

WILLAGEE STRUCTURE PLAN

PART 1-IMPLEMENTATION SECTION

NOVEMBER 2013 (UPDATED APRIL 2023)

RECORD OF ENDORSEMENT

This structure plan is prepared under provisions of the City of Melville Local Planning Scheme 6.

IT IS CERTIFIED THAT AMENDMENT NO. 2 TO THE WILLAGEE STRUCTURE PLAN WAS APPROVED BY RESOLUTION OF THE WESTERN AUSTRALIAN PLANNING COMMISSION ON:

10 MAY 2023

Signed for and on behalf of the Western Australian Planning Commission:



An officer of the Commission duly authorised by the Commission pursuant to section 16 of the Planning and Development Act 2005 for that purpose.

TABLE OF AMENDMENTS

AMENDMENT NO.	COUNCIL MODIFICATIONS	SUMMARY	COUNCIL ENDORSEMENT	WAPC ENDORSEMENT
N/A	N/A	Original Structure Plan	10 December 2013	27 July 2016
1	1	Addition of: <ul style="list-style-type: none">Clause 3.2 - Building HeightsClause 6.2 - Special Residential SitesClause 6.1.1 - Design Requirements	22 September 2014	
	2	Modification of: <ul style="list-style-type: none">Clause 7.2.2 - Carawatha Local Centre SectorClauses 7.4.3 (a-c) Leach Highway Policy Area Split Coding	21 July 2015	
2	3	Updates to align with the provisions of Local Planning Scheme No. 6 Amendment No. 12	15 February 2022	10 May 2023

EXECUTIVE SUMMARY

This Structure Plan shall apply to the area of land within the suburb of Willagee, bounded by North Lake Road, Stock Road, Leach Highway and Garling Street being the land contained within the inner edge of the line denoting the structure plan boundary on the structure plan map.

Currently the suburb of Willagee is fully developed to a density of R20/25 with four areas of Centre zoning. The plan is intended to rejuvenate the area.

This Structure Plan has the status of a Local Structure Plan and will supercede the Willagee Redevelopment Plan from the 1990s.

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9. Archibald Hub: How it could develop
10. Archibald Hub Revitalisation
11. Willagee Crime Prevention Through Environmental Design Short Term Strategy
12. Willagee Policy Area Spatial Guidelines

PART ONE: IMPLEMENTATION SECTION

WILLAGEE STRUCTURE PLAN PART 1 – IMPLEMENTATION SECTION

1 Structure plan area

This structure plan shall apply to the area of land within the suburb of Willagee, bounded by North Lake Road, Stock Road, Leach Highway and Garling Street being the land contained within the inner edge of the line denoting the structure plan boundary on the structure plan map (Plan 2).

2 Structure plan content

This structure plan comprises:

- a) Part 1 - Implementation section
This section contains the structure plan map and planning provisions and requirements.
- b) Part 2 – Non-statutory (explanatory) section.
This section to be used as a reference guide to interpret and justify the implementation of Part One, which shall be read in conjunction with Part Two
- c) Appendices – Technical reports and supporting plans and maps.

3 Interpretation and relationship with the Scheme

3.1 General

Unless otherwise specified in this part, the words and expressions used in this Structure Plan shall have the respective meanings given to them in the Local Planning Scheme including any amendments gazetted thereto.

Pursuant to the Scheme, Part Two of this Structure Plan and all appendices are to be used as a reference only to clarify and guide interpretation and implementation of Part One. The Scheme should not be read into the Scheme and in the event of conflict, the Scheme shall prevail over the Structure Plan

3.2 Building heights

Unless specified otherwise, building heights are measured in storeys in this structure plan. A storey is defined as follows:

The space between the floor and ceiling of a building which constitutes a floor or level for habitable uses, but does not include:

- a) Any floor of a building having 50% or more of its volume located below natural ground level; and
- b) Roof structures of a high quality design that reduce the visual impact of lift plant and other similar utility or services, not exceeding 3.0 metres in height; and
- c) Unenclosed roof structures of a high quality design that provide weather protection to areas used for private or communal open space, not exceeding 3.0 metres in height.

Note: for the purposes of this definition, a mezzanine is considered to constitute a storey

4 Operation

This structure plan shall come into operation when it is approved by the WAPC.

5 Land Use and Subdivision

5.1 Land Use Permissibility

Land use permissibility within the structure plan area shall be in accordance with the corresponding zone or reserve under the Scheme.

6 General Objectives

6.1 General Willagee Objectives

- (a) To provide for a mix of housing and mixed-use development options that integrate with their suburban context, with more intensive development strategically located in defined policy areas
- (b) To ensure the nature, form and scale of development outside the defined policy areas is consistent with a suburban streetscape and character
- (c) To manage building height, bulk, and setbacks to maintain private open space and landscape features as the prevailing visual element of residential lots

6.1.1 Design Requirements

Development outside the defined policy areas shall be consistent with the following design requirements:

- a) Development is to be of high quality and all facades and frontages shall be designed and finished with high quality materials;
- b) Building facades shall be articulated, coloured and detailed to contribute positively to the appearance of local streetscapes and adjoining properties;
- c) Building facades and frontages should highlight a vertical emphasis wherever possible to help break up the appearance of buildings. This can be achieved through the shape and placement of windows and openings and the innovative use of building materials, colours and textures;
- d) Feature elements are strongly encouraged on building facades, including (but not limited to) variations to colours and building materials, coloured or textured banding, recesses, ornamental details, gables, verandas, balconies, pillars, awnings, canopies and bay windows;
- e) Extensive blank walls, facades and featureless glazing facing streets or public spaces are not permitted; and
- f) Service areas and car parking (except on-street) are to be predominantly screened from public view.

6.2 Special Residential Sites

The following sites may be developed to a maximum height of three storeys:

Special Residential Site No.	Description	Date of Council Endorsement
1	Lots 1531 and 1532 (Nos 77-79) Archibald Street, Willagee	22 September 2014

7 Policy Area Design Principles

7.1 Archibald Hub Policy Area

7.1.1 Objectives

- i. To provide for a compatible mix of commercial and residential uses which service the local community
- ii. To ensure the nature, form and scale of development is appropriate for the suburb's primary activity centre
- iii. To encourage development in accordance with Crime Prevention through Environmental Design principles, the intentions of the Archibald Hub concept plan and principles of the Archibald Hub Policy Area Spatial Guidelines

7.1.2 Archibald Hub Commercial Sector

- Achieve a mix of land uses within the hub, with active uses located on ground floors
- Present activated frontages to public streets, public spaces and visual/access links
- Buildings of a scale and design appropriate for a Neighbourhood Centre, with awnings along frontages and, where possible, servicing areas screened from the street.
- Buildings of up to four storeys (16m) in height, plot ratio of 2
- Locate commercial buildings appropriately, with nil setbacks to frontages except in cases of entrances and alfresco service areas
- Provide landscaping to enhance streetscapes, pedestrian environment and generally improve the visual amenities of the area
- Provide vehicle parking bays in accordance with Council policy
- Provide opportunity and safe environments for pedestrian and cycle access

7.1.3 Archibald Hub Residential Sector

- Provide residential development that integrates with the adjacent centre in accordance with the Archibald Hub Policy Area Spatial Guidelines
- Provide residential development that interfaces appropriately with Winnacott Reserve
- Develop residential housing of scale and design that compliments the adjacent Neighbourhood Centre, in accordance with a masterplan if appropriate
- Protect mature vegetation where possible
- Buildings of up to four storeys (16m) in height, plot ratio of 2

7.2 Carawatha Policy Area

7.2.1 Objectives

- i. To provide for a mix of uses which primarily deliver diverse and affordable housing options
- ii. To ensure the nature, form and scale of development is appropriate for each of the policy area sectors
- iii. To ensure development is consistent with the intentions of the Carawatha concept plan
- iv. To develop in accordance with Crime Prevention through Environmental Design principles and the principles of the Carawatha Policy Area Spatial Guidelines

7.2.2 Carawatha Local Centre Sector

- Achieve a mix of land uses within the hub, with active uses located on ground floors
- Present activated frontages to public streets, public spaces and visual/access links
- Buildings of a scale and design appropriate for a Local Centre, with awnings along frontages and, where possible, servicing areas screened from the street
- Locate buildings appropriately, with nil setbacks to frontages except in cases of entrances and alfresco service areas
- Provide landscaping to enhance streetscapes, pedestrian environment and generally improve the visual amenities of the area
- Provide sufficient vehicle parking bays in accordance with Council policy
- Provide opportunity and safe environments for pedestrian and cycle access
- Buildings of up to three storeys (12m) in height, plot ratio of 1.5

7.2.3 Carawatha Residential Sector

- Achieve visual surveillance and access through the development area
- Present activated frontages to public spaces and visual/access links
- Preserve the residential character of the sector by limiting commercial activity to small scale uses such as home businesses, home offices and home occupations only
- Develop residential housing of scale and design that integrates with surrounding public open space and residential areas as per the intentions of the Carawatha concept plan and Carawatha Policy Area Spatial Guidelines
- Provide landmark residential buildings to define the entrance to Willagee
- Protection of mature vegetation highly desirable

- Buildings of up to four storeys (16m) in height in accordance with the Carawatha Policy Area Spatial Guidelines, plot ratio of 2

7.3 Webber Policy Area

7.3.1 Objectives

- To provide for a compatible mix of commercial and residential uses which service the local community
- To ensure the nature, form and scale of development is appropriate for its location adjacent to public open space
- To ensure the design and landscaping of development is conducive to safe and efficient vehicular access, safe and convenient pedestrian movement and a high standard of visual amenity, as per the principles of the Webber Policy Area Spatial Guidelines Part A and Part B

