOPMENT PLAN (REVISION G) DECEMBER 2022

PREPARED FOR  
ELLENBROOK MANAGEMENT PTY LTD

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# EXECUTIVE SUMMARY

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## INTRODUCTION

The current Development Plan for the Ellenbrook Town Centre was prepared in 2014. Development to date which comprises Stages 1 and 2 has been focused on the portion of the town centre south of the transit corridor. Future development will occur in the Northern portion of the town centre and planning/design has been undertaken on the public transit station centrally located within the transit corridor. In response to the above developments and the time since the original Development Plan was prepared a design review of the northern portion of the town centre was undertaken by the project team.

The Ellenbrook Town Centre Development Plan creates a design framework for the progressive development of the Ellenbrook Town Centre into a vibrant commercial, cultural, civic and residential heart for Ellenbrook and the wider region.

The Development Plan is divided into two sections: Section A and Section B.

Section A consists of the Part 1 – Implementation, which contains the structure plan map and outlines the requirements that will be applied when assessing subdivision and development applications over the land to which the structure plan relates, and Part 2 – Explanatory Section, which supports the development plan contained in Part One by providing the background and explanatory information used to prepare the development plan.

Section B provides design guidelines, including where appropriate detailed site plans for individual street blocks and development sites. Additional guidelines will be inserted into Part B as the Town Centre is progressively developed.

## THE SITE

The Ellenbrook Town Centre occupies approximately 150 hectares of land owned by the Ellenbrook Joint Venture. The Town Centre has developed rapidly since the original Development Plan was approved, including the following developments:

- The Shops at Ellenbrook – Stage 2 (31,000m<sup>2</sup> retail floorspace);
- Main Street Stages 1, 2 (retail, cafes, offices) and 3;
- Police Station;
- Indoor pool;
- Waterplay facility;
- Ellenbrook Library;
- Ellenbrook Middle and Senior Schools;
- Retirement village;
- Four apartment buildings;
- Aged care facility;
- Community garden;
- Service industrial units;
- Service Station; and
- Tavern.

## CONTEXT

The Town Centre will perform the function of a Secondary Centre in accordance with the Western Australian Planning Commissions (WAPC) Statement of Planning Policy 4.2 Activity Centres for Perth and Peel (SPP4.2), comprising up to 50,000m<sup>2</sup> of retail floor space and servicing a population catchment of approximately 70,000 people.

The regional road network and a dedicated transit corridor connect the Town Centre with its regional service catchment, whilst locally the adjacent Ellenbrook villages incorporate street and park linkages that lead to the Town Centre, ensuring a high level of access for pedestrians, cyclists and motorists.

## DEVELOPMENT PLAN

The Development Plan provides for a flexible urban structure with capacity to respond to the Town Centre's evolution and future demands. It has regard to the physical and contextual elements of the site, recognising that these elements will contribute to the defining qualities of this new Town Centre.

The Plan is designed to achieve the following:

Celebration of the **Public Realm**, including a prominent Main Street, public streets, plazas, squares and parks.

**Walkable** urban environment, whereby all users are no more than a ten minute walk from any of the Town Centre elements

**Diversity**, achieved through a mix of housing types and uses

**Sense of Place** engendered through appropriate architectural, landscape and spatial qualities

**Flexible** urban structure and built form that is capable of responding to changing community needs well into the future

**Compressed Maturity** whereby as many elements of the Town Centre as possible are present from its earliest stages of development

**Community Building** achieved through civic and community support infrastructure and opportunities for local employment



## ACTIVITY ZONES & CHARACTER AREAS

The principal connections carrying the largest traffic volumes, being Main Street, The Parkway and The Promenade, will bind together the major elements of the Town Centre, resulting in concentrations of commercial development within the northern realms of the Town Centre. Various forms of housing will feature more strongly in the south.

The seven Character Areas defining the Town Centre reflect these activity zones:

**Main Street** will be the heart of the Town Centre and most intense activity zoning

**Drummond** will capture the energy of adjacent Main Street, The Parkway and The Promenade and cater for predominantly residential uses with some mixed use commercial

**The Promenade** will feature development forms and land uses that have a greater reliance on car based access for viability

**Community/Learning** will be the heart for community activities, including learning, recreation and civic

**High Street** Station links the northern and southern portions of the Town Centre with uses ranging from high density living to commercial and retail, all drawing amenity from a central park.

**Hesperia** will showcase residential architecture and other contemporary medium density housing, accompanied by a quality public realm

**Reveley** will share similar characteristic to Drummond

**Southside** will form a quality inner city address, with a provision for a diversity of housing including retirement living.

## LAND USE & EMPLOYMENT PROJECTIONS

Land use creation projections have been prepared for the Town Centre that are based on the Development Plan and one land use scenario that may eventuate under prevailing market forces. The projections found that the Development Plan has capacity to yield a combined area of approximately 205,788m<sup>2</sup> of commercial, light industrial, retail and community floor space. This scenario also found that the Town Centre may yield approximately 1,750 dwellings, accommodating close to 3900 residents; or 13% of the total 30,000 residential population projected for Ellenbrook.

Based on this land use scenario for the Town Centre, the Development Plan and adjacent Ellenbrook Villages have projected capacity to create approximately 6,740 jobs, or 8,390 jobs if home based businesses are included, equating to an employment self-sufficiency rate of 56%.

# ENDORSEMENT PAGE

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This structure plan is prepared under the provisions of the City of Swan Local Planning Scheme No. 17.

IT IS CERTIFIED THAT THIS STRUCTURE PLAN WAS APPROVED BY RESOLUTION OF THE WESTERN AUSTRALIAN PLANNING COMMISSION ON:

**FEBRUARY 2005**

In accordance with Schedule 2, Part 4, Clause 28 (2) and refer to Part 1, 2. (b) of the Planning and Development (Local Planning Schemes) Regulations 2015.

Date of Expiry: **19 OCTOBER 2025**

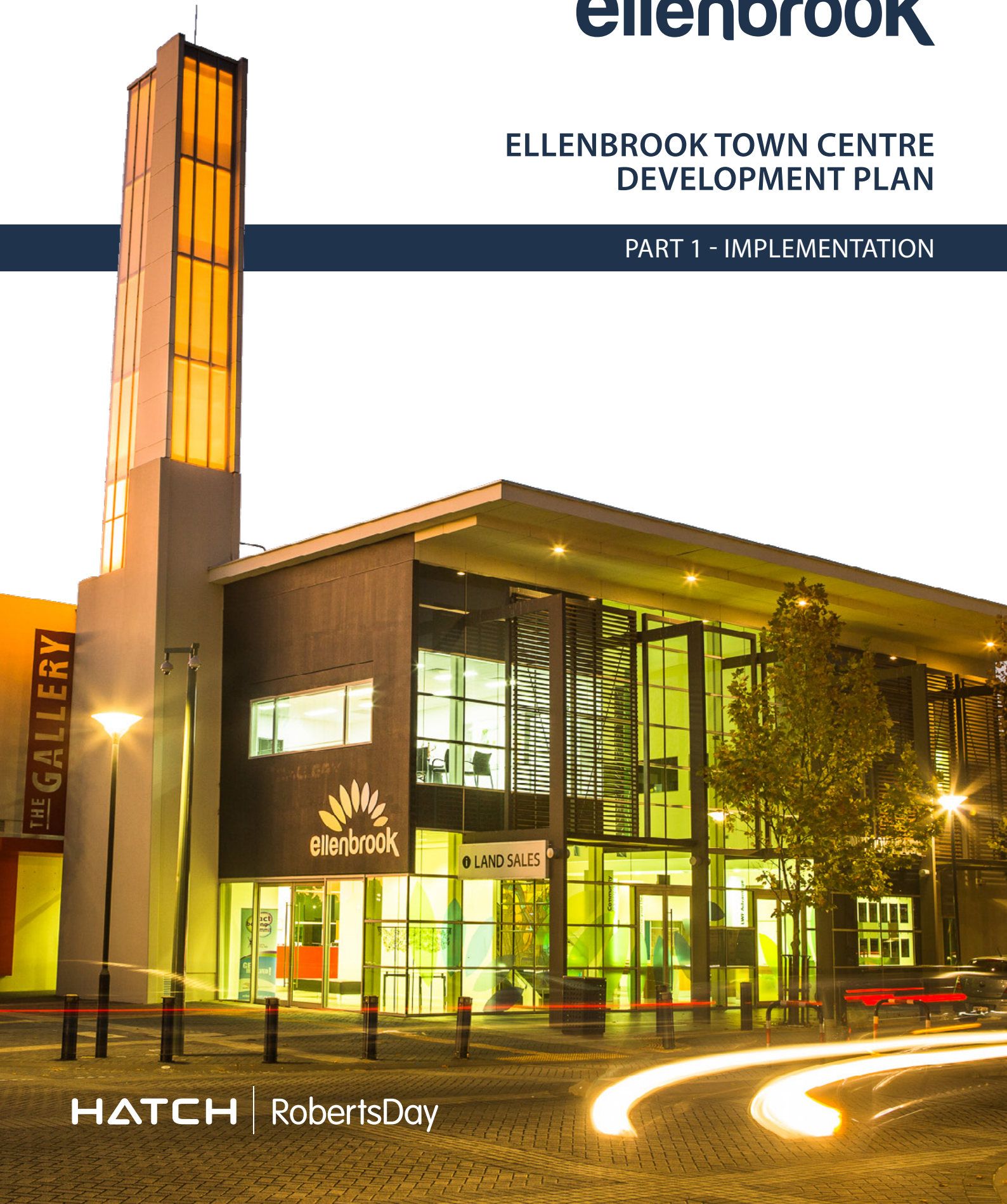






## ELLENBROOK TOWN CENTRE DEVELOPMENT PLAN

PART 1 - IMPLEMENTATION



# PART 1 - IMPLEMENTATION

---

## EXECUTIVE SUMMARY

### Location of the Ellenbrook Town Centre Development Plan Area

The Ellenbrook Town Centre Development Plan ('Development Plan') comprises of approximately 158 hectares bound by The Promenade and Charlotte's Vineyard to the north, Pinaster Parade to the east, The Bridges to south and Drumpellier Drive to the west.

### Land uses proposed by the Ellenbrook Town Centre Development Plan

The Ellenbrook Town Centre is a Secondary Centre and the Development Plan divides the centre into the following seven integrated character areas:

- Main Street
- Community/Education
- The Promenade
- Drummond
- High Street Station
- Hesperia
- Reveley
- Southside

These areas will come together to create a vibrant, multifunctional Town Centre that accommodates a patchwork of different uses, including retail, offices, residential, recreation, community, educational, civic and service commercial.

### Relationship with the Local Planning Scheme

The Development Plan has been prepared in accordance with Schedule 4 of the City of Swan Local Planning Scheme No. 17 incorporating the 'Schedule 2 Deemed Provisions' of the *Planning and development (Local Planning Scheme) Regulations 2015*.

# PART 1 - IMPLEMENTATION

## SUMMARY TABLE

ITEM	AMOUNT/AREA (HA) (APPROXIMATE)
Total area covered by the Development Plan	157.7ha
Character Area:	
• Hesperia	20.2ha
• The Promenade	31.2ha
• High Street Station	21.4ha
• Drummond	12.8ha
• Community/Learning	17.8ha
• Main Street	27.3ha
• Southside	16.9ha
• Reveley	10.1ha
Estimated number of dwellings	1800 dwellings
Estimated population	3950
Number of high schools	1
Estimated employment generating floorspace (inc retail) - ultimate	205,788m <sup>2</sup>
Estimated retail floorspace	50,000m <sup>2</sup> (retail NLA)
Estimated employment creation	6000 jobs
Estimated area and percentage of public open space given over to public open space	12.2ha (10.1%)

# PART 1 - IMPLEMENTATION

---

## 1.0 Development Plan Area

This Structure Plan shall apply to Balance Lot 9264 The Promenade, Ellenbrook being the land contained within the inner edge of the line denoting the boundary on Plan 1 and in accordance with Schedule 4B of City of Swan Local Planning Scheme No. 17 (the 'Scheme').

## 2.0 Operation

The date the structure plan comes into effect is the date the Development Plan is approved by the WAPC.

## 3.0 Staging

Development of the site will commence upon issue of subdivision approval. Staging of development will rely on key development parameters, primarily relating to:

The construction of the Ellenbrook BRT; and  
The relocation of the transmission tower.

## 4.0 Subdivision and Development Requirements

### 4.1 Land Use Zones and Reserves

Land Use permissibility within the Development Plan area shall be in accordance with Plan 1 and corresponding Zoning Table in Schedule 4A of the Scheme.

### 4.2 Reports/Strategies Required Prior to Subdivision

Prior to the lodgement of subdivisions the following management plans are to be prepared, as applicable, to the satisfaction of the relevant authority and provided at the time of subdivision:

- a) Fire Management Plan (City of Swan, DFES); and
- b) Public Open Space Schedule prepared in accordance with Liveable Neighbourhoods (City of Swan, WAPC)

## 4.3 Conditions of Subdivision Approval

- a) At the time of subdivision the following conditions may be recommended, as applicable, requiring the preparation and/or implementation of the following strategies:
  - i) Urban Water Management Plan (City of Swan, Department of Water)
  - ii) Geotechnical Report (City of Swan)
  - iii) Acoustic Assessment (City of Swan, Public Transport Authority, Main Roads WA)
  - iv) Fire Management Plan (City of Swan, DFES)

## 4.4 Public Open Space

### 4.4.1 Local Public Open Space

- a) The provision of a minimum of 10% public open space being provided in accordance with the WAPC's Liveable Neighbourhoods. Public open space is to be provided generally in accordance with Plan 1, with an updated public open space schedule to be provided at the time of subdivision for determination by the WAPC, upon the advice of the City of Swan.
- b) All public open space reserves are to be vested in the City of Swan.

## 4.5 Movement Network

Access and intersection controls shall be provided generally in accordance with Plan 1.

# PART 1 - IMPLEMENTATION

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## 4.6 Residential Design Code Variations

### 4.6.1 R-MD Codes

The City of Swan 'Variation to deemed-to-comply provisions of the R-codes – Medium-density single house development standards' Local Planning Policy (POL-LP-11) sets out acceptable variations to the deemed-to-comply provision of the R-Codes for lots coded R25 – R60. The variations set out in the R-MD Codes LPP apply to this Local Structure Plan and thereby constitute Acceptable Development within the structure plan area.

### 4.6.2 Assessment of Single Dwellings with an R80 Density

The following R-MD – R60 standards listed in Appendix 1 of POL-LP-11 shall apply for single dwelling development on lots with a density of R80 and shall be enforced via a Local Development Plan in accordance with Clause 47(c) of the Deemed Provisions in the *Planning and development (Local Planning Scheme) Regulations 2015*:

- i) Open space;
- ii) Parking;
- iii) Overshadowing; and
- iv) Privacy.

### 4.6.3 Innovation Area (Lots less than 100m<sup>2</sup>)

For lots identified as 'Innovation Area' on Plan 2 and on a Residential Density Code Plan referred to in 4.7.2(b), development is to be in accordance with the final 'Position Statement: Housing on Lots less than 100m<sup>2</sup>'.

## 4.7 Residential Development

### 4.7.1 Dwelling Target

To provide for a minimum of 1800 dwellings within the Development Plan area.

### 4.7.2 Density

- a) Plan 2 defines the broad residential density ranges that apply to specific areas within the Development Plan. Lot specific residential densities, within the defined residential density ranges, are to be subsequently assigned in accordance with a Residential Density Code Plan approved by the WAPC.
- b) A Residential Density Code Plan is to be submitted at the time of subdivision to the WAPC and shall indicate the Residential Density Coding applicable to each lot within the subdivision and shall be consistent with the Structure Plan, and the Residential Density Ranges identified on Plan 1.

- c) The Residential Density Code Plan is to include a summary of the proposed dwelling yield of the subdivision.
- d) Approval of the Residential Density Code Plan shall be undertaken at the time of determination of the subdivision application by the WAPC. The approved Residential Density Code Plan shall then form part of the Structure Plan and shall be used for the determination of future development applications. Variations to the Residential Density Code Plan will require further approval of the WAPC.
- e) Residential Density Code Plans are not required if the WAPC considers that the subdivision is for one or more of the following:-
  - i) the amalgamation of lots;
  - ii) consolidation of land for "superlot" purposes to facilitate land assembly for future development;
  - iii) the purposes of facilitating the provision of access, services or infrastructure; or
  - iv) land which by virtue of its zoning or reservation under the Structure Plan cannot be developed for residential purposes.
- f) Lots that comply with the Innovation Area requirements detailed in 4.6.3 shall adhere to the locational criteria stated in the final 'Position Statement: Housing on Lots less than 100m<sup>2</sup>'.

## 4.8 Dampier-Bunbury Gas Pipeline

In accordance with the WAPC resolution following the assessment of the Quantitative Risk Assessment, the following separation distances from the Dampier-Bunbury Gas Pipeline and Parmelia Gas Pipeline:

- a) a 200 metre separation distance for sensitive developments such as school and aged persons homes;
- b) a 60 metre separation distance for unfenced, residential development, within which non-residential land use is permitted, including POS, road reserves, road and public transit crossings and car park; and
- c) fencing further reduces the separation distance adjacent to residential development within the easement on the western side and to 30 metres of the Dampier-Bunbury Gas Pipeline on the eastern side.

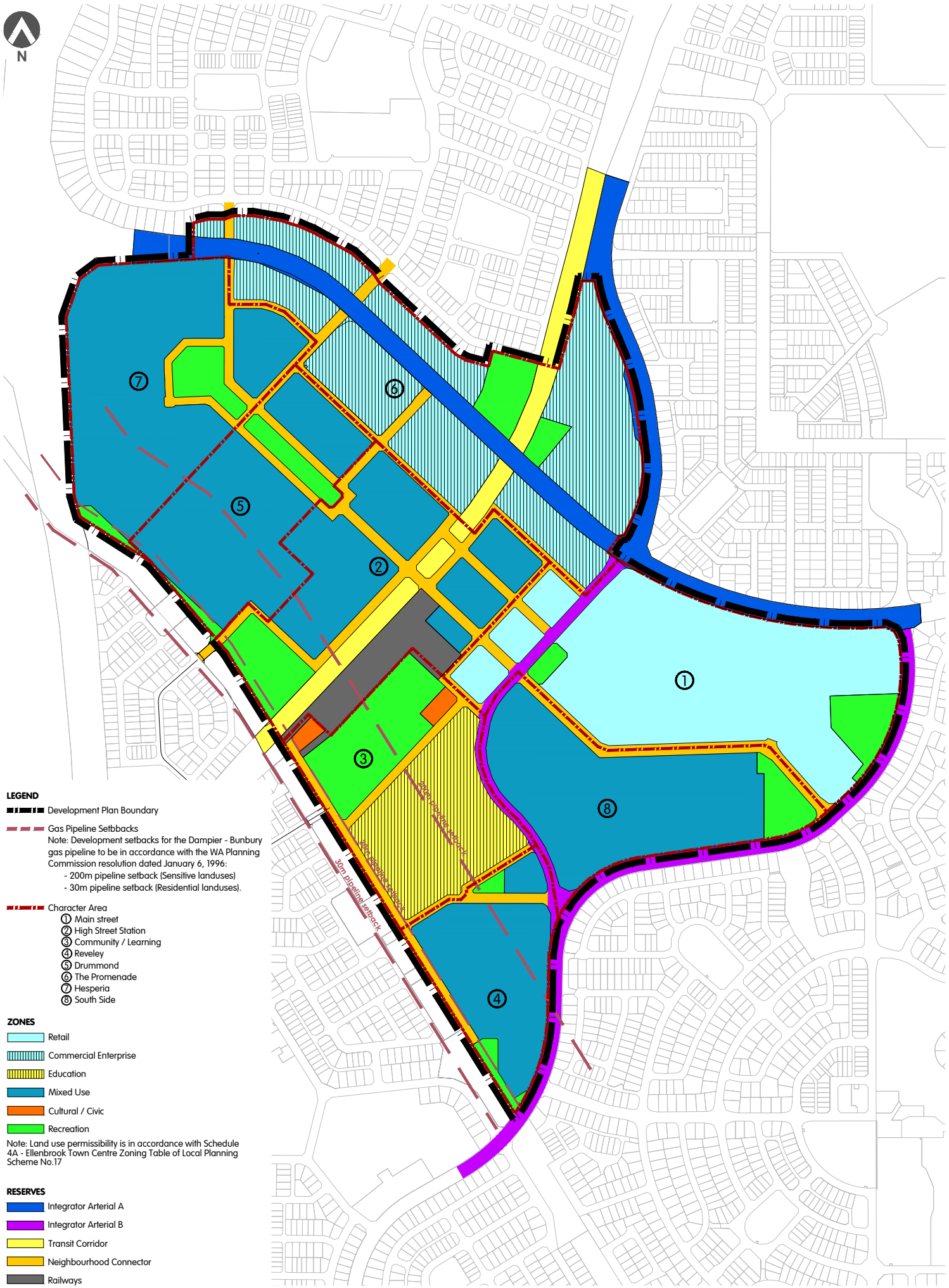
#### **4.9 Car Parking Standards**

Parking provision is to be in accordance with the Ellenbrook Town Centre Parking Strategy approved by the City, incorporating parking rates, maximisation of on-street parking, integrated public parking facilities and promotion of reciprocal use, cash-in-lieu provisions and provision for bicycle parking and end of trip facilities.

#### **5.0 Local Development Plans**

Local Development Plans (LDP) shall be required as a condition of subdivision (excluding land amalgamations, superlot subdivision for land consolidation purposes, and subdivision and/or development facilitating servicing, access and/or infrastructure) and shall be prepared in accordance with Part 6 of DPS2 Deemed Provisions. The LDP's shall be prepared and approved over all or part of a precinct(s), or overlapping precinct boundaries where the City considers this is necessary, to address the following:

- a) Standards of R80 lots in accordance with clause 4.6.2;
- b) ensure compatibility between built form, car parking, access, land use, and other relevant considerations;
- c) Building orientation;
- d) Building design and setbacks;
- e) Passive solar design (where applicable);
- f) Overlooking and privacy;
- g) Car parking and access (including pedestrian);
- h) Private open space;
- i) Bushfire protection provisions (where relevant); and
- j) Any such other information considered relevant by the proponent and/or determining authority to address the requirements of this Structure Plan.



**LEGEND**

- Development Plan Boundary
- Gas Pipeline Setbacks  
Note: Development setbacks for the Dampier - Bunbury gas pipeline to be in accordance with the WA Planning Commission resolution dated January 6, 1996:  
- 200m pipeline setback (Sensitive landuses)  
- 30m pipeline setback (Residential landuses).
- Character Area
  - ① Main street
  - ② High Street Station
  - ③ Community / Learning
  - ④ Reveley
  - ⑤ Drummond
  - ⑥ The Promenade
  - ⑦ Hesperia
  - ⑧ South Side

**ZONES**

- Retail
- Commercial Enterprise
- Education
- Mixed Use
- Cultural / Civic
- Recreation

Note: Land use permissibility is in accordance with Schedule 4A - Ellenbrook Town Centre Zoning Table of Local Planning Scheme No.17

**RESERVES**

- Integrator Arterial A
- Integrator Arterial B
- Transit Corridor
- Neighbourhood Connector
- Railways



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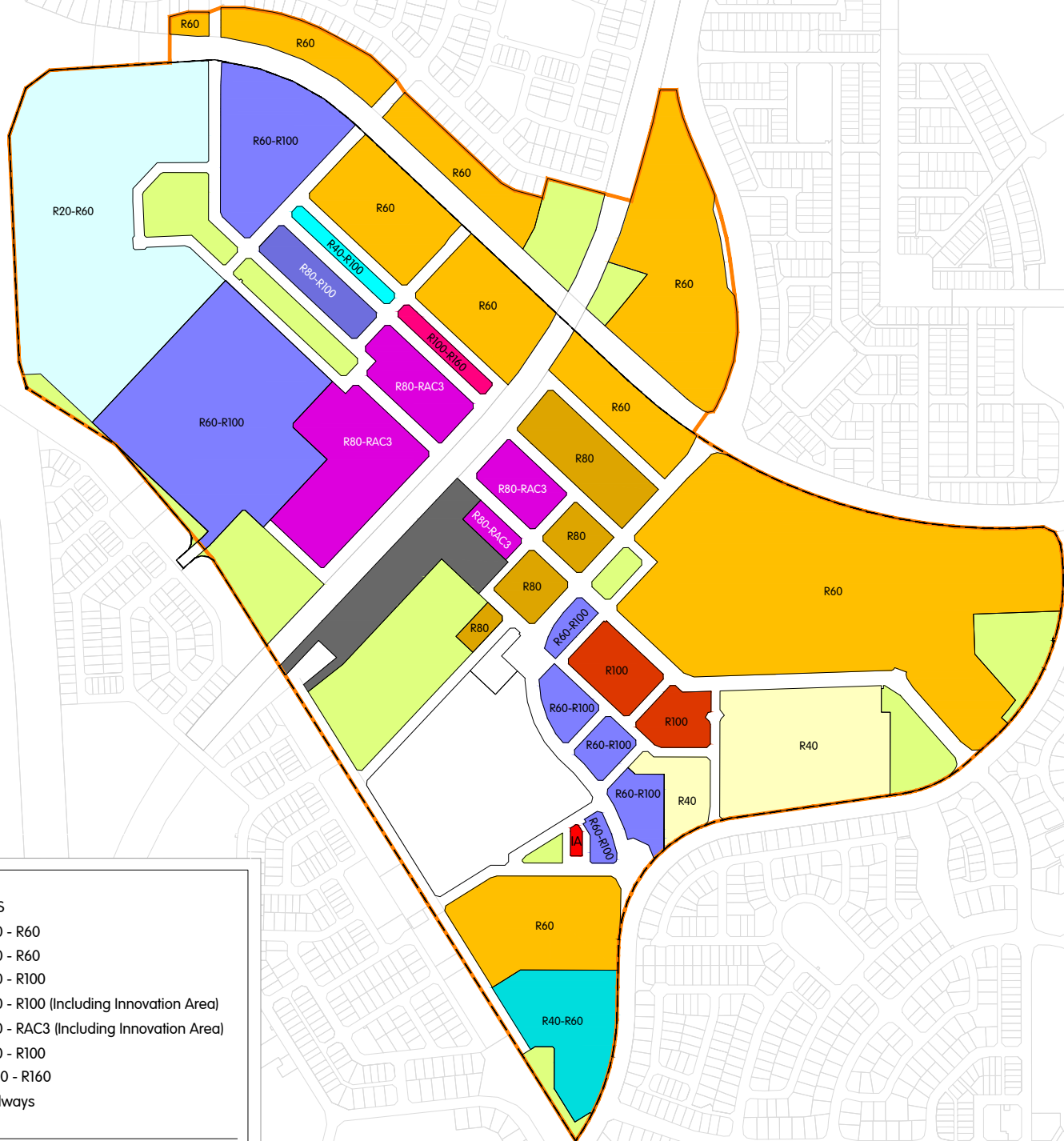


REV	DESCRIPTION	Y/M/D	SB	RD	APP'D
M	CHARACTER BDY MODIFIED	210802	SB	RDa	
L	INCLUDE RAILWAYS ZONE	210721	SB	RD	
K	UPDATED MIXED USE AREAS 2 & 5	210609	NR	RD	
J	REMOVE POS PARCEL FROM REVELEY	210429	SB	RDa	
I	FURTHER ADJUST POS IN REVELEY	201103	SB	TT	
H	INCLUDE POS INTO REVELEY	200207	SB	TT	
REV	DESCRIPTION	Y/M/D	DRAWN	APP'D	

PLAN 1 - DEVELOPMENT PLAN  
**Ellenbrook Town Centre**  
 City of Swan

REF NO. **EJV TWC** DRAW NO. **RD1 074** REV. **M**





- LEGEND**
- POS
  - R20 - R60
  - R40 - R60
  - R40 - R100
  - R60 - R100 (Including Innovation Area)
  - R80 - RAC3 (Including Innovation Area)
  - R80 - R100
  - R100 - R160
  - Railways

- Approved Densities**
- R40
  - R60
  - R80
  - R100
  - Innovation Area (IA)



**HATCH | RobertsDay**

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X.4	UPDATE DENSITY CODES (R80-RAC3)	220905	TG	RDa
X.3	UPDATE DENSITY CODES	220831	TG	RDa
X.2	INCLUDE RAILWAYS	210802	SB	RDa
X.1	UPDATE DENSITY IN REVELEY	210608	SB	RDa
X	UPDATE DENSITY COLOURS	210531	SB	RDa
W	UPDATE DENSITIES	210510	SB	RDa
V	REMOVE POS FROM REVELEY	210429	SB	RDa
REV	DESCRIPTION	YYMMDD	DRAWN	APPRD

**PLAN 2 - DENSITY CODE PLAN**  
**Ellenbrook Town Centre**  
 City of Swan

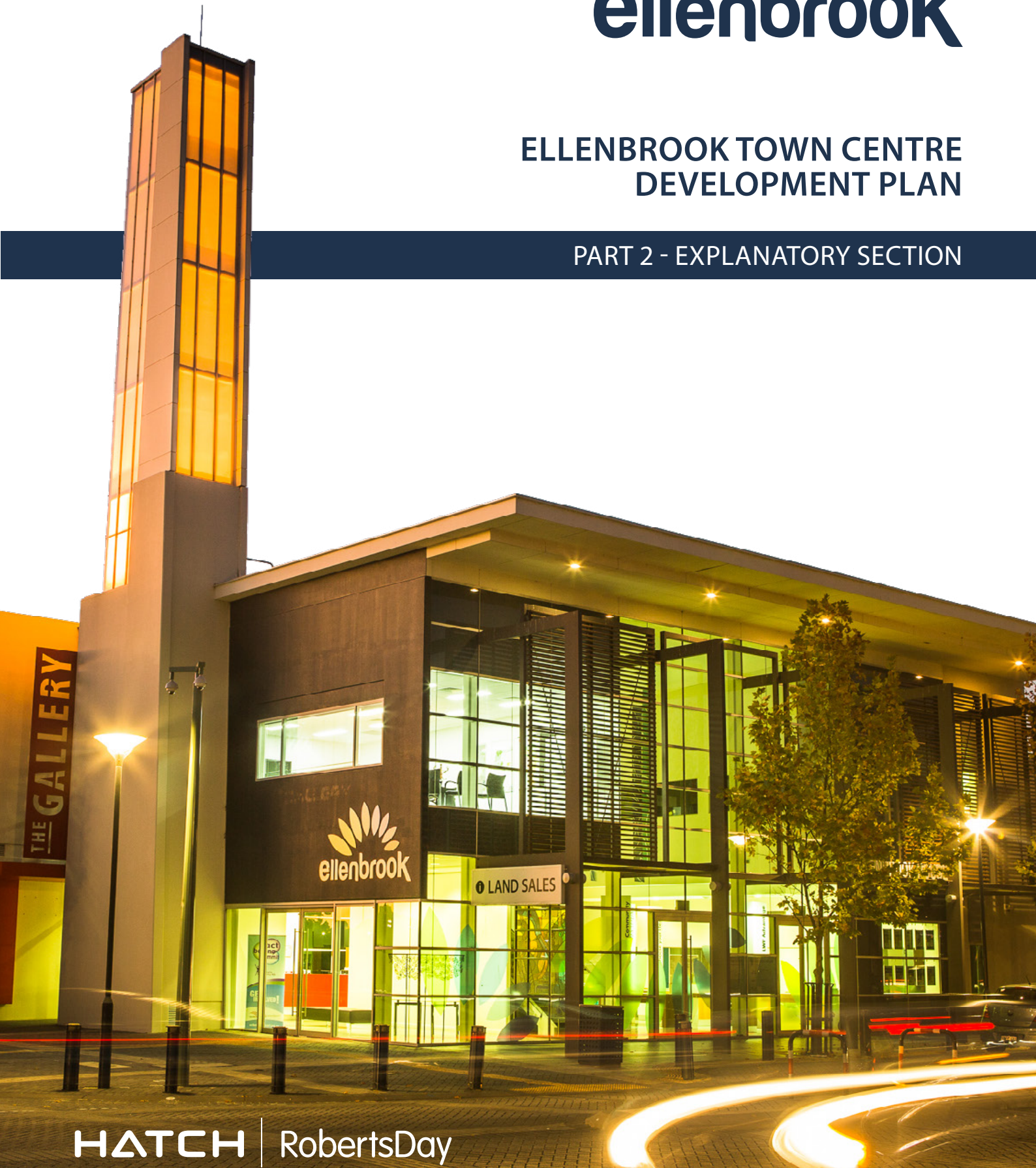
REF NO. **EJV TWC** DRAW NO. **RD1 015** REV. **X.4**

DISCLAIMER: ISSUED FOR DESIGN INTENT ONLY. ALL AREAS AND DIMENSIONS ARE SUBJECT TO DETAIL DESIGN AND SURVEY



## ELLENBROOK TOWN CENTRE DEVELOPMENT PLAN

### PART 2 - EXPLANATORY SECTION



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# 01 INTRODUCTION

*The original Development Plan was approved in 2005 and design reviews were undertaken in 2011, 2015 and 2020.*

*Working in collaboration with Government, local stakeholders and professionals, the opportunities and constraints of the Town Centre site were identified and a range of development scenarios explored. The outcome is a flexible plan that will guide the progressive development of the Town Centre over the next 15 years and beyond. It will be a centre of varied uses for a diverse community – a centre that embraces sound principles of sustainable urban evolution.*

## OVERVIEW

The Ellenbrook Town Centre will grow over the next 15 years to become the main cultural, economic and community node for the Ellenbrook New Town.

