Warragul & Drouin

Design Guidelines

DRAFT

Design Guidance on the Delivery of New Housing in Warragul and Drouin.

Prepared for Baw Baw Shire Council

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Part A - Project Overview.

1 Introduction – What We Are Responding To?

"The feel of new neighbourhoods in Warragul and Drouin should be appropriate for Baw Baw Shires peri urban context". Warragul and Drouin Precinct Structure Plans Review, Baw Baw Council, 2020.

Victoria's regions are growing faster than ever. It is estimated that the population of Baw Baw Shire will increase by at least 50% over the next twenty years. That figure is based on 2016 Census data and does not consider the recent population trends that have been seen as a response to COVID-19. Regional Victoria is experiencing unprecedented growth as people move away from metropolitan areas for the amenity and lifestyle of coastal and rural settings. This trend is likely to continue as employers are now offering working arrangements that many expect. Some people are making the transition from a daily commute into the CBD, to living in a regional centre that offers more space and a relaxed and affordable lifestyle. Regional centres that are commutable from Melbourne, such as Warragul and Drouin are particularly sought after.

It is important to highlight the Shire's expected population growth because population and housing are intrinsically linked. Any changes to local populations has a direct effect on housing demand. Communities in Warragul and Drouin are experiencing strong population growth and as a result strong demand for housing.

State and Local Governments have a range of statutory and non-statutory tools and mechanisms that establish the parameters for the design and delivery of residential housing. In growth areas, the overarching strategic frameworks for delivering new communities in growth areas are called Precinct Structure Plans (PSPs).

The State Government is responsible for developing PSPs to address forecast population growth and the resulting housing and employment demands. PSPs are high level master plans that provide guidance on land use and development, and inform long term infrastructure investment and service provision required to support new communities. They provide a blueprint for future neighbourhoods, places to work , and ways to get around.

PSPs are critical in guiding the growth of areas in transition and ensuring new housing development optimises the use of land through increased densities and integrated urban design. They provide direction for town character, biodiversity, natural systems, bushfire management, open space, community facilities, transport and movement and utility provision that informs the planning provisions in local planning schemes.

The Warragul and Drouin PSPs outline areas where future housing will be delivered. These areas are located outside of the established towns, usually in areas that have traditionally been used for farming.

Since the introduction of the Urban Growth Zone (UGZ) into the Baw Baw Planning Scheme in 2014, farming areas have been rapidly transforming into residential areas. Residential growth within the UGZ is necessary and supported however, some of the housing outcomes are causing concern with Council and the local community. Much of the subdivision and housing design being delivered is typically suburban in its character, and does not sit comfortably within the local landscape.

Councils, such as Baw Baw, are grappling with managing the rate of housing development to meet the needs of local growing communities. In particular, Councils are seeking housing delivery solutions that will provide for new residents whilst preserving the highly valued rural lifestyle their municipalities offer. These Design Guidelines have been produced to help Baw Baw Council better manage these challenges.

Low density residential housing will interface with future residential development.

New residential housing being delivered in Warragul.

2 Why is There a Need for Design Guidelines?

"Our rural character, appearance and small town feel is what many in the community say that they currently value about the Shire, however this will come under pressure as our community grows." Baw Baw Shire Council Plan 2017 – 2021.

Over the next 30 to 50 years the PSPs will guide Warragul's growth from 14,000 to 44,000 residents and Drouin's growth from 11,000 to 29,000 residents. In Warragul 12,500 new homes will be constructed on approximately 1,400 hectares of land. In Drouin over 7,000 new homes will be delivered on approximately 900 hectares of land.

The majority of this housing will be delivered in land that has been re-zoned and is subject to the Urban Growth Zone. UGZ areas are typically situated on the outskirts of the towns, in areas that was formally farm and agricultural land.

Since the introduction of the UGZ in the Baw Baw Planning Scheme in 2014, and the accompanying Development Contributions Plans in 2015, the Warragul and Drouin PSP areas have been developing at a rapid rate. Local farming land has been transitioning into metropolitan style suburban housing estates. Both the rate of development and the types of housing being delivered has been problematic.

Some of the key challenges Council is facing and seeking feasible solutions to include:

- Ensuring that highly valued natural environmental assets and local character elements, such as views of surrounding landscape and farmlands experienced when arriving into the town, are preserved.
- Encouraging residential development design outcomes, in both the established and growth areas, that responds to the local context and landscape features, such as topography and slope.
- Designing new neighbourhoods in growth areas that reflect the preferred local character without compromising the development capacity of the land.
- Encouraging infill residential development that relates to the established streetscape and built form character.
- Ensuring that a diversity of housing typologies are delivered to meet the needs of the growing communities.

Both Council and the local community recognise the level of housing demand in the Shire's two major centres has the potential to change the look and feel of both Warragul and Drouin.

The purpose of these Design Guidelines is to:

- Explain to the community that the adopted PSPs for Warragul and Drouin have established the areas where residential growth will happen and the densities in which housing will be delivered.
- Identify the residential areas where the design guidelines can influence future housing outcomes.
- Define the preferred neighbourhood character of key residential areas.
- Provide design guidance to ensure new residential neighbourhoods are designed and developed to reflect the preferred local character without compromising the development capacity.
- Encourage new multi dwelling residential development that respects the existing neighbourhood character and/or contributes to the preferred neighbourhood character of an area.
- Provide a finer grain of advice around preserving the natural assets and picturesque landscape elements that positively contribute to Warragul and Drouin's valued rural character, supporting the ambitions of the PSPs.
- Provide recommendations to Council on the most effective implementation tools and mechanisms.

3 Focus Areas for the Design Guidelines.

The Warragul and Drouin PSPs have designated where, and to what level, future residential development can occur. A large percentage of new housing has been delivered in these areas, and there are a number of subdivision applications that have been endorsed by Council.

The design guidance provided in Part B - Design Guidelines for Residential Housing in New Communities, will have greatest influence over those areas within the Urban Growth Zone that are designated for housing but have not yet had planning applications prepared. Figures 1 and 2 on the following pages highlight the Urban Growth Zones in red.