7.3.2 Webber Local Centre Sector

- Achieve a mix of land uses within the hub, with active uses located on ground floors
- Present activated frontages to public streets, public spaces and visual/access links
- Buildings of up to four storeys (16m) in height, plot ratio of 2
- Buildings of a design appropriate for the policy area, with awnings along frontages and, where possible, servicing areas screened from the street
- Locate commercial buildings appropriately, with nil setbacks to frontages except in cases of entrances and alfresco service areas
- Provide landscaping to enhance streetscapes, pedestrian environment and generally improve the visual amenities of the area
- Provide sufficient vehicle parking bays in general accordance with Webber Policy Area Spatial Guidelines Parts A and B
- Provide opportunity and safe environments for pedestrian and cycle access

7.3.3 Webber Residential Sector

- Present activated frontages to public spaces and visual/access links
- Buildings of up to four storeys (16m) in height, plot ratio of 2
- Develop residential housing of scale and design that integrates with surrounding public open space and residential areas
- Protection of mature vegetation highly desirable

7.4 Leach Highway Policy Area

7.4.1 Objectives

- i. To provide for residential uses which deliver diverse and affordable housing options
- ii. To manage noise and access impacts from Leach Highway through innovative design responses
- iii. To ensure the nature, form and scale of development respects and integrates with the surrounding suburban streetscape
- iv. To reduce direct vehicular access from private property onto Leach Highway and encourage direct vehicular access onto alternative streets in recognition of increasing freight traffic use of Leach Highway

7.4.2 Leach Highway Restricted Local Centre Sector

- Encourage offices on ground floors
- Present an activated frontage to public streets and visual/access links
- Develop buildings of an appropriate scale (up to four storeys and 16m in height, plot ratio of 2) and design to contribute to the built form of the Local Centre
- Locate buildings appropriately, with nil setbacks to frontages
- Provide landscaping to improve the visual amenities of the area
- Provide sufficient vehicle parking bays in accordance with Council policy
- Provide opportunity and safe environments for pedestrian and cycle access
- Ensure retail development is of a scale and character that does not detrimentally impact nearby centres

7.4.3 Leach Highway Residential Sector

7.4.3 (a) Split Coding

When considering an application for approval of development or when making a recommendation to the Commission in respect of a subdivision within the Leach Highway Policy Area, which is identified as having two density codes in the form of a split or multiple R-Code, Council is to apply the lower of the two Codes unless —

- i. In the case of sites with frontage to Leach Highway, all vehicular access (including vehicular access in respect of existing development) is provided to a road or carriageway other than Leach Highway; and
- ii. In the case of sites which adjoin a site with frontage to Leach Highway, but which itself does not have such frontage, provision is made to the satisfaction of the Council for vehicular access to the adjoining site so as to obviate the need for direct access to Leach Highway from that adjoining site

7.4.3 (b) Development at R20 density

- Develop residential housing of scale and design that integrates with surrounding residential areas

- Development manages noise impacts associated with Leach Highway utilising quiet design, including but not limited to double glazing of windows and location of bedrooms away from Leach Highway in accordance with Main Roads policy
- Buildings of up to three storeys (12m) in height

7.4.3 (c) Development at R60 density

- Development removes the need for private access to Leach Highway in accordance with the principles of Leach Highway Policy Area Spatial Guidelines
- Protection of mature vegetation highly desirable
- Development activates non-Leach Highway street edges
- Development presents visual surveillance and activated frontages to secondary streets, public spaces and visual/access links
- Provide parking whilst maintaining the suburban and landscaped character of suburban Willagee
- Develop residential housing scale and design that integrates with surrounding residential areas
- Development manages noise impacts associated with Leach Highway utilising quiet design, including but not limited to double glazing of windows and location of bedrooms away from Leach Highway in accordance with Main Roads policy
- Buildings of up to three storeys (12m) in height

8 Structure Plan Map



- LEGEND**
- STRUCTURE PLAN BOUNDARY**
- LAND USES:**
- PUBLIC OPEN SPACE
 - PUBLIC PURPOSES (PRIMARY SCHOOL)
 - NEIGHBOURHOOD COMMERCIAL CENTRE
 - COMMERCIAL USES
 - LOCAL COMMERCIAL CENTRE
 - RESIDENTIAL (R60)
 - RESIDENTIAL (R40)
 - RESIDENTIAL (R25)
 - SPECIAL RESIDENTIAL SITE
- ROAD HIERARCHY:**
- CONNECTOR A
 - CONNECTOR B
- POLICY AREAS:**
- LHPA LEACH HIGHWAY POLICY AREA
 - WPA WEBBER POLICY AREA
 - AHPA ARCHIBALD HUB POLICY AREA
 - CPA CARAWATHA POLICY AREA
- RECOMMENDATIONS:**
- 1 MAINTAIN CURRENT ADDITIONAL USES IN SCHEME FOR OFFICE AND MEDICAL
 - 2 RETAIN CURRENT ADDITIONAL USES

WILLAGEE STRUCTURE PLAN

PART 2 - EXPLANATORY SECTION

NOVEMBER 2013 (UPDATED APRIL 2023)

WILLAGEE STRUCTURE PLAN...

A different layout for a very good reason

On the 10th February, over 100 Willagee residents came together for a workshop, commencing the development of the Willagee Structure Plan.

The level of attendance and participation significantly exceeded that usually seen for planning projects.

Stakeholder engagement continued with an indigenous workshop, meetings with business owners and other community members, whilst residents informally shared their thoughts, ideas, and concerns through letters and emails.

To respond to such an engaged community, the Willagee Structure Plan has been specially prepared and laid out to reflect and be understood by everyone in the community. Instead of being developed as a technical planning report, the structure plan is presented as a series of posters, that visually and easily explains all the planning and technical ideas, and the activities required for implementation.

Everything in the Willagee Structure Plan responds to the community, and what they've shared about the place they love, and live in.

Contents

The following describes where to find the information requirements set out in the Western Australian Planning Commission Structure Plan Preparation Guidelines.

Part 1: Willagee in 2013

Includes relevant parts of Section 1 Planning Background and Section 2 Site Conditions and Constraints of the Structure Plan Preparation Guidelines

Part 2: Willagee Structure Plan

Includes relevant parts of Section 3.1 Land use, Section 3.6 Education facilities, Section 3.8 Infrastructure coordination, servicing and stage, and Section 3.10 Other requirements of the Structure Plan Preparation Guidelines

Part 3: Willagee's Public Spaces

Includes relevant parts of Section 3.2 Open space of the Structure Plan Preparation Guidelines

Part 4: Willagee's Centres

Includes relevant parts of Section 3.7 Activity centres and employment of the Structure Plan Preparation Guidelines

Part 5: Housing in Willagee

Includes relevant parts of Section 3.3 Residential of the Structure Plan Preparation Guidelines

Part 6: Moving Around in Willagee

Includes relevant parts of Section 3.4 Movement networks of the Structure Plan Preparation Guidelines

Part 7: Water Management in Willagee

Includes relevant parts of Section 3.5 Water management of the Structure Plan Preparation Guidelines

Part 8: Carawatha Masterplan

Provides a development concept for the Carawatha site.

Part 9: Archibald Hub Masterplan

Provides a development concept for the Archibald Hub.

Part 10: Archibald Hub Masterplan Delivery

Describes staged redevelopment of the Archibald Hub, along with short term recommendations for Crime Prevention through Environmental Design and Placemaking.

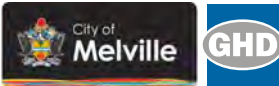
Willagee: Crime Prevention Through Environmental Design

Preliminary short term strategy to deliver crime prevention through environmental design within the Archibald Hub areas, with objectives to be considered across the Willagee Structure Plan area

Willagee: Spatial Guidelines

Provides spatial design guidelines to assist interpret and deliver on the objectives and design guidelines within Part 1 for key policy areas.

WILLAGEE STRUCTURE PLAN PART 1:
WILLAGEE IN 2013



Expectations for the Willagee Structure Plan

The Willagee Structure Plan provides a spatial framework and an implementation pathway to deliver the outcome the community needs, and wants.

The Plan has been developed to meet the following performance measures:

Commercial Vitality

The Willagee Structure Plan provides a rationale for the evolution, location and revitalisation of centres within the study area; and recognises and enables the connections to external opportunities and functions

Place Activation

The Willagee Structure Plan builds on placemaking principles and enables a range of development opportunities encouraging growth, diversity and affordability of housing

The project delivers a strategic masterplan for the Carawatha site

Collaborative Partnerships

The Willagee Structure Plan is delivered in partnership with key stakeholders to enable the regeneration of Willagee, and will provide direction for shared delivery of the Structure Plan recommendations which includes the identification of areas for future planning

Outcomes

The reports and plans will communicate the vision for Willagee and will be accessible* and inclusive and be easy to interpret by all audiences

* where all members of the community can access the document, by reading, through translation etc



Willagee is characterised by suburban style housing, with a blend of old and new housing styles.



Willagee is serviced by several small centres; the Archibald St Hub is the main local centre in Willagee containing an IGA, smaller shops as well as the Willagee Library and Community Centre.



Willagee is well serviced by local parks which provide good places to play. More lighting and other facilities, including drink fountains or toilets, can further enhance the enjoyment the community gets from them.



Willagee is well connected by its existing road network, however not all streets are accessible for all users, and upgrades are needed for pedestrians and cyclists.



The old Carawatha Primary School site is a key development site for the community.



The City of Melville Community Planning Scheme No. 5, which sets out the rules for land use, development, and the density of housing, maintains a low density character, with a density code of F20 or P20 across the majority of the suburb, with higher densities allowed on key development sites.