This Development Plan provides a flexible urban planning framework to guide the development and use of the Town Centre as it matures well into the future.

It satisfies the requirements of the City of Swan Local Planning Scheme No. 17 (LPS17) for the preparation of Development Plans and the WAPC's SPP4.2 for the preparation of an Activity Centre Plan.

The Development Plan divides the Ellenbrook Town Centre into the following seven integrated character areas:

- Main Street
- Community/Education
- The Promenade
- Drummond
- High Street Station
- Hesperia
- Reveley
- Southside

These areas will come together to create a vibrant, multifunctional Town Centre that accommodates a patchwork of different uses, including retail, offices, housing, recreation, community, educational, civic and spiritual.

The project is being managed by LWP Property Group on behalf of the Ellenbrook Joint Venture: a partnership between the Department of Housing and private sector developers.

## REPORT STRUCTURE

The Development Plan report is divided into the following sections.

Section 1 introduces the Town Centre Development Plan.

Section 2 provides details of the Town Centre development site and its immediate and broader metropolitan context

Section 3 introduces the Development Plan, including the vision and the principles shaping its design.

Section 4 describes the Development Plan, including strategic

linkages, the public realm and the land use and design elements embodying each of the character areas.

Section 5 introduces street block, building and street typologies that will contribute to the rich variety of environments available within the Centre.

Section 6 sets out relevant land use and development control standard, whilst Section 7 projects floor space creation and dwelling yields and uses this information to anticipate job creation.

Section 8 addresses the requirements of the Ellenbrook Place Plan.

Section 9 – 12 address specific technical and design considerations, including car parking and traffic management, environmental management, landscaping treatments, and engineering service requirements.

Section 13 explains the sustainability initiatives proposed for the Town Centre, whilst Section 14 sets out the intended staging.



# 02 SITE & CONTEXT

*A deep understanding of the context is critical for positioning the Town Centre within the wider metropolitan area and ensuring it is integrated and complementary of its surrounds.*

*Knowing the elements that define the spatial envelope of this site will facilitate design that is responsive, respectful and meaningful.*

## CONTEXT Metropolitan

The Ellenbrook Town Centre is located within the City of Swan, approximately 20 kilometres north-east of the Perth Central Business District and 10 kilometres north-west of the Midland Town Centre. Whiteman Park offers a major regional playground to the south and the Swan Valley provides a rural interlude to the east.

The immediate service catchment of the Town Centre comprises the remainder of the Ellenbrook New Town, Vale (located to the east) and The Vines (located to the north east). This comprises a population catchment of approximately 50,000 people. The Town centre will also service the Swan Urban Growth Corridor located to the south of Ellenbrook, which includes the suburbs of Brabham, Henley brook, Albion, West Swan and Caversham. This corridor has the potential to accommodate 33,000 new residents.

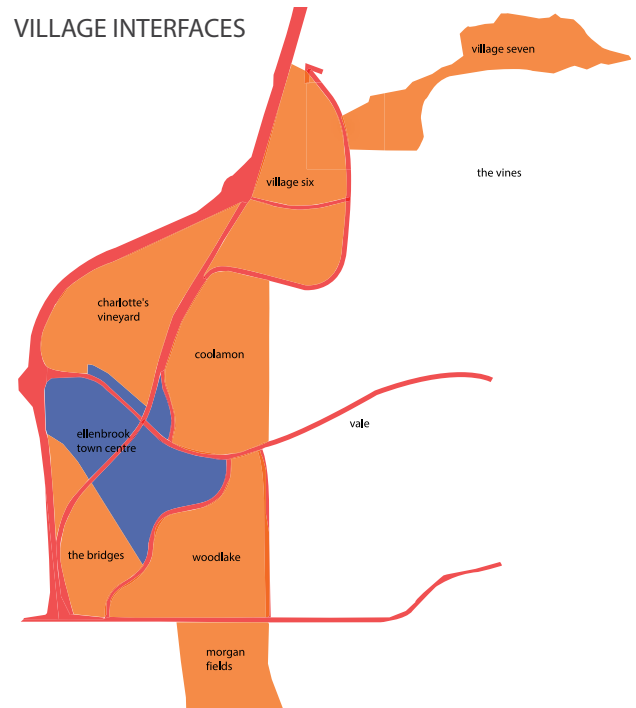
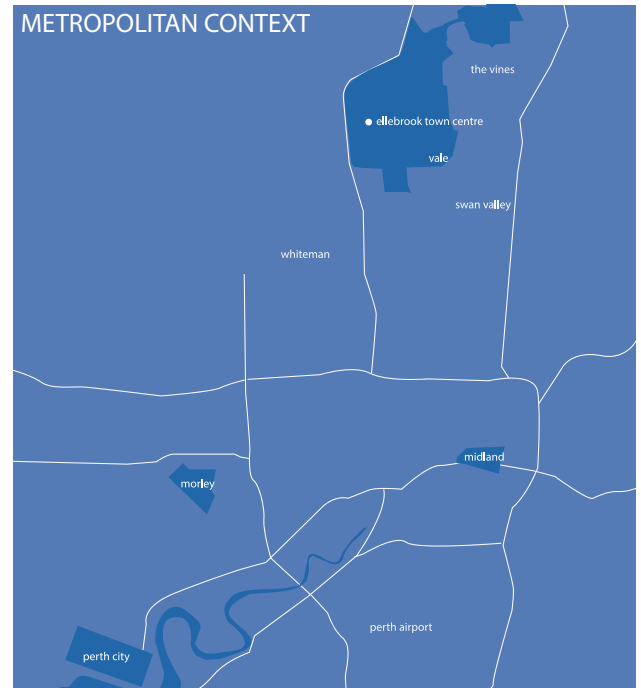
## Ellenbrook New Town

The Town Centre forms part of the Ellenbrook New Town: an integrated community structured around seven villages that commenced development eight years ago. Traditional town planning principles have guided the development of the villages, resulting in intimately scaled neighbourhoods overlain by a movement network of interconnected streets whereby most residents are within a five minute walk (400m) of centrally located community facilities and services.

When completed in 2025, Ellenbrook is projected to have a community of 30,000 people accommodated within more than 10,000 homes. Each village has access to local neighbourhood and district level facilities and has been designed in anticipation of the Town Centre, thereby incorporating a comprehensive network of pedestrian/cyclist and vehicular access linkages that will ultimately connect with the Centre.

To date over 9,000 housing sites have been created (accommodating an estimated population of over 30,000) within the following villages that are either developed or under construction:

- Village 1: Woodlake Village;
- Village 2: The Bridges;
- Village 3: Morgan Fields;
- Village 4: Coolamon;
- Village 5: Charlottes Vineyard;
- Village 6: Malvern Springs;
- Village 7: Lexia; and
- Village 8: Annies Landing



## Statutory Planning Considerations

### Zoning

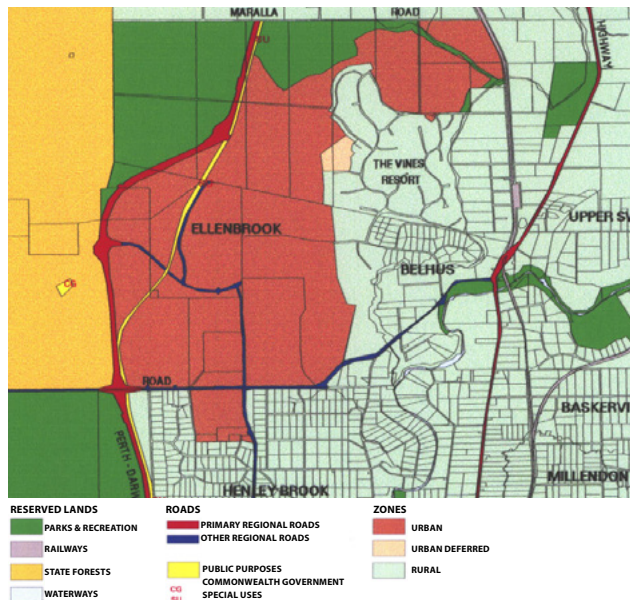
Most of the Town Centre is zoned 'Urban' in the Metropolitan Region Scheme (MRS). The transit corridor which traverses the centre of the site is reserved 'Public Purposes' in the MRS. Pinaster Parade and The Broadway are reserved 'Other Regional Roads' and the Perth-Darwin Highway alignment abutting the western boundary of the Town Centre is reserved 'Primary Regional Roads'.

The Town Centre, together with the remainder of the Ellenbrook New Town, is zoned 'Special Purpose Zone Ellenbrook' in the City of Swan Local Planning Scheme No. 17 (LPS17).

This Development Plan satisfies the requirements set out in LPS17. It will supersede the existing Ellenbrook Town Centre Development Plan (Roberts Day, February 2005), which has City of Swan and WAPC endorsement.

Local Development Plans (LDPs) will be progressively prepared for street blocks and individual development sites prior to the landholdings being transferred to new owners. This will ensure that a consistent and appropriate level of guidance is maintained over the ultimate development outcome.

### METROPOLITAN REGION SCHEME ZONING



## Commercial Centre Hierarchy

The Ellenbrook Town Centre's primary catchment will comprise the residential populations of Ellenbrook, Vale and The Vines, which together are projected to accommodate approximately 50,000 people. Its secondary catchment, incorporating areas further a field, including Bullsbrook, Henley Brook, Caversham, Brabham and Pearce, is projected to accommodate approximately 85,000 persons.

The WAPC's Statement of Planning Policy 4.2 (SPP4.2) identifies Ellenbrook as a 'Secondary Centre' in the Activity Centres Hierarchy. SPP4.2 recommends that the Ellenbrook Town Centre and other Secondary Centres within the metropolitan area should function as multi-purpose centres that provide a diversity of uses which perform an important role in the city's economy, and provide essential services to their catchments. Whilst this Development Plan accommodates this diversity of uses, it purposefully also allows for the injection of a range of housing types to stretch the use of the Town Centre beyond daytime office and shopping hours.

An Activity Centre Structure Planning Table has been prepared to demonstrate that the Development Plan accords with the Model Centre Framework contents of SPP4.2, including:

- Centre Context;
- Movement;
- Activity;
- Urban Form;
- Resource Conservation; and
- Implementation.

The Table can be found in Appendix 1.

Midland is the closest Strategic Metropolitan Centre to Ellenbrook. SPP4.2 envisages that Ellenbrook will be the major city servicing the north-eastern and eastern corridors of the Perth Metropolitan Region. The closest light industrial and service commercial areas to Ellenbrook, which are about eight to ten kilometres away, are Malaga, Wangara and Midland. These centres will continue to function as strategic employment and service centres for the region.

The neighbourhood and local centres within the villages surrounding the Town Centre will complement the suite of functions and services provided in the Town Centre. They will provide accessible centres for local conveniences and community services, as well as nodes for social interaction.

## Regional Access and Transit

The existing and planned regional transport network will ensure the Ellenbrook Town Centre is highly accessible to its catchment population.

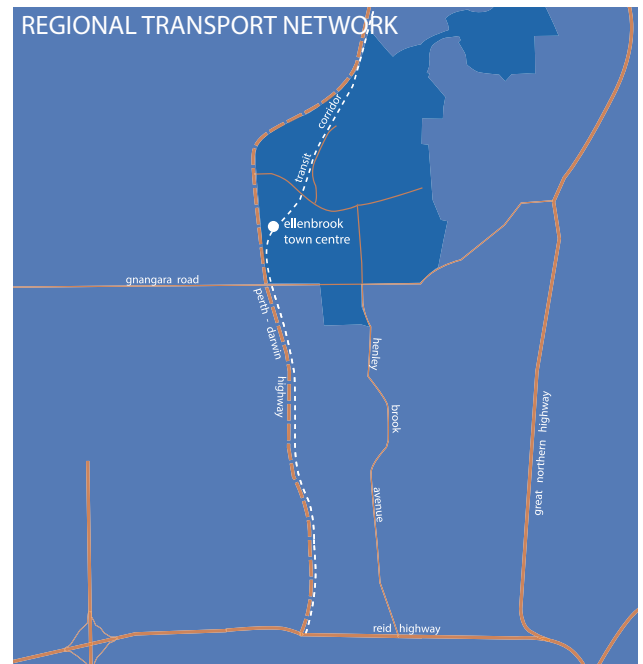
*Regional road access to the Ellenbrook Town Centre is via Gnangara Road, which is linked to the Perth and Midland City Centres and other strategic metropolitan areas by Lord Street, Reid Highway, Alexander Drive, Tonkin Highway, Beechboro Road and West Swan Road. Recent expansions to this network (partly funded by the Ellenbrook Joint Venture) include the construction of Drumpellier Drive, which provides direct access to the Town Centre from Gnangara Road via The Promenade, The Broadway, which provides access to The Vines, and The Promenade, which provides access to Aveley.*

*Planned future improvements include the construction of Henley Brook Avenue between Reid Highway and the Ellenbrook/Vale areas and the Perth-Darwin National Highway.*

*The main entries into the Town Centre will be from Pinaster Parade in the south and from The Promenade and The Broadway in the north. Main Street and The Parkway, which will extend between Pinaster Parade and The Promenade, will provide the main internal access links for the initial stages of development. The PDNH will provide a direct access connection to the Town Centre from existing urban development to the south and any future urban development to the north.*

*Existing public transport to Ellenbrook is restricted to bus services, which has only recently been improved via more frequent bus services. The public transport system to Ellenbrook will be further enhanced by the delivery of the Morley-Ellenbrook rail line. This is expected to be completed in 2024 with the terminus station provided within the Town Centre.*

*The portion of the transit corridor north of the future transit station will be established as a linear park that will accommodate a dual use pathway to provide for a direct pedestrian and cyclist access link to the centre from the surrounding villages. The pipeline corridor (Forrestview Park) abutting the south-western boundary of the Town Centre and the other park linkages incorporated into the design of the surrounding villages perform similar functions.*



**THE SITE**  
**Introduction**

The Town Centre site comprises approximately 150 hectares and is bordered by Pinaster Parade on its south-eastern boundary, by the pipeline corridor park (Forrestview Park) on its south-western boundary and by the Perth-Darwin Highway on its western boundary.

The site is owned by the Ellenbrook Joint Venture, which allows a large degree of control over its future development to ensure a coordinated and high quality planning outcome.



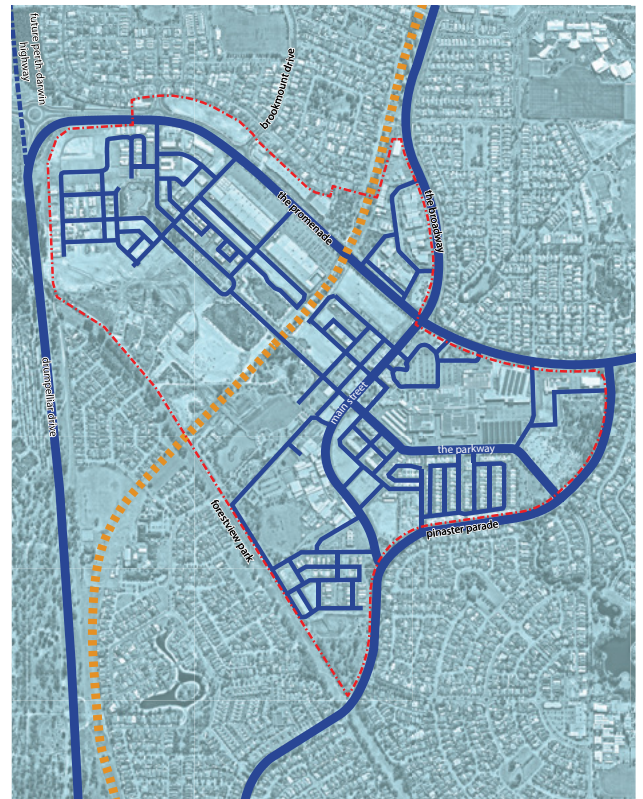


## Interfaces



The Town Centre's immediate context comprises Charlotte's Vineyard and Coolamon to the north, Woodlake to the south-east, The Bridges to the south-west and the Gnangara State Forest to the north-west. The four adjacent villages comprise predominantly single residential housing, open spaces and mainly local community facilities and services, with the exception of Coolamon, which has district level recreational facilities.

## Infrastructure



The Perth – Darwin National Highway, abutting the western boundary of the site, will provide one of the most significant north-south connections in the region was completed in 2005. Likewise the dedicated transit corridor reserve passing through the Town Centre presents the opportunity to elevate future visitation levels to the Town Centre. The Morley-Ellenbrook rail line is expected to be completed in 2024.

## Open Space Linkages & Site Features



The adjacent villages are designed with the Town Centre in mind and therefore incorporate streets and park linkages that lead to the Town Centre. The opportunity is available for the Town Centre to integrate with these linkages. Forestview Park, perhaps the most prominent of these linear park linkages, brings residents safely to the Town Centre from The Bridges, Woodlake Village and Morgan Fields. A pedestrian/cycleway link temporarily accommodated within the transit corridor also provides a safe and direct access link from surrounding villages.

The landform is gently undulating (elevations ranging from RL43m to RL60m AHD), falling away slightly from Pinaster Parade and rising to a modest ridgeline that defines the northern area of the Town Centre. The Development Plan allows for the retention of the two highest points of this ridgeline within open space, creating a backdrop to future development and allowing the natural terrain to permeate the urban environment.

## Microclimate



Ellenbrook is located approximately 21 kilometres from the coast and is therefore relatively immune to the moderating climatic effects of the ocean and associated sea breezes. Consequently, the temperatures are typically a few degrees more extreme in summer and winter at Ellenbrook compared with settlements closer to the coast. Warm easterly and south westerly breezes are also prevalent during summer months.

This poses a challenge for the design of the Town Centre, particularly given that it is planned to be a predominantly open centre with a strong emphasis on an activated public realm. Important design considerations should therefore include orientation of buildings and lots for passive solar access, shade protection above pedestrian walkways and seating, and appropriate landscape species selection.

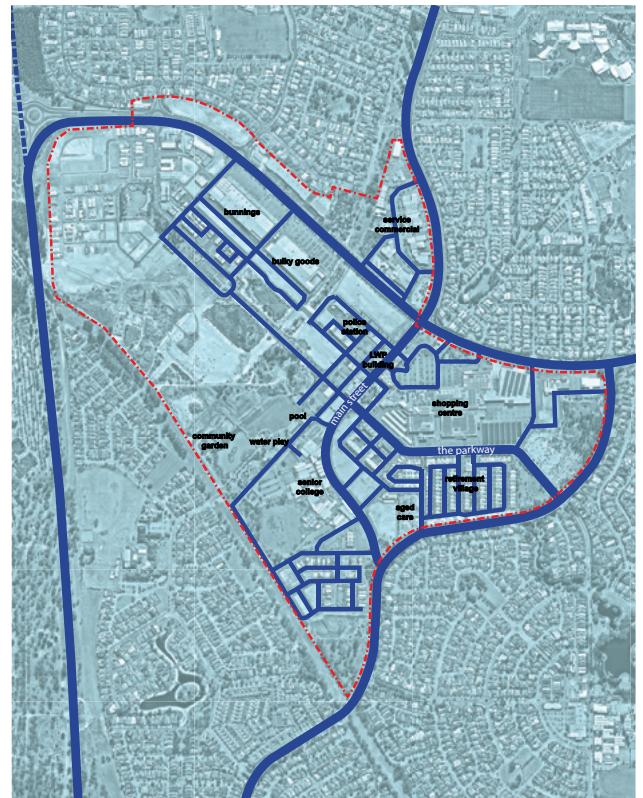
## Services



Land use restrictions apply to high-pressure gas pipeline located immediately to southwest of the Town Centre to manage risk (i.e. 200 metre separation buffer to sensitive land uses such as schools and aged persons accommodation, and a 60 metre separation for residential development, reduced to 30 metres if residential development is fenced). The Development Plan accommodates these separations.

With respect to future servicing requirements, investigations indicate that all necessary services can be made available to the Centre. These services will need to be designed with sufficient capacity to accommodate intensification and changes to land use well into the future. Drainage will be accommodated within the natural site depressions and will feature retention basins (designed as landscape depressions). One such retention basin has already been constructed and is an important feature in the Town Centre. Drainage infiltration areas will service the north-western portion of the site where considerable open space areas will be allocated to the retention of the elevated land. The efficient use of land made possible through the use of sumps in this area will ensure a compact urban form can still be achieved.

## Existing Buildings + Facilities



The Town Centre has developed rapidly since the original Development Plan was approved, including the construction of the following buildings and facilities:

- The Shops at Ellenbrook – Stage 2 (31,000m<sup>2</sup> retail floorspace);
- Main Street Stages 1 and 2 (retail, cafes, offices);
- Police Station;
- Indoor pool;
- Waterplay facility;
- Ellenbrook Library;
- Ellenbrook Middle and Senior Schools;
- Retirement village;
- Four apartment buildings;
- Aged care facility;
- Community garden;
- Service industrial units;
- Service Stations;
- Bulky goods retail; and
- Tavern.



# 03 TOWN CENTRE DEVELOPMENT PLAN

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*The Town Centre Development Plan has evolved having regard to the physical and contextual elements that will contribute to the defining qualities of this new urban centre. It provides for a robust urban structure that can respond to the Town Centre's evolution and an engaging public realm that emphasises people above all else. The movement network and land use mix will ensure the Town Centre is highly accessible on foot, bicycle and public transport.*

## **VISION**

The Ellenbrook Town Centre will become the vibrant commercial, cultural and residential heart of Ellenbrook and the wider district. Some people will live in the Town Centre, while others will go there to work, learn, be entertained, to meet others, or to participate in community and cultural activities.

Changing lifestyle demands, sustainability considerations and an overriding objective to satisfy the needs of the Ellenbrook and wider metropolitan community will drive the urban structure and physical fabric.

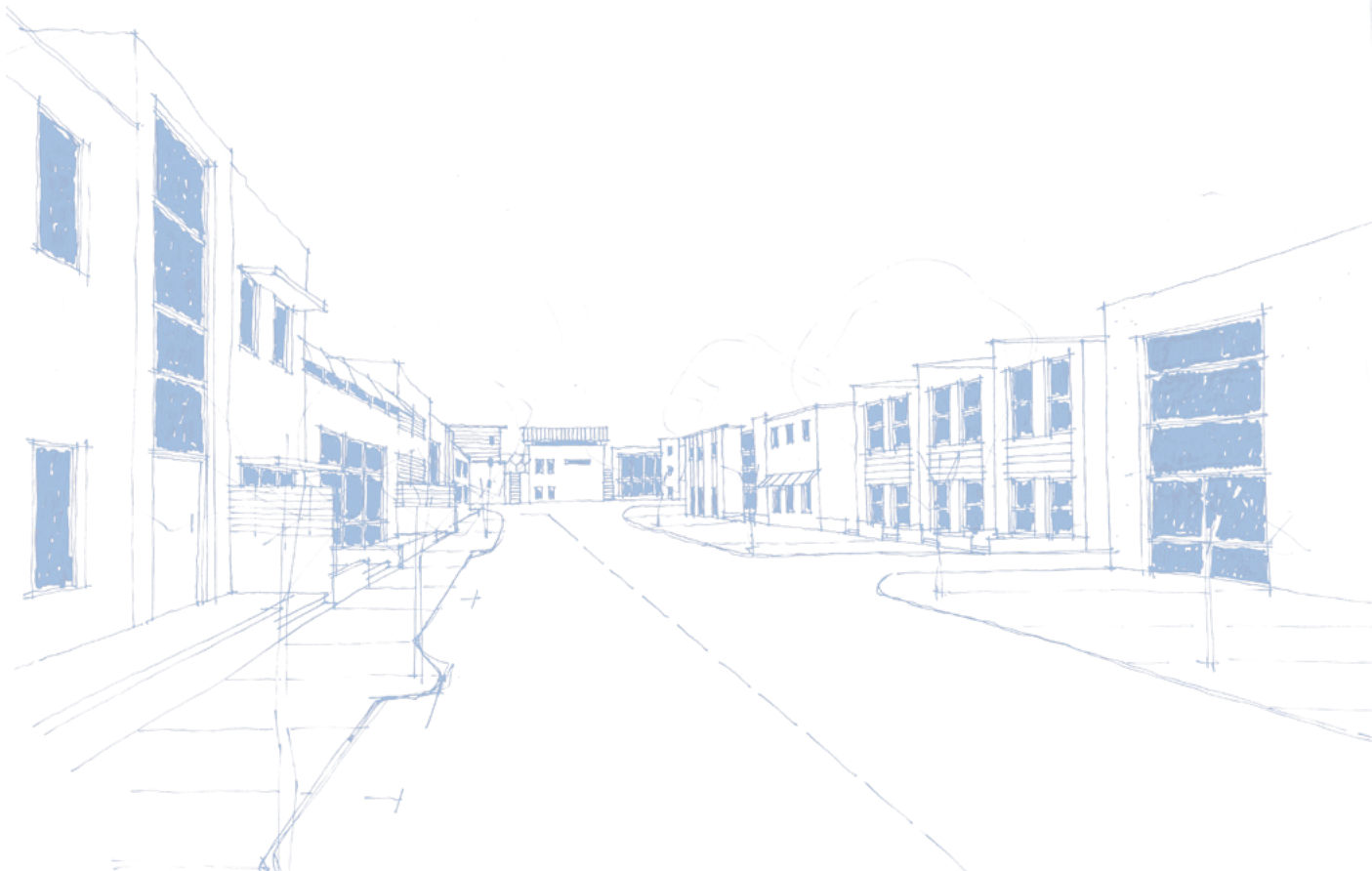
The intensity of the urban form and the blending of uses will foster accessibility, with a particular emphasis on walking, cycling and public transport. Putting the everyday experience of the street by making it as easy and attractive to walk, cycle or take public transport, as it is to travel by car will be foremost on the agenda.

The broad mix of land uses, including the injection of a range of housing types, will promote day and night time activity.

A new aesthetics in urbanity will be showcased incorporating tree-lined streets, quality urban parks and contemporary architectural design. The various design elements will come together to create a Town Centre of intensity and substance that is distinct from, although integrated with the surrounding villages.

The staged development of the Town Centre will be organised to achieve compressed maturity, whereby social, physical and economic outcomes are accelerated early in the Town Centre's evolution to become a foundation for future stages of development. Every consideration will also be taken in the planning to 'future proof' the Town Centre; that is to ensure it remains viable and relevant to the communities it serves well into the future.

Partnerships forged between the State Government, City of Swan, business and industry, the Ellenbrook Joint Venture and the Ellenbrook community will make achieving this vision possible.





## OBJECTIVES

The Town Centre will provide the focus for major retail, commercial, cultural, entertainment, residential and leisure uses in either stand-alone buildings or mixed use development.

It will become the major employment focus for Ellenbrook and its surrounds, and provide the hub for higher order goods and services. The key objectives being:

*Celebrate the public realm* - to orchestrate a vibrant and prominent public realm with pedestrian friendly streets and parks and adjacent uses that activate these spaces and blur the definition between public and private spaces on key streets and locations

*Walkable* - to foster an environment that is safe, stimulating and conducive to walking

*Mixing the uses* - to promote the compatible mixing of land uses including retail, commercial offices, showrooms, community, spiritual and residential within buildings and street cells

*Social diversity* - to incorporate a mix of residential housing forms (warehouse apartments, townhouses, multi-level apartments, shop-top housing etc) for maximum choice, diversity and affordability

*Sense of place* - to engender an urban visual character and identity through appropriate architectural, spatial and landscape qualities

*Flexible and robust* - to create a robust and flexible urban structure and built form that is capable of responding to changing community needs well into the future

*Compressed maturity* - to achieve the orderly staging of growth over the timeframe of the Town Centre development, with as many elements as possible present from the earliest stages

*For the community* - to ensure appropriate levels of civic infrastructure and opportunities for local employment are accommodated in the mix of uses

*Interactivity* - to develop an interactive environment and public spaces, where appropriate, rather than developing static environments

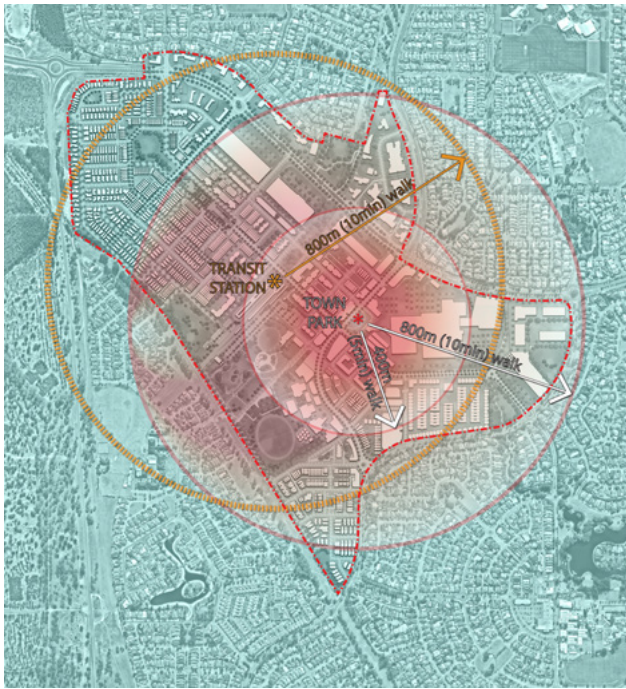
*Economic health* - to become the regional focus for employment and economic development and a highly sought after location for commercial investment by Ellenbrook residents and the wider business community.

*Cultural diversity* – to ensure the Town Centre develops as the regional centre to service the commercial needs of the Ellenbrook locality and surrounds.

*Commercial development* – To ensure the Town Centre develops as the regional centre to service the commercial needs of the Ellenbrook locality and surrounds.



**URBAN STRUCTURE**  
**Ped-Shed Analysis**



In contrast to an enclosed shopping centre with a single commercial use dimension, an open air Town Centre needs to be multi-dimensional and multi-directional, allowing users choice about how they will access and use the Centre at various times.

The Development Plan is based on an urban structure whereby residents and visitors are within no more than a ten minute walk from the centre of Town to the edge. This is achievable through an interconnected network of streets, laneways and linear parkways that provide for optimal choice of movement for pedestrians/cyclists, as well as congestion free access for motorists.