Part C - Design Guidance for Infill Residential Housing applies to the General Residential Zones in Warragul and Drouin. The Design Guidelines will have the greatest influence on planning applications that are seeking to deliver multiple dwellings on one lot, within the General Residential Zone. The General Residential Zone is indicated as purple in Figures 1 and 2 on the following pages.

View of residential housing on arrival into Drouin.

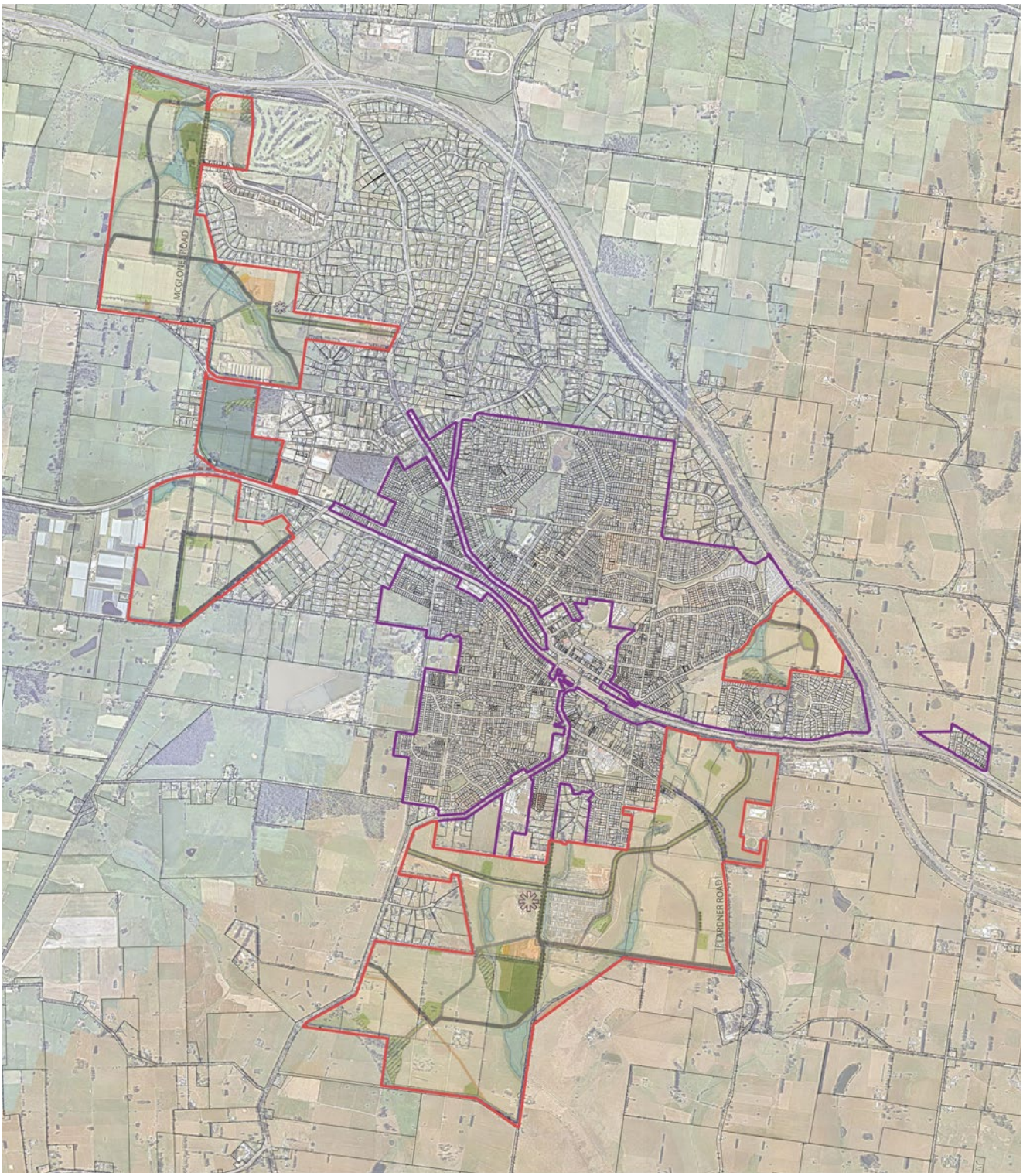


Figure 1. Drouin Study Area

LEGEND

URBAN GROWTH ZONE (UGZ)

GENERAL RESIDENTIAL ZONE (GRZ)