Willagee's Community

The Willagee community is passionate about the place they live in, and engaged in their future. As part of the development of the Willagee Structure Plan, over 100 residents came together for a workshop, contributing their thoughts and aspirations for the future. The Willagee Structure Plan has been prepared in response to the community's thoughts and ideas. Some of the key themes are summarised in the 'Willagee Issues, Opportunities and Community Comments' image.

The Willagee population of 4,768 people (as counted in the 2011 census) is made of 47 percent males, and 53 percent females. The median age in Willagee is 36 years. Children (0 - 14 years) make up 22 percent of the population, and people aged 65 years and over make up 15% of the population.

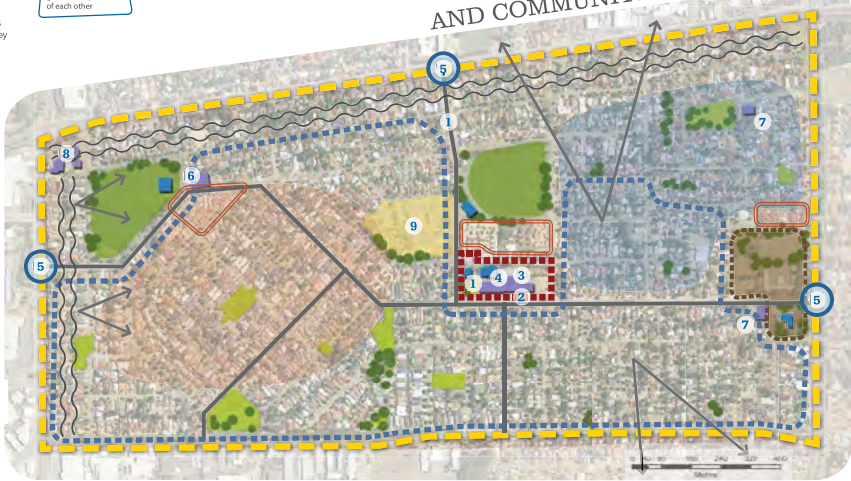
The Willagee community is diverse, with 31 percent of the community from places outside of Australia, and the Indigenous community making up just under 5 percent of the population. Outside of Australia, the most common countries of birth were England (6 percent), New Zealand (3 percent), Philippines (1 percent), Scotland and South Africa (both 1 percent).

In Willagee 30 percent of people attend an educational institution. Of these, 27 percent are in primary school, 17 percent in high school and 22 percent at university, TAFE, or other tertiary institution. Of those working in Willagee, 58 percent are employed full time, 30 percent are employed part-time. The unemployment rate in Willagee is 5.4 percent, which is higher than the state average of 4.7 percent. The median weekly personal income in Willagee is \$556; the average household income is \$1,019.

Most people in Willagee drive to work (63 percent), with 3 percent of workers in Willagee taking the bus. 38 percent of households have one registered vehicle, 35 percent have two vehicles and 12 percent have three or more. 12 percent of Willagee households have no private vehicles, which is twice the state average.

62 percent of households in Willagee are family homes. Of the families in Willagee, 39 percent are couple families with children, 33 percent are couples without children and 27 percent were single parent families. In Willagee 17 percent of single parents were male and 83 percent female.

33 percent of houses in Willagee are single person households, and 5 percent are group households. 20 percent of homes in Willagee are owned outright, 36 percent are owned with a mortgage and 40 percent are rented.



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WILLAGEE STRUCTURE PLAN PART 2: WILLAGEE STRUCTURE PLAN



Carawatha Policy Area

The Carawatha Policy Area provides for the development of a diverse, high quality, and higher density residential area that integrates with a new public park to serve the local community.

The R60 density code provides for a range of higher density homes, including town housing and low rise apartment buildings. These will provide smaller housing types in a suburban setting for people wanting smaller homes, or people looking to downsize, but wanting to remain in Willagee.

Existing shops and the Arthur Kay Reserve will redevelop over time to provide more housing options in a mixed use setting, with high density in these locations providing an incentive for redevelopment.

A development concept for the Carawatha site provides greater detail on the opportunities for future built form and access arrangements for this location, and will be implemented through a design guidelines set out in the Willagee Structure Plan Part 1 - Statutory Provisions.

Archibald Hub Policy Area

The Archibald Hub Policy Area provides for the existing hub to develop as the primary community and commercial area for Willagee, including mixed use development. This includes taking on functions of other community and retail areas around the suburb, including the Senior Citizens Centre, and other smaller shops. Over time, redevelopment of the hub will enable businesses in the other smaller centres to relocate into the consolidated hub.

The Neighbourhood Centre zoning, with R60 density code, will enable consolidation of community facilities and retail, with potential for upper floor apartments to incorporate greater mixed use. Increased density of existing residential development in the policy area, including existing lifestyle villages to the north, will enable the redevelopment of these facilities over time, to meet rising demand for aged persons and retirement housing in Willagee.

Webber Policy Area

The Webber Policy Area provides for redevelopment of a niche, mixed use local centre, integrating with the adjacent Webber Reserve. Uses would include arts and cultural spaces, with supporting retail and business. The area would be further activated by integrated residential development at higher densities.

Private development of cultural spaces within the Webber Policy Area can be further supported by enhanced community facilities on Webber Reserve, such as community gardens and play/performance spaces.

Leach Highway Policy Area

The Leach Highway Policy Area aims to facilitate higher density town house development as an incentive to move residential access away from Leach Highway. A split density code encourages amalgamation of private lots to achieve higher density development that does not require access from Leach Highway. New housing provides opportunity to incorporate quiet building design (for noise amelioration), to improve the amenity of housing in this location.

The Policy area also seeks to ensure that retail development within the local centre, located at the corner of Leach Highway and Stock Road, is of a scale and character that does not detrimentally impact nearby centres.



Revitalisation and diversity across Willagee

The Willagee Structure Plan provides for different areas of character and varied levels of suburban revitalisation through defined policy areas and varied densities from low to medium density across the remaining suburb.

The Willagee Structure Plan Part 1 - Statutory Provisions will define the desired suburban character, look and feel for housing, as a benchmark for future development across Willagee. These provisions, and additional policy frameworks where required, will provide additional, local guidance for controlling how future housing will look, and guide the use of the Residential Design Codes in Willagee. For example, guidance will ensure street setbacks, street trees, and the feel of open space is retained even though the number of houses increases.

Areas of Willagee requiring special attention are identified as policy areas. These areas have different objectives, and will have tailored design guidelines within the Willagee Structure Plan Part 1 - Statutory Provisions to manage their redevelopment.

Yields

The Willagee Structure Plan has the opportunity to generate up to 1,000 to 1,600 additional dwellings. This would support a future population of 7,200 to 8,700, an increase of 2,500 to 4,000 people.

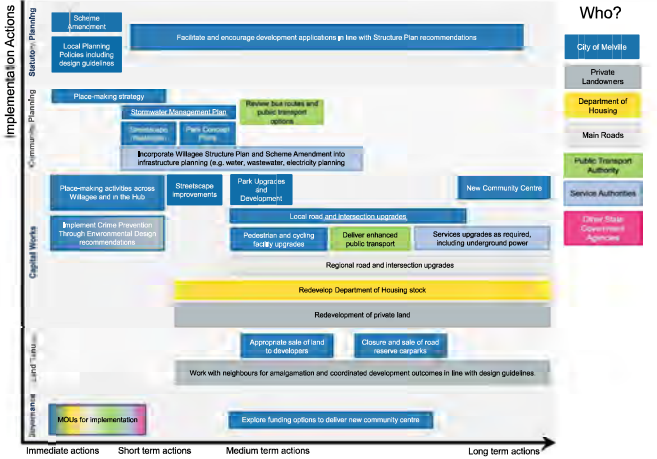
In terms of local jobs, the Structure Plan provides for 6,500 to 7,000m² of commercial floor space (including office, retail, and medical). This will support approximately 180 to 200 local jobs.

Implementation Pathway

The Structure Plan sets out Council's vision and land use expectation for Willagee into the future. Implementation of the plan will progressively occur based on various factors including associated demands, financial feasibility and securing funding.

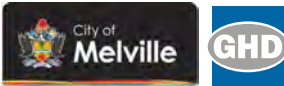
A key aspect of implementing the plan is through effective partnerships with the community, landowners, state government, and local businesses. Much development will be driven by landowners, with community infrastructure supported by local and State government.

The Implementation blueprint includes a range of activities, by a range of people and organisations, recommended to facilitate the implementation of the Willagee Structure Plan over time.



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WILLAGEE STRUCTURE PLAN PART 3: WILLAGEE'S PUBLIC SPACES



Willagee's Parks

Willagee's parks include land set aside for sport and recreation, preservation of natural environments, provision of green space and/or urban stormwater management.

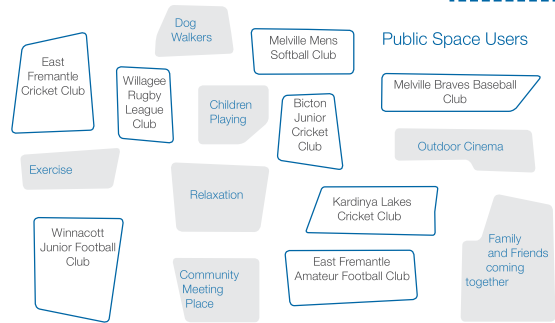
Parks and open space vary in size, form and the range of functions that they support. Spaces can be categorised into a hierarchy which in Willagee includes active parks (places for organised sport), passive parks (places for informal play and recreation) and informal street parks (unstructured places for relaxation, walking, and other recreation).

The provision of suitable parks and open space can contribute to the protection and enhancement of environmental, cultural and heritage values of an area.