**Vistas and View Sheds**



In addition to being walkable, the development plan is structured to engender a stimulating urban experience. Inherent in the growth of the Town Centre will be the inclusion of reference points, cross streets and deflections that take users through a series of vistas. An example is the view corridors to the retained portions of the former ridge line that will be accentuated by the pine trees and revealed as one arrives at the Station Plaza. Other important visual cues include the library that will enclose the southern end of Main Street and views to the future transit station and plaza from adjacent terminating streets. Sweeping views of the Town Centre and its surrounds should also be available from the retained high points.



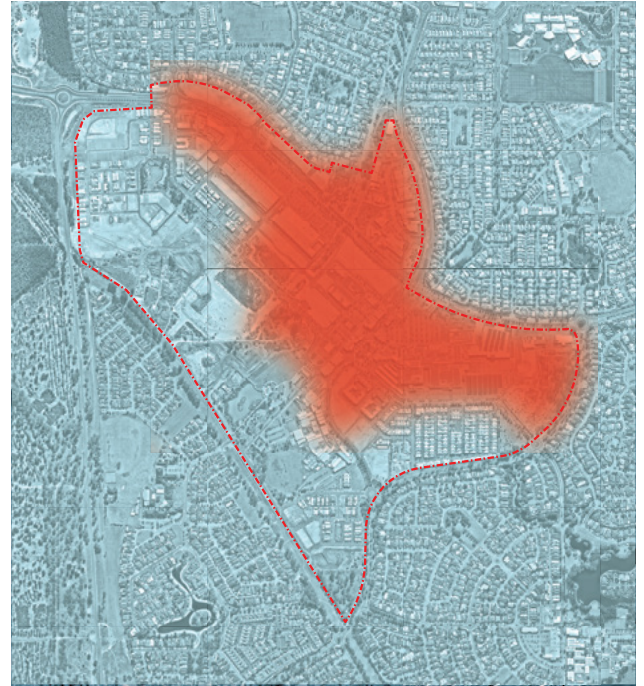
## Street Block



The street block will be the basic organising element, providing for a high degree of permeability for all modes of transport and allowing buildings and land uses to establish strong relationships with the street. With all circulation focused on the public streets, which are always open, there will be greater scope to integrate entertainment, leisure and community uses into shop-front locations where the viability and enjoyment of these uses is more assured.

Street blocks range in size across the Town Centre to allow for diversity in the built form and land use. Block sizes increase for instance adjacent to The Promenade to accommodate 'bulky good' showroom development and warehousing. DAPs will in most cases be prepared for a street block at a time, to ensure compatibility between built form, car parking, access, land use and other relevant considerations.

## Activity Zones



The principal connections attracting commercial and other high-end land uses will be those carrying the largest traffic volumes, being Main Street, The Parkway and The Promenade. These connections are configured to bind the major elements of the Town Centre, including the transit station, the Town Park, the Community/Learning precinct and Main Street retailing, and to provide direct linkages with the major thoroughfares adjacent to the Town Centre.

As Main Street, The Promenade and The Parkway will afford the greatest commercial exposure and energy, it can be expected that there will be a discernible concentration of commercial activity in the vicinity of these connections. Retailing and other activities that rely principally on a high level of commercial exposure will front these connections, whilst those commercial uses less reliant on exposure will occupy the street blocks behind. Shops and entertainment uses will initially assemble on Main Street, although it is anticipated these uses will eventually extend along The Parkway, particularly when the transit station anchors this growth.

The focus of commercial activity will therefore be on this northern side of the Town Centre. This will contribute to an urban character distinctive from the south side where there will be a greater concentration of medium and high density housing in various forms, complemented by quality urban parks and plazas.

## CHARACTER AREAS

The Development Plan is divided into seven character areas. The success of each of these areas will be contingent on the success of the Town Centre as a whole.

Although the character areas will each perform a range of overlapping functions, the activity mix found within each will aim to avoid conflict and maximise synergy between land uses. This mix will also bring a specific character to each area, which will contribute to legibility and identity. The intensity of activity will vary between areas and at different times of the day.

In brief, the character areas are:

**Main Street** – incorporating Main Street, the Town Square and the shopping complex, this area will be the heart of the Town Centre and nucleus for retail activity.

**High Street Station** – drawing upon the energy of Main Street, The Parkway and The Promenade, High Street will cater for predominantly commercial uses, including offices, commercial, retailing and light industrial, with residential located above in some instances. The transit station and associated Station Plaza will form the heart of this precinct; defining its personality and providing a major focus for street level activity.

**The Promenade** – enjoying a high level of access and situated towards the edge of the Town Centre, this area is ideally suited for land uses and development forms that have a greater reliance on car based access for viability.

**Community/Learning** – this area is ideally suited for community and learning activities. In addition to being highly accessible from the adjacent villages and other parts of the Town Centre, the high activity levels and prominent buildings within this zone will anchor and enclose Main Street.

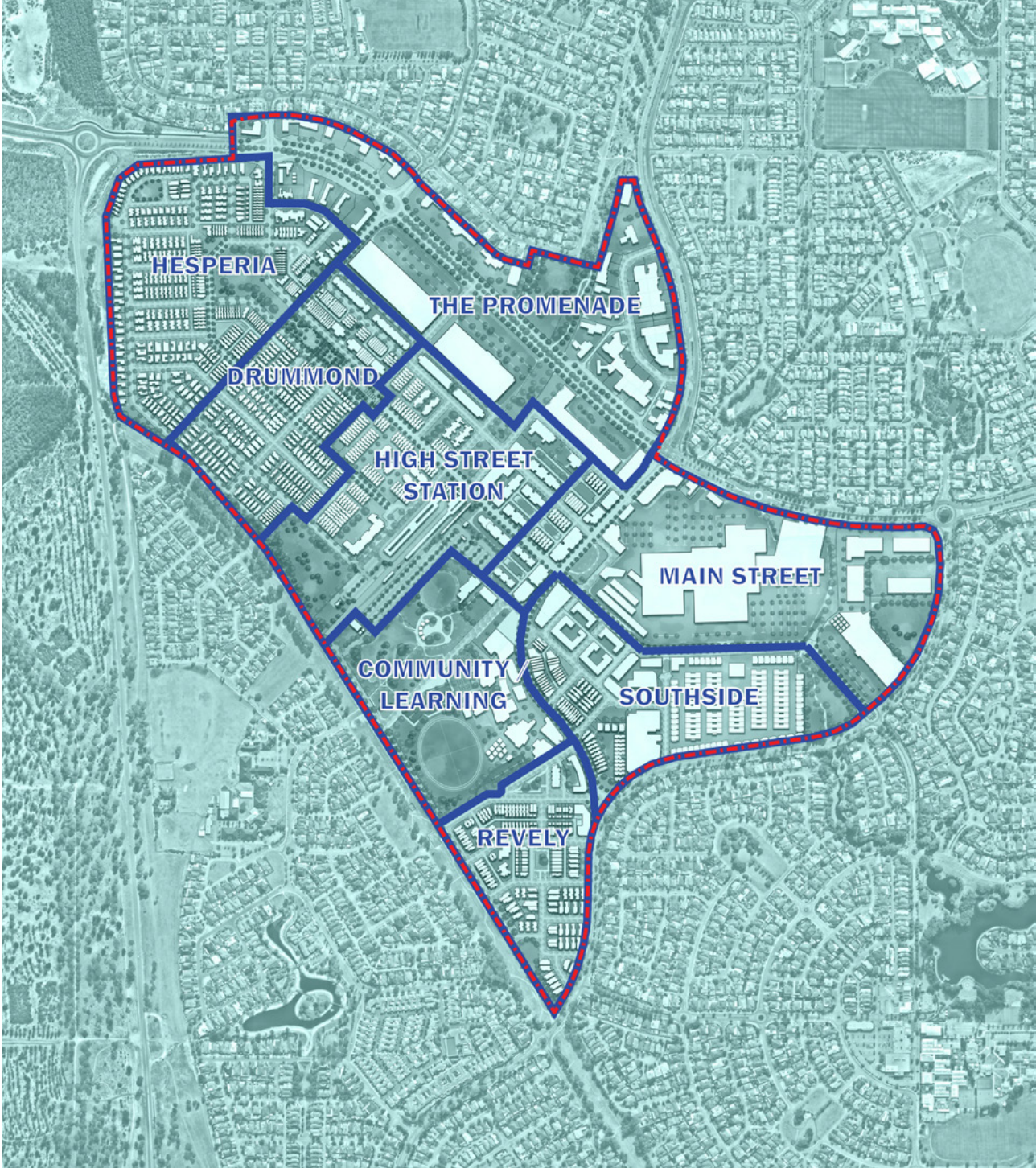
**Drummond** – this is the quieter, less commercially oriented side of the Town Centre, perfect for urban living. A range of housing types, including residential apartments, townhouses and studios, together with quality parks, will characterise this area.

**Hesperia** – this part of town will showcase residential architecture, designed with capacity to accommodate changing uses. Deep development sites established adjacent to Drumpelliar Avenue and The Promenade and reserve will have capacity to accommodate composite live/work building typologies.

**Reveley** – this area will share similar characteristics to the Drummond area and deliver an urban based form of residential and mixed use development.

**Southside** – this area is in close proximity to the Main Street retail area and will consist of primarily residential uses including apartment buildings, a retirement village and aged care facility.

Character Areas Plan



## MOVEMENT

A multi-functional, mixed-use Town Centre functions best when public streets connect all its elements.

The street network of the Ellenbrook Town Centre will be structured according to a modified grid pattern that provides 24 hour access to all parts of the Centre, allowing a high degree of permeability and integration between the character areas. It is designed to be pedestrian, cyclist friendly and 'transit oriented'. Streets are also configured and oriented to optimise view corridors to open spaces and other prominent features and to provide convenient access to major trip destinations. The simplicity of the structure will ensure pedestrians and cyclists can easily navigate a preferred route to their destination.

To ensure the Centre can be conveniently accessed from adjacent areas, a total of eight entries are proposed: three off The Promenade, four off Pinaster Parade and one from The Bridges.

The major internal linkages will be:

*Main Street* - connects The Promenade with Pinaster Parade and binds the centre's major civic, community and retail functions;

*The Parkway* - extends from Pinaster Parade, passing through Main Street and the Station Plaza nodes before veering north to terminate at The Promenade;

*The Promenade* - extends between Henley Brook Avenue/ Main Street and the Perth – Darwin Highway.

*Ellen Stirling Parade* – Extends from the town centre park to the High Street.

These linkages and all other streets will be designed to promote a slow traffic environment. The extent of calming will be influenced by the function of the road.

Other internal lower order streets will support the modified grid block pattern, allowing good circulation and connectivity. In essence the modified grid pattern is designed to achieve the following outcomes:

- *Permeability* – choice of access for all users
- *Public/Private Distinction* – clear separation between public and private realms
- *Vistas* – unimpeded vistas to key landmarks, allowing visual relationships to be forged between streets, structures and public spaces

- *Active Frontages* – buildings designed to address streets, squares, parks and other public spaces, whilst the backs of buildings integrate with laneways and parking courts
- *Flexibility* – a flexible framework that can be adapted to changing uses and densities of development over time

The compact urban form and mix of land uses located in proximity to residential housing, together with the strong linkages that exist to adjacent villages, will contribute to an environment that is highly conducive to walking and cycling. To ensure that the townspeople embrace walking and cycling as a pattern of behaviour from the very beginning, footpaths and streetscape treatments will be provided in every street and dual use pathways provided on the streets identified in the Cycle Plan. The opportunity is also available to inform residents and other Centre users of the available recreational walk trails to encourage walking and promote the Town Centre generally.

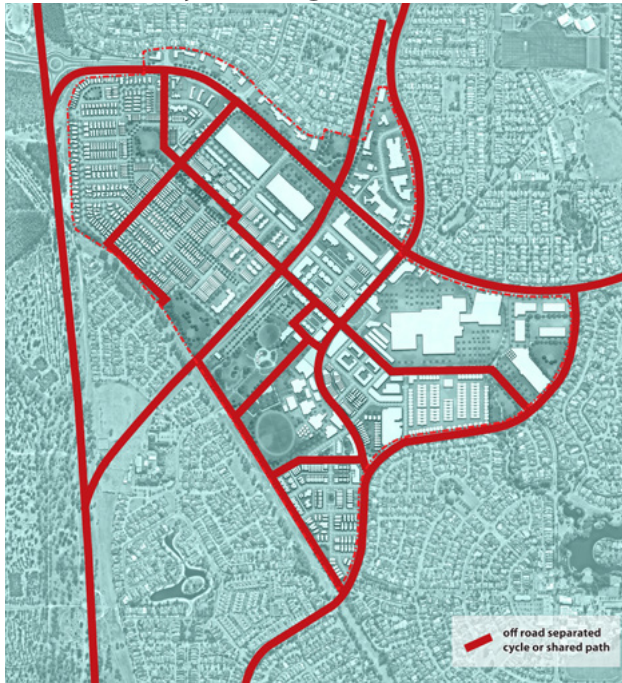
Car parking will be provided on all streets, with extra capacity provided in parking courts located behind perimeter block development. Deck car parking stations can be provided if necessary to cater for increased demand.

A viable and attractive bus service will be an essential component of reducing private travel demand. The early delivery of regular public transport services will play a major role in attracting new people to the Centre and encouraging new residents to adopt public transport as a major form of travel.

A site for the future transit station is nominated in a location that is central and highly accessible to the remainder of the Town Centre and adjacent areas. A design for the Ellenbrook Bus Rapid Transit station is currently being prepared by Main Roads.

Further details on the movement network, including traffic management, projected traffic movements, street hierarchy and typologies, car parking and public transport services, are provided under Sections \*\* of this development plan.

### Pedestrian / Cycle Linkages



### Vehicular Movement



### Transit Station Plan



## Public Realm



## Public Open Space



## PUBLIC REALM

The allure of the public realm and the possibilities it presents for public life will be a defining quality of the Centre that sets it apart from conventional shopping centre and housing developments.

Designed to complement and augment the built form and enhance the environmental and landscape attributes of the site, the public realm will encapsulate the urban qualities and identity of the Town Centre and its community and civic life.

Spaces will vary in scale, function and design - from intimate scaled plazas, gardens and laneways to civic squares and larger wooded parks. This permutation of spaces will contribute to varied and memorable experiences as one moves through the Town Centre. The dispersal of these areas throughout the Centre will ensure that a range of recreational needs can be satisfied within proximity of homes and workplaces.

The Development Plan effectively integrates a range of spaces that will add much interest to the urban fabric as experienced by residents and visitors. The sense of enclosure created by the dense urban environment in one part of the Centre will give way to open spaces and plazas in another. The Development Plan is designed to allow streets to terminate on open space areas where possible. In addition to creating attractive view corridors that entice interest and exploration, this technique allows the amenity of the spaces to be drawn into the nearby streets.

The total area allocated to public open space in the Development Plan is 12.19ha, representing 10.1% of the Town Centre land area. In the absence of a specific minimum public open space standard for mixed use development, this level of provision needs to be contemplated in conjunction with the equally important considerations of open space distribution, function and quality.

With respect to distribution, the Public Realm Plan demonstrates that all users of the Town Centre will have convenient access to a range of public spaces. The anticipated function these spaces will perform is summarised below. The quality of landscaping treatments that are proposed to be applied to these spaces is addressed under Section 11 of this report.

### **A - Town Centre Linear Park (2.6551 ha)**

The linear park will be divided into a series of interconnected spaces that will cater to a variety of civic functions and activities from formal to informal, enhancing the "Journey of Discovery" experience. The majority of the park will be formal in character, reflecting its strategic position at the heart of the Town Centre and located on the High Street which shares an axis with Main Street, with the formality "breaking down" to a less structured park at the western end which incorporates a landscaped drainage basin.

***B - Passive Parkland + Drainage (2.3537ha)***

Incorporating a constructed drainage wetland and catering for passive recreation

***C - The Meadow (2.1739ha)***

Large area of open space defining the edge of the Town Centre and accommodating passive recreation and drainage

***D - Town Centre Recreation Grounds (3.1032ha)***

This large portion of the Town Centre provides a range of active and passive recreational opportunities which cater for a variety of age groups, including a waterplay facility, walking trails, playing field and community garden.

***E - Playing Fields***

Shared school/community recreational ground for organised sports and other active recreation. Note that this is not included in the POS calculations as it is located within the high school site.

***F - Civic Square***

A highly urbanised space framed by the middle school and library buildings, terminating the south-western end of Main Street. This space is expected to be used for casual social interaction, relaxation and as a major avenue for pedestrian movement.

***G - Town Square (0.3753ha)***

Focal point of Main Street and formal public space for the wider community of Ellenbrook. Functions include passive recreation and a venue for community and civic events.

***H - Passive Parkland + Drainage (1.3951ha)***

Incorporating a constructed drainage wetland and catering for passive recreation

***I - Town Centre Parkway (1.2722ha)***

Forms part of a strategic green link between the Woodlake Village centre and Town Centre Main Street and a passive recreational space for nearby aged person's accommodation and apartments

***J - Hill Top Park (0.5940ha)***

This park is an extension to the existing pipeline park which is well utilised by walkers and cyclists.

In addition to these major spaces, smaller pockets of public space will be dispersed throughout the Town Centre. These spaces will include public walkways, pedestrian laneways, forecourts, arcades and plazas.

Furthermore, the streets linking these spaces will be landscaped to reflect the established hierarchy of access connections and to provide informal avenues for community enjoyment.

The following table, prepared in accordance with Liveable Neighbourhoods, provides an indicative outline of the POS provided within the DP area. The calculations demonstrate that approximately 10.7% of the gross subdivisible area is being provided as POS. This percentage is indicative only and will be subject to refinement at the detailed subdivision design stage.

Site Area			
<b>Total Net Site Area</b>			156.9ha
Deductions			
Town Centre Retail	18.9705ha		
Mixed Use (Developed Non-Residential)	1.26ha		
Commercial Enterprise (Developed Non-Residential)	18.56ha		
High School	8.3638ha		
Transit Corridor	3.92ha		
Irrigation Lake	1.5618ha		
The Promenade	4.403ha		
Railways	3.4586ha		
<b>Total</b>		60.50ha	
<b>Gross Subdivisible Area (GSA)</b>			96.4ha
<b>Public Open Space requirement @10% of GSA</b>			9.64ha
Public Open Space Contribution			
May comprise:			
Minimum 80% Unrestricted Public Open Space			7.71ha
Maximum 20% Restricted Public Open Space			1.93ha
Unrestricted Public Open Space Sites (12.7551ha required)			
2	0.1426		
3	0.1101		
4	1.3385		
5	0.3235		
6	0.2703		
8	1.0241		
13	0.0500		
14	2.1739		
15	3.1032		
16	1.5067		
17	0.5117		
18	0.3753		
19	1.3951		
20	1.2722		
21	0.1977		
22	0.2133		
23	0.2087		
		14.2169ha	
Minus 1 in 1 year storm volume		-3.8616ha	
Minus Restricted POS		-0.2060	10.1493ha
Restricted Public Open Space Sites (ha maximum)			
Total restricted use public open space contribution (less than 20% of total POS)	0.2060ha		0.2060ha
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)			
<b>Total Public Open Space Provision</b>		10.7%	10.3553ha

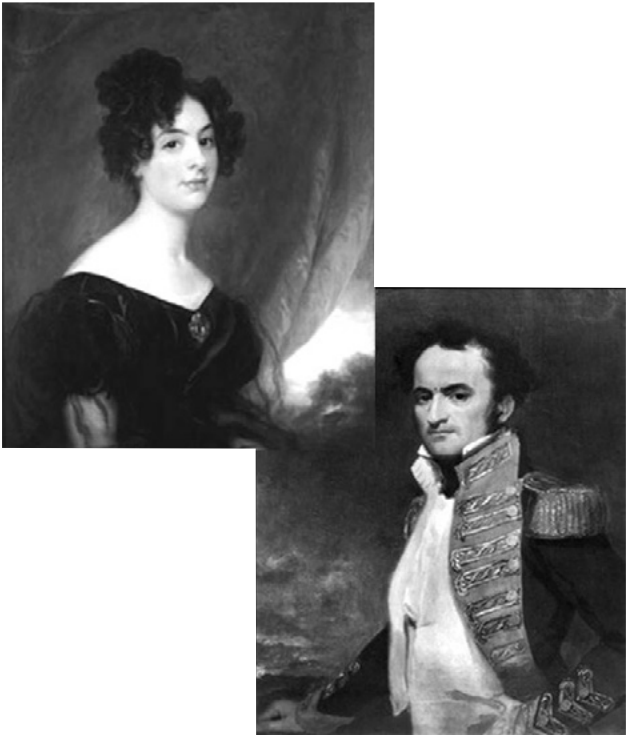


**CULTURAL AND CIVIC**

The Ellenbrook new town in the Swan Valley is named for a reason, an adventurous, interesting and lively woman called 'Ellen Stirling'. In addition the land around Ellenbrook was first explored as a result of a journey of discovery up the Swan River by; Captain James Stirling, John Septimus Roe – Surveyor General and James Drummond – Horticulturalist.

At the Ellenbrook Town Centre the story is one of 'Exploration and Discovery'. The street network and range of public spaces provide for a journey along 'Discovery Trails'. A diversity of public spaces and large iconic gestures strategically placed throughout the Town will provide a rich and interesting backdrop to daily life.

The Ellenbrook story will be reflected in the Town Centre through large and small design decisions that will add real depth to the experience of urban living. For example, the use of 'red brick' for planters, seats, buildings is inspired by the industrial workshops at Midland and the small heritage cottages of Guilford. The story has already started with the boat on Main Street in the Town Park and Ellen Stirling in the Plaza fronting the library. The journey of discovery trails will be a logical progression of the work already completed.





# 04 CHARACTER AREAS

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The Development Plan is divided into seven character areas:

- Main Street
- High Street Station
- Community/Learning
- Reveley
- Drummond
- The Promenade
- Hesperia
- Southside

These areas will perform a range of overlapping function, however the activity mix found within each will bring a specific character to each, contributing to legibility, identity and diversity. The defining qualities of each precinct and the principles guiding development and use are described below.



Main Street



High Street Station



Drummond



Hesperia



Community



The Promenade



Reveley



Southside



active ground floor uses  
(being those uses which generate pedestrian activity on the frontage street)

## MAIN STREET

*"The heart of the Town Centre that binds a range of compatible activities. It is place to enjoy, shop, meet friends, work, wander & explore and somewhere to relax"*

### Urban Elements

- Main Street
- Retail Core
- Town Park
- Community, Civic & Cultural
- Pedestrian Focus
- Lanes & Alleys
- Central Parking Courts

### Guiding Principles

- Public domain that provides a safe and attractive environment for pedestrians and community life
- Maximum integration and synergy between Main Street and enclosed shopping complex
- Community uses and Town Square organised to convey a strong civic character
- Versatile buildings capable of adapting to a mix of uses and intensification over time
- Public access to Main Street maintained at all times to foster day and night time activity
- Streetscapes that impart a sense of place and arrival
- Building designs that address and reach out to the street
- Quality retirement accommodation and apartments



Ellenbrook House



Dome Cafe, Main Street

### Main Street Design & Function

Main Street is approximately 300m in length - a distance conducive to pedestrian movement and comparable to Perth's Hay Street Mall.

Main Street provides a vibrant and animated element of the 'public domain', which links all stages and activities of the Town Centre. It is also the thread that binds a range of overlapping activities into a single experience.

Main Street will be activated during day and night by cafes, restaurants, shops; becoming the hub for commercial and social interaction. The buildings will contain a mix of uses, with retail/commercial/civic/community and other uses that promote day / night activity at street level being encouraged. Uses contained within the upper floors may include residential, studios, community and offices. Robust, flexible building designs will be promoted that have capacity to adapt to changing land use and possible intensification.

An overview of the key elements defining Main Street follows.



Ellenbrook Main Street

**Building Design**

Development on both sides of Main Street will feature two storey buildings on corner sites and single and two-storey development mid-block. Buildings will create a continuous built edge that frames the street, creating a backdrop to street activity and a sequence of intimate spaces of pedestrian scale. The streetscape will be furnished with quality lighting, street trees and furniture to aid this experience.

Pedestrian activity is highly desirable and will be encouraged through the integration of pedestrian laneways, colonnades, verandahs, awnings and canopy trees.



Town Park



The Brook Tavern



### **Town Square**

The Town Square, the symbolic heart of Ellenbrook, is located within the core of the Town Centre, at the nexus of the primary vehicular, cycling and pedestrian routes. It will be the most vibrant and intensely used of all open spaces and the focus of community activity.

The Town Square will be framed by civic and other buildings of a human scale that accommodate primarily active uses within the ground level (i.e. cafes/restaurant uses, community and civic uses). The landscape treatment will reinforce this space as the symbolic heart of Ellenbrook and ensure it has the capacity to cater for a range of user groups. Key elements will include paved and grassed areas, seating, shade structures, deciduous trees, pedestrian linkages, public art and a performance space. The opportunity to create a landmark focal point will also be explored as part of its detailed design.



Oscars Restaurant

### **Community, Civic & Cultural**

Community, civic and cultural facilities will be encouraged to locate within Main Street, providing a focal point for the urban structure that contributes to a strong sense of community identity. These facilities may include a tavern, performing arts centre and administrative offices for the City of Swan.

These uses will be accommodated within landmark buildings and integrated with commercial operations. They will support pedestrian activity on the street level, including activity 'after hours'. Streets adjacent to civic and cultural uses will be developed to a high standard, incorporating street furniture and public art to foster an affable pedestrian environment.

### **Car Parking**

Car parking has been provided on-street and in parking cells sleeved behind the Main Street frontage. As the Town Centre reaches maturity, there will need to be sufficient parking bays to accommodate demand for uses/activities separate from those associated with retail/commercial development. These additional bays will be provided in the form of parking stations located adjacent to (within 100-200m of the Town Square), but not on Main Street. The grid pattern and mid-block lanes will allow motorists to access these stations without having to pass through the shared zone to ensure that the pedestrian emphasis is maintained.

### **Compressed Maturity**

A challenge for the evolution of Main Street will be for the built form and land uses to establish an intensity of activity and physical presence that creates a dynamic environment attractive to visitors and investors from the early development stages. To rise to this challenge, building mass will initially be developed along both sides of Main Street within the first 100 metre block of the Town Park towards The Promenade. Landscaping and streetscape design will complement the built form and provide the desired backdrop for street activity, as well as create a distinctive gateway into the Town Centre. To accommodate these physical attributes, the Ellenbrook Joint Venture will work in partnership with government and business to facilitate the early introduction of a range of strategic activities into the Town Centre.



Town Centre Forecourt



### Retail Core

The WAPC's SPP4.2 designates Ellenbrook as a 'Secondary Centre'. It is proposed to provide up to approximately 50,000m<sup>2</sup> NLA of retail/shopping floor space within the Town Centre.

Although this ultimate floor space level is not expected to be reached for 5 to 10 years, it is envisaged that at least 40,000m<sup>2</sup> will eventually be consolidated east of Main Street, allowing up to 10,000m<sup>2</sup> to be provided within the remainder of the Town Centre, including both sides of Main Street. 31,000m<sup>2</sup> of retail/shopping floor space has been constructed thus far.

Retailing east of Main Street will be concentrated around an east - west oriented mall integrated with Main Street via a dedicated pedestrian walkway that encompasses the Town Square and active adjacent uses including the tavern site. The combined effect will be to create a hybrid centre that successfully integrates the more conventional indoor shopping complex with Main Street uses.

Retail uses east of Main Street will comprise high order comparison-shopping, including a discount department store(s), supermarkets, a wide range of specialty shops and a cinema complex. At this stage there are two supermarkets, one district department stores and over 60 specialty stores currently operating in the shopping centre.

The parking area sleeved behind buildings fronting the south side of Main Street will perform the dual function of servicing the existing and proposed retail development and Main Street activities. Provision is made for a cinema complex to eventually be developed above this parking area that will generate pedestrian activity on Main Street. The opportunity will be made available for buildings to frame the remainder of the shopping complex car parking area to foster active street frontages and screen car-parking areas.



Main Street



The Brook Tavern



The Shops, Ellenbrook



## HIGH STREET STATION

*"An assortment of complementary land uses, including office, retail, dining, community and showroom, within a quality urban environment that incorporates the flexibility for adaptation and intensification over time."*

### Urban Elements

- offices, retail, showrooms, light industrial and housing
- a central park which links the north and south areas of the Town Centre
- adaptable street blocks and built form
- laneways and alleys
- pedestrian focus
- public streets, urban plazas, forecourts and parks
- legible street network with an integrated use of public and private space

### Guiding Principles

- flexible building designs that cater for a mix of uses
- parking on-street and within central courts concealed behind buildings
- streets oriented for a high level of connectivity and integration with Main Street and The Parkway
- high standard of built form that activates frontage streets, Station Plaza and laneways
- quality pedestrian environment on all streets & intimate pedestrian laneways
- Well defined view corridors to hilltop parks
- Landmark buildings/structures terminating key vistas
- Flexible urban form to cater for future rapid transit service when required



## Function

High Street Station is strategically located immediately north and generally within the 400 metre ped-shed of Main Street. It will draw upon the energy of The Parkway (projected to carry 4000 vpd), The Promenade (projected to carry 20,000 vpd) and Main Street (projected to carry 10,000 vpd). It is predicted that The Parkway will emerge as the second 'Main Street', particularly once the transit station becomes operational.

High Street Station will accommodate a range of varied but compatible uses, including offices, service commercial, light industry, retail, showroom, residential and recreation. The ultimate mix of commercial and residential uses will be largely a product of market forces, with retail and showroom uses expected to front The Parkway and Station Plaza and service commercial on the southern side of the transit corridor. Medium density residential, including apartment buildings, will be located in the street blocks to the north of the transit corridor. The High Street will provide a clear visual linkage between Main Street, the public transit station and the northern central park.



## Design

A key design objective is to create a flexible urban structure and built form with capacity to accommodate changing uses and their intensification over time. Flexibility to accommodate higher order uses is particularly pertinent to this area given its close relationship to Main Street and the future transit station.

The street blocks and highly permeable street network provides the foundation for future urban adaptation and evolution. The orientation of streets allows high level of integration with The Parkway and Main Street to enable the energy of these streets to be drawn into this precinct.

The LDPs and design guidelines for this area will be focused on ensuring buildings are functional yet adaptable, and of a scale that respect the proportions of the remainder of the Town Centre. Buildings will be required to address frontage streets and laneways and landmark buildings will be encouraged in strategic locations, including prominent corner sites and adjacent to the Station Plaza.

The central park links with Station Plaza and Town Square via The Parkway and will draw residents into the Town Centre core and provide amenity for surrounding residents and workers.

Station Plaza will form a distinctive gateway to the Town Centre and facilitate the integration of the transit station with adjacent uses. Buildings framing this space will ensure the Plaza is well defined to be a centrepiece for the Town Centre. The design and use of adjacent buildings will be encouraged to engage with this space.

Similarly, elsewhere in this precinct, public and semi-public ground floor uses will be encouraged to animate adjacent streets and urban spaces. Wide, sheltered pedestrian paths, pedestrian crossings and a slow vehicular speed environment will ensure pedestrian movement is given priority.

Throughout the High Street Station character area, residential housing will be accommodated through a mix of medium and high density built form options, including apartments, town houses and terrace houses. Residents will be afforded a lifestyle option where they can live amongst the energy of the Town Centre, whilst bringing diversity and interest to its community and extending its operation beyond normal working hours.

Car parking will be unobtrusive and provided on-street, undercroft or within parking courts sleeved behind buildings. Given the mixed-use quality of this area, there will be opportunity for car parking to serve a reciprocal function. As the Town Centre matures, provision will be made for public parking stations within the centre of street blocks. These parking stations will be accessible without having to pass through Main Street, aiding traffic flow and encouraging





pedestrian activity on Main Street.