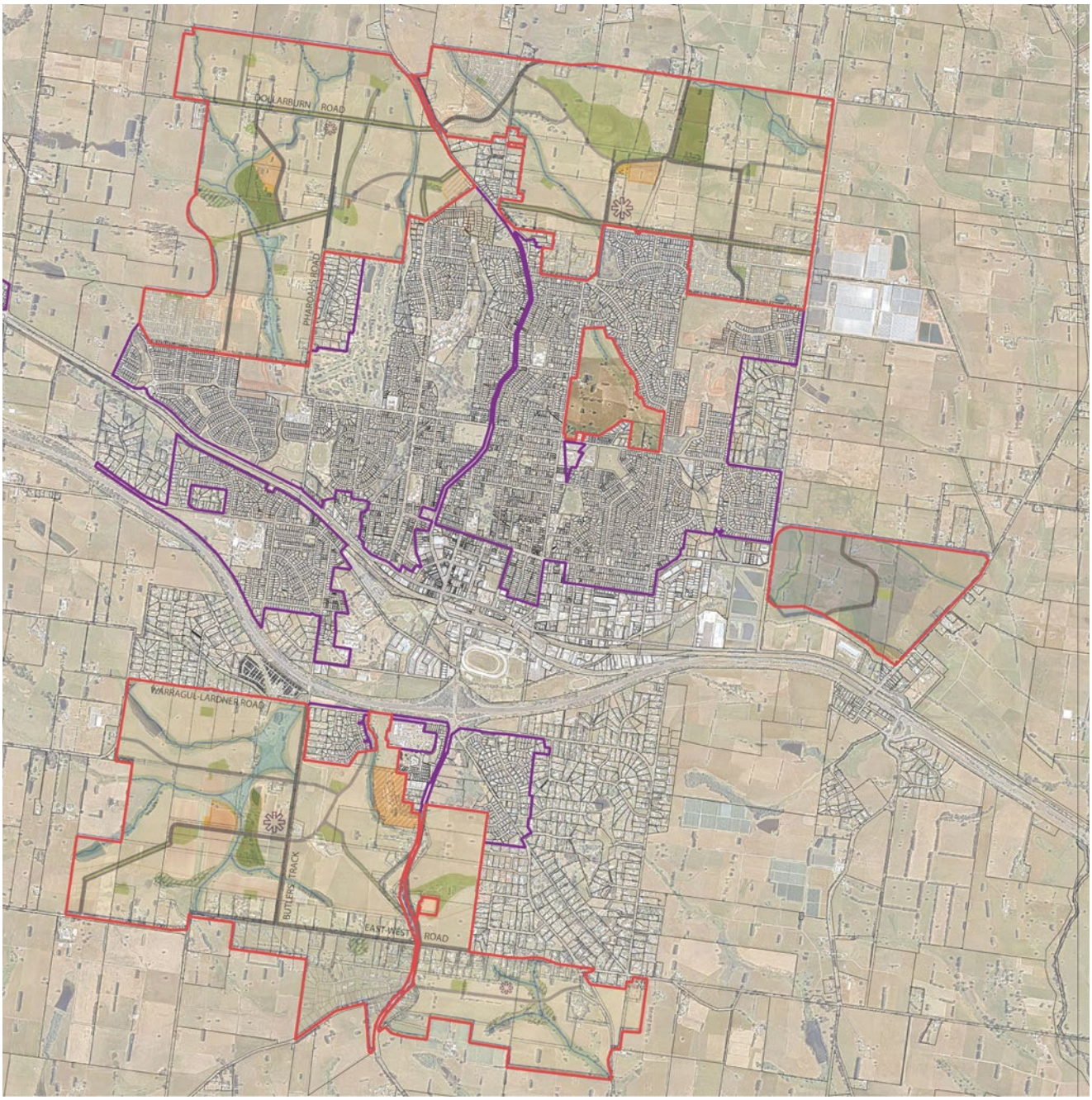


Figure 2. Warragul Study Area

4 What is Local Character?

"Our green rolling pastures, forest clad hills and productive rich soils are our point of difference, the reason we live here and why so many come to visit". Baw Baw Community Vision, 2020.

A place's character is often one of the main reasons why people love living in a particular neighbourhood, town or city. However defining neighbourhood character is challenging. Character by its very nature is subjective, so it can have a range of meanings for different people. It can be about having a connection to natural elements, such as the ocean and Country, or recognising physical characteristics such as local landmarks and buildings. More often than not, when asked about what people love about where they live, they often talk about landscape, trees and vegetation. People's response to landscape is inherently part of a place's local character.

Commonly, the key elements in the Baw Baw landscape that contribute to one's perception and experience of their surroundings and environment include:

- Broad expansive district views to surrounding hills and distant mountain ranges.
- Long views to vegetated creek corridors and water bodies.
- Localised views and experiences of established gardens in residential areas.
- Recognition of large established trees and landscaped wind breaks, often in farmland between properties.
- Recognition of the natural features that signify town boundaries.
- The cumulative perception of areas of established canopy trees and green verges in local streetscapes.

The key to understanding local character is being able to describe how the features of an area relate and contribute to the area's own distinct look and feel. Broadly, local character is the combination of the elements that make up the public and private realms. It's the cumulative impact of all the elements that make up built form and streetscape.

The elements that define local character are the site specific relationships between the built form and streetscape. In rural areas these relationships are typically:

- Development pattens such as informal lot sizes and the sporadic siting of buildings.
- Roads and streets that are unmade, often with no kerbs, and wide, allowing long distance views.
- Neighbourhoods that are predominately made up of older dwelling styles, with larger, landscaped building setbacks and significant gaps between buildings.
- Front gardens with low or no fencing that blend into wide nature strips and green verges.
- Established street trees that contribute to a garden character.

Typical example of an entry road into the towns with roadside vegetation and established canopy trees.

Green rolling hills and established trees are typical visual elements that positively contribute to the rural character of Warragul and Drouin

Established street trees and front gardens contribute to the local character of the towns.

Residential housing on larger lots set within the landscape.

5 Natural Elements that Influence Character.

"Maintaining the things that are precious to us - the green landscapes which surround our communities and dynamic rural environments that sustain and offer opportunities for both relaxation and invigoration." Baw Baw 2050 Community Vision.

"The town's magnificent setting is always present through close-range views to hill tops, along ridge lines and open valleys, across undulating farmland, and distant views to the Strzelecki and Baw Baw Ranges..." Warragul and Drouin PSP.

"The trees, shade, rolling hills, tree lined roads and feeling of peace and beauty. We love the birds and beauty" Online survey participant.

The key natural elements that influence local character in Drouin and Warragul are topography, views and landscape. Subdivision layouts should respond to the local landscape and environmental features of the surrounding land. It is the relationship between topography, vegetation and built form that creates a local sense of place.

Topography and Views:

Drouin and Warragul are situated at the base of the foothills that extend from the Strzelecki to the Baw Baw Ranges. Warragul has a higher elevation than Drouin, with the high points located in the north west region, however both towns have significant ridge lines that extend from north to south.

These local topographic conditions create an abundance of viewing experiences. Views range from expansive district views of surrounding farmlands to contained views within valleys and rolling hills. Distant views to the surrounding ranges are often visible from within the established residential neighbourhoods. With new residential development predominately being delivered outside of the established town, often on the surrounding undulating hillsides, housing is highly visible from the town approaches and town centres.

Views of prominent, and often sensitive landscape features should be considered for their contribution to local character. The types of views that are recognised as contributing to local character in Warragul and Drouin include:

- District views to surrounding farmlands and mountain ranges.
- Localised views that provide a sense of containment within the landscape.
- Intermittent views experienced along town gateways.
- Local views of streetscapes and public realm areas.

Sloping land influences water movement, access to sunlight and the visual dominance of buildings within the landscape. In areas where there is sloping land, buildings located on high points protrude and become dominant. This is an issue in Warragul and Drouin where there are large areas of sloping land. Generally, buildings located on slopes greater than 15 per cent will protrude above ridge lines, so require site specific design responses that enable the building to sit within the landscape.