The public open space plan identifies areas of public land within road reserves which would provide Informal Parks with pleasant and welcoming spaces, through landscaping, park furniture (seats, drinking fountains) and lighting for the community.

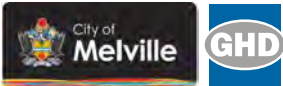
The structure plan recommends the preparation of park concept plans in consultation with the local community to identify what additional facilities are required (e.g. formalised parking, drink fountains, toilets, play equipment) to further enhance these places for the community.

- Creating Great Parks**
- In developing park concept plans, the following principles should be considered and where possible integrated into design.
- Ensure good passive surveillance from surrounding roads/development
 - Establish connections to the wider Open Space network, green corridors and greater pedestrian/cycle networks
 - Provide pathway networks which consider desire lines through the POS
 - Provide facilities for a wide range of user groups and abilities
 - Provide facilities for passive recreation such as seating nodes, picnic opportunities and cycle/ pedestrian pathways
 - Provide adequate shade through strategic tree planting
 - Create sustainable spaces with consideration to long-term management and maintenance
 - Create spaces for community interaction and engagement
 - Provide for recreation diversity
 - Create sustainable spaces with consideration to long-term management and maintenance
 - Provide a variety of function which responds to the hierarchy of the Public Open Space
 - Create a legible landscape through viewsheds, landmarks and path networks
 - Retain existing natural landscape form and features where possible
 - Retain existing native vegetation where possible
 - Focus on the creation of usable areas
 - Interpret local cultural, natural and heritage values where possible within the design to create a sense of place
 - Where possible, create multi-use spaces
 - Choose appropriate low maintenance plant species and consider Water Sensitive Urban Design Principles
- Images here provide examples of how parks can be further developed in line with these principles, or show existing attributes of parks.



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WILLAGEE STRUCTURE PLAN PART 4:
WILLAGEE’S CENTRES



The way we shop, and the types of centres we need are changing. The Willagee Structure Plan recognises that the current distribution of smaller centres around the suburb is not viable in the longer term, therefore looks to consolidate community and local retail services into a redeveloped hub in the centre of the suburb. By keeping the heart central, everyone in Willagee has access.

The placement and retention of Willagee's centres is based on ensuring that important services and retail are not displaced from the central hub, and that any smaller centres complement, rather than compete with, the heart.



Jemerson Street Mixed Use

The residential development of the Carawatha site will be supported by a revitalised mixed use area at the current Jemerson Street shops. Providing a local commercial centre zone with residential R-coding of R60 provides an incentive to grow these local shops into a niche, local, mixed use area.



Transitioning to other uses

In the short term, some specific businesses in the smaller centre at Harrison Street, are operating successfully. However, should these businesses move on, it is unlikely that future retail would be viable in the longer term.

Existing, approved businesses in these locations can continue to operate as long as they would like to. The structure plan provides for high density residential coding on these areas to provide a financial incentive for later redevelopment, once current businesses decide to move on.



Archibald Hub – Willagee's Heart

A redeveloped Archibald Hub will be the heart of Willagee, and a place for people to meet and access daily services. Key services that will drive the redevelopment and expansion of the Archibald Hub include a new medical centre, new community centre, local indigenous centre, and retail (IGA and a range of smaller shops and cafes). These services will be supported by residential development, with upper floor residential.

To ensure the Archibald hub remains the primary retail centre within the Structure Plan area, it's important that retail land uses in the other local centres do not undermine the hierarchy of centres in the Structure Plan area.



Bawdan Street Shops – Arts Precinct

The Bawdan Street shops, within the Webber Policy Area, will become an arts precinct with some supporting retail such as a general store and or cafe for the local community. This will include mixed use commercial/retail at ground floor with residential on the upper floors. Future redevelopment will enhance interaction with Webber Reserve through improved pedestrian access and complementary uses on the park. These uses could be an art park, small amphitheatre, community vegie patch and/or nature based play area that integrate and reflect local indigenous heritage.



Stock Road Commercial

In future, this area will be impacted by noise and land impacts of on and off ramps at the intersection of Leach Highway and Stock Road. The long term access and egress of this site is likely to be considerably restricted, with access only via Webber Street.

Office development in this location will benefit from highway exposure, but will not rely on immediate highway access for 'drive by' trade. The area will not support substantial retail that would convenience elsewhere in Willagee, but just enough to service the office spaces above or give the office tenants a shop front for their business.

Whilst retail development is permissible, the structure plan will seek to ensure that retail development is of a scale and character that does not detrimentally impact the hierarchy of nearby centres.

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WILLAGEE STRUCTURE PLAN PART 5: HOUSING IN WILLAGEE

Achieving quality housing outcomes

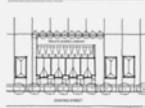
Design guidelines will be prepared and implemented through design guidelines and objectives provided within Willagee Structure Plan Part 1: Statutory Provisions. This will incorporate the density and height requirements shown on the built form plan, along with other requirements such as set backs, access arrangements, and site development to ensure future residential development meets the objectives of the policy areas, and maintains the character of Willagee.

Development applications for major developments in key policy areas will be advertised to ensure the community has further opportunity to comment on the built form of Willagee into the future.

Achieving diverse housing options for suburban living

The structure plan recommends the introduction of an additional density concession within R40 areas, to add greater diversity of built form into Willagee's streets. The outcome will be scattered examples of small housing options, that will enable people to live in a smaller house, on a smaller lot, yet still on a suburban street. It provides an alternative, smaller housing product for people who still want to live on quiet streets, rather than in more vibrant hubs or cities, but do not want a large house or garden.

This outcome will be achieved by a density concession in the scheme which will enable development of town houses at a density of R60. This will only be allowed where a minimum of 4 or 5 lots are amalgamated along a single street frontage. Design guidelines will ensure only single houses are developed, in a way that contributes to the character of Villagee's streets.

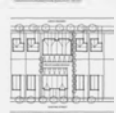


Split coding for access management

The Leach Highway Policy Area aims to facilitate higher density town house development as an incentive to move residential access away from Leach Highway. This is done through a split density code, which effectively provides several density codes to an area – a lower 'as of right' code, and a higher code if certain requirements can be met.

A split density code of R20/60 will enable development at the higher density only where development provides for lots accessing Leach Highway to gain access from an alternative road. This may include amalgamation to achieve an alternative street frontage, or individual developing properties providing extended driveways with access easements to lots fronting Leach Highway. This would remove the need for access directly from Leach Highway. Where the required access arrangements are not achieved, the R20 density applies, which does not facilitate subdivision of these lots.

Examples of how alternative access and townhouse development can occur in this area are shown opposite. Design guidelines to manage access and built form will be prepared, advertised to the community, and implemented through statutory provisions.



What do density codes mean?

R25	Generally low density, single housing with lot sizes, on average, of 350 square metres. Only half of the lot can generally be built on, leaving half for gardens and setbacks.
R40	Medium density housing, usually built as smaller single houses or grouped houses, although there can be small apartment buildings built at this density in some areas.
R60	Medium to high density housing, which can be built as town housing, or as apartments. At this density, design guidelines are prepared to tailor built form outcomes specific to a location – this will be the same for Villages.

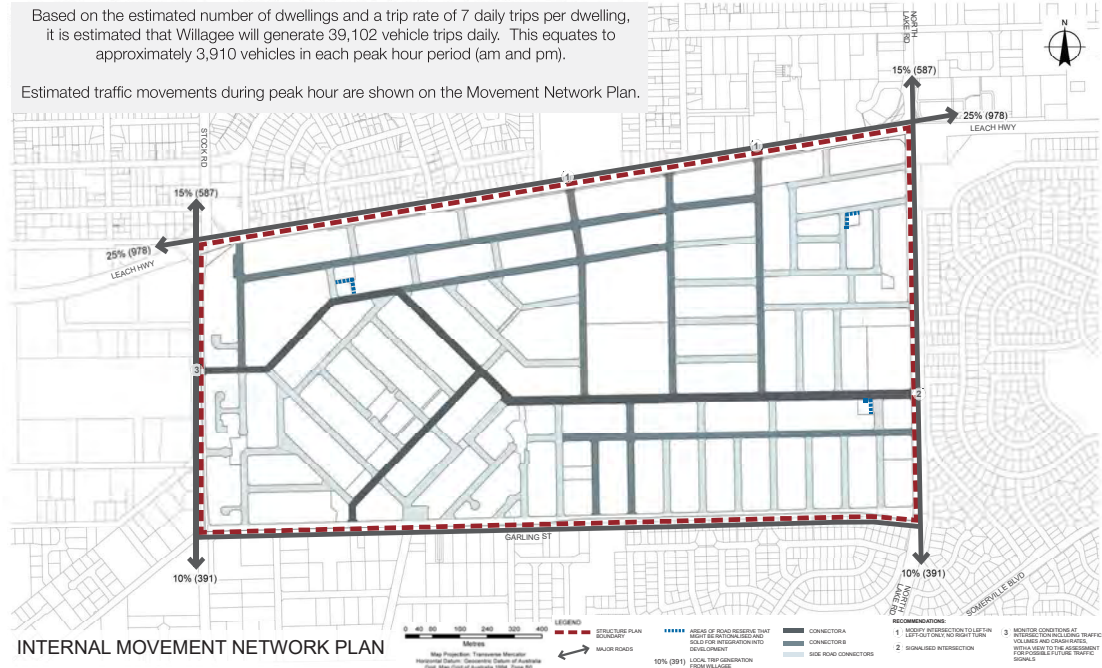


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Data source: Landgate - Metro Centre Feb 2012

WILLAGEE STRUCTURE PLAN PART 6: MOVING AROUND IN WILLAGEE

Based on the estimated number of dwellings and a trip rate of 7 daily trips per dwelling, it is estimated that Willagee will generate 39,102 vehicle trips daily. This equates to approximately 3,910 vehicles in each peak hour period (am and pm).