## COMMUNITY/LEARNING

*"The educational and community heart of Ellenbrook, accommodating a 'next generation' high school and contemporary multi-purpose community buildings, together creating identity and injecting activity into the Town Centre"*

### Urban Elements

- multi-purpose community/recreation facility
- middle school and senior high school
- Community recreation centre
- high level pedestrian activity
- Civic Square and active recreation grounds
- shared community/school learning centre (library)
- pool
- Café / kiosk

### Guiding Principles

- landmark buildings focused towards Main Street to create a defining terminating vista
- high standard of built form and eminent community/civic buildings
- pedestrian priority environment achieved through comprehensive pathway network, quality landscaping, street furniture, slow vehicle speeds and community/public art
- Good connectivity with future transit station
- shared facilities for school and community use
- sustainable building designs and landscaping
- active and passive recreational opportunities

### Function

The collocation of an education and community/civic facilities within the Community Character area will create a vitality that will anchor the western end of Main Street and result in a high-energy pedestrian environment.



Ellenbrook Senior College



Water Facility



Ellenbrook Community Garden

## Ellenbrook Senior College

The first stage (Middle School and Community Library) of the Ellenbrook Secondary College was completed in 2007 and second stage (Senior School) was completed in 2011. The Community Library is available for shared use between the school and the community.

The Ellenbrook Senior College currently has an exceptional range of facilities including:

- Fully integrated information communication & technology (ICT) network linking students to the world.
- Three general learning communities complete with integrated science labs, seminar rooms, and computer banks.
- Cafe and undercover meals area.
- Community library shared with the City of Swan.
- Arts facilities - performing arts theatre complete with retractable seating and bio box, music studio, instrumental practice rooms, green room, media studio and edit suite, graphics lab and three visual art studios.
- Sporting arenas including enclosed gymnasium with change-room facilities, outdoor playing courts, College oval and fitness studio.
- Lecture Theatre with tiered seating
- Science wing with seven laboratories including preparation room.



State Swim Pool



Ellenbrook Middle School and Learning Centre (viewed from Civic Square)



- Four fully fitted computer laboratories.
- Design and Technology studios including specialist metals and engineering room and graphic design laboratory.
- Home economics studios to cater for hospitality, textiles or childcare contexts.
- Senior campus general classrooms and seminar rooms, including observational and filming capabilities for pod cast lectures.
- Student services and administration buildings.

The Community Library is a landmark building that creates a strong visual cue enclosing the western end of Main Street. This building will frame the adjacent Civic Square. Civic Square is a well defined urban space comprising a predominantly hard surface, shade structures, minimalist planting and seating. It is a space for pedestrian movement and where people can sit, observe others, gather and socialise. The pavement is raised to encourage slow traffic speeds as vehicles approach this gateway to Main Street.

### **Other facilities**

Other facilities that have been accommodated within this character area thus far include a water play facility, indoor swimming pool, playing field, BMX track and community garden.

The provision of accessibility for all modes of transport, including safe and direct connections to the future transit station, has been a key consideration in the planning of the Community/Learning Character area. Adjacent streets have been designed to accommodate on-street car parking and to efficiently transport vehicle movement, but within a slow speed environment that gives priority to pedestrian and cyclist access. Bus embayments have been accommodated within Main Street near the Civic Square and bus parking areas for the college have been accommodated within the road reserve adjoining the south eastern boundary of this site.



*Ellenbrook Irrigation Lake*



## REVELEY

*"A rich urban environment comprising varied forms of residential housing and the occasional commercial use, all within easy walking distance of the community and Main Street character areas."*

### Urban Elements

- predominantly quality residential housing interspersed with the occasional commercial use
- Apartments, studio apartments and townhouses
- an environment conducive to walking and cycling
- canopy tree lined streets and quality urban parks

### Guiding Principles

- innovative medium density housing based upon an 'urban' not 'sub-urban' form' within a high amenity environment
- unobtrusive parking accommodated on-street, undercroft, off laneways and within central car courts
- high standard of built form that contributes to attractive frontage streets and addresses laneways
- A series of short, interconnected streets designed to limit four-way intersections, slow vehicle speeds and maximise connectivity and permeability
- pedestrian priority environment
- quality public realm that offsets higher density living

### Design & Function

Reveley enjoys excellent accessibility to the adjacent Community/Learning and Main Street character areas. It will accommodate a diversity of medium and high density housing types suited to a diversity of townspeople, including older residents, 'empty nesters', young singles and couples.

Given its strategic location and relationship with other character areas and quality open space areas, Lower Southside is designed to accommodate a wide range of quality medium to high density housing typologies suited to residents seeking the convenience of living within the Town Centre. The mix of housing may include apartments, cottage, terrace, grouped and townhouses.





## SOUTHSIDE

*"A rich urban environment comprising varied forms of residential housing, including retirement and aged care and the occasional medical and commercial use, all within easy walking distance of the Community/Learning and Main Street character areas."*

### Urban Elements

- predominantly quality residential housing interspersed with the occasional commercial use
- Apartments, independent living units and integrated aged care, studio apartments and townhouses
- an environment conducive to walking and cycling
- canopy tree lined streets and quality urban parks

### Guiding Principles

- innovative medium density housing based upon an 'urban' not 'sub-urban' form, including multi-storey apartment buildings, within a high amenity environment
- unobtrusive parking accommodated on-street, undercroft, off laneways and within central car courts
- high standard of built form that contributes to attractive frontage streets and addresses laneways
- A series of short, interconnected streets designed to limit four-way intersections, slow vehicle speeds and maximise connectivity and permeability
- pedestrian priority environment
- quality public realm that offsets higher density living

### Design & Function

The permutation of housing types will be very similar to the housing built in the Mid Town character area, with the exception that Southside will also host independent living units (ILUs) and a residential age care facility (RACF). This accommodation will be tailored to the needs of older, less mobile residents and integrated with adjacent areas.

Being part of an environment that is familiar and that is close to friends and/or family is important to people as they grow old. The full range of care and accommodation facilities provided in Southside will provide older residents of Ellenbrook with the real choice of being able to remain part of the community fabric whilst being provided with the level of care they require.

Older residents of the ILUs and RACF will also have ready access to a wide range of facilities and services (including public transport, a medical centre, shopping, a public library/learning centre and other community facilities), embracing a holistic approach to meaningful ageing and wellbeing. Achieving this will involve a shift in focus from providing a retirement village that offers basic accommodation and nursing care, to a village with a range of facilities and activities that is integrated into the wider Town Centre.

Complementing the housing in south side will be intimate, pedestrian scaled urban spaces within walking distance of all residents. A medical centre is proposed to be located near the aged persons accommodation and shopping complex. Some other ground floor commercial uses and home based businesses may also choose to locate in this part of the Town Centre





## DRUMMOND

*"Offering a rich tapestry of urban experiences and the highest level of amenity for residential living, Drummond will accommodate a wide range of housing, seamlessly integrated with the occasional commercial use"*

### Urban Elements

- predominantly quality residential housing interspersed with the occasional commercial use
- townhouses, apartments and studio apartments
- adaptable street blocks, laneways and built form
- pedestrian focus
- quality public realm incorporating canopy tree lined streets

### Guiding Principles

- innovative medium density housing based upon an 'urban' not 'sub-urban' form' within a high amenity environment
- unobtrusive parking accommodated on-street, off laneways, undercroft and within central car courts
- high standard of built form that contributes to attractive frontage streets and addresses laneways
- permeable street network integrated with the wider network
- Most streets oriented to terminate on parks
- pedestrian priority environment
- quality public realm that offsets higher density living

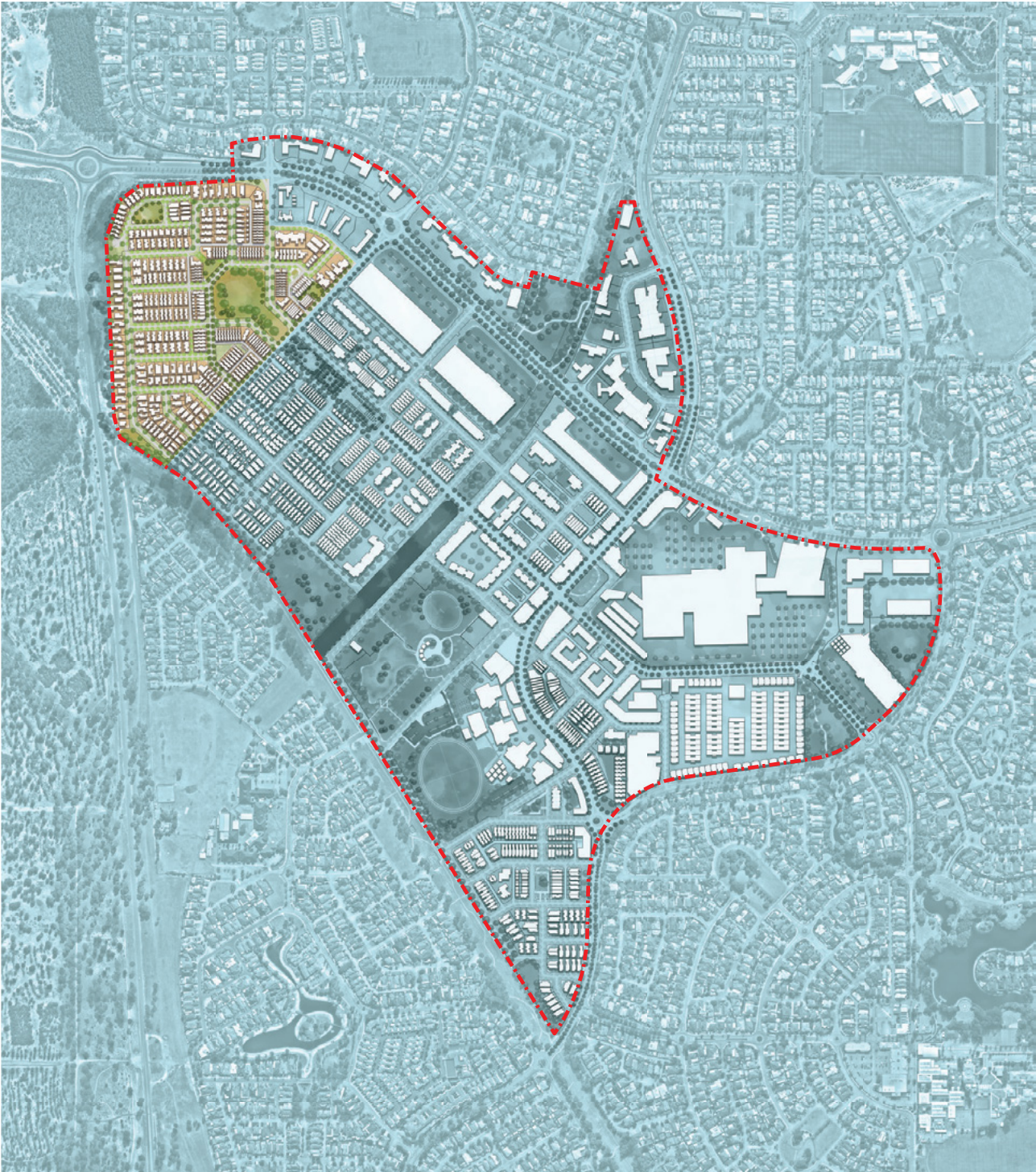


### Design & Function

Drummond enjoys accessibility to the High Street and Main Street character areas and to the future transit station, however will be a quieter precinct comprising local streets with lower traffic volumes. Most streets within this precinct are oriented to terminate on the central park, so as to allow a maximum number of residents to enjoy the amenity of these spaces and limiting the number of crossings that pedestrian are required to negotiate in order to access these spaces.

Given its strategic location and relationship with other character areas and quality open space areas, Drummond is designed to accommodate a wide range of quality medium to high density housing typologies suited to residents seeking the convenience of living within the Town Centre. The mix of housing may include apartments, studios and townhouses. Home businesses and the occasional compatible commercial use will be interspersed throughout Drummond, most likely at corner sites and near the Station Plaza.

Compared with the High Street Station character area, Drummond will be less commercial, with a greater emphasis on innovative, quality medium and high density residential. Therefore, unlike the High Street Station area where public and semi-public uses on ground level will be actively encouraged, it is anticipated that residential ground floor uses will be predominant within this area.





## HESPERIA

*"A quality, compact community showcasing expressive architecture and enjoying direct linkages to the facilities and amenity of the Town Centre and excellence in urban living."  
[Upper Northside character area]*

### Urban Elements

- mix of housing types including warehouse apartments, townhouses and studio apartments
- pedestrian focus
- canopy tree lined streets and quality open spaces
- connectivity with The Parkway and transit Station Plaza via the central park

### Guiding Principles

- parking accommodated on-street, undercroft and within central car courts concealed behind buildings
- high standard of built form that activates frontage streets and laneways
- pedestrian priority environment
- quality public realm to offset higher density living
- flexible urban structure and built form that allows adaptation of uses and intensification over time
- elevated public realm incorporating apartment development

### Design & Function

Hesperia will be a quality urban lifestyle village, located within approximately 800 metre (10 minute walk) of Main Street. The direct axial connection, linking this precinct with the Station Plaza and The Parkway will bring future residents of the Hesperia within comfortable walking distance of the amenities on offer.

Laneways will feature strongly, providing rear access to medium density housing so as to promote attractive frontage streets that are not dominated by crossovers and carports/garages. Laneways will also offer alternative routes of access for pedestrians and cyclists and the flexibility for intensification of development over time through the introduction of second affordable dwellings onto the laneway (studio apartments) and potentially home-based workspaces.

Commercial uses in the short to medium term are expected to be limited to home-based businesses, compatible with the predominantly residential land use. Deeper lots developed adjacent to the Drumpellier Drive would be particularly suited to live/work arrangements.

As the Town Centre matures, it is possible that more commercial development will extend into this area. The housing design intended for this precinct therefore needs to be sufficiently robust to accommodate this.



The public realm will be a defining feature of this precinct, comprising most notably, the top end of the central park a number of smaller parks, which will be urban in nature. Like Drummond, adjacent streets will be oriented to terminate on these spaces. Residential apartments will frame sections of these parks that are designed to complement the change in grade and ensure good surveillance. Apartment building will not be built where strategic vistas to these prominent spaces are to be preserved.



active ground floor uses  
(being those uses which generate pedestrian activity on the frontage street)

telecommunications tower site

## THE PROMENADE

*"A quality environment that nurtures a range of business enterprise endeavours, including those less suited to the Main Street or MidTown character precincts due to their size and greater dependence on vehicle access and exposure."*

### urban elements

- showrooms, warehouses, light industrial, service commercial and offices
- human scale development
- controlled vehicle access
- controlled signage
- unobtrusive car parking areas

### guiding principles

- service commercial, light industrial and office developments that service the local needs and provide local employment opportunities
- a high standard of built form and landscaping for the benefit of employees and visitors alike
- unified streetscape whereby landscape, buildings and land uses complement each other
- protection of the amenity of adjacent residential areas
- safe movement of pedestrian and vehicle traffic
- well designed car parking areas that do not adversely impact on the amenity of adjacent streets

### land use

The Promenade character area is located adjacent to The Promenade and The Broadway district distributor roads. Upon full development of Ellenbrook, Vale and The Vines, these two roads are projected to carry 24,000 and 25,000 vehicles per day, respectively.

The Promenade area is therefore suited to those businesses that are dependent upon vehicle access and that require larger land areas within which to conduct their operations. It presents the opportunity for the development of a range of business outlets (including showrooms, light industrial, service commercial, storage and offices) not suited to the retail or mixed use areas due to their size or nature of activity.

### amenity

Substandard building design and landscaping, sign pollution and poor traffic management have compromised local amenity of comparable commercial showroom precincts across the Perth Metropolitan Region.

At Ellenbrook, The Promenade enterprise area will form the main point of arrival to the Town Centre and therefore, a driving objective is to ensure this area presents well from the street. Design guidelines formulated for The Promenade will therefore encourage:

- quality buildings of various scale with engaging architectural form, detail, material and colour;
- uniform building setbacks;
- generous landscaping;
- screened car parking areas; and
- signage integrated with buildings;

Controlled access places (CAP) and easements will be used to restrict the number of vehicle access points to those businesses located adjacent to The Promenade.





# 05 STREET & BUILDING TYPOLOGIES

*Diversity of built form and use will be key to the town centre's sustainability and vibrancy. The flexible urban structure of the town centre has the capacity to accommodate a range of land uses and building types, as well as the evolution of land use as the centre matures.*

## INTRODUCTION

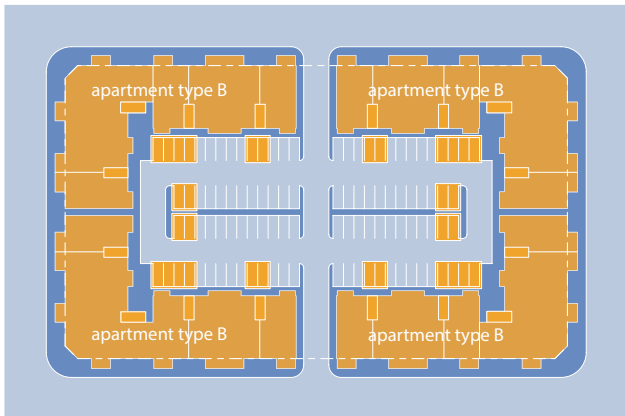
This section explores the different applications of a typical Town Centre street block (70m - 120m) for accommodating varied land uses and built form, including office, retailing and various forms of housing.

The options presented are indicative only to demonstrate the flexibility of the street block. Building design guidelines, car parking requirements and in some cases land use controls will be addressed through DAPs formulated for individual street blocks prior to subdivision and development.

Street typologies are detailed in the appended Transport and Traffic Report prepared by SKM (Appendix 3). The typologies embrace the dimensions set-out in the Liveable Neighbourhoods (Edition 3) for different street types having regard to projected traffic volumes, together with character, land use integration and street function. The street typology cross-sections nominated in the appended report, and agreed to as part of this Development Plan, will ensure that there is a degree of certainty with respect to road reservation widths and treatments at subdivision stage.

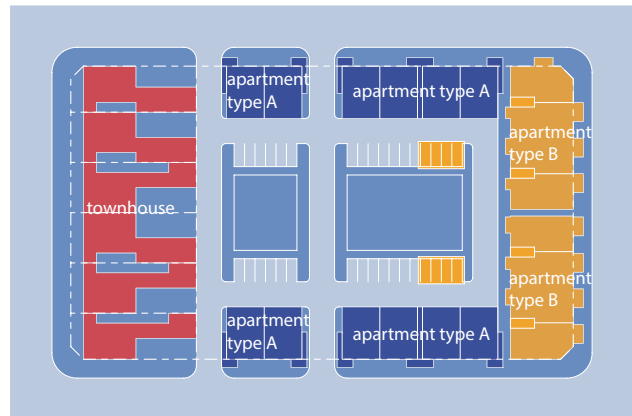


## STREET BLOCKS



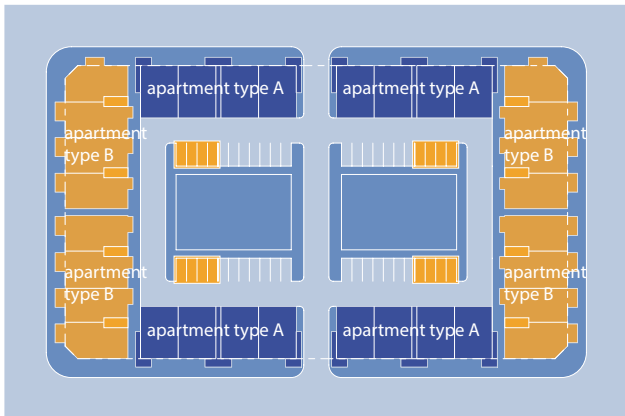
### Option 1

- Permeable street block incorporating mid-block vehicular and pedestrian access linkages
- Buildings oriented outwards onto adjacent streets and parking sleeved behind within internal car court
- Opportunity available for shared amenity within court area (eg. communal BBQ facility, swimming pool)
- Designated car parking allocated to each residential unit



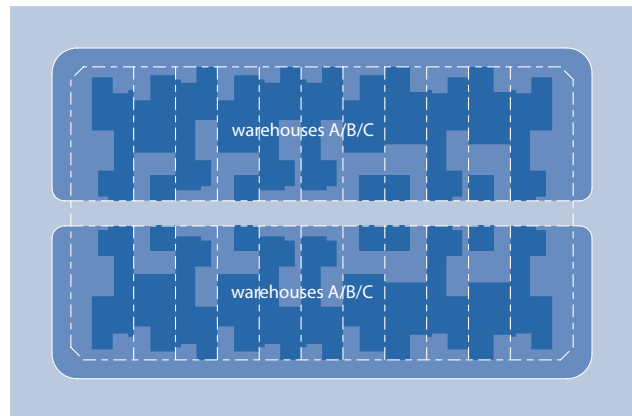
### Option 3

- Permeable street block incorporating mid-block vehicular and pedestrian access linkages
- Buildings oriented outwards onto adjacent streets and parking sleeved behind within internal car court
- Generous internal car parking area to service residential apartments and ground level commercial



### Option 2

- Warehouse and townhouse residences with rear laneway access
- Laneway presents opportunity for future second studio apartment above garage



### Option 4

- Permeable street block incorporating mid-block vehicular and pedestrian access linkages
- Varied range of building types including liner buildings to screen car parking, apartments, townhouses and ground floor commercial
- Rear lane access to townhouses

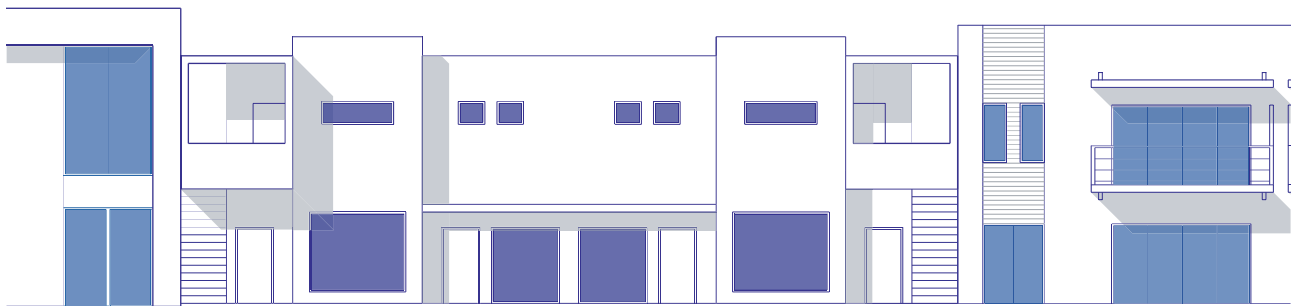
## BUILDING TYPOLOGIES

The following building types are indicative only. The floor plates shown demonstrate how varying housing products can be sited within the Town Centre street block and lot layout while contributing to the desired character of a precinct.

Apartments have been designed to either suit ground floor level or to sit above a commercial/retail tenancy. Balconies help to activate the streetscape and provide opportunities for passive surveillance. There is a variety of one, two or three bedroom apartments to provide for a diverse range of people and needs.

The Warehouse typology is a flexible model to allow for either home/office, commercial or residential uses. Design of internal layouts are to be of a robust nature to allow change over time. Similarly the external facades provide a contemporary but robust aesthetic to allow for varied uses.

Laneway housing or 'Town Houses' provide for another type within the Town Centre, similar to the traditional terrace.



### Residential Apartment

- Separate entrances to each dwelling from rear parking court
- Generous balcony attached to each apartment that activates frontage street and provides opportunities for passive surveillance
- Commercial uses able to be accommodate within ground floor tenancies
- 1, 2 and 3 bedroom floor plan designs able to be provided to cater for different household types

### Warehouse Typologies

- Parapet walls to side boundaries creating a continuous urban edge to adjacent streets
- Contemporary façade incorporating commercial/warehouse architectural design elements
- Designed and oriented for passive solar access

#### Type A

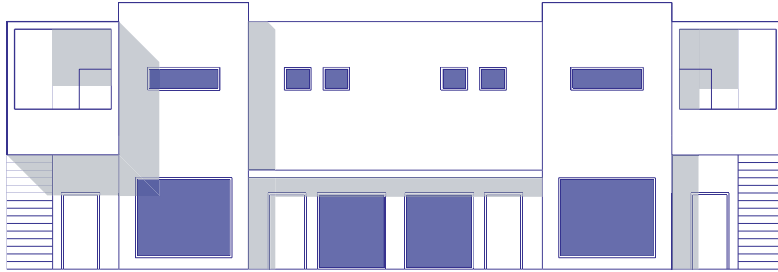
- Home office at front of warehouse dwelling with separate entry for live/work opportunity
- Rear laneway access

- Opportunity for studio or outdoor deck above garage
- #### Type B
- Home office at front of warehouse dwelling with separate entry for live/work opportunity
  - Rear laneway access
  - Balcony at rear to activate rear laneway and provide opportunities for passive surveillance

### Laneway Housing

- Narrow frontage laneway lot (5m)
- Courtyards and main living area oriented for passive solar design
- Rear car parking off laneway with potential for a studio apartment above.

**Apartment Type A (1 bed apartment)**

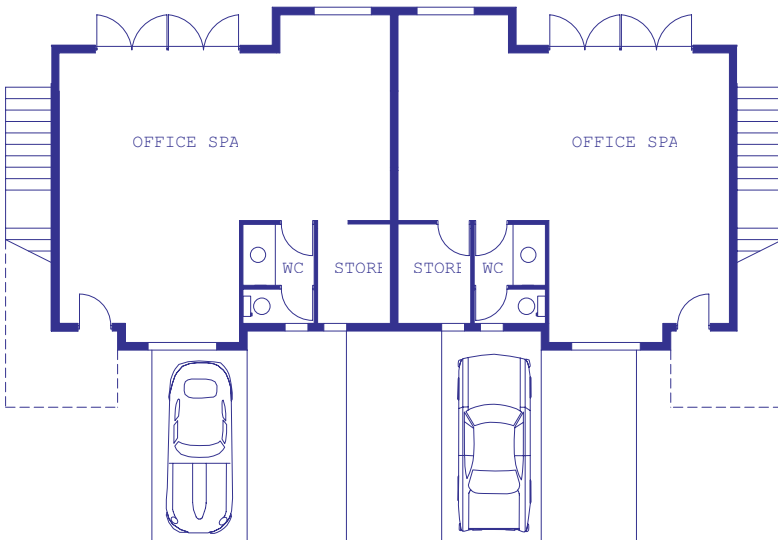


Street Elevation



Upper Floor Plan

▲  
Street Elevation

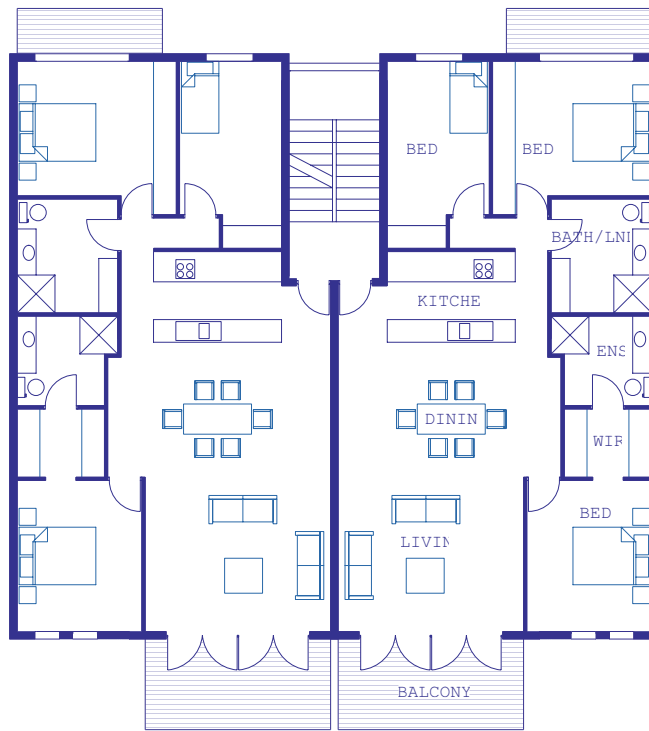
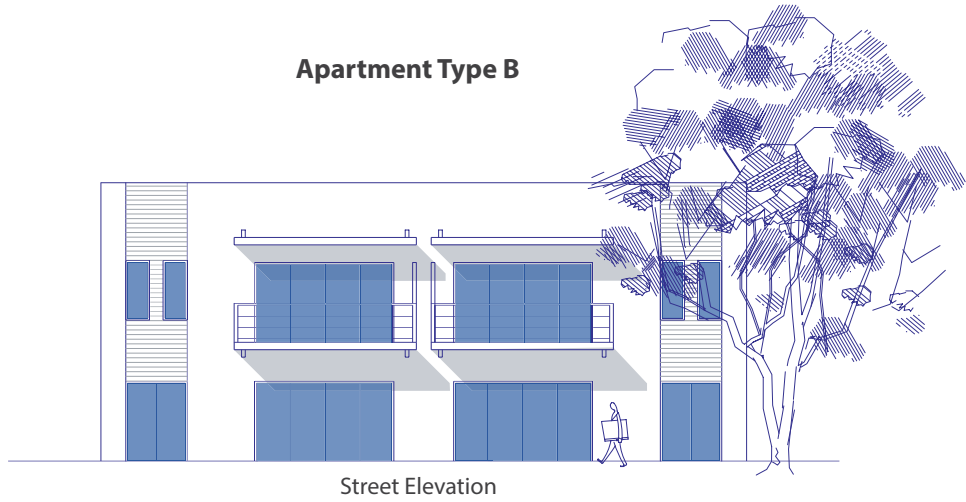