Landscape:

Our understanding of the landscape is often influenced by our viewing experience, and our response to the natural elements because they make it distinctive and memorable. The PSPs articulate a future vision for Drouin and Warragul that specifically responds to local character. Typical landscape characteristics found in the towns include;

- Low lying and elevated farmland.
- Large gum trees found in pockets of remnant bushland.
- Roadside vegetation consisting of dense under storey vegetation.
- Vegetated creek and waterway corridors, and
- Canopy trees and grass verges.

The key natural elements that contribute to Drouin's local character include:

- Creeks and waterway corridors including the Stony and King Parrot Creeks.
- Farmland set on undulating hills and low lying pastures.
- Established European trees forming windrows and clusters along visible ridge lines.
- Prominent stands of remnant Strzelecki Gums scattered across the farming pastures and in some cases, along roadsides.

In Warragul the key natural elements include:

- Hazel Creek, and other smaller creeks, tributaries and water bodies forming an extensive riparian network.
- Predominant hills surrounding the town.
- Established vegetation evident from arrival in the town, from roadside vegetation, to views of prominent, large established trees.
- Mature street trees and wide green verges and nature strips.
- Informal footpath treatments, including gravel, and in some cases, variation in treatments (i.e. surface, width, one or two sided).

There is opportunity to retain, and some cases, enhance many of the landscape characteristics listed above, by retaining and adding to the existing vegetation coverage in new public and private development. Importantly, design outcomes that are site responsive can also improve local environmental and biodiversity values.

6 How Local Character is Changing.

Community and stakeholder consultation was undertaken in the early stages of the development of the Design Guidelines. Gathering local insights was critical in understanding community values and exactly what local character means to residents. The purpose of the early engagement activities was to understand the broad views of the local community around the outcomes of residential development in the UGZ areas. Positive and negative insights were sought in order to understand what elements the community value and better understand which outcomes require future guidance.

The following characteristics are broadly recognised by the community as positive outcomes of new residential development:

- Additional sporting facilities and open space.
- Drainage upgrades.
- Increase in the provision of local parks.
- In some cases, larger house blocks (mainly in Drouin).
- Increased footpaths in some areas.
- Place more priority on the delivery of local infrastructure.
- Provides the opportunity for new residents including young families to enjoy our fantastic towns.
- Enables people who want to live in new, modern homes the opportunity, and in some cases provides variety in house design.

When asked to rate in order of importance the following characteristics that positively contribute to neighbourhood character the following priorities were revealed:

- Views to surrounding land from my neighbourhood (e.g. adjoining farmland and parks).
- Landscaping in the streetscapes (e.g. street trees, planting, water features etc).
- Access to local public open space (e.g. local parks, water bodies, walking trails).
- Landscaping in front yards (private gardens).
- Design and appearance of housing in my neighbourhood.
- Fencing design (e.g. low fences for increased visibility).

Through the online survey, and discussions with people at the Drouin and Warragul drop-in sessions the following common ideas, concerns and priorities were raised:

- Need to improve pedestrian connectivity throughout new residential areas (many people suggested via provision of more shared paths).
- Desire for the delivery of larger playgrounds in new residential areas.
- Supporting infrastructure needs to be delivered in conjunction and consistent with levels of residential development.
- Visual impacts of large sheds located within small residential lots.
- House lot size is too small (common suggested size minimum 600m2).

Specifically, issues around preservation of local character included:

- Concern about the visual impact of new development on surrounding farmland.
- Lack of diversity in housing design.
- Concern around areas of sensitivity between future boundary interface conditions and treatments.
- Strong support for the protection of environmental values and landscape diversity.
- Major concerns around the loss of valuable farmland and loss of roadside vegetation to residential development.

Further analysis was undertaken to understand exactly what elements are contributing to the changing local character in Warragul and Drouin. The key findings are summarised below.

Arrival Experience Into New Residential Areas.

- Experiencing the transition from district views of green farming land to close views of roadside vegetation signifies the arrival experience into the towns.
- The scale of land that is transitioning from farmland to residential uses dominates the visual perception of arriving into the towns.
- Views to rolling farmland and vegetation are being replaced by views of large areas of housing with limited greenery and this is having a detrimental impact on the arrival experience into the towns.
- The visual impact of prominent town gateways are being diminished by new housing development that is inappropriately sited and interfacing with key arrival roads.

Entry roads with wide green verges and distant district views typify the arrival experience in the towns.

Large canopy trees in residential streets frame district views of surrounding farmland.

Tree & Vegetation Coverage.

- Vegetation and landscaping in the public and private realms are key elements that contribute to both Warragul and Drouin's rural character.
- The established residential areas in both towns have a high percentage of tree canopy cover.
- Most residential streets benefit from medium to large street trees.
- Some streets are characterised by large canopy trees that form an avenue and enclose the streetscape. In some cases the trees in these streets are heritage protected.
- The new residential areas do not have the same level of tree and vegetation coverage because of loss through development and due to low levels of new plantings.
- The PSPs recommend retaining existing significant vegetation within the urban growth zone and have identified some areas where remnant vegetation should be retained.
- However, the majority of significant vegetation and trees are not protected by the PSPs and are therefore being removed through residential development, significantly changing the character of the towns.
- The PSPs have identified some vegetation in the main road reserves, and in some cases, existing windrows on private land, however there are other areas of significant vegetation, predominately on private land that should be retained for their contributory value to local character.
- There are no controls to manage the retention of significant trees on sites, or to encourage the retention of vegetation into areas of local open space. Neighbourhoods could be designed around pocket and linear parks.
- There are no controls to encourage planting of new canopy trees and vegetation on new residential lots.
- Appropriately sized street trees are not being delivered in new streetscapes.
- The size and configuration of residential lots influences the ability to retain existing and provide new vegetation and canopy trees. Larger lot sizes allow for the retention and provision of appropriately sized canopy trees within the private realm.
- It is recommended that an audit be undertaken assessing the value of existing vegetation throughout the UGZ areas (on both public and private land).

Typical examples of an entry roads into the towns with roadside vegetation and established canopy trees.

Established trees in both the private and public realm are key elements in local character.