Estimated traffic movements during peak hour are shown on the Movement Network Plan.



Archibald Street/ North Lake Road priority intersection

From the start of 2007 to the end of 2011 there were 17 recorded collisions. Eleven collisions are likely to have occurred during peak hour. When the area is congested, right turn movements into and out of the intersection seem to be a main issue with collision rates.

It is possible that traffic speeds along North Lake Road and reduced visibility for turning vehicles at the intersection due to the hill crest within 100 m may also be reasons for collisions occurring.

The structure plan proposes signalling this intersection, therefore reducing the danger presented to vehicles using the intersection.



Winnacott Street/ Leach Highway priority intersection

Leach Highway is managed by Main Roads.

From the start of 2007 to the end of 2011 there were 12 recorded collisions. Seven collisions are likely to have occurred during peak hour. During peak hour, right turn movements into and out of the intersection seem to be a key issue (6 accidents involved right turn turns). Nine collisions occurred during Winter, suggesting there may also be a visibility issue due to sunset/ sun rise for drivers (Leach Highway runs east to west at the intersection).

Due to the majority of accidents resulting from right hand turns, the structure plan proposes modifying this intersection to allow only left in-left out movements, therefore reducing the danger presented to vehicles using the intersection. It is expected vehicles entering or leaving Willagee via right hand turns will use safer, controlled intersections elsewhere.



Stock Road/Boon Street intersection

The intersection of Stock Road with Boon Street is managed by Main Roads, as Stock Road is a key regional road.

From the start of 2008 to the end of 2012, there were 10 reported collisions. Main Roads does not have any current plans for the upgrade of this intersection and do not consider it a high priority.

Monitoring of conditions at this intersection including traffic volumes and crash rates, with a view to the assessment for possible future traffic signals, should be undertaken. Potential opportunities to enhance safety to be considered by Main Roads includes widening of the existing median in Stock Road to 6m to allow a right turning vehicle from Boon Street to store and to construct a high entry left turn lane under give way control for left turning traffic turning from Boon Street, to overcome sight distance restrictions.



Garling Street

The Willagee community has raised concerns regarding the speed of vehicles and heavy vehicles along Garling Street.

Garling Street services residential properties, and is also a route for vehicles accessing the adjacent O'Connor light industrial area. Because Garling Street services O'Connor, many speed reduction devices (traffic humps etc), slow zone areas and other physical ways of slowing traffic down, are not likely to be appropriate.

There are some measures that could provide information that Garling Street is predominantly residential to manage the way vehicles use the road. Upgrades such as kerb entry treatments, continuous speed reduction signage and variable speed message signage to show speeds of moving traffic should be considered in future roadworks.



Connector A (up to 7,000 car movements per day)

Future road and streetscape upgrades in line with this section will provide greater access for non-car movements. Cycling and walking shared path facilities (as dual use paths on the verge) will ensure greater access through Willagee. It is important that, to ensure safety and encourage more cycling, that cycling facilities are separated from other road traffic.



Connector B (up to 3,000 car movements per day)

This cross section provides traffic facilities on roads that do not currently provide appropriate cycling connectivity. These roads would have lower traffic volumes through Willagee, with dual use paths provided in the verge.



Side road connectors (between 1,000 and 3,000 car movements per day)



Rationalising Road Reserves

Local centres in Willagee include street parking within gazetted road reserves. Where these local shops are redeveloped (Bawdan Street, Archibald St East, and Harrison Street) for mixed use or residential development, there is opportunity to close and sell these parking areas to encompass into redevelopment. Design guidelines for policy areas will include measures to ensure future development provides sufficient off street parking.

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WILLAGEE STRUCTURE PLAN PART 7: WATER MANAGEMENT IN WILLAGEE



Currently, stormwater in Willagee is managed via a traditional piped network. There is opportunity to prepare a stormwater management strategy for Willagee to facilitate the upgrade of existing infrastructure to incorporate best practice management, for greater environmental benefit.

Upgrades to the stormwater management system for the Willagee Structure Plan area should be designed in accordance with Department of Water's Stormwater Management Manual for best practice drainage design. This can be achieved over time through capital works investment as part of other road and park upgrade projects.

- The following management objectives are recommended to be adopted;
- Treat frequent events (up to 1-year ARI) for water quality;
- Convey minor storm events (5-year ARI) for road serviceability; and
- Manage major flood events (100-year ARI) events for flood protection.

Stormwater management within the Willagee structure plan area should comprise a treatment train system to capture and treat stormwater close to source, and maintain pre-development flows. Images on this poster show what that might look like in future.

Major development applications (for example within the Hub and Webber Policy Areas) and subdivision of the Carawatha site should be supported by Urban Water Management Plans.



Mosquito breeding can occur where there is standing water such as in flood detention/infiltration areas. Mosquito breeding can be controlled by ensuring detention basins:

- Drain within 3 days of filling
- Are free from depressions, potholes and related irregularities
- Do not seep to other low lying areas



Flood Protection – Major flood event management
Upgrades of roads and public open spaces should be designed to cater for the surface overflow for more severe storms with habitable floors at least 500 mm above the adjacent 1 in 100 year ARI flood or storage level in streamlines and basins, and 300 mm above for other drainage paths (such as road reserves).

Detention areas, located at low points, should be sized to store and infiltrate the 1 in 100 year ARI flood event.



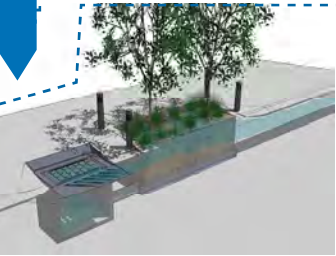
Water Quality – Frequent event storm management
Runoff from events up to the 1 in 1 year event should be retained as close to source as possible within infiltration and bioretention areas integrated into the urban form. Bioretention systems should be sized at a minimum of 2% of the connected impervious area they receive runoff from.



Runoff from all residential and commercial lots may be captured within rainwater tanks where possible, with excess directed into soakwells or other infiltration facilities for removal.

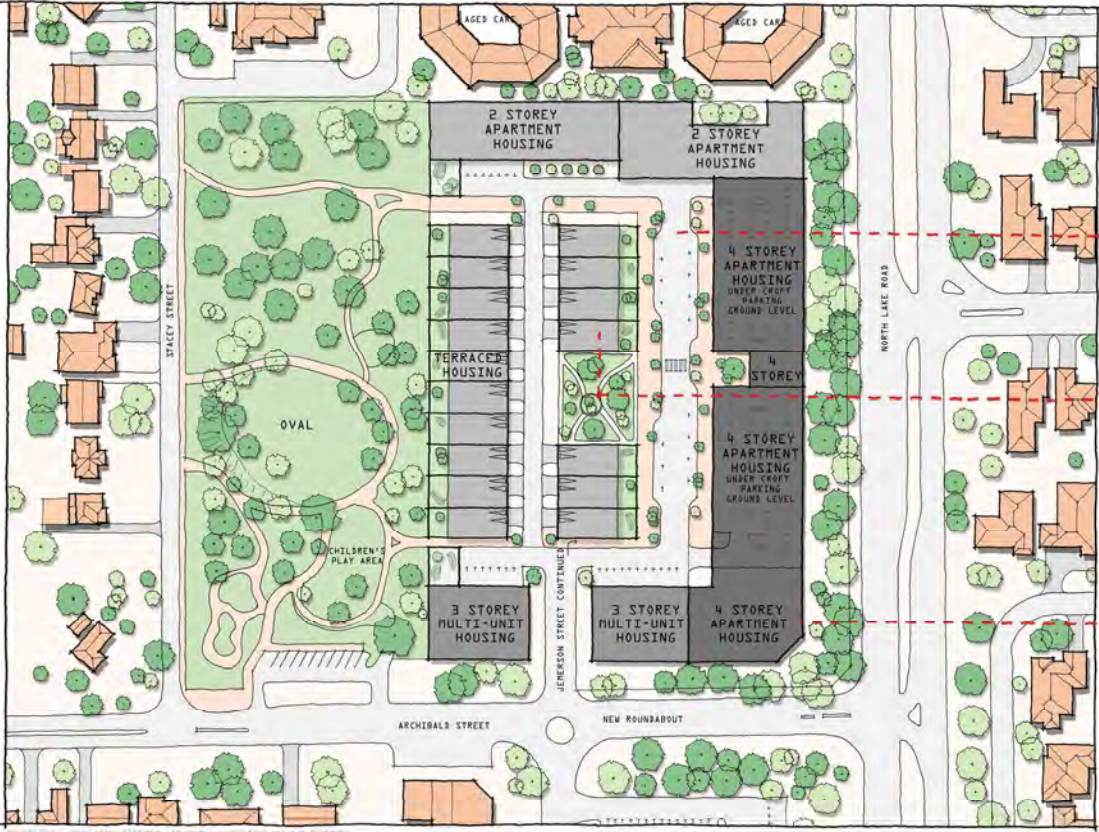
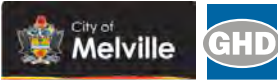


Serviceability – Minor event storm management
Runoff from events up to the 1 in 1 year event should be retained as close to source as possible within infiltration and bioretention areas integrated into the urban form. Bioretention systems should be sized at a minimum of 2% of the connected impervious area they receive runoff from.



This poster provides information for general guidance only. It is not intended to be used as a basis for any particular project and does not constitute a contract. It is not intended to be used as a basis for any particular project and does not constitute a contract. It is not intended to be used as a basis for any particular project and does not constitute a contract.