Ground Floor Plan

CAR BAY  
▲  
Street Elevation

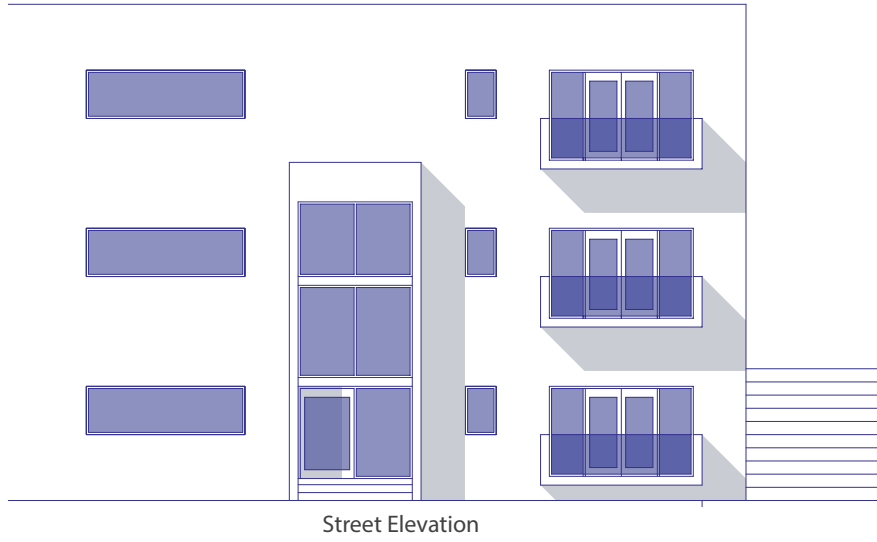


### Apartment Type B

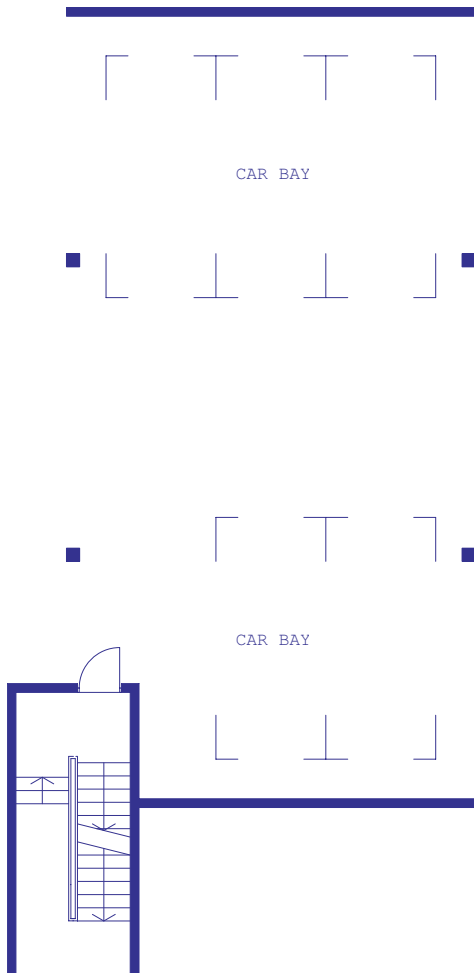


▲  
Street Elevation

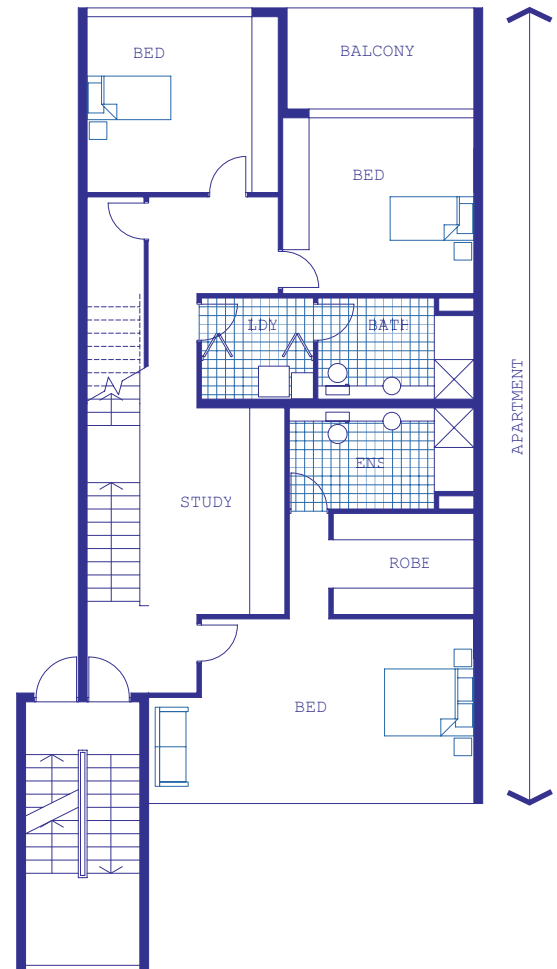
**Apartment Type C** (suits hill top park locations where lot has a change in levels)



Street Elevation

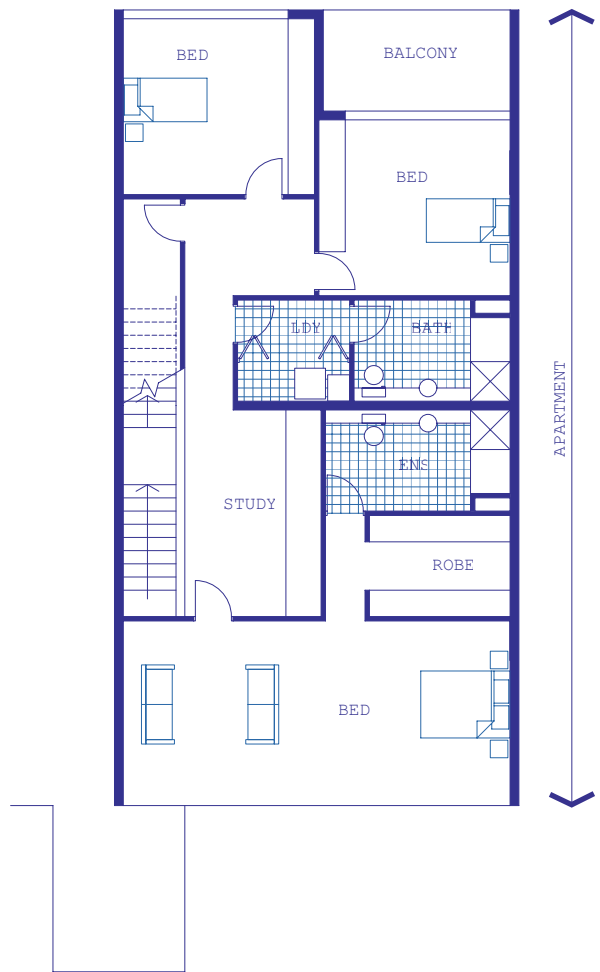
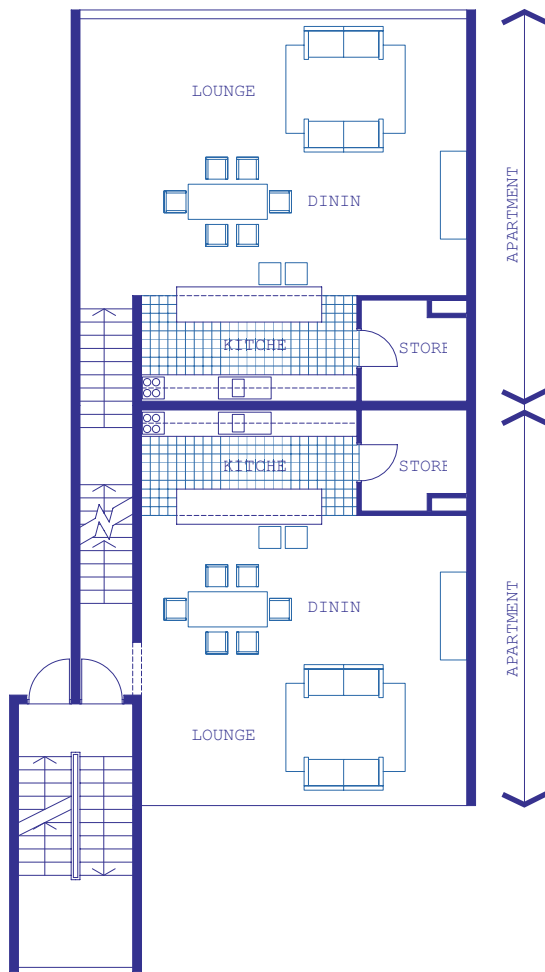
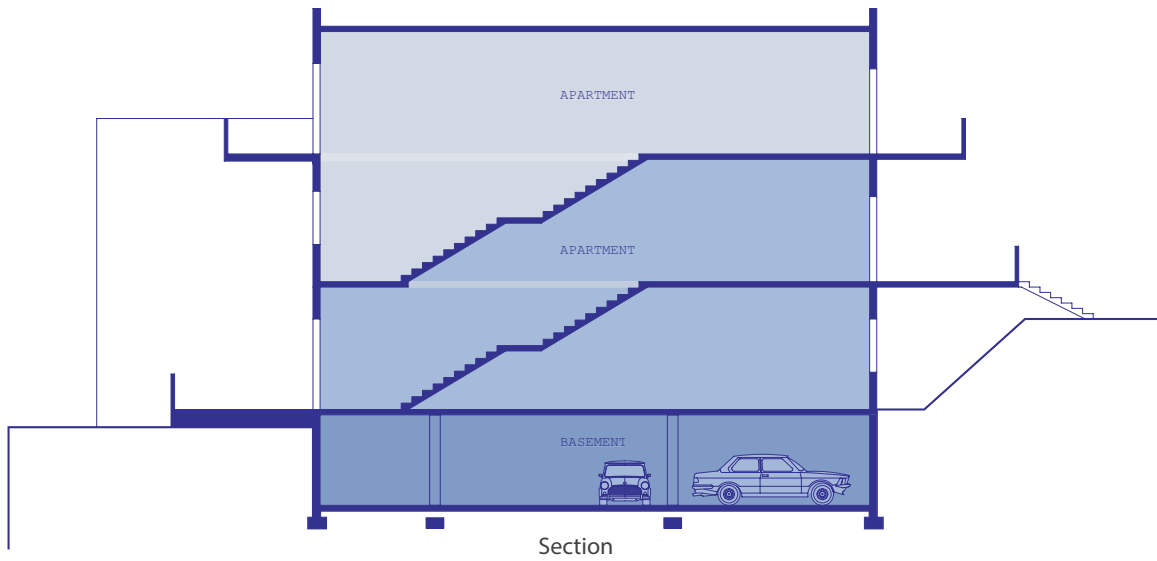


Basement Floor Plan



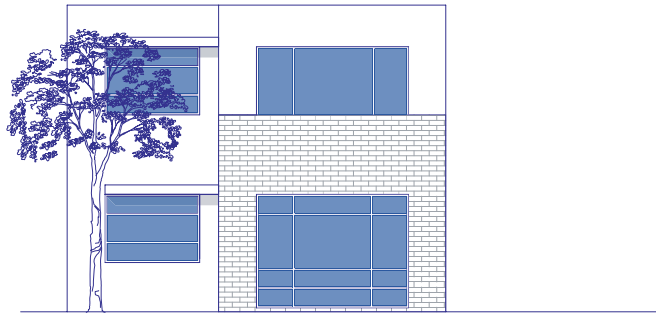
Level 1 Floor Plan

▲  
Street Elevation

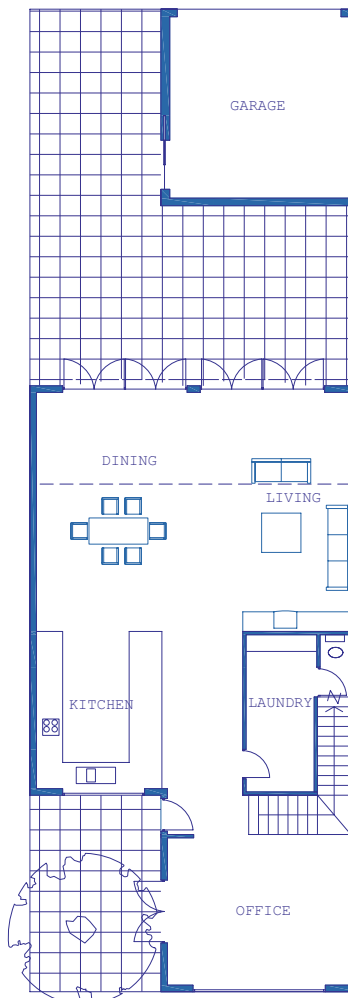


▲  
Street Elevation

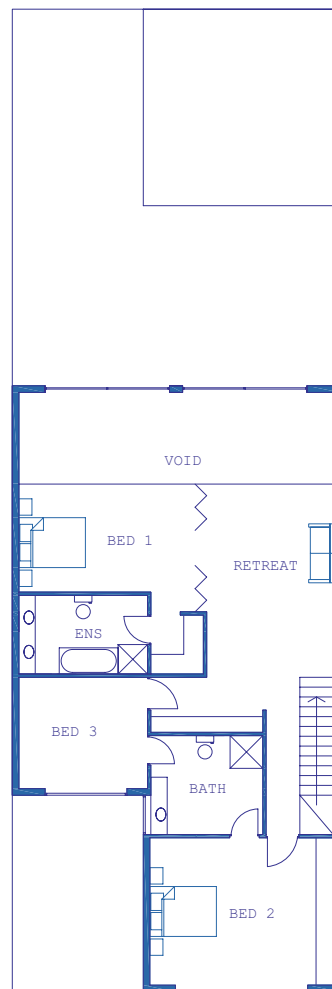
**Warehouse Type A** (suits north-south lot layout)



Street Elevation



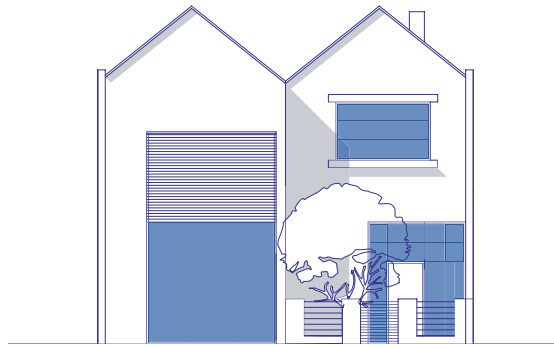
Ground Floor Plan



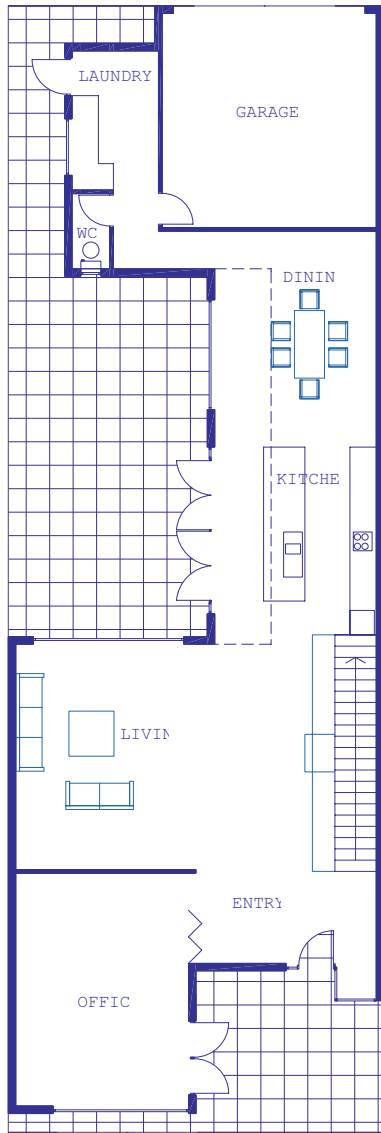
Upper Floor Plan

▲  
Street Elevation

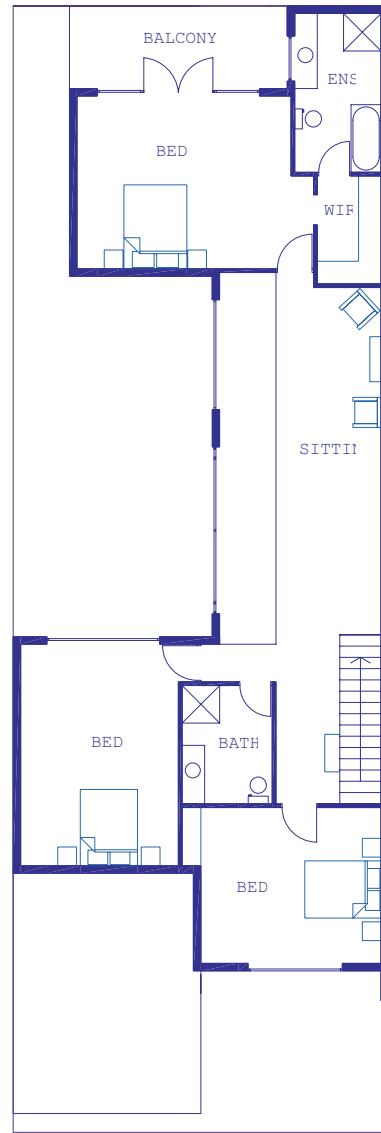
**Warehouse Type B** (suits east-west lot layout)



Street Elevation



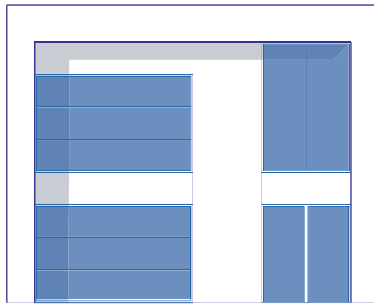
Ground Floor Plan



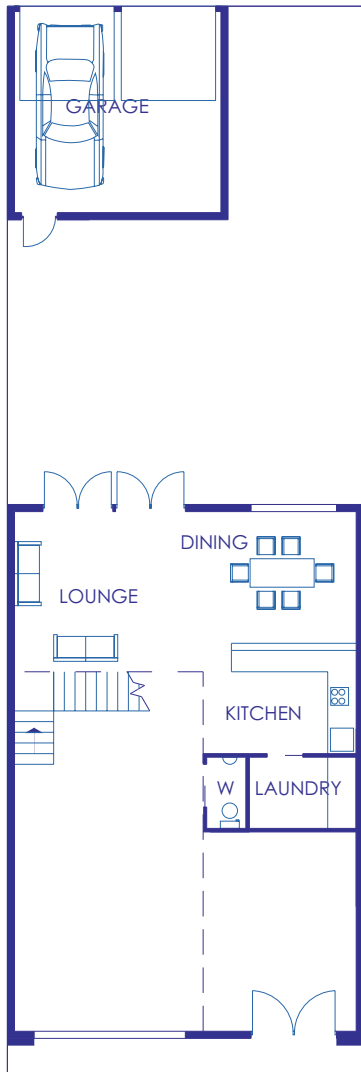
Upper Floor Plan

▲  
Street Elevation

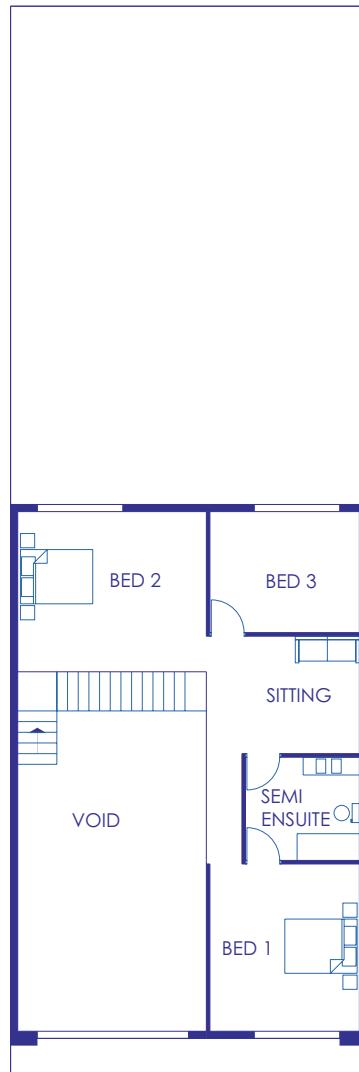
### Warehouse Type C



Street Elevation



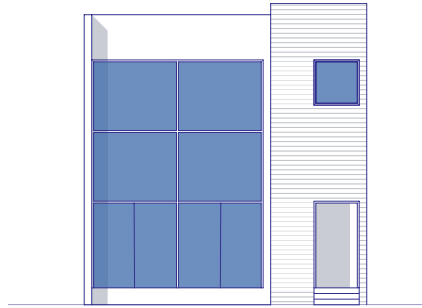
Ground Floor Plan



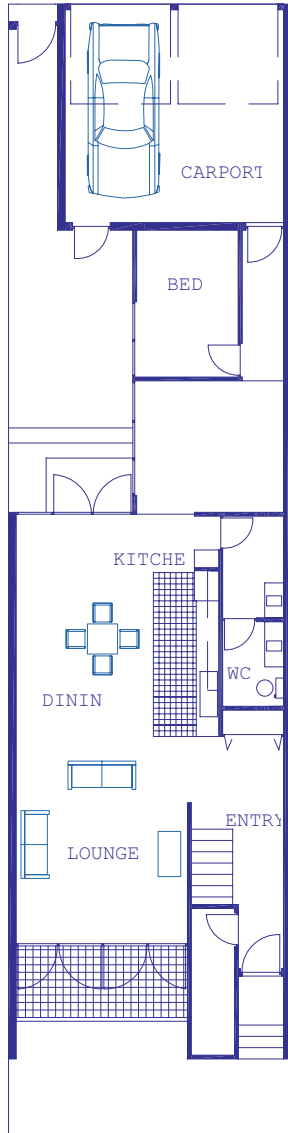
Upper Floor Plan

▲  
Street Elevation

**Townhouse** (suits east-west lot layout)

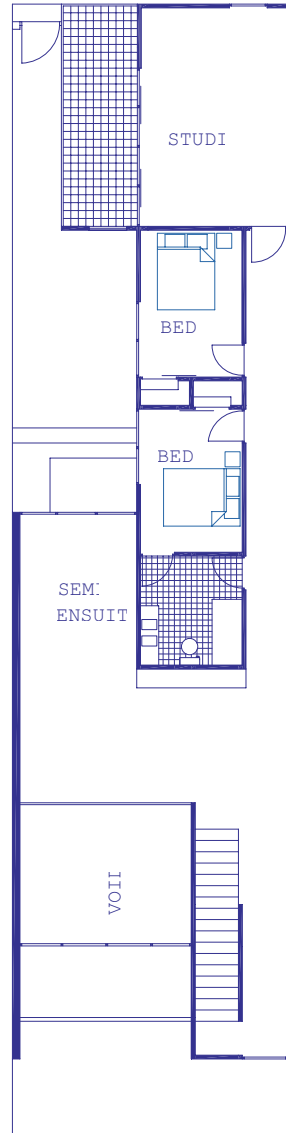


Street Elevation



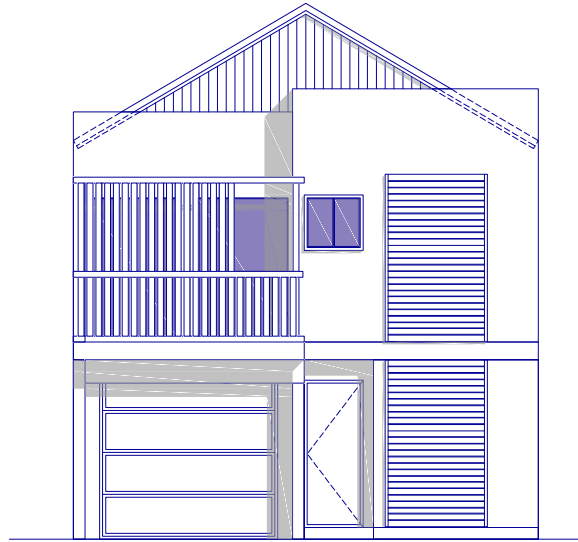
Ground Floor Plan

▲  
Street Elevation

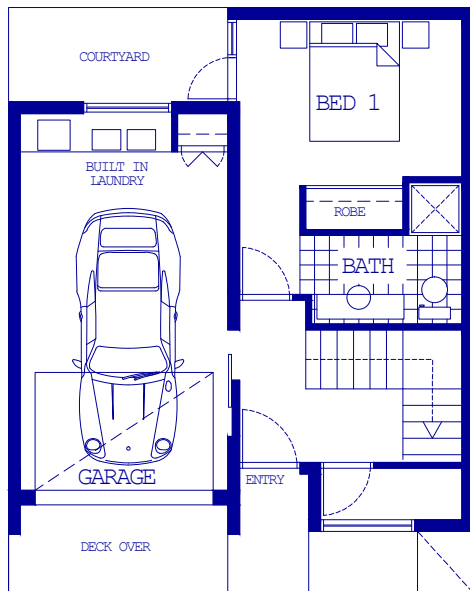


Upper Floor Plan

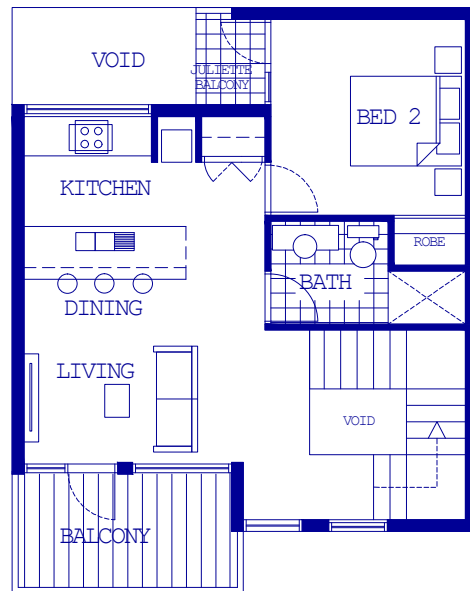
INNOVATION PRODUCT (80m<sup>2</sup> LOT)



STREET ELEVATION



GROUND FLOOR

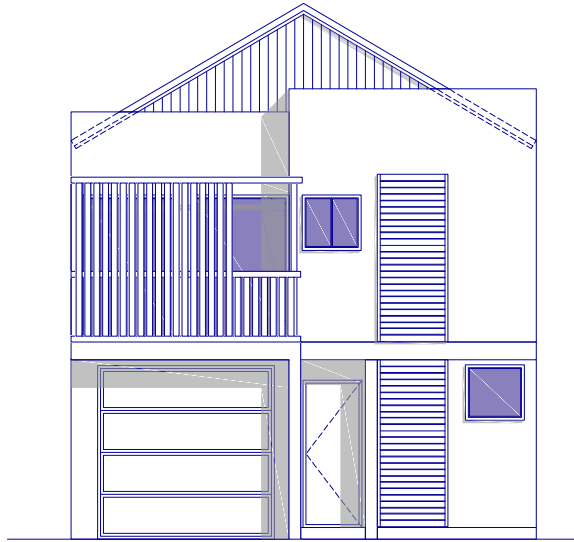


FIRST FLOOR

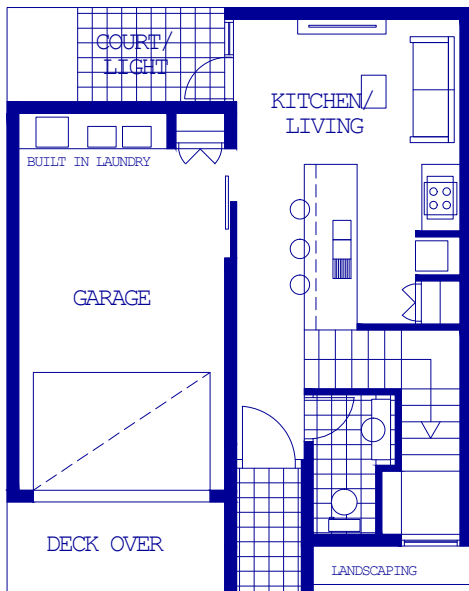
OPTION 1



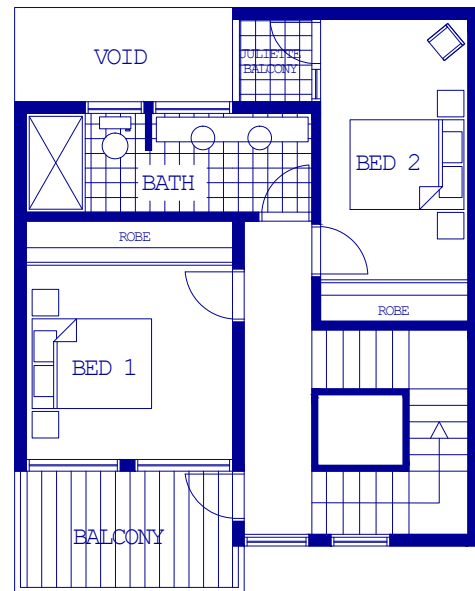
**INNOVATION PRODUCT (80m<sup>2</sup> LOT)**



STREET ELEVATION



GROUND FLOOR



FIRST FLOOR

**OPTION 2**

# 06 LAND USE & DEVELOPMENT STANDARDS

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*As the Town Centre will be the principal activity area of Ellenbrook flexibility is required in terms of approved uses to achieve a truly mixed use environment. Accordingly, the zoning boundaries applied to town centre are configured to accommodate this flexibility and allow for a mix of land uses.*

*Development control will be largely through detailed area plans. Where no detailed area plans are proposed, the provisions of this section of the development plan and the relevant provisions of the City of Swan local planning scheme no. 17 are to apply*

## **LAND USE STANDARDS**

Amendment No. 384 to the City of Swan Town Planning Scheme No. 9 (now superseded by Local Planning Scheme No. 17) inserted a land use table into Appendix 6(A) of the Scheme for controlling the permissibility of land use within the Ellenbrook Town Centre precincts. These provisions are now located in Schedules 4A and 4B of LPS17. It is to be read in conjunction with the Precinct Zoning Plan and is to perform a similar function to a statutory zoning classification plans

It is important to note that these statutory land use precincts or zoning boundaries are defined for the purpose of controlling land use and are distinct from the Character Areas referred to in the remainder of this Development Plan Report. Unlike the land use precincts, the Character Areas embrace the broader range of urban elements that come together to create distinctive urban places, including built form, land use and landscape.

## **DEVELOPMENT STANDARDS**

### **Development Objectives**

In considering an application for town planning approval in the Town Centre the Council, in addition to any other aim or objective of LPS17 and to any other matter it is required or permitted to consider, shall have regard to the following objectives:

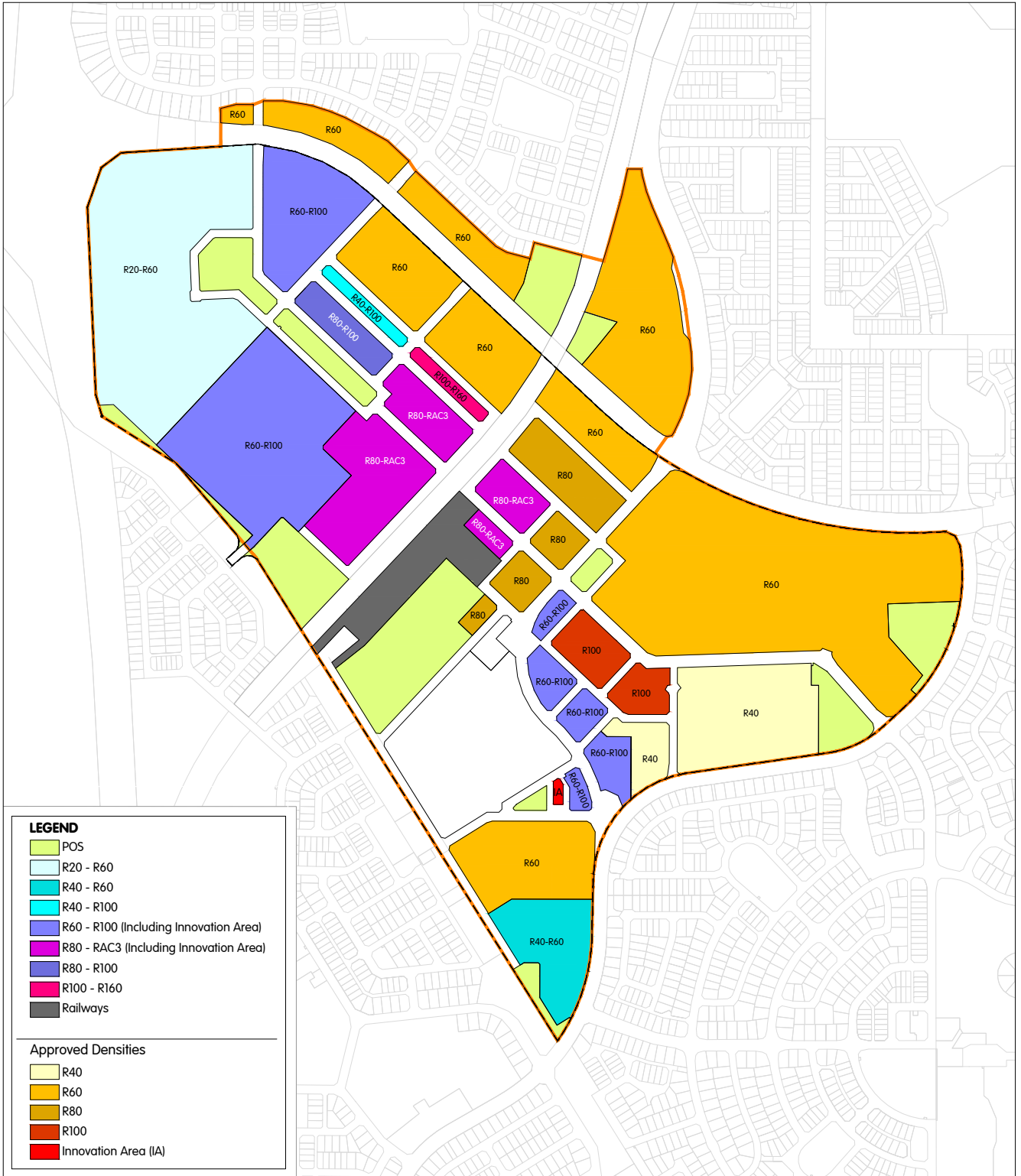
- a) promotion of a high standard of building development, landscaping and working / living environment;
- b) protection of the amenities of the adjacent areas;
- c) safe movement of vehicular and pedestrian traffic in the area; and
- d) to promote residential as an integral component of mixed use development.