Subdivision, Lot & Housing Design In New Residential Areas.

- New patterns of development in the UGZ areas are more regular in size and shape, in comparison to what had traditionally been delivered in the town's established areas.
- Typically, new housing lots are smaller and dwellings are larger so the building site coverage has increased.
- Generally overall building site percentage ranges from 30% to 45%, however site coverage is influenced by the slope of the land.
- The increase in site coverage and the increase in the areas of impermeable surfaces on lots limits opportunities for canopy tree planning within a lot.
- Combined these factors restrict the opportunity for the planting of canopy trees in front, side and rear building setbacks, and the built form becomes the dominant element, both in the streetscape and when viewed from afar.
- New dwellings appear to be repetitive in style and colours, resulting in homogeneous streetscapes which are a contrast to established parts of the towns.
- Roof colours being specified on new dwellings are predominantly dark colours – grey and black, which is resulting in roofing becoming the predominant element of many views.

Figure 3. Typical residential layout in the established areas in Warragul (GRZ)

Figure 4. Typical residential layout in the greenfield areas in Warragul UGZ)

Figure 5. Typical residential layout in the established (GRZ) areas in Drouin

Figure 6. Typical residential layout in the established (UGZ) areas in Drouin

Housing Design on Sloping Sites

For both townships there is a significant area of flat and moderately sloping areas which will support a range of housing types with limited earthworks however:

- In Warragul there is a higher proportion of steep (10% 1:10) and very steep (15% 1:6.7) land in comparison to Drouin.
- Approximatively 37% of urban growth zone land in Warragul is categorised as steep (10%) or very steep (15%) sloping land.
- In comparison Drouin has approximately 18% steep (10%) or very steep (15%) sloping land within the urban growth zone.
- These areas will require careful design to ensure attractive neighbourhoods are delivered with a level of amenity for residents.
- The challenge to design new dwellings that respond to the sloping land to avoid the need for substantial retaining walls. Large retaining walls become dominant visual elements in views and diminish the quality of private open space for new dwellings.

Streetscape Character

- Typically roads have more engineered treatments than streets in established areas. The hardscape is not balanced by the scale of trees and under storey planting so it becomes the dominant visual element in a new streetscape.
- Street trees whilst maturing are usually small which limits their visual contribution to the streets look and feel, until the trees grow and mature.
- Road reserves are wider and have less street trees, resulting in the perception of increased impermeable surfaces and less vegetation.
- The quality of the private realm also contributes to the streetscape character. In particular, the size and amount of landscaping in front gardens contributes to the greenness of the adjacent street.

A typical view of new residential housing being delivered on sloping land.

A comparison of a streetscape in an established residential neighbourhood (above) to a streetscape in the urban growth zone (below) shows the significant contribution established trees make and the negative impact that impervious surfaces have on the look, feel and function of a residential street.

7 What Shapes Residential Development?

Relevant Strategies & Plans

State and local government establish the policy context in which residential development occurs. There are a range of strategic plans that influence how new residential development is delivered in established and emerging neighbourhoods.

The key influencing documents are:

- Baw Baw Shire Planning Scheme - Local Planning Policy.
- Warragul & Drouin Neighbourhood Character Study (August 2011).
- Settlement Management Plan (August 2013).
- Drouin Precinct Structure Plan (PSP) (2014).
- Warragul Precinct Structure Plan (PSP 2014).
- Warragul and Drouin Precinct Structure Plans (Review – 2020).
- Drouin Township Plan 2020-2036 (2020).

Local Planning Policy Baw Baw Shire Planning Scheme.

Relevant Policy Objectives:

- Confirmation of the agreed vision for the Shire as 'Happy, healthy people, sharing prosperity and knowledge from living sustainably and in harmony with our rural identity, thriving villages and productive and inspiring landscapes'. (Clause 21.02).
- Recognising the valued local character, specifically the attractive rural landscape of forested mountains, cleared hills and river flats together with the amenities of the towns, and the high quality lifestyle and opportunities for tourism, it affords. (Clause 21.02).
- Valuing the local environment and protecting the Shire's rural character by recognising the wealth of natural attributes, including its tall Ash forests with shady fern gullies and cool mountain streams, its undulating alpine herb fields, its leafy reserves and parks and its native animal species. (Clause 21.02).
- Recognition that the Shire's continuing growth, particularly in Warragul and Drouin has placed strong pressure on the use of high quality agricultural land for residential purposes (Clause 21.01).
- Warragul and Drouin are developing complementary roles as a combined Regional Centre, Drouin taking a secondary role. Land has been identified and rezoned on the periphery of Drouin and Warragul suitable for urban use to support the future development of sustainable, high-growth settlements. (Clause 21.03).

Mechanisms To Achieve The Desired Outcomes:

- Any further residential rezoning of land in the growth areas is subject to Precinct Structure Plans (PSPs) providing integrated neighbourhoods and clarity on infrastructure provision.
- Recognition of Drouin's key character attributes:
  - Views to surrounding farmland and mountain ranges.
  - Garden suburb development in older parts of the town.
  - A collection of heritage significant buildings, trees and structures.
  - Flowering gum-lined boulevards.
- Recognition of Warragul's key character attributes:
  - A collection of heritage buildings, trees and structures.
  - Hilly topography.
  - Farmland setting.
  - Garden suburb development.

Settlement Management Plan (August 2013)

Relevant Policy Objectives:

- To outline how growth and development should be accommodated and managed in alignment with community aspirations, demographic trends, the provision of infrastructure, services and environmental values.
- To acknowledge that it is unusual to have two large population centres with distinct characters and historical/cultural backgrounds in close proximity to one another.
- To ensure consistency with State, regional and local strategic directions, and community and stakeholder views.

Mechanisms To Achieve The Desired Outcomes:

- Warragul and Drouin should maintain and enhance their separate identities.
- Recognition that a lack of diversity in housing in greenfield residential estates (single dwelling on the lot) may not meet the needs of changing demographics and household types.
- Agreement of the need to manage residential development design on sloping land in Warragul.

Direction to retain Drouin's:

- Country lifestyle, connections to the landscape and village atmosphere.
- Open space links and views to rural landscapes are valued elements.
- View lines to rural areas, particularly along roads and vantage points. These view corridors need to be identified and considered in the development of new housing areas.