WILLAGEE STRUCTURE PLAN PART 8:
CARAWATHA HOW IT COULD DEVELOP

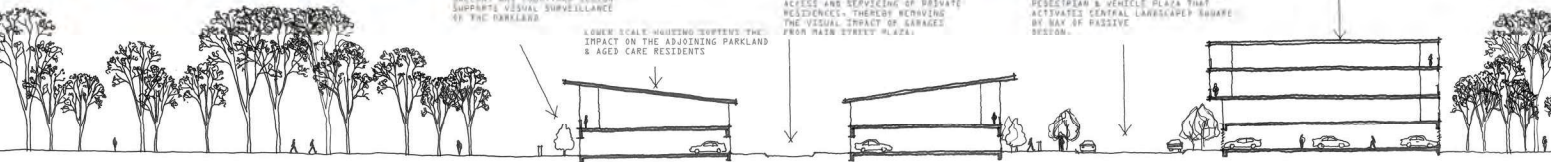


The "concept" was prepared in response to community desire to see an entry-statement development that integrates with a new, high quality park on the Carawatha site. The "concept" is therefore a collection of ideas only; it is for illustrative purposes only to show the area might be redeveloped in the future in accordance with policy principles.

Community consultation identified a wide range of options for the Carawatha site, including commercial uses, medical uses, residential uses and community uses. The overwhelming response from the community was that the Archibald Hub should be maintained as the centre of Willagee. Any commercial or medical development at the Carawatha site, would risk attracting important services away from the hub, and would make the hub unviable in the longer term. Therefore, the future of the Carawatha site is considered to be most appropriate as public open space, and diverse residential development.



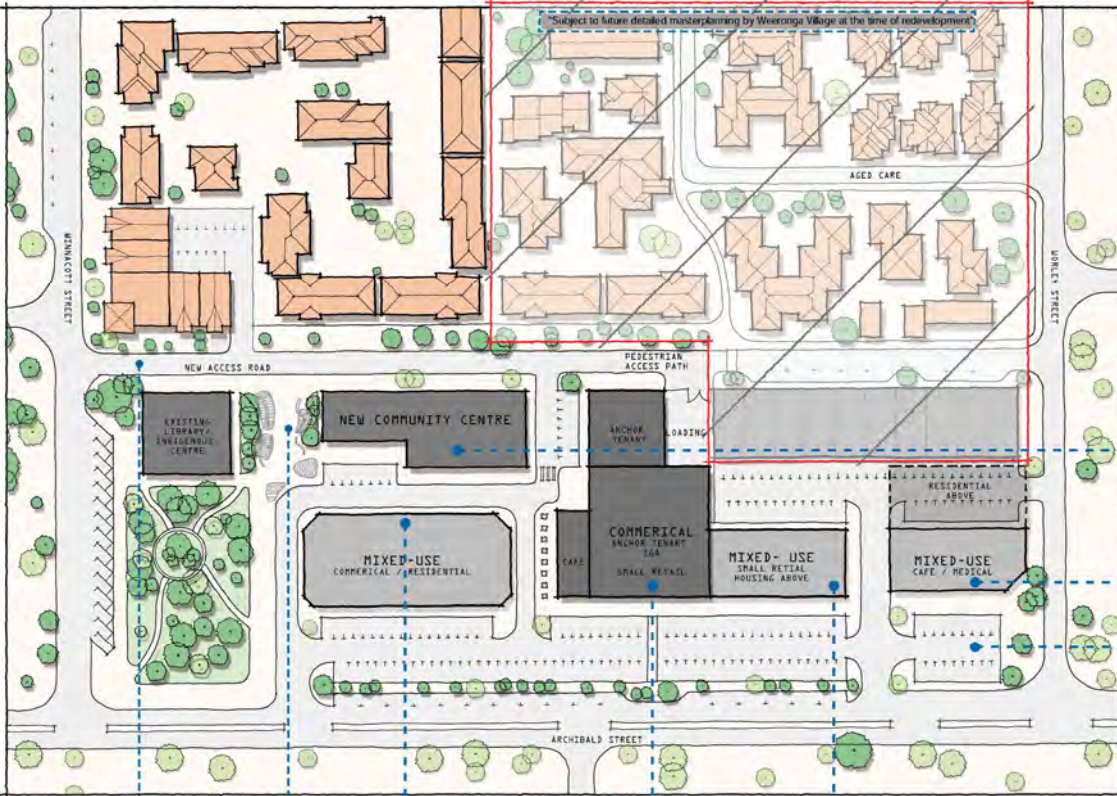
MULTI-STOREY BUILDING DESIGN CREATES POTENTIAL BARRIER TO EASY NORTH-LAKE PARK. THE FORM STIMULATES REGIONAL OPPORTUNITY FOR A CORNER ENTRY STATEMENT / LANDMARK INTO WILLAGEE.



WILLAGEE STRUCTURE PLAN PART 9: ARCHIBALD HUB HOW IT COULD DEVELOP



This "concept" was prepared in response to community desire to retain the primary commercial hub in this area. The concept was developed to investigate how the area might overcome current issues and function as a higher quality hub over time. The concept is therefore a collection of ideas only; it is for illustrative purposes only to show the area might redevelop into the future in accordance with policy principles set out in the structure plan.



A new, multi-storey community centre will provide fit-for-multi purpose facilities to support Wirrongo's growing community. It will consolidate current functions, and provide modern facilities to support existing programs, a new library, cafe, senior citizens, dance, and other community services and needs.

The introduction of a medical centre would provide much needed medical facilities to the local community. The centre can support a number of general practitioners, along with complementary businesses such as an expanded pharmacy, physiotherapy, chiropractor, pathology, and speech pathology. The City is encouraging the private sector to develop accordingly.

Redevelopment of the hub will require careful attention to car parking. Future developments will yield up to 14,000 square metres of retail floor space, and up to 7 medical consulting rooms. This will require planning policy to provide for reciprocal car parking, between different properties and businesses. It is unlikely all carparking can be retained on private property - however some concessions are possible due to the high number of people in walking distance to the centre, as well as potential to expand parking within road reserves.

New access road provides greater connectivity, whilst increased traffic movements provides greater surveillance - changes 'back of house' to 'front of house'

Redevelopment of existing retail will provide an active edge to all public areas, rather than unsightly 'back of house' that currently exists.



Completion of soft and hard public spaces provides better interaction between community facilities. The street frontage creates a better 'front of house' building functionality and mitigates potential loitering.



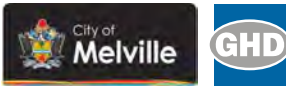
IGA anchor tenant serves as a central business figure for the hub; that local require daily. An extension of the business creates a continuous flow of traffic and draws other small businesses.



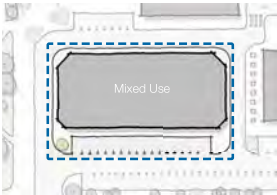
Introduction of residential dwellings increases site occupancy both during and after business trading hours, creating a more visual surveillance throughout the hub.



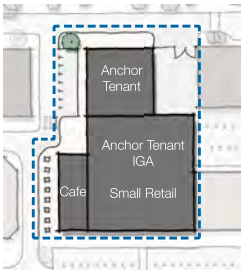
WILLAGEE STRUCTURE PLAN PART 10:
ARCHIBALD HUB REVITALISATION



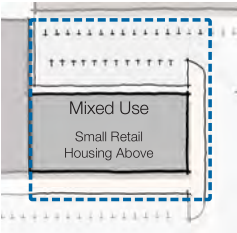
Local Community/Cultural Hub
Lot 11668 PI 190435
(City of Melville)



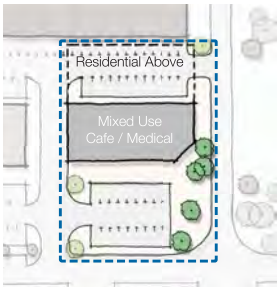
Mixed Use
Lots 24-30 PI 6848 & Lot 400 PI 38504
(Private Owners)



Commercial
Strata 39995 51/1
(Private Owners)



Mixed Use
Strata Lot 1
(Private Owners)



Mixed Use/Medical/Cafe
Lot 17 PI 6848
(Private Owner)



Residential
Lot 311 Dia 100070
(Private Owner)

‘Staging’ of Redevelopment

Over time, the Archibald Hub will redevelop in stages – with each stage or ‘cell’ relating to a single large landholding, strata landholding, or properties of similar tenure. This recognises the current function and fragmented ownership of the hub. The concept shows how groups of landowners will independently develop, subject to their own detailed design and planning in accordance with policy principles. This provides a pragmatic approach to implementation, which will enable the redevelopment of the hub over time, as private investment is made. The stages shown here identify the likely cells which relate to land holdings and tenure, however the timing for development is subject to investment decisions, as well as funding of community infrastructure. The form of the development will be determined by owners, and development applications will be advertised for community comment.

Because development will be subject to private investment decisions, specific timing cannot yet be confirmed. It is important for the City of Melville to work with landowners and businesses to assist them understand the implications of the Willagee Structure Plan and Archibald Hub masterplan for their property, and how to facilitate redevelopment of their property.

Crime Prevention Through Environmental Design

In the longer term, redevelopment of the hub, in line with the masterplan, will address key issues of security, particularly in terms of surveillance, connectivity, legibility, and activity.

In the short term, a range of options are available to assist with the management of actual and perceived issues of security and anti-social behaviour. A preliminary Crime Prevention Through Environmental Design strategy for the hub has been prepared that recommends a range of activities in the short term to address issues and concerns.



Short Term Placemaking

Structure plans and master plans can take a considerable number of years to come to fruition. This may be due to planning issues, design program, land assembly or funding. The Willagee Structure Plan recognises that people will live and work in the area during the interim years before the final state of development is reached.