Development requirements for permissible land uses shall be in accordance with the relevant planning provisions contained in the City of Swan Local Planning Scheme No. 17 Sections 4, 5 and 8 and/or the Residential Design Codes, unless alternative provisions are included in a DAP or design guidelines adopted under Part B of this Development Plan, where such alternative provisions shall prevail.

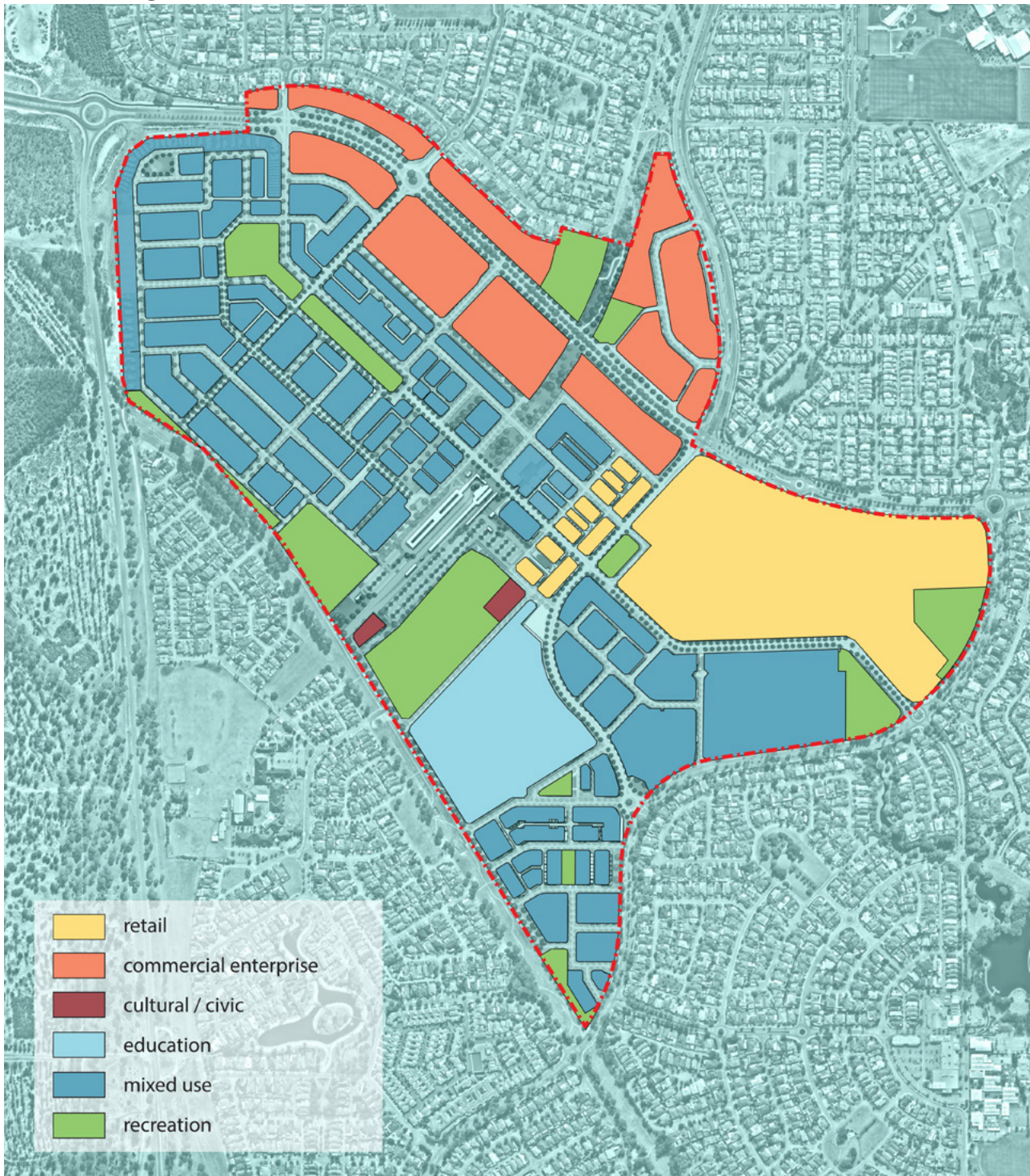
### **Residential Densities**

In order to provide flexibility over time in respect to the densities within the Town Centre a Density Code Plan is appended (Appendix 6) to this Development Plan in accordance with the WAPC's Draft Structure Plan Preparation Guidelines. The Density Code Plan provides for a Residential Design Code density range over the street blocks with the potential for residential development. At the time of subdivision it is proposed to lodge a Residential Density Code Plan (RDCP) which will detail the residential density code for each lot that has the potential to be developed for residential purposes.

## Density Code Plan



## Precinct Zoning Plan



**Table 1: Land Use Table**

LAND USE	PRECINCTS DESCRIBED IN THE DEVELOPMENT PLAN					
	RETAIL	CULTURAL / CIVIC	EDUCATION	COMMERCIAL ENTERPRISE	MIXED USE	RECREATION
Car Park	D	D	D	D	D	D
Car Sales Lot	D	X	X	P	D	X
Car Sales Showroom	D	X	X	P	D	X
Car Wash Station	D	X	X	P	D	X
Cinema / Theatre	P	P	X	X	D	X
Civic Building	D	P	X	X	D	P
Consulting Rooms	D	D	X	P	D	X
Consulting Rooms: Group	D	D	X	P	D	X
Convenience Store	P	D	X	P	D	D
Cultural Use	D	P	D	D	D	P
Dwelling: Aged or Dependent Persons	X	X	X	X	P	X
Dwelling: Attached House Grouped (2 only) multiple	X	X	X	X	P	X
Dwelling: Attached House (more than 2)	X	X	X	X	P	X
Dwelling: Grouped (more than 2)	X	X	X	X	P	X
Dwelling: Multiple	D	D	X	D	P	X
Dwelling: Single House	X	X	X	X	P	X
Education Establishment	D	D	P	D	P	X
Factory Tenement Building	X	X	X	P	X	X
Fast Food Outlet	P	D	X	P	D	X
Funeral Parlour	D	X	X	P	D	X
Hospital	D	P	X	X	D	X
Industry: Cottage	X	X	X	P	D	X
Industry: Light	X	X	X	P	D	X
Industry: Service	X	X	X	P	P	X
Medical Centre	P	X	X	P	D	X
Motor Vehicle Repair	D	X	X	P	D	X
Exhibition Centre	D	P	X	X	D	X
Garden Centre	D	X	X	P	D	X
Office	D	X	X	P	D	X
Restaurant	P	D	X	X	D	D
Service Station	D	X	X	D	D	X
Shop	P	D	X	D	D	D
Showroom	D	X	X	P	D	X
Tavern	P	D	X	X	D	X
Veterinary Centre	D	X	X	P	D	X
Warehouse	D	X	X	P	D	X
Any other use not listed above	D	D	D	D	D	D

P: Permitted Use    D: Discretionary Use    X: Not Permitted

## Gas Pipeline Buffers



## **DAMPIER - BUNBURY GAS PIPELINE**

The Ellenbrook Joint Venture engaged Stratex Worley to prepare a Risk Assessment in order to determine development setbacks in relation to the Dampier - Bunbury gas pipeline. The risk assessment study was prepared in consultation with the Department of Environmental Protection (DEP), Department of Minerals and Energy (DOME) and the gas pipeline operators at the time (Alinta/WANG). Both DOME and the DEP reviewed the risk assessment and provided comments to the WA Planning Commission (WAPC). The WAPC considered the risk assessment report and DOIR/DEP comments and resolved to determine development setbacks from the two gas pipelines consistent with the findings of the Quantitative Risk Assessment (QRA). The WAPC resolution is set out below.

### *Ellenbrook Land Exchange - impact of existing gas pipelines*

*The Commission resolved that having regard to the Ellenbrook Land Exchange Agreement approved by Cabinet to:*

- 1. determine development boundaries consistent with the outcome of the Quantitative Risk Assessment (QRA) which has been prepared and in conjunction with DOME and the DEP, with particular reference to:*
  - a 200 metre separation distance for sensitive developments such as schools and aged persons homes;*
  - a 60 metre separation distance for unfenced, residential development, within which non-residential land use is permitted, including POS, road reserves, road and public transit crossing and car park;*
  - that fencing further reduces the separation distance adjacent to residential development within the easement on the western side and to 30 metres of the WANG pipeline on the eastern side;*
- 2. advise the Minister for the Environment and the EPA accordingly;*

## **BUSHFIRE MANAGEMENT**

Subdivision and development shall be designed in accordance with best bushfire prevention practice, which is currently considered to be the Planning for Bushfire Protection guidelines - Edition 2. Subdivision/ development may result, but is not limited to, any of the following requirements as considered necessary by Council:

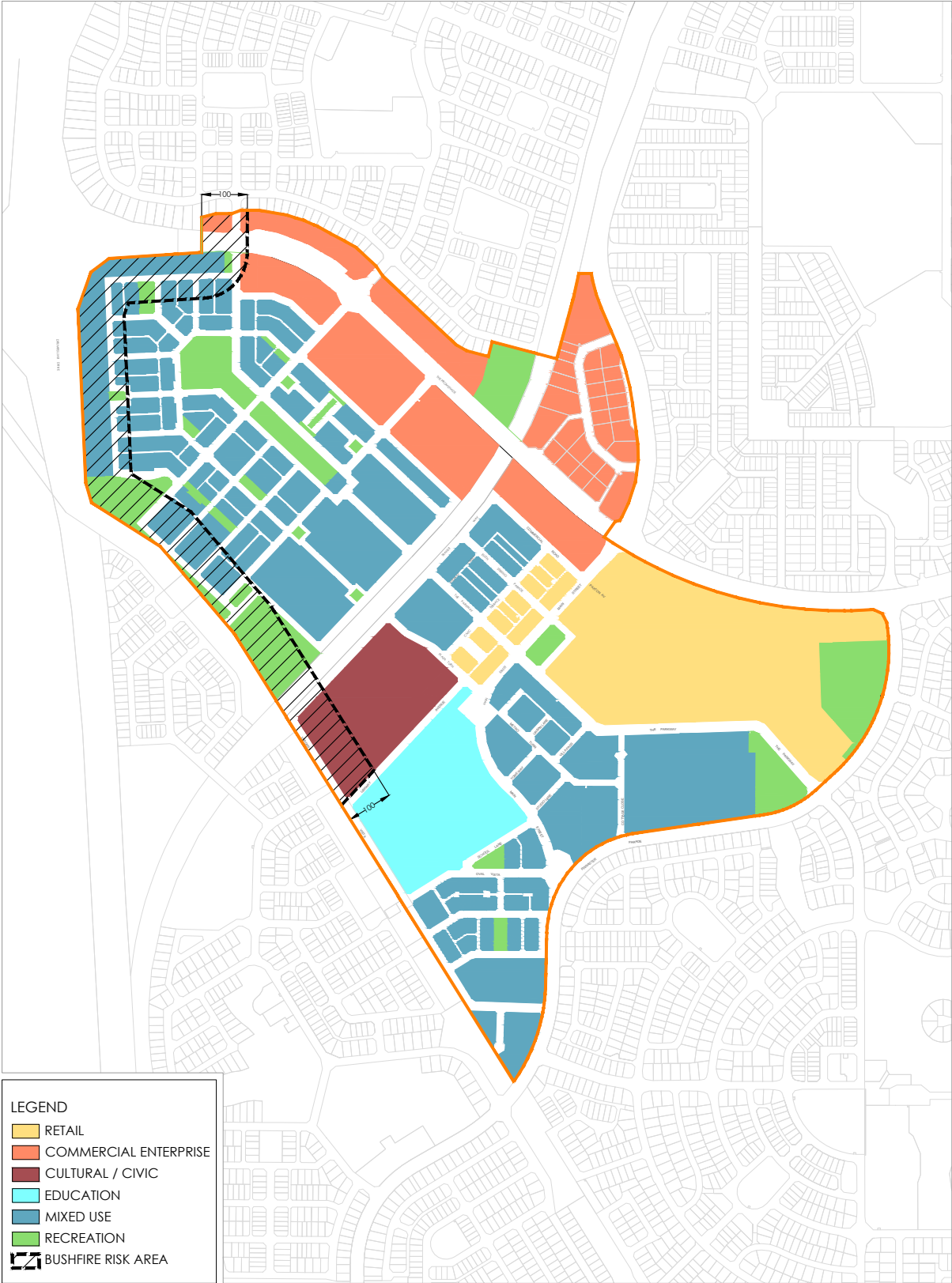
- i. Clearing vegetation of up to 100 metres from development/ subdivision boundaries to achieve appropriate bush fire hazard separation and building protection zone separation.
- ii. Clearing vegetation to achieve a minimum 20 metre Building protection zone and the inclusion of appropriate requirements, which may include notifications on title or restrictive covenants, to ensure residential development within the hazard separation zone (remanning 80 metres) is developed in accordance with AS3959-2009 as amended.
- iii. Detailed bushfire mapping and bushfire management plan(s) to be prepared, to the satisfaction of the City, in accordance with the Planning for Bushfire Protection Guidelines - Edition 2 or any other WAPC or Council adopted/ draft policies relating to bushfire management, as advised by the City.
- iv. Preparation of a Local Development Plan outlining the Bushfire Management requirements.

## **INNOVATION AREA**

Development is to be in accordance with the final WAPC 'Position Statement: Housing on Lots less than 100m2'.



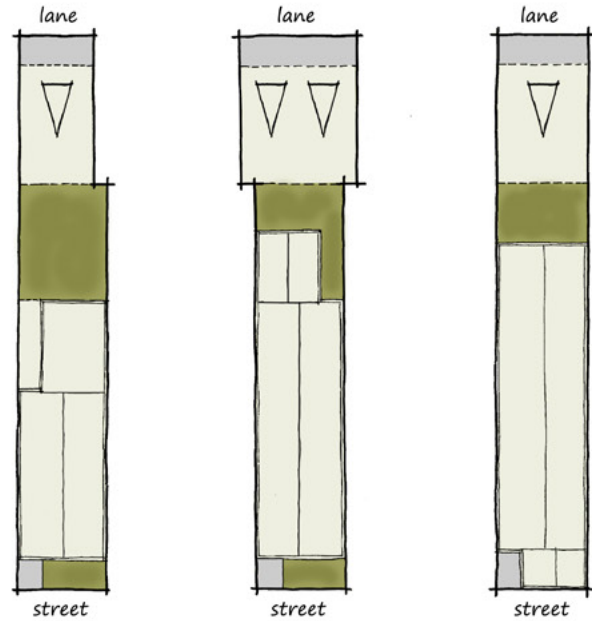
**Bushfire Risk Area**



## URBAN PRODUCT RANGE

Ellenbrook has been at the forefront of housing innovation since its inception in 1993. The Joint Venture team has worked closely with builders in designing and delivering new housing types to meet demographic needs and to ensure housing choice for purchasers. This innovation has continued in the Town Centre with the introduction of the Urban Product Range. This new range of housing includes 14 new designs that reflect to the urban nature of the Town Centre and to ensure that appropriate density is maximised to take advantage of the access to retail, food and beverage, entertainment, open space and public transport.

In order to appropriately deliver this range of housing there are variations required to the regulatory standards. The WAPC Planning Bulletin 112/2016 Medium-Density Single House Development Standards – Development Zones’ (RMD Codes) was prepared to address the deficiencies of the current State Planning Policy 3.1 Residential Design Codes in assessing cotemporary and innovative lot and housing types, such as those detailed above. However, the RMD Codes only provide alternative standards for R-Codes R25 to R60. Not including the R80 coding is considered to be a significant deficiency because the resulting standards are more relaxed for the included R-Codes compared to the R80 coding in respect to open space, parking, overshadowing and privacy. In order to provide consistent development it is proposed that the RMD60 provisions relating to open space, parking, overshadowing and privacy be applicable to the R80 coded lots within the Development Plan area.



**Stirling A (Zipper Lot)**

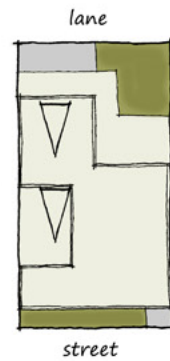
Lot Width	4.5m
Lot Depth	28m
Lot Area	120.7m <sup>2</sup>
Bed/Bath	2x2
Parking	1 bay
Access	Lane
Site Cov.	68%
Dwelling Floor Area	112m <sup>2</sup>

**Stirling B (Zipper Lot)**

Lot Width	4.5m
Lot Depth	28m
Lot Area	136.5m <sup>2</sup>
Bed/Bath	3x2
Parking	2 bays
Access	Lane
Site Cov.	71%
Dwelling Floor Area	129m <sup>2</sup>

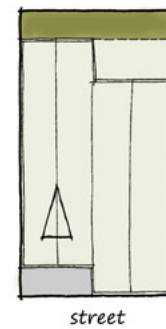
**Urban**

Lot Width	4.5m
Lot Depth	28m
Lot Area	126m <sup>2</sup>
Bed/Bath	2x2 or 2x1
Parking	1 bay
Access	Lane
Site Cov.	79%
Dwelling Floor Area	117m <sup>2</sup>



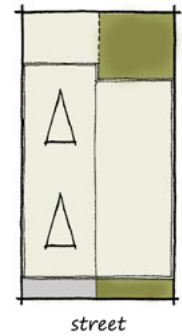
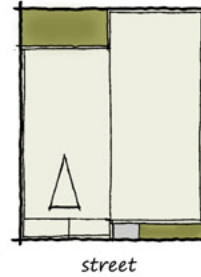
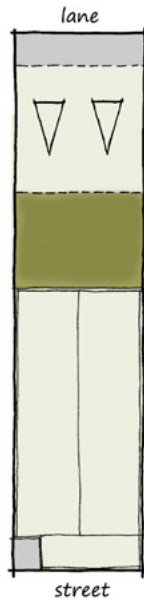
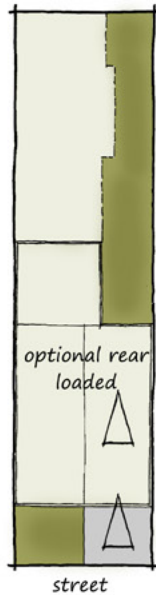
**Terrace 1**

Lot Width	8m
Lot Depth	15m
Lot Area	120m <sup>2</sup>
Bed/Bath	2x1
Parking	2 bays
Access	Lane
Site Cov.	78%
Dwelling Floor Area	132m <sup>2</sup>



**Terrace 2**

Lot Width	8m
Lot Depth	15m
Lot Area	120m <sup>2</sup>
Bed/Bath	2x1
Parking	1 bay
Access	Street
Site Cov.	68%
Dwelling Floor Area	148m <sup>2</sup>



**The Loft**

Lot Width	8m
Lot Depth	10m
Lot Area	80m <sup>2</sup>
Bed/Bath	2x2
Parking	1 bay
Access	Street
Site Coverage	77%
Dwelling Floor Area	110m <sup>2</sup>

**Woodbridge**

Lot Width	8m
Lot Depth	15m
Lot Area	120m <sup>2</sup>
Bed/Bath	2x1
Parking	2 bays
Access	Street
Site Cov.	79%
Dwelling Floor Area	138m <sup>2</sup>

**Mangles**

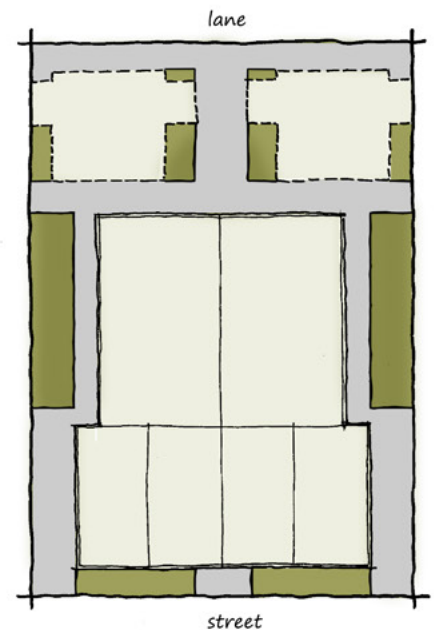
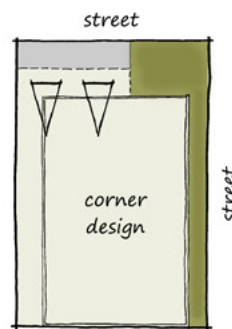
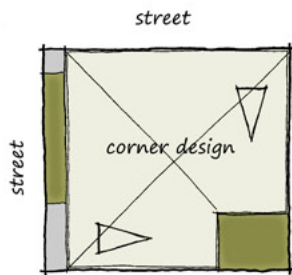
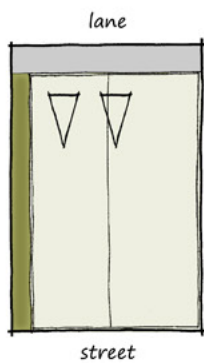
Lot Width	4.5m
Lot Depth	28m
Lot Area	126m <sup>2</sup>
Bed/Bath	3x2
Parking	1 bay
Access	Lane
Site Cov.	79%
Dwelling Floor Area	148m <sup>2</sup>

**Botanical**

Lot Width	7m
Lot Depth	28m
Lot Area	196m <sup>2</sup>
Bed/Bath	3x1 or 3x2
Parking	2 bay
Access	Street
Site Cov.	65%
Dwelling Floor Area	185m <sup>2</sup>

**Georgian**

Lot Width	6m
Lot Depth	25m
Lot Area	150m <sup>2</sup>
Bed/Bath	3x2
Parking	2 bays
Access	Lane
Site Cov.	66%
Dwelling Floor Area	140m <sup>2</sup>



**Warehouse**

Lot Width	10m
Lot Depth	15m
Lot Area	150m <sup>2</sup>
Bed/Bath	2x2
Parking	2 bays
Access	Lane
Site Cov.	80%
Dwelling Floor Area	200m <sup>2</sup>

**The Hoff (Home / Office)**

Lot Width	11m
Lot Depth	10m
Lot Area	110m <sup>2</sup>
Bed/Bath	1x1
Parking	2 bays
Access	Street
Site Cov.	82%
Dwelling Floor Area	133m <sup>2</sup>

**Heritage**

Lot Width	15m
Lot Depth	10m
Lot Area	150m <sup>2</sup>
Bed/Bath	3x1
Parking	2 bays
Access	Street
Site Coverage	67%
Dwelling Floor Area	135.6m <sup>2</sup>

**Maisonette (4 dwelling)**

Lot Width	20m
Lot Depth	28m
Lot Area	560m <sup>2</sup>
Bed/Bath	2x2
Parking	1 bay per dwelling
Access	Lane
Site Cov.	58%
Dwelling Floor Area	121m <sup>2</sup> x 4

# 07 LAND USE & EMPLOYMENT PROJECTIONS

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*The planning for the Ellenbrook New Town seeks to promote local self-sufficiency, to encourage more sustainable transport and lifestyle patterns, including a high level of local employment and reduced car travel. The Town Centre Development Plan supports this objective by creating the framework for a multi-functional regional centre with capacity to accommodate a range of land uses including retail/shopping, offices, showrooms, entertainment/recreation and residential.*

## INTRODUCTION

This section assesses the capacity of the proposed Town Centre Development Plan design to accommodate the range of land uses envisaged for the Town Centre and to generate a sustainable level of local employment. More specifically, this section gives the following projections:

- floor space areas for different land use types within the Town Centre;
- number of residences and residential population to be accommodated within the Town Centre;
- total employment creation within the Ellenbrook New Town.

## LAND USE PROJECTIONS

### Non-Residential Uses

An assessment of the Town Centre Development Plan has been undertaken to determine likely floor space yields for different non-residential land uses. To establish these yields the following steps were carried out:

Step 1: Prepare floor space projection plan based on anticipated land use scenario (refer to following page). A Centre Plan has been prepared to support the proposed floor space allocation for the retail site (refer to Appendix 2). *[NB: This is only one of many scenarios that could be developed for the Centre, recognising that land use mix will ultimately be determined by a multitude of factors outside the influence of planning controls, including commercial investment decisions and market forces];*

Step 2: Prepare building typology plans for different land use types to establish realistic maximum permissible site coverage (*NB: typology plans have regard to the car parking requirements of the City of Swan Local Planning Scheme No. 17*) (refer to building typology plans);

Step 3: Apply the following site coverage percentages (derived from Step 2) to total development site areas to determine floor space yields:

Land Use Type	Floor Space
Ground Level Retail	45%
Shopping Complex (% of retail floor space within shopping complex)	80%
Commercial (incl office/business)	60%
Other Retail/Service Commercial	50%
Ground Level Commercial/Retail & Residential Above	40%
Non-Commercial (excl. School)	60%
Light Industrial	60%

The results from Step 1-3 are illustrated in Table 2.

Table 2: Floor Space By Land Use Type

	ELLENBROOK FLOOR SPACE PROJECTIONS (SCENARIO A)	ELLENBROOK PERCENTAGE OF TOTAL FLOOR SPACE
<b>Shop/Retail</b> - Ground Level - Ground Level with residential/ office above	42,000m <sup>2</sup> 8,000m <sup>2</sup> <b>(total 50,000m<sup>2</sup>)</b>	24%
<b>Commercial (office/business)</b> - Ground Level Commercial and; - Ground Level with residential above	40,000m <sup>2</sup>	19%
<b>Other Retail / Service Commercial</b>	55,000m <sup>2</sup>	27%
<b>Light/Service Industry</b>	33,900m <sup>2</sup>	17%
<b>Other</b> (welfare, health, community service, recreation, cultural)	26,888m <sup>2</sup> (excludes school)	13%
<b>TOTAL</b>	<b>205,788 m<sup>2</sup></b>	<b>100%</b>

1. Commercial and Industrial Land Use Surveys for 2001 (WAPC 2004)

**Shop/Retail:** Any activity which involves the sale of goods from a shop located separate to and/or in a shopping centre other than those included in WASLUC Category 6 - Other Retail.

**Office/Business:** Administration, clerical, professional and medical offices are activities which do not necessarily require the land area/ floor space or exposure of other land uses. Although offices require building and parking facilities, these needs are quite distinct from those of commercial uses and service industries.

**Other Retail:** Many of these activities normally are not accommodated in a shopping centre. By virtue of their scale and special nature, the goods of these activities separate them from the Shop/Retail category (e.g. car sales yards, carpet, showroom).

**Service/Light Industry:** Includes service and light industries offering a range of services and in some instances the manufacturing, processing and fabrication of general goods. The scale and environmental impact of such activities may require separation from other land uses.

It is evident that the land use scenario prepared for the Ellenbrook Town Centre allows for significant capacity for mixed commercial, light industry and other business floor space development.

Furthermore, it must be recognised that whilst the Development Plan provides significant capacity for achieving this level of commercial development, the ultimate land use mix will be determined by a multitude of factors in addition to planning controls, including commercial investment decisions and market forces.

## Dwelling Yields

The locations proposed for residential development are depicted in the Land Use Scenario Plan. Densities range from between R10 to R160. To calculate residential yields, the development site area was divided by the relevant residential density code average site area requirement.

For the purpose of projecting a Town Centre residential population, reference was made to the Australian Bureau of Statistics (ABS) data for occupancy rates for different dwelling types. The results are presented in Table 3.

*Table 3: Town Centre Dwelling Yield and Residential Population Projections*

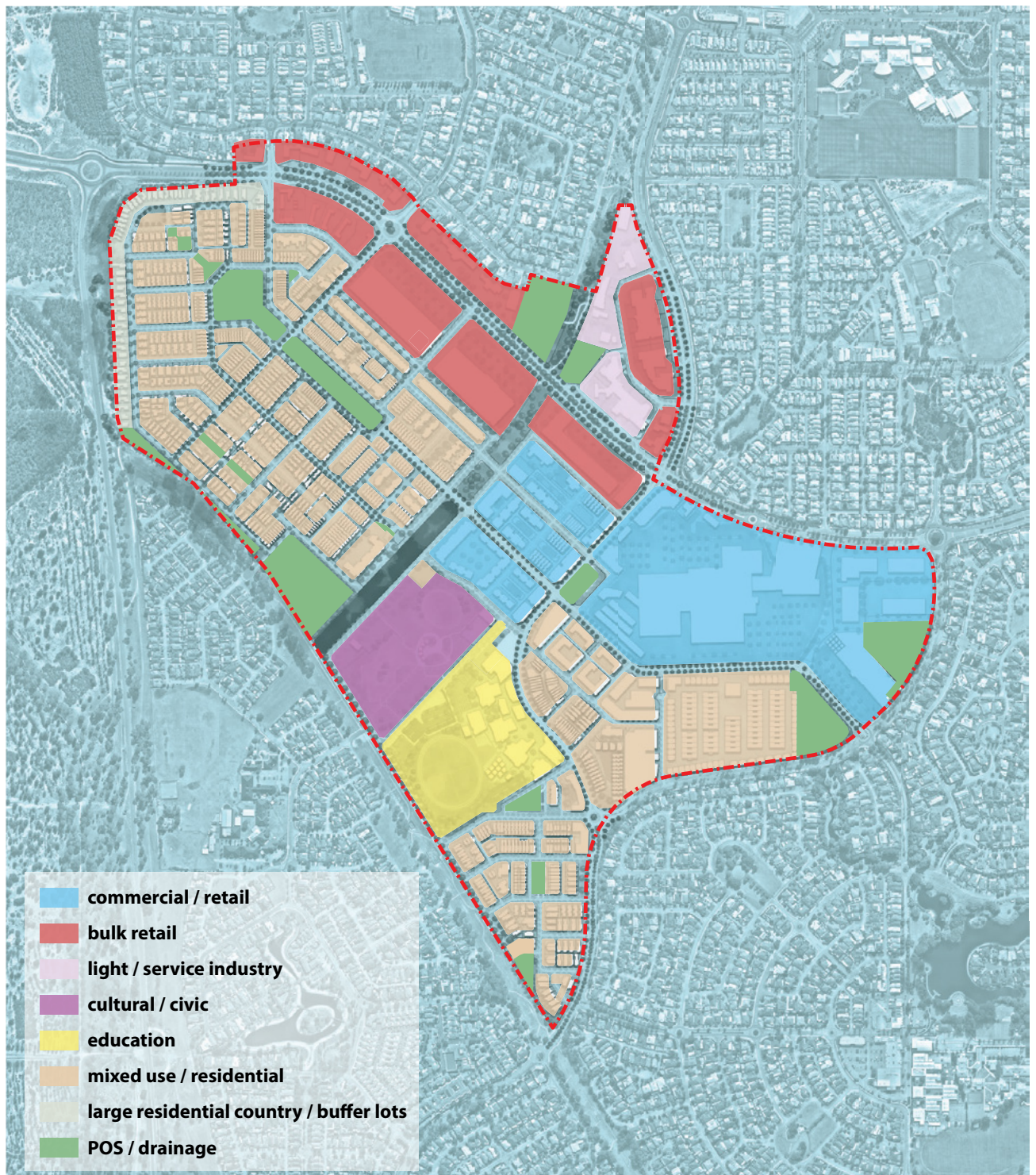
DWELLING TYPE	DWELLING YIELD	OCCUPANCY RATE <sup>1</sup>	RESIDENTIAL POPULATION
Grouped Dwellings	136	2 res/dwelling	272
Single & Two Storey Residential (R20/80)	906	2.8 res/dwelling	2537
3-4 Storey Residential (R40/160)	601	1.5 res/dwelling	901
Independent Living Units	157	1.5 res/dwelling	236
<b>TOTAL</b>	<b>1800</b>		<b>3946</b>

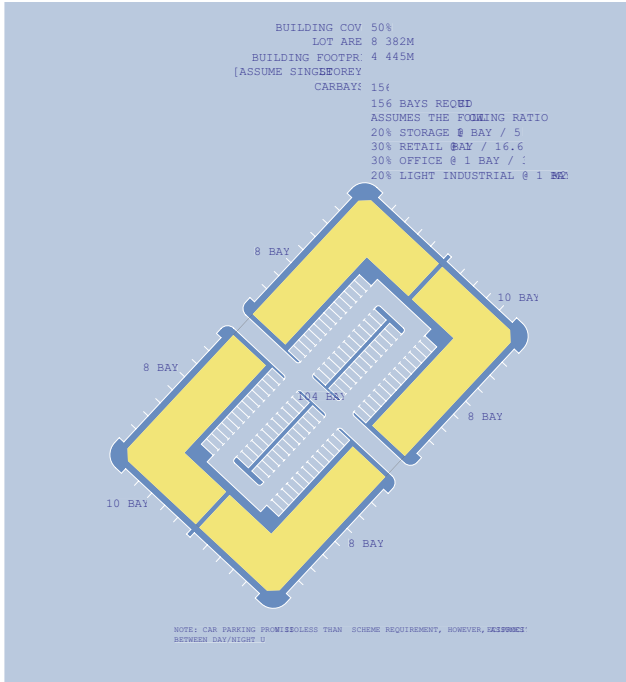
*1. Occupancy rates derived from ABS 2001 Occupancy Rates by Dwelling Types*

It is evident that the Town Centre is projected to yield 1,800 dwellings, accommodating approximately 3,950 residents. This equates to around 13% of the total 30,000 residential population projected for Ellenbrook.