Warragul & Drouin Neighbourhood Character Study (August 2011)

Relevant Policy Objectives:

- To define neighbourhood character as the combination of the public and private realms, not simply about architectural style or era of development.
- To provides an assessment of pre-1970 residential development in Warragul and Drouin, identifying areas that will benefit from further planning controls to ensure areas that are developed retain neighbourhood character.

Outlines two distinct character types for Drouin and Warragul:

1. Garden Suburban – Spacious residential areas in a garden setting that have a formal street pattern and generally modified grid. Garden suburban precincts are generally located in the town centres and in the surrounding general residential zone.

2. Garden Court – Spacious residential areas in a garden setting that have informal, generally curving, street patterns, often with court/cul-de-sacs. Garden court precincts are generally scattered through the outskirts of the towns.

Identifies neighbourhood character precincts including those that are potentially significant and those that have potential for Heritage Overlay controls. In Drouin, there are 3 potential significant character areas, and 1 potential significant character area with potential heritage overlay control. In Warragul, besides to the 7 potential significant character areas and 2 potential significant character area with potential heritage overlay, there are potential inclusion areas to garden court precinct.

It is important to note that this study did not consider development post-1970, which accounts for the majority of the existing development in Drouin.

Mechanisms To Achieve The Desired Outcomes:

- Outlines a tool kit of possible recommendations for key areas that may be justified for further statutory protection through the use of overlay controls.
- Subsequent work has been undertaken to protect areas/buildings identified as having heritage significance in the Planning Scheme through heritage overlays.

Drouin Precinct Structure Plan (PSP) (2014)

Relevant Policy Objectives:

- To accommodate growth, while still protecting and celebrating the town's 'rural character and magnificent landscape'. The PSPs key message is that while growth presents challenges, it can also bring about positive change.
- To provide certainty for the development industry, Council and community through guidance on how to deliver 7,400 new homes over the next 30 to 50 years.
- To strengthen existing infrastructure to service an increased population, from 11,000 to 29,000 residents, including:
    - A new road network that provides alternative routes through and around the town, including the Drouin South Bypass, a new connection from Main South Road to Princes Way. (This has been partially constructed as a Connector Boulevard - which includes a single lane in either direction)
    - 18 kilometres of new pedestrian and cycle paths, building on the success of the two-towns trail.
    - 46 hectares of new open space, including new large regional parks in the south and north of town.
    - Provision for two new community centres and two new schools.
    - One neighbourhood centre and one village convenience centres, providing convenience retail and essential services closer to where people live.
    - An expanded business and industry precinct to increase the number of local jobs.

Warragul Precinct Structure Plan(PSP) 2014)

Relevant Policy Objectives:

- To seek to protect and celebrate the town's 'rural character and magnificent landscape' while accommodating anticipated growth. Central to the vision for Warragul is the town's 'country feel' and maintaining this through retention of views from the town to open valleys, rolling hills and trees.
- To guide the town's growth from 14,000 to 44,000 residents through the construction of 12,500 new homes over the next 30 to 50 years.
- To recognises the opportunities to integrate the water corridors into a connected network of linear open space and, protect the remnant vegetation that lines the rural roads.

Mechanisms To Achieve The Desired Outcomes:

- Street trees must be provided on both sides of all roads and streets (excluding lane ways) at regular intervals appropriate to tree size at maturity.
- Streets must be aligned to protect short vistas to waterways, open space, and surrounding landscape (refer to Plan 3).
- Development must address prominent sections of the town boundary, with public streets or direct building frontages. (refer to Plan 3).
- Residential lot and street layouts must not prejudice the ability for the town boundary to be extended and for effective integration with future development, particularly where lots directly adjoin the town boundary.

Warragul and Drouin Precinct Structure Plans, Review – 2020

Relevant Policy Objectives

- To determine whether there are adequate strategies or tools available within the PSPs to achieve the desired development outcomes.

Review Outcomes:

- Key recommendation identified the need for guidelines that articulate design strategies that will achieve:
    - Preservation of Baw Baw Shires' rural character through retention of significant landscape elements and maximising views to the town's hinterland (Objective 1).

- Practical, viable and attractive interfaces between residential, existing low-density residential, industrial, commercial, and agricultural uses (Objective 4).
- A diversity of streetscape and open space outcomes that enhance local distinctiveness and amenity (Objective 9)
- A series of neighbourhoods with discernible character and a community focus (Objective 11).

·Mechanisms To Achieve The Desired Outcomes:

- The Guidelines will support the strategic intent of the Warragul PSP and the Drouin PSP by providing design guidance on how to achieve:
  - Vistas to be protected or created, and the correct locations of the prominent hilltops, panorama, existing vegetation to be retained, supporting Objective 1.
  - Site responsive development considerate of sensitive interfaces, particularly for land abutting existing Low Density Residential Zone, Rural Living Zone and Farming Zones, supporting Objective 4.
  - Clearly defined town and UGZ approaches through considered, site responsive built form and landscaping treatments within the public and private realm, supporting PSP Guideline 8.
  - Alternative street sections that better contribute to local character, supporting Objective 9.
  - Bringing all the local character elements together to ensure all future development in residential areas positively contribute to creating discernible local neighbourhoods, supporting Objective 11.

Relevant Zoning and Overlays

- The guidelines relate to land located within the Urban Growth Zone (UGZ) and General Residential Zone (GRZ) in Warragul and Drouin.

8 How Can We Improve Design Outcomes?

Generally PSPs provide a response to the significant and continuing population growth across Greater Melbourne and beyond. There is dissatisfaction from key stakeholders with the way the Warragul and Drouin PSPs are guiding growth, and this is compounded by the rapid rate at which the growth is occurring. There is agreement that the vision and objectives of the PSPs are sound, however the results being delivered are not meeting the expectations of the community. Some community members have concerns around the loss of Baw Baw Shire's rural character due to the suburban nature of new developments in the PSP areas.