The City of Melville can address the interim period with short and medium term place making projects. These initiatives should be generated by or in conjunction with the local community. They should be coordinated with Council run events programs, as well as Council policy on social justice, open space and recreation. In the context of Willagee, the initiatives should promote the reuse of the at grade car parking for community use.



Streets and carparks become a place for art and play



Carparks become people parks - a place for sitting and enjoying



Portable community and health services can take advantage of currently unused space



Pop up playgrounds and places in carparks



Public art helps people interact with their spaces

WILLAGEE: CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

PRELIMINARY SHORT TERM STRATEGY

CPTED IN URBAN DESIGN: OBJECTIVES

The following areas identify the core areas of Crime Prevention Through Environmental Design in relation to urban redevelopment and community planning.

CONNECTION
To ensure a well-integrated urban structure that increases activity by maximising connections between neighbourhoods.

ACTIVITY
To develop urban areas with 'walkable neighbourhoods' and active neighbourhood centres

LEGIBILITY
To design an easily navigable and legible network of streets, providing convenient access for all users across neighbourhoods and to activity centre

DIVERSITY
To encourage active neighbourhoods where people are present during most hours of the days.

SURVEILLANCE
To design neighbourhoods that maximise visibility and surveillance of public space to enhance real and perceived safety.

CONNECTIVITY
To connect new residential subdivisions to adjacent subdivisions through a physically integrated and direct movement/street network.



Library carpark looking into park. Poor lighting provides opportunities for undetected behaviour. Increased perception of crime/safety when legitimate Library users enter/exit.



Old artwork has not been maintained. Poor perception of ownership.



Building signage shows sign of wear and not maintained. Not clearly visible from public areas, especially at night.

Willagee Library

- Expand parking on West side of Library to the full possible extent northwards.
- Remove low laying flora and replace with matching library paving
- Open West-facing wall and install open window façade to increase visibility from inside-outwards and visa versa. This will enhance surveillance and perception of use.
- Refurbish and expand main library sign. Add additional sign to increase visibility of ownership.
- Provide seating and tables outside for Library patrons in full line-of-sight of Library supervisors/staff.

George Humes Park

- Keep old and large trees well pruned to maintain high level of natural sunlight entering communal area.
- Install lighting around park perimeter, access walkways and central gathering area.
- Redevelop a small area to accommodate a small playground for children and seating for parents. Must be well lit, in accordance with council guidelines and regulations, and not obstruct the line-of-sight from public roads to community centres and local businesses.
- Increase community art around park and along Library's main entrance walkway. Refurbish current artwork and sculptures. Involve local schools, business and community groups to produce artwork and show ownership and pride. Include signage indicating any historical or community significance.
- Improve general landscaping. Grow seasonal plants with a set theme.

Willagee Community Centre

- Refurbish, widen and furnish main entrance of Community Centre. Include benches and seating to reduce perception of loitering by legitimate users.
- Decrease the height of all hedges to increase visibility of people sitting on ledges or on the ground.
- Maintain fence integrity and construction. Eliminate any signs of climbing with maintenance schedule.
- Option to replace chain-link fence with palisade fencing. Reduces ability to scale fence line and increases aesthetics.



Signs of climbing along most parts of the fence leading into residential area and community centre garden. No lighting with extremely low lux reading and concealed by thick vegetation.



Flora conceals potential legitimate behaviour and lighting. Potential climbing aid. Poor lighting.



WILLAGEE: CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

PRELIMINARY SHORT TERM STRATEGY

Rear of Shopping Area

Install lighting to promote adequate visibility and safety to legitimate users. Refer to 'Lighting' Section.

Resurface bitumen to match road-facing parking area. Pot holes to be filled and covered.

Provide more parking areas by delineating allocate areas, areas of business service, and any private parking lots.

Provide relevant signage to show ownership of parking areas. Also see 'Signage' Section.

Repair or replace all fencing to match existing brick walls. This creates perception of uniform and consistent ownership. Option to be consistent with buildings of business and or community centre.



Fencing cross bar, overgrown vegetation and lack of visibility (sheet fencing) promote a potential climbing point.

All trees adjacent to the fence line which can be used as climbing aids to private residence should be removed or relocated. Trees should not block any natural or man made lighting which can lead to shadowing and dark areas.

Remove all rubbish from unsecured storage areas including crates, boxes, excessive rubbish, wood planks and other material which can be used as weapons, projectiles, or climbing aids.

Install consistent lighting amongst back areas of business stores. Replace all fencing with aesthetically pleasing palisade fencing to match surrounding area.



Poor waste management. Items including wooden planks are easily accessible and can potentially be used as weapons or projectiles.



Inconsistent fencing. Crates and portable bins can potentially be used to climb over this area and directly into business occupancy.



Poorly maintained road surfaces, vacant lot, and fencing decreases perception of ownership and semi-public property.



Store fronts and Building Façades

Maintain cleanliness of all doors, windows, shutters and wall faces including the removal of graffiti and damaged areas.

Reposition the ATM to its own independent area (not part of another business shop).

Option to continue artwork on West facing wall around to all areas, including shutters.

Allow businesses to operate and close at similar times.

Maintain bollards to a consistent cleanliness and colour scheme. Potential to transform or install bollards with artwork from local community. Helps promote pride and ownership of legitimate users.

Roof tops visible from the main public through-way should be kept well maintained, clean and well lit to illuminate signs.



Inconsistent type, location, colour and maintenance of bollards. Exposed light fittings, poor lux readings, inconsistent lighting types and some are not in use. Signs of new and old graffiti along store face.



Vacant Lot

To be cleared and uniform in appearance.

Signage to indicate ownership.

Provide a clear and concise perimeter.

Install natural bollards to stop vehicles and deter pedestrian access.



Signs of new graffiti and storage of used drug implements. Power meters unlocked and easily accessible.

Undercover Alleyway

Maintain cleanliness including the regular removal of graffiti and repair of damage to meter boxes (remain locked to deter use as drug storage/ disposal).

Install convex mirrors in the corners of each entrance to increase safety and visibility by legitimate users along the main store front.

GENERAL RECOMMENDATIONS

LIGHTING

Use uniform type of lighting for driveways, parking, building faces, walk ways and building signage.

Preferred cool-white lighting or light-blue for good colour rendition when identifying pedestrians.

Lighting to be evenly distributed around all areas to reduce black spots and reduce the contrast between shadows and illuminated areas. All wall sides and corners shall be well lit.

Heavily used spaces such as car parks, entries to buildings and pedestrian routes should be lit with power of 50-100lux.

Wall lighting to be mounted high and out-of-reach to avoid becoming a climbing aid.

Outward-facing lighting helps increase visibility from inside buildings to the outside.

Upward-facing lighting helps illuminate main signs, public art, focal points, and store front features.

Avoid unshielded lighting at eye level.

AS 1158.1.3 Pedestrian lighting
AS 4282 (1997) The Control of the Obtrusive Effects of Outdoor Lighting

PARKING

Prepare a signage plan focussing on the 'safe routes' and indicating destinations, facilities and amenities en route.

For car parks with low night time activity, provide an average luminance of 15lux and minimum 5lux.

For car parks with high night time activity, provide an average luminance of 20lux and minimum 10lux.

AS2990.1 (1993) Parking Facilities – off-street car parking

Provide minimum average luminance of 50lux for parking spaces in outdoor car parks for people with disabilities or the elderly.

SIGNAGE

Prepare a signs system to identify a place and indicate whether or not it is accessible to everyone; indicate warnings where necessary; and give routing information.

Ensure that signage is easily legible and viewable from public space.

Locate signs strategically at entrances, pedestrian traffic routes, and near activity nodes, including:

- Main entrances to parking areas,
- Entrance to park, library, community centre and local shops,
- Access walkways and entrance to neighbouring residential complex.

All active shops should have well maintained, well lit at night and easy to read signs located at the store front viewable from both pedestrians and vehicle traffic along main roads.

Provide signage which indicates where to go for assistance, including:

- Telephones,
- Taxis,
- Bus stops, and
- The nearest 'safe place'.

Local business signage should be in contrast with neighbouring business and general aesthetics of the precinct to increase perception of community bond and pride.

Trespassing signage should be used to further enhance the effect of business and property ownership. Highlight consequences of trespassing and contact details for witnesses.

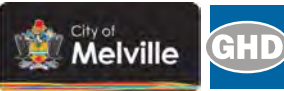
Third-party surveillance signage, including any electronic security measures, should be used with clear indication of providers contact details. Must be clearly visible to the public and located at vulnerable points of entry to buildings and hot-spots.

Community watch signage should be used along side other deterrent signage and uniformly distributed around the precinct.

All signage used for deterrence purposes shall be consistent in and around all areas of the precinct and in compliance with all relevant standards, including:

- AS1742.10 (1991) Manual of Uniform Traffic Control Devices – Pedestrian Control and Protection
- AS1428.1 (1998) Design and Access and Mobility – General Requirements for Access

Install signage away from vegetation to avoid being obscured from sight.



WILLAGEE SPATIAL GUIDELINES

ARCHIBALD HUB POLICY AREA



Archibald Hub Policy Area

The Archibald Hub Policy Area provides for the existing hub to develop as the primary community and commercial area for Willagee, including mixed use development. This includes taking on functions of other community and retail areas around the suburb, including the Senior Citizens Centre, and other smaller shops. Over time, redevelopment of the hub will enable businesses in the other smaller centres to relocate into the consolidated hub.

The Neighbourhood Centre zoning, with R60 density code, will enable consolidation of community facilities and retail, with potential for upper floor apartments to incorporate greater mixed use. Increased density of existing residential development in the policy area, including existing lifestyle villages to the north, will enable the redevelopment of these facilities over time, to meet rising demand for aged persons and retirement housing in Willagee.