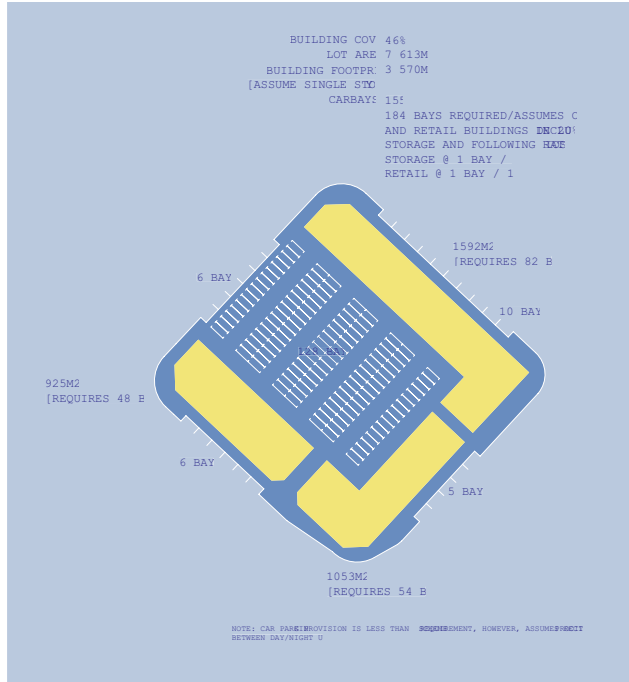
The Town Centre residential population will be dispersed throughout the Centre to ensure a high level of accessibility, surveillance and activity during all hours. Flexibility has been built into the design, including the incorporation of a interconnected street network, to enable residential densities to increase as the Centre matures.

## Land Use Scenario

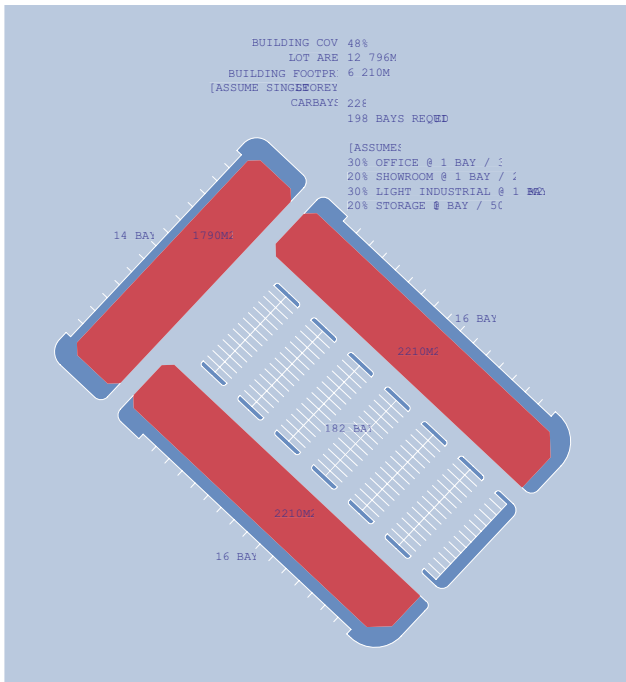




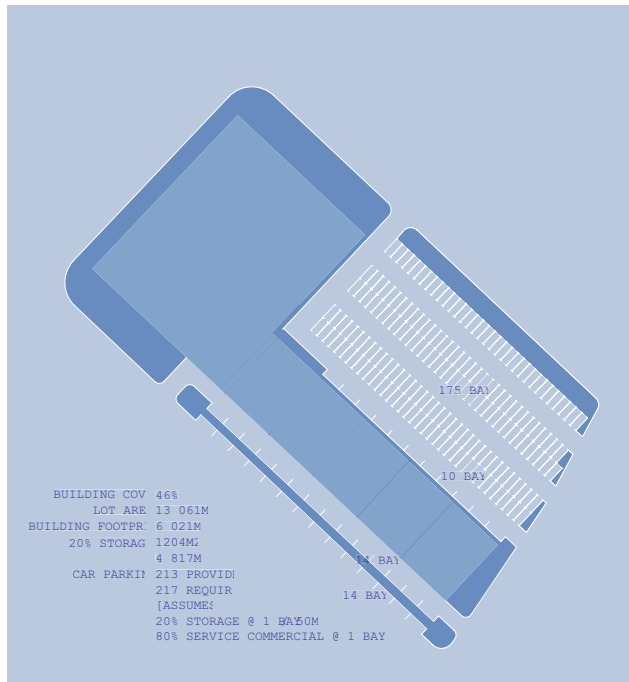
**Retail/Residential Apartment Typology**



**Retail Typology**



**Mixed Commercial Typology**



**Service Commercial Typology**



## EMPLOYMENT PROJECTIONS

### Employment Objectives

Employment generating land uses are unevenly spread across the Perth Metropolitan Region, with most jobs concentrated in the inner and middle sectors (approximately 75%), with the Central Business District accounting for around 20% of all jobs. Although the outer sectors account for approximately 50% of Perth's population, they accommodate less than one third of all jobs (Source: *North East Corridor Structure Plan, WAPC 2003*).

A primary objective for Ellenbrook is to address this spatial imbalance between jobs and population by making adequate provision for the employment needs of its residents. A high level of workforce retention will assist in reducing the need for residents to travel long distances to access employment, as well as generate local wealth creation and encourage local residents to participate fully and remain part of the community fabric of Ellenbrook.

Employment is projected to be primarily focussed within the Town Centre, however, opportunities for local employment will also be available within the Village Centres, local schools and other community services. The key employment generators within Ellenbrook are expected to be strongly tied to the needs of the community and include:

- retail/showroom/service commercial;
- light/service industry;
- public service (including teachers and Council employees);
- emergency services;
- community health;
- professional services (i.e. to service the needs of local residents and businesses, including accountants, legal, finance, property);
- lifestyle (arts, cultural and civic); and
- home-based employment, including home offices and businesses offering niche services to 'time-poor' residences.

## Directions 2031

Directions 2031 establishes a vision for future growth of Perth and provides a framework to guide the detailed planning and delivery of housing, infrastructure and services necessary to accommodate the projected growth.

Directions 2031 states the North- East Sub Region, which includes Ellenbrook, is forecast to grow to an estimated population of 258 000, a 37% increase on current population levels. An additional 40 000 dwellings are required to accommodate this growth. The NE region enjoys a relatively high level of employment self-sufficiency at 63%. Direction 2031 has identified a target of 75% employment self-sufficiency for the NE sub region.

To achieve the 75% employment self-sufficiency target an additional 42 000 jobs need to be created in the NE sub-region. To assist in achieving this target the Ellenbrook Town Centre will create approximately 8390 jobs as detailed in the next section of the report.

## Method

In order to project the level of employment likely to be generated within Ellenbrook the following steps were undertaken:

*Step 1:* Determine level of floor space provided within Town Centre and Villages by industry type;

*Step 2:* Calculate total number employment positions projected to be created using 'commercial floor space by employee ratios' that apply to existing commercial centres within the Perth Metropolitan Region and employment numbers associated with community uses;

*Step 3:* Compare the projected employment numbers with the ultimate total Ellenbrook workforce and calculate potential local labour force participation rate in Ellenbrook;

*Step 4:* Examine implications for Ellenbrook, including level of employment self-sufficiency and whether sufficient land is set aside for employment generating land uses.

### **Ellenbrook Employment Generation**

Table 7 provides ultimate employment creation projections for Ellenbrook. The floorspace per employee ratio used to calculate employment generation from commercial land uses is derived from the Commercial Land Use Survey (WAPC: December 2000) for the Perth Metropolitan Region and more recently the Syme Marmion report detailing economic development for the Yanchep-Two Rocks District Structure Plan (2007). The employment numbers include full and part time employment and the floorspace is presented as net lettable area.

Employment figures associated with Ellenbrook's public and private schools and aged persons accommodation are respectively derived from the DET, the Catholic Education Commission of Western Australia and aged care accommodation service providers.

It is evident from Table 4 that there is the potential for Ellenbrook to generate approximately 8028 jobs. Whilst the table shows some industries being more labour intensive than others, in reality it can be expected that there would be differences between floor space per employee within each industry, depending on the type and success of the business, land availability and location.

It is also noted that market forces and the location decisions of employers in the private and public sector will largely determine the final mix of employment.

Notwithstanding this, the provision of sufficient land areas within suitable locations of the Town and Village Centres will assist in ensuring a viable and sustainable employment pattern suited to the characteristics of Ellenbrook and the north eastern corridor generally.

Table 4: Ultimate Employment Creation Projections, Ellenbrook

EMPLOYMENT GENERATOR	EMPLOYMENT RATIO	EMPLOYMENT CREATION (No. of Jobs)
<b>Town Centre</b>		
Other Retail/Service Commercial (55,000)	55m <sup>2</sup> /employee1/4	1000
Commercial (Office/Business) (40,000m <sup>2</sup> )	24m <sup>2</sup> /employee1/4	1666
Shop/Retail (50,000m <sup>2</sup> )	28m <sup>2</sup> /employee1/4	1785
Light/Service Industry (33,900m <sup>2</sup> )	50m <sup>2</sup> /employee1/4	678
Community (26,888m <sup>2</sup> )	40m <sup>2</sup> /employee1/4	672
Aged Persons Accommodation	70 employees	70
High School	150 employees/ H.S. <sup>2</sup>	150
<b>Woodlake Village</b>		
Neighbourhood Centre (4,500m <sup>2</sup> NLA retail floorspace)	28m <sup>2</sup> /employee1/4	125
Two Primary Schools	50 employees/P.S. <sup>2</sup>	100
Aged Persons Accommodation	70 employees	70
<b>The Bridges</b>		
Local Centre (1,500m <sup>2</sup> NLA retail floorspace)	28m <sup>2</sup> /employee1/4	53
Private School	200 employees/private school (pre-primary – Yr 12) <sup>3</sup>	200
<b>Coolamon</b>		
Neighbourhood Centre (6,500m <sup>2</sup> NLA retail floorspace)	28m <sup>2</sup> /employee1/4	232
Primary School	50 employees/ P.S. <sup>2</sup>	50
Private School	200 employees/private school (pre-primary – Yr 12) <sup>3</sup>	200
<b>Morgan Fields</b>		
Local Centre (1,500m <sup>2</sup> NLA retail floorspace)	28m <sup>2</sup> /employee1/4	53
<b>Charlottes Vineyard</b>		
Local Centre (1,500m <sup>2</sup> NLA retail floorspace)	28m <sup>2</sup> /employee1/4	53
Primary School	50 employees/ P.S. <sup>2</sup>	50
<b>Village 6</b>		
Neighbourhood Centre (6,500m <sup>2</sup> NLA retail floorspace)	28m <sup>2</sup> /employee1/4	232
One Primary School	50 employees/P.S. <sup>2</sup>	50
<b>Village 7</b>		
Local Centre (1,500m <sup>2</sup> NLA retail floorspace)	28m <sup>2</sup> /employee1/4	53
Primary School	50 Employee/PS	50
<b>District Centre</b>		
Local Centre (6,500m <sup>2</sup> NLA retail floorspace)	28m <sup>2</sup> /employee1/4	232
High School (50% Ellenbrook & 50% the Vale)	150 employees/H.S. <sup>2</sup>	75
Other Retail/ Service Commercial (3000 m <sup>2</sup> )	55m <sup>2</sup> / employees1/4	54
<b>TOTAL</b>		<b>8028 jobs</b>

1. Commercial Land Use Survey, 1997 (WAPC 2000)

2. Education Department of Western Australia, 2004

3. Catholic Education Commission, 2004

4. Syme Marmion 2007

## Labour Participation Rate

The 'labour participation rate' refers to the proportion of the total population of a given region employed or that aspire to be employed in the workforce. The participation rate is derived by dividing the total employed persons (includes all employed persons aged over 15 years and part-time employees) and unemployed persons (excludes people over 15 years who are not in the labour force) by the total population of the locality.

To establish a labour force participation rate for Ellenbrook, comparisons were made with the Perth Metropolitan Region and Swan (refer to Table 5).

The variation in labour force participation rates between the Metropolitan Region and Swan is indicative of varying population profiles of the different sectors identified. For instance, areas with a high proportion of families with young children such as Ellenbrook or areas that have large elderly populations such as Midland can be expected to have lower labour force participation rates.

The variations between the areas are nonetheless relatively minor, and thus it is considered that a 50% participation rate would be a reasonable supposition for Ellenbrook. Based on a projected ultimate population of 30,000, the labour force participation rate for Ellenbrook is therefore projected to be approximately 15,000 persons.

Table 5: Labour Force Participation Rate

PERTH METROPOLITAN REGION			SWAN		
Total Popln.	Total Labour Force (incl. unemployed)	Labour Force as % of Total Popln.	Total Popln.	Labour Force (incl. unemployed)	Labour Force as % of Total Popln.
1,599,422	1,063,832	66%	92,613	45,041	49%

Source: ABS + forecast id (2006)

## Ellenbrook Employment Retention Ratio

The employment retention rate is the proportion of the total labour force able to be employed in locally provided jobs. Table 7 projects that Ellenbrook will ultimately have the capacity to accommodate 8028 jobs for its labour force of 15,000 persons. This equates to a self-sufficiency rate of 53%.

It is acknowledged that people living outside the development will fill a percentage of jobs within Ellenbrook. The proportion of Ellenbrook residents employed within other employment nodes located within the northeast corridor, including the industrial estate planned to the north, would however balance this influx.

Furthermore, a proportion of Ellenbrook's residential population will work from home either part or full-time. An Australian wide 2001 ABS survey: Locations of Work, Australia (ABS Publication 6275.0, 2001) found that in June 2001, 21% of persons at work, worked some hours at home in either their main or second job. Eleven per cent of people at work were classified as 'persons employed at home' - defined as persons who worked all or most hours at home and/or persons who have an arrangement with their employer to work some hours at home in their main or second job.

If the same figure of eleven per cent were applied to Ellenbrook, it can be projected that approximately 1,650 of the total 15,000 labour force will work from home. This would increase locally provided employment to 9678 jobs, equating to a self-sufficiency rate of 64.5%.

### **Regional Employment Retention Ratio**

The broader regional catchment comprising Ellenbrook, Vale, Albion, Baskerville, Upper Swan and Bullsbrook recorded a population of 13,720 persons at the 2001 ABS Census. The City of Swan projects the population of this broader catchment will climb to 51,711 by 2016 and ultimately reach 77,121 persons.

A proportion of the people residing within the broader region will fill a percentage of jobs created within the Ellenbrook Town Centre. However, the surrounding region will also provide local employment, primarily in planned commercial centres, community services (i.e. schools, aged care) and home based businesses.

According to the City of Swan's Commercial Centres Strategy, the commercial centres planned for the surrounding areas may yield approximately 22,700m<sup>2</sup> of retail/shopping floor space, which based on a ratio of 31.39m<sup>2</sup>/employee, could be expected to create approximately 723 jobs. Community oriented services including public and private schools and aged care, could be expected to create a further 800 jobs and approximately 4,242 persons can be expected to work from home (i.e. based on ABS statistics, which indicate 11% of the Australian workforce work most hours or have a formal arrangement with their employer to work from home).

Based on the above, it can be projected that the total region (including Ellenbrook) will sustain approximately 14,084 jobs (including people working from home) in terms of the total labour force which equates to an employment self retention rate of approximately 33%. To increase this employment self retention rate, it will be necessary for the Town Centre and other planned urban areas to include space for employment above and beyond that which is usually associated with servicing residential needs. The Land Use Scenario for the Ellenbrook Town Centre demonstrate that the Town Centre has capacity to accommodate commercial floor space (other than retail which is restricted to 50,000m<sup>2</sup> by the Metropolitan Centres Policy) above the level recorded for Joondalup in 2001. It is however recognised that the provision of sufficient space for employment generating uses will not alone be enough to promote employment generating uses.

In order to bring businesses and jobs to the Town Centre beyond those typically attracted to retail centres, Ellenbrook Management will prepare an Economic Development Strategy for the Town Centre. The Strategy will consider innovative schemes for, inter alia, attracting commercial investment, managing and marketing the Centre and creating local employment.

The North East Corridor Extension Strategy (WAPC, 2003) also recognises the need to raise the level of employment opportunities available within the north eastern sector of the metropolitan area. It incorporates an employment node at the Shire of Chittering and City of Swan border that encompasses a substantial land area of some 1,172 hectares. This node is proposed as a future source of general industrial employment for the residents of Ellenbrook, Vale, The Vines and future areas of the North East Corridor study area. It is intended to accommodate manufacturing, industrial and service oriented employment.



# 08 ELLENBROOK, THE VINES & VALE PLACE PLAN (2004)

*The development of the Ellenbrook Town Centre will bring significant social benefits for the locality and future uses and will contribute to the substantial social and economic change of the area. This includes improved access to community services and facilities and enhanced opportunities for local employment. The town centre can claim success when the needs and expectations of all user groups are met, if not exceeded.*

## PLACE PLANNING

The City of Swan has prepared a Place Plan that encompasses Ellenbrook, The Vines and Vale. The objective of the place planning project is to gain stakeholder consensus and support for initiatives that will ensure these communities continue to grow and develop into places that offer a quality lifestyle and sustainability. The project adopts a grassroots approach that is dependent upon partnerships between key stakeholders and community.

The Place Plan identified a number of Key Actions relating to four environments: Social, Economic, Developed and Natural. The following table lists the Key Actions which relate to the Town Centre and how the development of the Town Centre over the past seven years has addressed the Key Actions:

SOCIAL ENVIRONMENT	
KEY ACTION (AS IDENTIFIED BY PLACE PLAN)	RESPONSE
Develop and plan a Regional Library for the Town Centre as a multipurpose centre.	The Ellenbrook Community Library was completed in 2007 and is a shared facility between the Ellenbrook Secondary College and the Ellenbrook community.
Set vision and establish hierarchy for regional-level and local facilities for Ellenbrook and Egerton community facilities and services that: <ul style="list-style-type: none"> <li>designates hierarchy and potential locations</li> <li>focuses the staging and placement of community facilities within the Ellenbrook Town Centre as a priority</li> <li>identifies Ellenbrook town centre facility that reduces need for similar facilities in neighbourhood/village centres</li> <li>identifies facilities where they can be combined with other commercial, recreational and educational facilities</li> <li>only serve multi-functional purposes</li> <li>reduces funding and on-going maintenance risks for the City</li> <li>explores mechanisms for provision at village level service, other than in a facility built or funded by the City.</li> </ul>	A number of community facilities have been constructed within the Town Centre, including: <ul style="list-style-type: none"> <li>Ellenbrook Community Library</li> <li>Ellenbrook Secondary College</li> <li>BMX track</li> <li>Community garden</li> <li>Waterplay facility</li> <li>BMX track</li> <li>Ellenbrook Arts – The Gallery</li> <li>Police station</li> </ul>
Provide Regional Sports Facilities. <u>Directions:</u> <ul style="list-style-type: none"> <li>Identify requirements for regional-level active sports facilities in the Ellenbrook Town Centre to compliment the role of Coolamon oval facilities and provide a regional hub (Egerton, Ellenbrook, The Vines and Albion).</li> </ul>	The regional sports facilities provided within the Town Centre thus far are: <ul style="list-style-type: none"> <li>State Swim indoor pool</li> <li>Ellenbrook District Open Space</li> </ul>
ECONOMIC ENVIRONMENT	
KEY ACTION (AS IDENTIFIED BY PLACE PLAN)	RESPONSE
Establish education and training campus.	The Ellenbrook Secondary College was completed in 2011. The North Ellenbrook High School will open in 2018.
Develop a Policy that outlines desired businesses in service industry area. <ul style="list-style-type: none"> <li>Identify location and additional land in the Ellenbrook Place Area for commercial/industrial uses.</li> <li>See developed environment (Town Centre)</li> </ul>	A service industrial area, know as the Commercial Enterprise Precinct, has been subdivided and developed in accordance with the approved Commercial Enterprise Development Plan. This Precinct now forms part of this Development Plan. This Development Plan has also identified other areas to facilitate the provision of service industrial and commercial land uses.

DEVELOPED	
KEY ACTION (AS IDENTIFIED BY PLACE PLAN)	RESPONSE
Develop a vision and principles for Centre Plan Ellenbrook Regional Centre based on Outline Development Plan.	The vision for the Town Centre and the objectives are included in section 03 of this Development Plan. These were endorsed by the City as part of the original approval of this plan.
Provide input into the design guidelines for the Town Centre: <ul style="list-style-type: none"> <li>guided by Centre Plan Principles and the Draft Ellenbrook Town Centre Design Guidelines -Main Street (august 2003).</li> <li>adopt guidelines and identify enforcement regime and staging – early negotiation, guiding principles, identifying enforcement issues /role and negotiate solutions regarding development applications</li> <li>guidelines to be enforced by LWP for initial developments</li> <li>clarify the responsibilities of LWP – City of Swan in enforcing guidelines in the future (Caveats)</li> <li>define use of guidelines by the City of Swan + enforcement mechanisms for future design changes of existing buildings</li> </ul>	Detailed Area Plans (DAP) are prepared for each development site within the Town Centre. The City of Swan is required to approve the DAP's prior to the issue of a planning approval. Design Guidelines are also prepared for important sites. These guidelines are endorsed by the City and appended to Development Plan.
Work with LWP to ensure that educational facilities complement the Town Centre.	The Ellenbrook Secondary College was completed in 2011. In 2011 it had 1145 students enrolled.
Develop a Policy that outlines desired industries in Service Industry area: <u>Directions:</u> <ul style="list-style-type: none"> <li>Work with LWP to identify appropriate/preferred uses and to maximise employment in Service Industrial area</li> <li>Identify location and additional land in the Town Centre for commercial and industrial uses.</li> <li>Analyse possibilities for service industries between Lord Street and projected Perth-Darwin Highway (south of Gnangara Road)</li> <li>Provide DA planners with information to allow them to provide direction to desired/appropriate industries to locate in Ellenbrook regional centre.</li> <li>Provide commercial floor-space suitable (flexibility, price, lease period, location) for businesses graduating from the incubator (E14).</li> </ul>	A service industrial area, know as the Commercial Enterprise Precinct, has been subdivided and developed in accordance with the approved Commercial Enterprise Development Plan. This Precinct now forms part of this Development Plan. This Development Plan has also identified other areas to facilitate the provision of service industrial and commercial land uses.
Secure land for public parking areas: identify appropriate location, size, tenure, access, design, funding and number of parking bays required.	The street blocks within the Town Centre have been designed to allow for the construction of parking areas sleeved behind perimeter buildings. Ellenbrook Management has gifted two public parking areas within the first two stages of the Main Street. Additional parking areas will be required as part of the development applications or purchased utilising cash-in-lieu funds. The revised Ellenbrook Parking Strategy was approved by the City in 2015 to guide the provision of parking within the Town Centre.
Negotiate parking access for Shopping Centre to ensure 24-hour access and consistent parking regulation and make condition of DA.	The planning approvals for the shopping centre state that the associated car parks are to be accessible to the public 24 hours a day.
Assess the options for a 2nd entry to Ellenbrook Town and respond to funding request from LWP.	There are now multiple access points to Ellenbrook including The Promenade, Drumpellier Parade, The Broadway and Henley Brook Avenue.

The provision of community facilities and services will be staged over the next ten years, with the timing of their provision being largely contingent on the catchment population reaching the required critical mass and funding availability. Funding for these facilities and services will be partly sourced from the community plan fund which procures a financial contribution from the Ellenbrook Joint Venture and City of Swan for every residential lot created at Ellenbrook.



# 09 TRAFFIC MANAGEMENT

*The interconnected street network allows a balanced approach for catering for pedestrian, cyclist, public transport and vehicle needs. Main Street, The Promenade and The Parkway will carry the most traffic and will therefore be particularly attractive to businesses that depend upon commercial exposure. The system of access streets connecting to these major structuring streets will provide a variety of movement choices for pedestrians and cyclists, as well as drivers.*

## TRAFFIC

Sinclair Knight Merz has prepared a Traffic and Transport Report (Appendix 3) which examines the following elements of the Town Centre movement framework:

- Traffic movement projections
- Network analysis
- Pedestrian and cyclist network
- Public transport

The report confirms that the proposed street network has capacity to accommodate projected traffic volumes without compromising local amenity and community safety.

The traffic projections identified through the modelling were applied to establish a street hierarchy for the Centre and to develop appropriate intersection controls. The Promenade is projected to carry the largest traffic volumes (19,000 – 27,000 vehicles per day, vpd), whilst Main Street is projected to carry between 10,000 vpd and The Parkway between 2,000 – 6,000 vpd.

The traffic projection data, together with the nominated street hierarchy and intersection treatments, are fully documented in the Sinclair Knight Merz report.

With respect to pedestrians and cyclists, the report recommends that all roads within the Town Centre have a footpath on at least one side and both sides where traffic volumes are expected to exceed 1,000vpd. Roads with higher projected traffic volumes and/or high vehicle/bicycle speed differentials will contain either a dual use path or cycle lane.



## CAR PARKING Background

The Ellenbrook Town Centre Parking Strategy was adopted by the City of Swan at Council's Ordinary Meeting of 20 May 2009. This Strategy has been used to guide the provision of parking within the Town Centre since its adoption.

The parking strategy provides a strategic framework which the City of Swan can use as a guide when assessing individual development applications for the Town Centre in respect to the provision of car parking bays. The parking strategy is intended to:

- Identify parking ratios appropriate for the broad land use categories within the ETC.
- Provide clear and concise justification for a reduction and redistribution of parking through the concept for shared use (reciprocal) public parking.
- Control the amount and distribution of public and private parking.
- Identify a strategy for public parking to be provided through cash-in-lieu contributions from developers.
- Consider paid parking within the ETC into the future.
- Identify locations for short and long term public parking.
- Address management issues such as service vehicle loading areas, bicycle parking and taxis layover bays.

The Parking Strategy was reviewed and updated in 2015. The next review will occur in 2020.



# 10 ENVIRONMENT

*The Public Environmental Review, assessed by the Environmental Protection Authority in 1992, establishes that the Town Centre land is able to be developed for urban use in an environmentally acceptable manner. This Development Plan provides the framework that allows the Ellenbrook Town Centre to be developed and managed in a way that is mindful of long term sustainability objectives and respectful of the natural environment.*

## ENVIRONMENTAL MANAGEMENT

In support of the Ellenbrook project, comprehensive environmental assessment studies have been undertaken by RPS Bowman Bishaw Gorham – Environmental Management Consultants. These studies are related to protection of the Lexia Wetlands 12120 and the associated conservation area. The Department of Environment will oversee implementation of the recommendations contained within the drainage and nutrient strategy.

The objective of the work is to ensure that the wetlands and vegetation are not adversely affected by groundwater fluctuation following urbanisation. The water pollution control pond which is sited in the Henley Brook Precinct south of Gngara Road as part of the overall drainage strategy is a major component in achieving this objective.

## ENVIRONMENTAL STUDIES

A number of detailed environmental studies have been conducted of the Ellenbrook project area including the Public Environmental Review (PER) assessed by the Environmental Protection Authority in 1992. A Drainage and Nutrient Management Programme prepared by RPS Bowman Bishaw Gorham, Cossill and Webley and Jim Davies and Associates was approved in August 1994 for the southern catchment and 2004 for the northern catchment. On-going environmental studies include protection of the Lexia Wetlands and associated conservation areas, and involve:

- Routine monitoring of shallow groundwater levels in the vicinity of the wetlands, and water levels in the wetlands, predominately during the winter – spring period of groundwater recharge;
- Evaluation of the monitoring data, including comparative evaluation of data from nearby Water Corporation bores, in order to revise and update the interim water level criteria for the Lexia Wetlands (established as a condition of environmental approval for the Ellenbrook project).

## DRAINAGE & NUTRIENT MANAGEMENT PROGRAMME

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 Programme' was prepared for the southern catchment of Ellenbrook and is being implemented with the oversight of the Technical Review Committee. The southern catchment wholly contains the land comprising the Town Centre.





# 11 LANDSCAPING

*The landscaping treatment applied to the public and private realms should reflect the Town Centre's status as the strategic focus of the Ellenbrook New Town and a place of wider metropolitan significance. The Town Centre will require a very particular visual character and identity; derived from a complex range of architectural, spatial and landscape qualities which engender a sense of place with a quality exterior milieu. Design of the physical form and spatial sequences will significantly shape the perception and use patterns of the town centre. Anticipation of preferred activities and circulation will be key issues in the landscape analysis and design process.*

## OBJECTIVES

The treatments applied to the public realm will reflect the urban character of the Town Centre. The following elements will be encouraged:

- Effective use of water features that encourage activity and enhanced enjoyment of public spaces;
- Use of hard landscaping materials to create flexible spaces and attractive destinations and thoroughfares;
- Imaginative incorporation of natural topography (i.e. stairs, grass embankments, amphitheatre spaces);
- Application of high quality and innovative materials and lighting that add character, security and legibility;
- Incorporation of public and community art in appropriate locations;
- Incorporation of references to the story of Ellen Stirling in the Town Park and other public spaces.

Detailed landscaping and reticulation plans will be submitted to the City of Swan and approved for each Character Area prior to implementation of any improvements to the public domain.

## TOWN CENTRE SOUTH

### Main Street

Main Street will be the social heart of Ellenbrook and as such symbolic of its lifestyle. The Main Street elements already installed display a style that is urban and that promises to be modern, rich and colourful; encouraging daily community interest and involvement.

The streetscape design will actively promote social exchange by providing for street festivals and spaces for people to gather and chat. Seating has been placed along the footpath and patterned pavements have been used to add interest and character and to guide efficient pedestrian circulation.

High quality street furnishings such as themed tree guards, grates, litter bins, seats, drinking fountains and street lighting complement the setting. Innovative approaches to street furniture, paving and landscaping will be investigated and implemented, subject to the City approval. Shady trees and richly coloured accent planting in strategic locations will also be valuable contributions to the Main Street's ambience and character.



## Linkages

The Development Plan establishes strong axial linkages that will provide a sense of structure and order to the town centre to assist in legibility, orientation and wayfinding. These axial linkages will be reinforced and enhanced by:

- the use of strategically located iconic structures and artworks on key axes and vistas
- the establishment of themed avenues of street trees. Trees particularly will assist in creating major linkage elements along connecting roads, parkways and the major retail buildings.
- The use of high quality street furniture elements, including street lights, seats, bins, bicycle racks and possibly banner poles
- The use of a simple, elegant paving treatment, with feature red brick "carpet" inlays at strategic locations to add richness and interest

Both visual and physical linkages will receive careful consideration, with a key objective being to create linkages that provide a sense of surprise, interest and discovery at regular intervals. These elements of surprise and interest should build in intensity to key activity and focal nodes such as the Main Street Town Square and High Street Linear Park, reinforcing their status of civic importance.