The focus of the Design Guidelines is to fill the existing policy gaps, in particular, provide the detail to support the objectives and requirements of the Warragul and Drouin PSPs. As identified earlier, the PSPs have established the framework for land that will be developed for future residential housing. These guidelines have been developed to provide design responses to the PSP objectives and to respond to key concerns identified through community engagement. Specifically the following PSP objectives:

- Preservation of Baw Baw's rural character through retention of significant landscape elements and maximising views to the town's hinterland.
- Practical, viable and attractive interfaces between residential, existing low-density residential, commercial & agricultural uses.
- A diversity of streetscape and open space outcomes that enhance local distinctiveness and amenity.
- A series of neighbourhoods with discernible character.

To improve future design outcomes in new neighbourhoods the guidelines focus on providing advice on how to respond to and objectively consider:

- Sensitive interface conditions - the guidelines focus on providing appropriate buffers between sensitive land uses.
- Housing design on areas of sloping land - the Guidelines are focused on the earlier stages of development - considering how the street network, lot design, retaining walls and site earthworks are undertaken in a way that supports a range of housing. Developers will need to consider and plan for the likely housing types that will be delivered on each lot.
- Retention of key elements that contribute to the local character, particularly trees and vegetation - the Guidelines focus on encouraging site responsive subdivision and streetscape design as the best strategy for tree and vegetation retention.
- Strengthening the township arrival gateways - the Guidelines focus on providing advice on design outcomes that will influence the viewing and arrival experience into the towns.

The principles of tree retention and context responsive design underpin the design advice outlined in the design guidance for infill residential development.

View of a new residential area in Drouin.

Part B - Design Guidelines for New Communities.


WATTLEGLADE AV
20
km/h

1 Urban Growth Zone Design Guidelines

What are We Responding To?

The Precinct Structure Plans (PSPs) for Warragul and Drouin identify at total of 1620 hectares of future residential land, which is a 99% increase on the existing residential land within the towns. This growth will have significant impact on the look, feel and function of both towns.

The growth is happening now. Rolling farming land on the outskirts of town is gradually transforming into new communities, delivering significant amounts of housing, roads and expansive open space. The new estates look different to the established areas of Warragul and Drouin. Housing is generally less spacious, dwellings are highly visible, there is minimal landscaping in private gardens and there is limited retention of the large trees that previously characterised the landscape.

The entrances into both towns are also changing. The experience of driving through rural land with expansive views then transitioning to low density housing before arriving in town is being impacted by new development. Views are often interrupted by extensive areas of housing with a dominance of roofing and road pavements.

The community feedback undertaken as part of this project also identified new development in the growth areas as a key concern. In particular the loss of farming land, loss of vegetation, response to sloping land and the visual impact of new housing were key themes.

The Warragul and Drouin PSPs were reviewed by the Baw Baw Shire in June 2020. The review identified a number of areas where the PSPs lacked detailed guidance to achieve the specified objectives and recommended the development of Design Guidelines to achieve:

- Preservation of Baw Baw Shires' rural character through retention of significant landscape elements and maximising views to the towns' hinterland.
- Practical, viable and attractive interfaces between residential, existing low-density residential, industrial, commercial and agricultural uses.
- A diversity of streetscape and open space outcomes that enhance local distinctiveness and amenity.
- A series of neighbourhoods with discernible character and a community focus.

Design Guidelines have been developed to respond specifically to the PSP review and the key concerns identified through community engagement.

Example of new housing being delivered in Warragul.

How to Use the Design Guidelines

The Design Guidelines (the Guidelines) have been prepared to ensure a more considered approach to the development of Warragul and Drouin's growth areas. They aim to build on the identified valued characteristics of Warragul and Drouin by embedding these elements in the design of future residential neighbourhoods.

The Guidelines provide clear direction around how to achieve site responsive design outcomes that complement Warragul and Drouin's valued local character without compromising the development capacity of the Urban Growth Zone.

They have been developed as a tool for landowners, developers, statutory planners and the community to assist with the development assessment process to ensure improved design and development outcomes.

The diagram below outlines how the Guidelines apply and which section to refer to when planning, designing and reviewing development applications within the UGZ areas.

The Approvals Process

The Guidelines do not seek to replace, override or vary the PSP objectives and principles, or the objectives, standards and decision Guidelines that are set out in Clauses 54, 55 and 56 of the Baw Baw Planning Scheme. The Guidelines provide a finer grain of detail that will influence site specific outcomes.

Refer to each guideline section for any specific application requirements for new subdivision within the UGZ areas.

Section 1. Interface Guidelines

Identifies a range of interfaces and outlines how development should respond

Section 2. Slope Response Guidelines

Outlines how subdivision, lot design and development should respond to a range of slope conditions

Section 3. Public Realm Guidelines

Outlines a range of design Guidelines for achieving a more site responsive public realm that integrates existing character elements

Section 4. Neighbourhood Identity Guidelines

Provides guidance for new estates to create distinctive neighbourhood identities that respond to rural character

Section 5. PSP Precincts

Gateway Guidelines - Provides recommendations and Guidelines for strengthening the key Gateways into Warragul and Drouin

Guidelines Map - Identifies where the interface, slope response and public realm Guidelines apply within each PSP precinct

2 Interface Guidelines

Overview

The majority of the growth areas are bordering with either Farming Zone (FZ), Rural Living Zone (RLZ) or Low-Density Residential Zone (LDRZ) land. As land within the Warragul and Drouin growth areas develops, there will be locations where new conventional residential housing is delivered on land which interfaces with existing low-density residential lots, farming land and key town approaches.

In some instances, new development in the growth areas may have positive impacts on the amenity and uses, particularly through improved access to path connections, shopping facilities, public transport and public open space. However, there is also potential for new development to have detrimental impacts on the amenity of existing low density residential areas, as well as impact on existing farming operations and the arrival experience into the towns.

In the case where new housing is delivered in areas adjacent to existing low density residential housing there is potential for the increased development and activity to impact on the quietness of the area, and for the outlook from existing low density housing to change dramatically.

There will be instances where new housing is located in close proximity to existing farming operations. This presents potential conflict in terms of noise and the use of farming equipment and hazardous materials. There is also the potential for new residential development to impact on visual amenity of tourism and hospitality businesses.