Objectives:

- i. To provide for a compatible mix of commercial and residential uses which service the local community.
- ii. To ensure the nature, form and scale of development is appropriate for the suburb's primary activity centre.
- iii. To develop in accordance with Crime Prevention through Environmental Design principles

Spatial Guidelines

These spatial guidelines provide additional guidance and interpretation for future detailed planning to meet the objectives and design requirements for the Archibald Hub Policy area, as set out in Part 1 of the Willagee Structure Plan.



Archibald Hub Policy Area

Spatial Guidelines

- Policy area
- Visual and access links (road or pedestrian way)
- Public open space interface
- Two way vehicular exit/entrance
- Key public space/plaza
- Offsite car parking
- Open space and trees to be retained
- Architectural landmark feature

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Data source: Landgate - Metro Central Feb 2012 Mosaic

WILLAGEE SPATIAL GUIDELINES

CARAWATHA POLICY AREA



Carawatha Policy Area

The Carawatha Policy Area provides for the development of a diverse, high quality, and higher density residential area that integrates with a new public park to serve the local community.

The R60 density code provides for a range of higher density homes, including town housing and low rise apartment buildings. These will provide smaller housing types in a suburban setting for people wanting smaller homes, or people looking to downsize, but wanting to remain in Willagee.

Existing shops and the Arthur Kay Reserve will redevelop over time to provide more housing options in a mixed use setting, with high density in these locations providing an incentive for redevelopment.

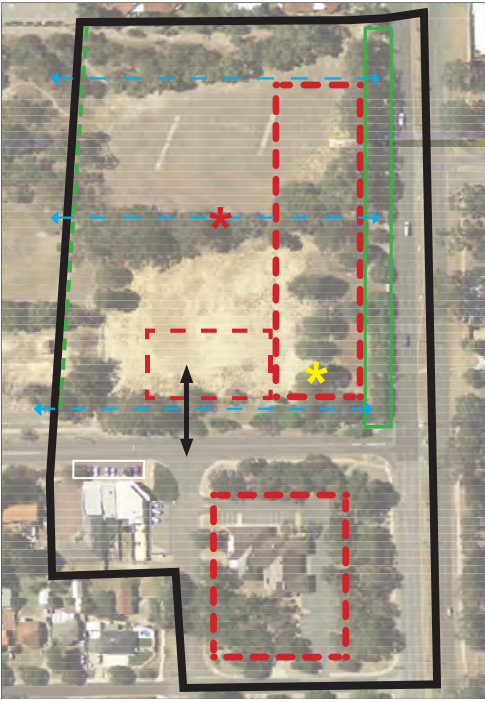
A development concept for the Carawatha site provides greater detail on the opportunities for future built form and access arrangements for this location, and will be implemented through a design guidelines set out in the Willagee Structure Plan Part 1 - Statutory Provisions.

Objectives:

- i. To provide for residential uses which deliver diverse and affordable housing options for the community.
- ii. To ensure the nature, form and scale of development respects and integrates with the surrounding streetscape.
- iii. To ensure development is consistent with the Carawatha Masterplan.
- iv. To develop in accordance with Crime Prevention through Environmental Design principles

Spatial Guidelines

These spatial guidelines provide additional guidance and interpretation for future detailed planning to meet the objectives and design requirements for the Carawatha Policy area, as set out in Part 1 of the Willagee Structure Plan.



Carawatha Policy Area

Spatial Guidelines

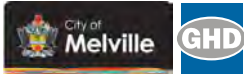
- Policy area
- Visual and access links (road or pedestrian way)
- Public open space interface
- Two way vehicular exit/entrance
- Key public space/plaza
- Offsite car parking
- Trees to be retained
- Architectural landmark feature
- Building height 12m
- Building height 16m; plot ratio 2

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WILLAGEE SPATIAL GUIDELINES

WEBBER POLICY AREA



Webber Policy Area

The Webber Policy Area provides for redevelopment of a niche, mixed use local centre, integrating with the adjacent Webber Reserve. Uses would include arts and cultural spaces, with supporting retail and business. The area would be further activated by integrated residential development at higher densities.

Private development of cultural spaces within the Webber Policy Area can be further supported by enhanced community facilities on Webber Reserve, such as community gardens and play/performance spaces.

Objectives:

- i. To provide for a compatible mix of commercial and residential uses which service the local community.
- ii. To ensure the nature, form and scale of development is appropriate for its location adjacent to public open space.
- iii. To ensure the design and landscaping of development is conducive to safe and efficient vehicular access, safe and convenient pedestrian movement and a high standard of visual amenity.

Spatial Guidelines

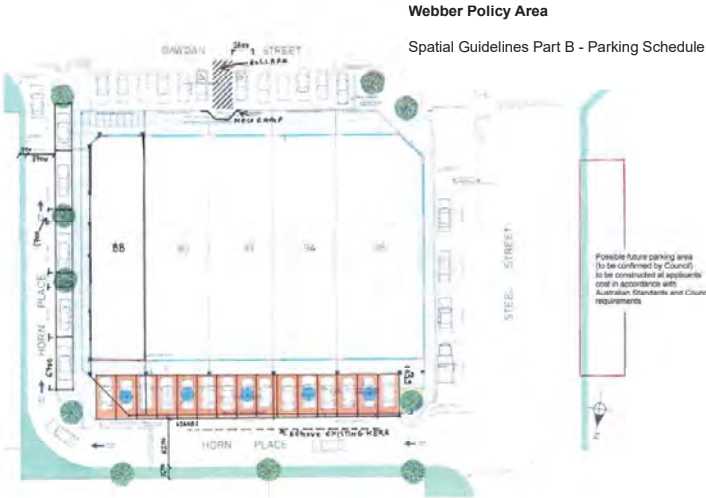
These spatial guidelines provide additional guidance and interpretation for future detailed planning to meet the objectives and design requirements for the Webber Policy area, as set out in Part 1 of the Willagee Structure Plan.



Webber Policy Area

Spatial Guidelines Part A - General

- Policy area
- Visual and access links (passive surveillance)
- Activated street and open space interface
- One way vehicular movements to sleaved parking
- Architectural landmark feature



Webber Policy Area

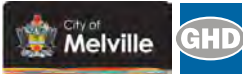
Spatial Guidelines Part B - Parking Schedule

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Data source: Landgate - Metro Central Feb 2012 Mosaic

WILLAGEE SPATIAL GUIDELINES

LEACH HIGHWAY POLICY AREA



Leach Highway Policy Area

The Leach Highway Policy Area aims to facilitate higher density town house development as an incentive to move residential access away from Leach Highway. A split density code encourages amalgamation of private lots to achieve higher density development that does not require access from Leach Highway. New housing provides opportunity to incorporate quiet building design (for noise amelioration), to improve the amenity of housing in this location.

Objectives:

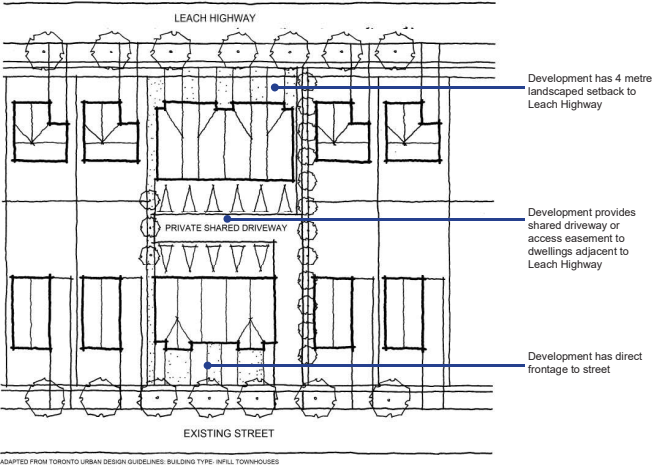
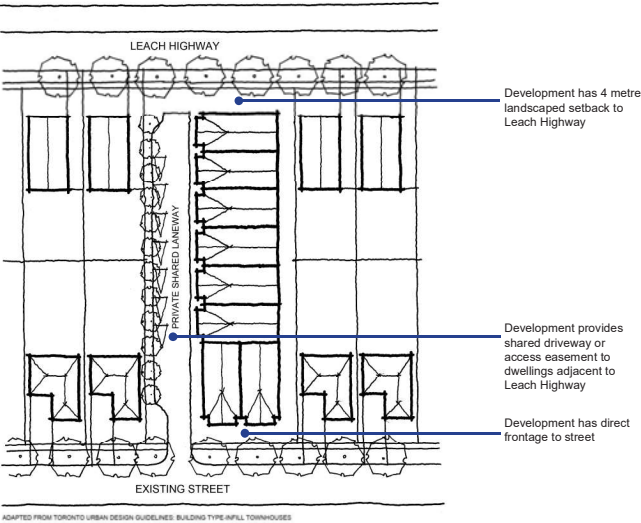
- i. To provide for residential uses which deliver diverse and affordable housing options for the community.
- ii. To manage noise and access impacts from Leach Highway through innovative design responses.
- iii. To ensure the nature, form and scale of development respects and integrates with the surrounding suburban streetscape.
- iv. To reduce direct vehicular access from private property onto Leach Highway and encourage direct vehicular access onto alternative streets.

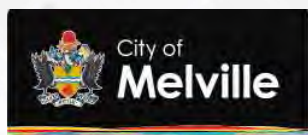
Spatial Guidelines

These spatial guidelines provide additional guidance and interpretation for future detailed planning to meet the objectives and design requirements for the Leach Highway Policy area, as set out in Part 1 of the Willagee Structure Plan.

Leach Highway Policy Area

The following spatial guidelines show two examples of how the objectives and split coding design requirements can be met.



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