Accessible and legible linkages to the Town Centre from the surrounding neighbourhoods are essential to facilitate easy access and egress for all modes of transport. Once in the Town Centre, wayfinding and access must also be clear and legible at the micro level, for things such as bus stops and public parking.



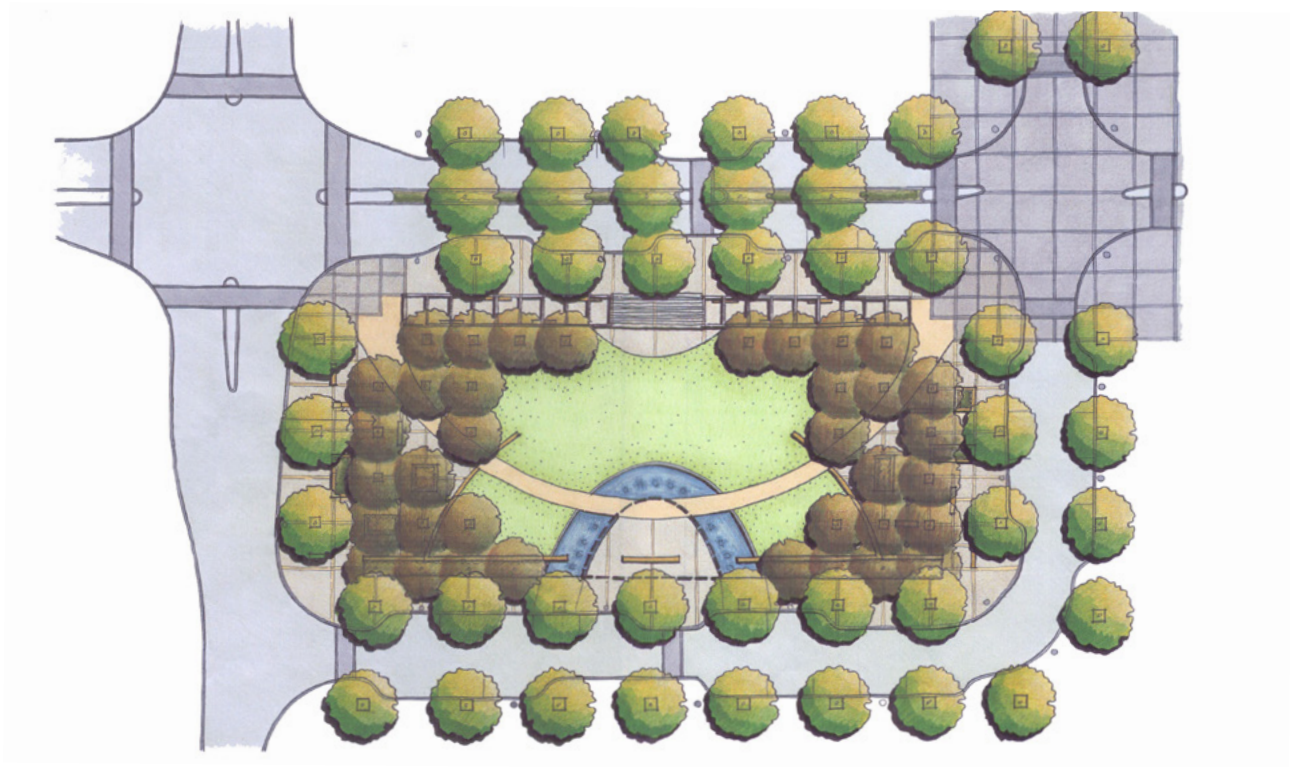
### **Town Square**

Stage 1 of the Town Square was constructed in 2004. As the symbolic heart of Ellenbrook, the Town Square is intended to reflect its enhanced traditional civic role as the physical hub of the community, and this vision will be realised once Stage 2 works are implemented

The Town Square reflects a formal, contemporary design, enhancing its status as a primary civic place in the town centre. A large, central lawn area with podium and cooling water feature on its eastern edge provides a large space for community and civic events as well as informal passive recreation. Smaller paved seating areas are located at the northern and southern ends of the square, providing more intimate seating spaces for smaller groups and individuals.

Two large, elegant arbors incorporating seating define the western edge of the park and present a “built” edge to Main Street, reinforcing the pedestrian thoroughfare along the street and the connection to the Main Street Plaza and associated school, library and performing arts facilities to the south. A sculpture of a rowing boat is located between the arbors, representing the exploration by Captain James Stirling of the Swan River and Ellen Brook (so named after his wife Ellen) in the early days of the Swan River Colony.

Over time the Town Square will become a significant landmark and enduring focus of the whole Ellenbrook community.



Source: Plan E

### Main Street Plaza

The Main Street Plaza is an important civic space located adjacent the High School Library and terminating the view south down Main Street from the town centre.

The Plaza is an urban space with a simple, formal design reflecting a civic quality. The western portion has been established on 2 levels; a lower level adjacent to Main Street that facilitates general pedestrian circulation along the street and into the site, and a slightly raised podium area that provides a forecourt to the library. This forecourt includes paved circulation and seating areas, and a central lawn area that provides a softening and cooling effect. A grid of Liquidamber trees has been planted that, in combination with low blade walls, direct views and movement towards the library, and will ultimately provide shade over the space and softening of the built form.

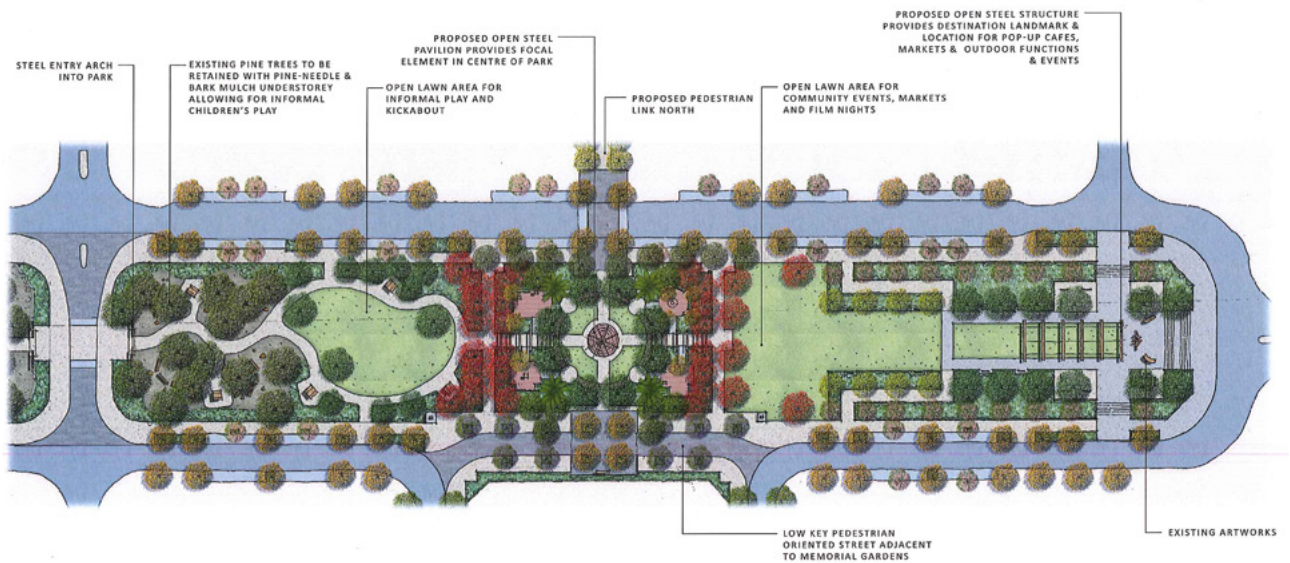
The Plaza contains several artworks of varying size and scale, ranging from iconic landmark elements to more intimate artworks that need to be viewed at close range. The artworks are all themed on the story of Ellen Stirling.

### Town Centre North

The landscape approach for Town Centre North will build on the landscape character established in the existing town Centre to ensure a synergy and strong relationship is achieved, with the intention to create an even greater emphasis on landscape within both streetscapes and open spaces, such that the landscape becomes a defining element of the town centre. The revised Development Plan supports this objective, with an interconnected grid pattern of streets and blocks establishing clear visual links between key element of the town centre, including the various parks and urban spaces. The arrangement of the streets and open spaces establishes a strong hierarchy of these elements, and the emphasis will be on establishing streets with a high level of pedestrian amenity and shade.

The story of Ellenbrook, relating to Lady Ellen Stirling, will be woven into the landscape fabric of the town centre, including the streets, parks and urban spaces. The story may be expressed through public art, hard and soft landscape materials, way finding objects and signage. Ellen Stirling was an adventurous, interesting and lively woman and the wife of Perth's first Lieutenant-Governor Sir James Stirling; that sense of adventure will be explored within the landscape and illustrated through "Journey of Discovery" trails and interactive elements.

The open space network comprises a diverse range and size of parks and urban spaces offering a great variety of recreational uses and experiences, interconnected via a permeable street system.



### **Town Centre Linear Park**

The park has been divided into 3 distinct zones, to provide a range of recreational opportunities and experiences in this primary park within the new town centre. The 3 zones are:

#### **COMMUNITY ZONE**

This zone occupies a prominent portion at the southern end of the park, providing a focal destination for community events such as pop-up cafes, markets, film nights, performances etc. An elevated podium accessed by wide flights of stairs from 3 sides and containing 3 dramatic artworks by Philippa O'Brien enhances the civic focal qualities of this space. The space has been designed to accommodate a permanent cafe, which would complement the community function of this end of the park.

#### **MEMORIAL ZONE**

This zone occupies the centre of the park and is intended to provide quieter, contemplative spaces for reflection and celebration. There will be 5 memorial spaces. The central memorial space is the largest, catering for larger groups and events, and features a focal central pavilion surrounded by a formal circular lawn area with axial paths connecting to the streets and the rest of the park. Four small, intimate memorial gardens are tucked into planted areas off the central circus, each space having a slightly different character and featuring artworks, ornaments, furniture and cut metal screens to provide unique places of reflection. One of the memorial gardens will celebrate the life of Ellen Stirling, after whom Ellenbrook was named, and another will celebrate the life of former state Labour MP for Swan Hills Jaye Radisich, a modern woman who embodied the spirit and qualities of Ellen Stirling, and strongly supported the development of Ellenbrook.

#### **FAMILY ZONE**

This zone is primarily for family use, with picnic and low key informal play elements set amongst the existing pine trees. Picnic settings are also located around a central lawn area which offers a small informal kickabout area for small children. The character of this end of the park is informal, in contrast to the other 2 zones which are formal and civic in character.

The materials, theming and design style for the park are inspired by the historical references, styles and materials from Ellen Stirling's rich early colonial heritage, which was Georgian in character. The park will feature formal design elements and the use of brick and wrought iron to reference this character. Some of the structures and artworks will have a softer, lighter more open feel to reflect a more feminine character appropriate to the spirit of Ellen Stirling. As the park is located in Drummond precinct, the plantings will have a strong botanical focus, reflecting his heritage as horticulturist in charge of Cork Botanical Gardens before emigrating to the Swan River Colony in 1829, where he became the first Superintendent of Gardens of the colony, and subsequently appointed Government Naturalist by Governor Stirling. Plantings will embrace both European and Australian species to reflect this heritage.

#### **URBAN POCKET PARKS**

Urban pocket parks are a feature of the development plan and are intended to provide small, intimate urban refuges that will add an element of surprise and discovery within the urban fabric. These will be formal spaces comprising paved seating areas, garden beds and trees, with artworks and/or structures adding vertical scale and elements of interest.

#### **GREEN BELT**

The town centre will be flanked by a more informal open space network on its southern and western edge which will give the town centre a defined green edge and sense of containment. A well-treed green belt will extend around the north-western edge as well, providing a visual and physical separation from Drumpellier Drive.

The primary function of this open space will be a Botanic Park, showcasing endemic Ellenbrook species in a variety of settings. The key areas of this park will include:

##### ***"Drainage Zone"***

A large drainage basin will be accommodated in the south-eastern corner of the park. This will be landscaped to form part of the Botanic Park, and will incorporate a central lawn area for informal passive and active recreation, extensive planted areas included a recreated dampland in the lowest part of the basin, and paved picnic areas with shade structures. A series of low blade walls will organise the space into a series of "rooms" to display different zones of the botanic park, with interconnecting paths linking the spaces.



## **STREETSCAPES**

The streetscapes in Town Centre North are intended to form an important part of the public realm open space network, providing legible and pedestrian friendly linkages to the various amenities and facilities in and beyond the town centre, including the parks.

The hierarchy of streets will be defined through the road reserve widths, street tree selection and hard and soft landscape treatments. Key streets will utilise the Plane Tree, building on the landscape character already established in the main streets in the existing town centre, as these trees will achieve a scale and size that will provide shade and amenity. Secondary and minor streets will utilise other deciduous trees, ensuring summer shade and winter sun. Elements of interest such as public art, planters and bespoke furniture may be introduced to signify key areas and enliven the streetscape.

## **PLACE ASSOCIATION AND PUBLIC ART**

Ellenbrook town centre will have a series of contemporary artworks that explore the origin of the name Ellenbrook.

In 1827 James Stirling explored the Swan River, rowing upstream as far as what we now know as Ellenbrook, and naming it after his new, young wife Ellen who he had left in England. Two years later, in 1829, they returned together to found the colony. This association with the young women colonists is a very appropriate theme for the new town of Ellenbrook. It will also be a matter of pride for Ellenbrook residents that this name pre-dates the city of Perth and is the only place in the state named after Ellen Stirling. Her family, the Mangles, were very influential in the early years of the colony, owning a shipping line that sailed to Australia and traded with India. Her cousin James Mangles, a naval captain like James Stirling, was also a keen natural scientist and while visiting for three months in 1830 collected the Kangaroo Paw (*Anigozanthus manglesei*) that is now the state's floral emblem.

The artworks will have a strongly contemporary theme and use modern materials, while interpreting historical ideas and illuminating the role of women in the beginnings of the colony, as homemakers, wives, mothers and inventors of a viable social fabric in isolation in the midst of the bush. The art works will establish a sense of place and identity and reflect the feminine aspect of the colonial enterprise, women's roles often going unrecorded. They will utilise contemporary materials such as stainless steel beside objects redolent of history and the domestic realm such as bronze casts of Georgian furniture.

The first series of artworks exploring these themes have already been created and installed in the Town Square and Main Street Plaza.



# 12 ENGINEERING SERVICES

*Town Centres services will be designed with sufficient capacity to accommodate intensification and changes to land use well into the future. Cossill and Webley Pty Ltd, consulting engineers, has prepared a report on the engineering and servicing requirements of the Ellenbrook Town Centre Development which is provided at Appendix 4. The report confirms that all necessary services are able to be made available to the centre. The key points are summarised below.*

## SITWORKS

It is expected that Town Centre earthworks will be designed to result in a balanced cut to fill from within the Ellenbrook landholding. Earthworks will entail removal of peaty sand and where necessary the general re-contouring of the site to meet desirable maximum grades applicable to each land use/development and that are required for drainage and sewerage.

## ROADS

The roads servicing the Town Centre will be designed in accordance with Department of Planning (DoP) policies for innovative and varied approaches to commercial and residential street development. This will entail traffic calming to reduce vehicle speeds and landscaping treatments aimed at enhancing streetscapes and safety. Road reserve sizes will suit land uses and be designed in close consultation with the City and DoP. Nominated reserve widths are set out in the attached SKM Traffic and Transport Report (2011).

## DRAINAGE

Drainage will be designed in accordance with the Drainage and Nutrient Management Programme approved in August 1994 for the southern catchment and 2004 for the northern catchment. It will comprise the incorporation of retention basins (designed as landscape depressions where possible), regional subsoil cut off drain and water pollution control ponds that control both run-off quantity and quality prior to downstream discharge to Ellen and Henley Brooks.

## WATER & SEWERAGE

The Water Corporation has made provision for water supply and sewerage of the Town Centre Development.

The planning for water supply is based on a local supply from the Gngangara groundwater mound beneath the State Forest, west of Ellenbrook, supplemented by a connection to the metropolitan system that services the north-east and north-west corridors.

Sewerage will be pumped via a major pumping station located to the south of Gngangara Road and adjacent to the PDNH corridor to the Beenyup Waste Water Treatment Plant (WWTP). Sewerage will ultimately be pumped to the Alkimos WWTP.

## OTHER PUBLIC UTILITY SERVICES

Underground electricity supply for the Town Centre will be sourced from the existing high voltage feeds from The Bridges Village and the feed located parallel to the gas pipeline.

Telecommunication can be provided by extension of the reticulation system from Woodlake Village.

Reticulated natural gas is to be supplied by a connection to the existing Dampier-Bunbury pipeline at a "gate station" located within the old state forest 65 section of Ellenbrook adjacent to the Town Centre.

## TELECOMMUNICATIONS

Telephone supply can be provided by the extension the reticulation system from existing Town Centre development. Telstra has installed an exchange within Woodlake Village to service the Ellenbrook Development and sections of the adjoining north east corridor. EMPL has an existing agreement with Telstra Velocity and this is to be extended through the remainder of the Town Centre.





# 13 SUSTAINABILITY

*"Sustainability is meeting the needs of current and future generations through an integration of environmental protection, social advancement and economic prosperity" (Western Australian State Sustainability Strategy, 2003). A Sustainability Strategy Action Plan will be developed for the Town Centre that addresses a range of issues including energy conservation, greenhouse emissions, waste and water management, community and stakeholder engagement and sustainable urban design.*

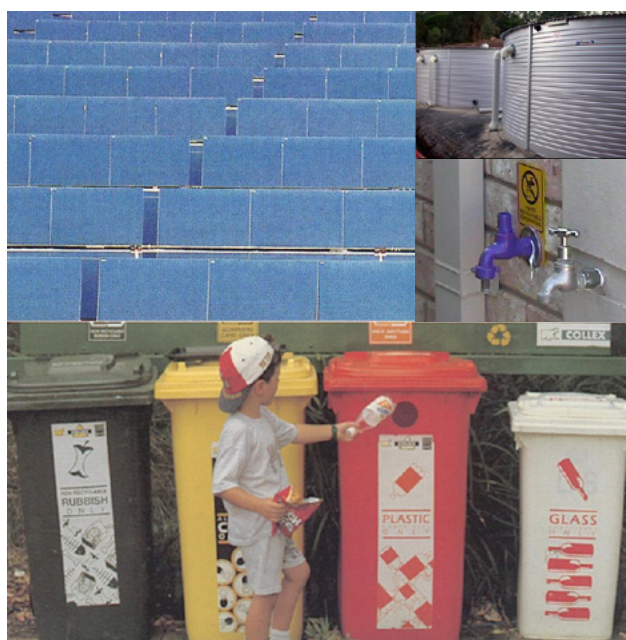
## PREAMBLE

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;
- 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 the Town Centre in regard to appropriate land use, transport and infrastructure, and the protection of natural resources.



## ELLENBROOK TOWN CENTRE

### Introduction

This Development Plan promotes the evolution of a new urban settlement which not only has regard to the physical environment, but also contains social measures for a liveable and equitable community. It also presents the opportunity to lay down the foundation for an urban settlement that reflects key sustainability criteria, including good access to services, employment and recreation opportunities; a positive environment for living, working and recreating; and a strong sense of community.

Ellenbrook Town Centre will be developed and delivered in accordance with LWP's Corporate Sustainability Strategy, which encompasses the following

### Core Sustainability Objectives

The core objectives elaborate upon different sustainability aspects of the vision for each development and provide guidance in developing detailed sustainability programs at each stage of growth.

The objectives for each development are individual but relate to corporate reporting requirements of LWP as well as the project's specific geographic and urban development context.

Core objectives for Ellenbrook Town Centre include:

1. Create a model development that sets new benchmarks in sustainable development for the region where it is located;
2. Improve economic, social, environmental and governance outcomes within the context of the locality of the development;
3. Establish benchmarks and targets where applicable and monitor and measure them at the relevant phase of development;
4. Continue to engage internal and external stakeholders and thereby build capacity at each phase of development;
5. Foster enduring value through maintenance of appropriate governance mechanisms.

### **Benchmarking and Measuring Performance**

The outcomes sought by the objectives are further defined using a series of strategies, performance indicators and targets to measure achievement or progress in delivery. Enviro Development (ED) certification, delivered by UDIA WA (Urban Development Institute of WA), is used as a vehicle to benchmark sustainability. It offers independent certification of the sustainability credentials of a development and the framework covers a wide spectrum of environmental and community sustainability issues relevant to the development. In addition, economic impacts are considered and integrated in to the standards.

As a means of industry and peer review and recognition of sustainability initiatives, development will be entered into state, national and international awards.

### **Monitoring and Review**

Monitoring the sustainability reporting program will enable progress and information to be shared with the community and other stakeholders. The monitoring program comprises:

Sustainability issue specific reports – LWP’s regular project team meetings will continue to provide an opportunity to consider sustainability issues. This information will form part of operational reports.

Policy statements - addressing aspects of sustainability (economic, social, and environment) will be developed in consultation with LWP’s stakeholders to maintain innovation and establish a consistent approach to sustainability issues. Examples include water conservation, economic success, energy, safety and diversity.

ED Renewal - certification is valid for 12 months and must be renewed annually. In order to gain renewal, the project must continue to meet its obligations as defined in the criteria.



## **ELLENBROOK TOWN CENTRE**

The development of the Town Centre will adopt the core sustainability principles to provide a unique mixture of people and place that will evolve and adapt. The design process will build on experience and knowledge gained through applying these principles in previous stages of Ellenbrook; this is outlined further below:

### **Sustainability Principles**

#### ***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 - the Liveable Neighbourhood Community Design Code, Edition 3 (WAPC, 2004). This Code is aimed at fostering sustainable community development through six key elements of community design and development.

Key initiatives proposed for the Ellenbrook Town Centre, that are consistent with the Code, include: mixed use development; a choice of quality, medium and high density housing; a walkable movement network; accessible parks and community facilities; and well defined urban centres and edges that allow the user to identify with the spatial qualities of the Centre.

#### ***Transport Alternatives***

The intensity and mixed of land uses, together with the permeable and legible movement system whereby all elements of the Centre 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 Town Centre culture and lifestyle, pathways will be provided on both sides on a majority of streets and all streets will have good surveillance, shady trees and offer stimulating local character.

Furthermore, regular public transport services and a planned future rapid transit connection to the 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 dependence through urban design and community infrastructure will also enable people to be more physically active and healthier.

### **Land Use Diversity**

The mix of land uses in the Town Centre will create a convenient environment for all users, reducing travel distances and promoting activity beyond normal business hours for a safer and more vibrant environment.

The intensity of land uses will allow efficient servicing and sustainable use of strategically located urban land.

Residential densities will be elevated in the Town Centre so that a maximum number of residents can enjoy the benefits of living close to a wide range of facilities and services. The mix of available housing types injected into the Town Centre will ensure that Ellenbrook caters for residents' housing needs as they move through the lifecycle. This will allow people to remain part of the community, promoting a stable and diverse residential population founded on trust and strong relations.

Similarly the Town Centre has the capacity to cater for the business lifecycle, including smaller site and building floor plates for start-up businesses and larger site and building floor plates for mature organisations.

### **Affordable Housing**

Housing affordability has declined in Perth in recent years with increasing land and housing prices. The Town Centre will incorporate a proportion of public housing and privately owned affordable housing typologies, including studio and warehouse apartments.

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

### **Building Design**

Design Guidelines and Detailed Site Plans will be used for specific precincts to control the quality of the built form and promote sustainable practices, including buildings oriented and designed for passive solar access, recycled materials, surveillance of public open space areas, streets and laneways and acoustic attenuation.

### **Local Employment**

The Town Centre introduces significant opportunity for local employment. Analysis indicates that the planning for the Town Centre and Ellenbrook generally has the potential to accommodate a local workforce retention ratio of over 60%.

### **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 pedestrian and cyclists and streets will be designed to incite a slow speed environment.

### **Landscape and Open Space Systems**

The public realm will feature strongly in the Town Centre and contribute to its distinctive character and sense of place.

It will feature a network of highly accessible spaces, provided in a timely manner that is responsive to the diverse recreational needs of the community. There will be significant investment in the treatment of the public realm to build a sense of local identity that reflects the Town Centre's role as the major focus for Ellenbrook and the wider region.

### **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 townspeople will be provided with a rich assortment of experiences, originating with the open spaces of the hill top park through to intense urban spaces focussed around The Parkway and Main Street.

Artistic and cultural organisations and events, including potentially a performing arts centre and community arts programme will also be contribute to the development of a 'sense of place' and identity and promoting community engagement.

### ***Storm Water Management***

The management of stormwater within the Town Centre will be in accordance with the approved strategy detailed within the Ellenbrook Southern Catchment Drainage and Nutrient Management Programme (DNMP) August 1994 prepared for the project by RPS Bowman Bishaw and Gorham, Cossill and Webley and Jim Davies and Associates.

The strategies within the Town Centre will be refined to achieve sustainable outcomes both within the Town Centre and the adjoining residential villages. The strategies may include a variety of approaches incorporating on site storage within lots, on site infiltration basins which will assist in aquifer recharge, combining controlled drainage runoff within irrigation facilities and enhancement of existing water-bodies through localised re-direction of run-off. This integrated approach will seek to address a broad range of environmental, economic and social issues to achieve sustainable outcomes.

### ***Inclusive Community***

The Town Centre 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 the Town Centre and emphasis on the public realm will be imperative to creating opportunities for planned and unplanned interaction and promoting social cohesion.

Furthermore, significant community infrastructure has been located in the Town Centre, including a senior school, art gallery, indoor swimming pool, water play facility, community garden and shared school/community learning centre developed as part of the first stage. Other community infrastructure, including, health care services and recreational facilities are envisaged as part of successive stages.

### ***Partnerships***

Achieving a sustainable Town Centre at Ellenbrook is contingent upon the building of partnerships with local and State government, the business and community. Ellenbrook Management undertakes to continue to build and secure these partnerships to ensure the Town Centre is identified and established as a unique, affordable and sustainable community.

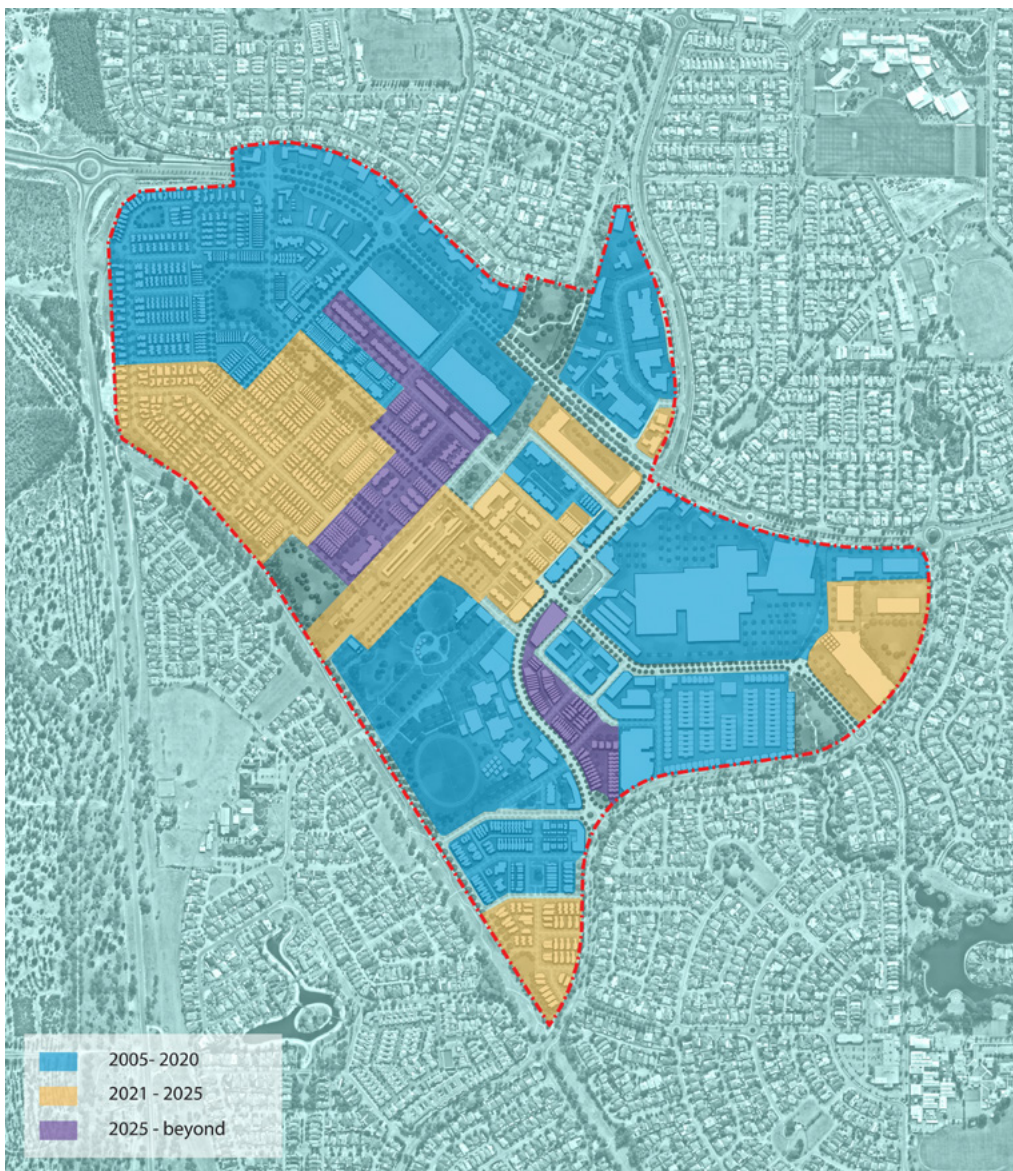


# 14 STAGING

*A challenge for the evolution of the Town Centre will be for the built form and land uses to establish an intensity of activity and physical presence that creates a dynamic environment attractive to visitors and investors from the early development stages. To rise to this challenge, building mass will initially be developed along both sides of Main Street within the first 100 metre block of the Town Park towards The Promenade. Development will then extend to adjacent areas, including commercial development along the major transport routes and a mix of residential housing on the quieter town streets.*

To date, development has occurred in the Main Street, The Promenade, High Street, Community/Learning, Southside, Reveley, Hesperia and Drummond Character Areas.

The next stages of the Town Centre (2021 and beyond) will include mixed use development in the High Street Station, additional medium/high density residential housing in Southside and new housing within the Reveley, High Street Station, Drummond and Hesperia, additional service commercial and bulky good retail in The Promenade and the final stages of retail development within Main Street.





# ELLENBROOK TOWN CENTRE DEVELOPMENT PLAN

APPENDIX 1 - SPP4.2 ACTIVITY STRUCTURE PLANNING CHECKLIST



# ELLENBROOK TOWN CENTRE DEVELOPMENT PLAN

APPENDIX 2 - ELLENBROOK TOWN CENTRE CENTREPLAN (CNN, 2003)



# ELLENBROOK TOWN CENTRE DEVELOPMENT PLAN

APPENDIX 3 - TRAFFIC + TANSPORT REPORT (SKM, 2011)



# ELLENBROOK TOWN CENTRE DEVELOPMENT PLAN

APPENDIX 4 - REPORT OF ENGINEERING ASPECTS (COSSILL + WEBLEY, 2011)



# ELLENBROOK TOWN CENTRE DEVELOPMENT PLAN

APPENDIX 5 - DEVELOPMENT PLAN



# ELLENBROOK TOWN CENTRE DEVELOPMENT PLAN

APPENDIX 6 - DENSITY CODE PLAN