It is evident that some new residential development has adversely impacted on the visual amenity and the strong sense of arrival into the towns. In some case views to surrounding farmlands and landscape features that contribute to the gateway experience have been obscured by fencing and new housing.

New residential neighbourhoods must sensitively address adjoining low density residential areas, farming land and town approaches. The purpose of these Guidelines is to demonstrate how sensitive interfaces can be designed to minimise adverse amenity impacts. Future development will need to consider how to appropriately respond to the following interface conditions:

Interface 1 Residential land within a PSP with Existing Low Density Residential Zone (LDRZ)

- Where there is direct abuttal between the uses, the Guidelines aim to reduce amenity impacts and maintain the spacious, landscape dominated outlook from existing low density properties. This will be achieved by minimising the number of new conventional lots adjoining the existing low density lot, providing large building setbacks and a landscape buffer on the new lots.
- Where an existing road separates conventional and low density residential, the Guidelines aim to maintain the spacious streetscape character. This will be achieved by providing generous landscaped front and side setbacks and gaps between conventional residential dwellings.

Interface 2 - Residential or Low Density Residential Land within a PSP with Farming Zone (FZ) / Rural Activity Zone (RAZ).

- The Guidelines aim to minimise operational and amenity conflicts between existing farming and tourism uses with future residential areas, and capture the outlook across the rural land. This will be achieved by providing a road separation between the uses where possible, to maximise the landscape buffer and capture rural views from the public realm. Where a road is not achievable, larger building setbacks and a landscape buffer on the new lots will be provided along with compatible fencing outcomes.

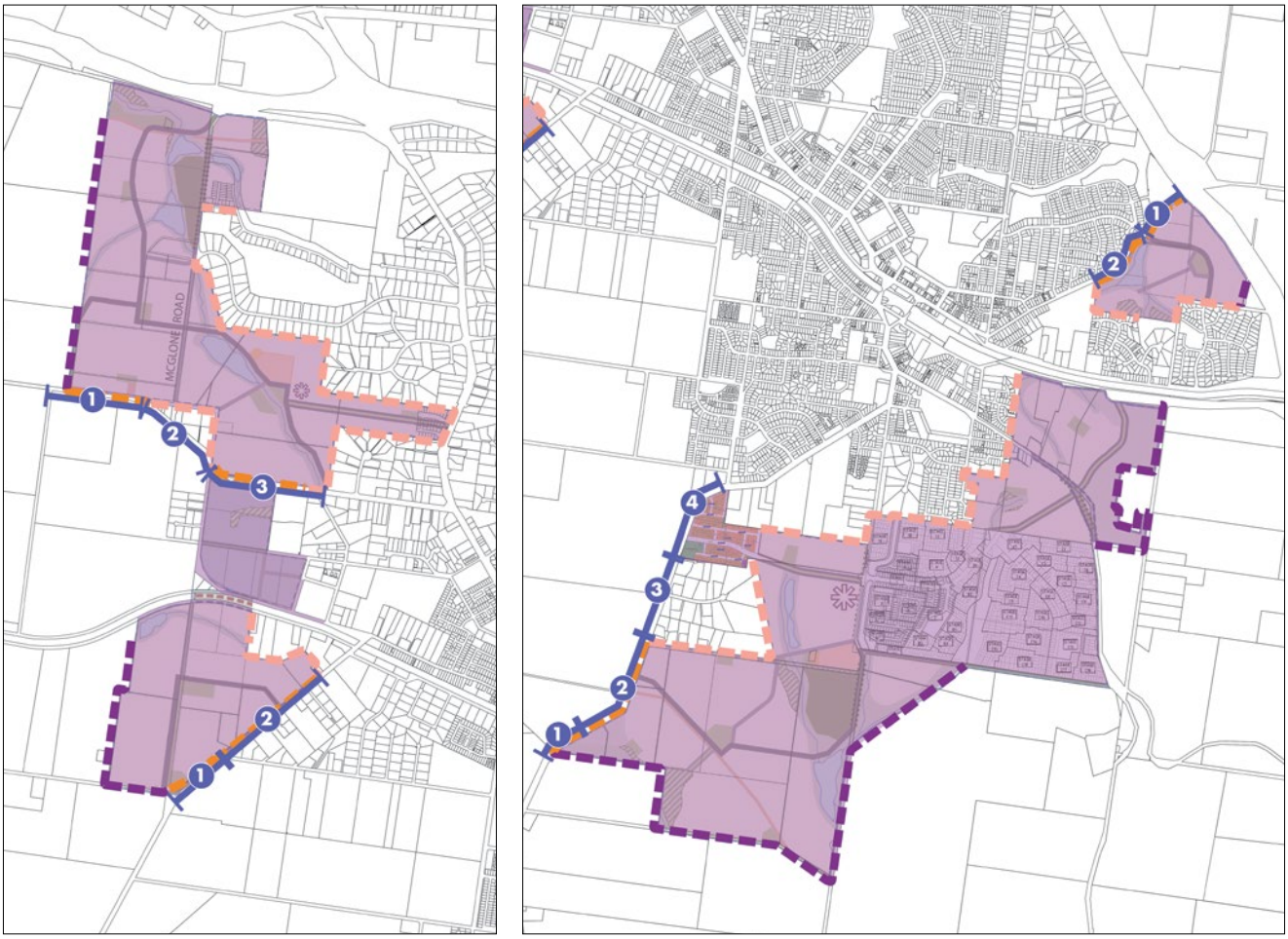
Interface 3 - Residential and Low Density Residential within a PSP and an identified Town Gateway

- The Guidelines aim to enhance the town gateways by reflecting the spacious and natural character of the entry. This will be achieved by providing larger, landscaped front setbacks, high quality housing and service road streetscapes that are compatible with the gateway. A key element of the entries is the presence of remnant canopy trees within the road reservation and the sense of spaciousness.

Refer to Figures 7 and 8 which identify the various interfaces across the residential areas of the Urban Growth Zone.

Examples of typical interface conditions found in Warragul and Drouin

Figure 7. Interface conditions in the UGZ areas in Warragul



LEGEND

- URBAN GROWTH ZONE
- INTERFACE 1 - RESIDENTIAL LAND WITHIN A PSP WITH EXISTING LOW DENSITY RESIDENTIAL ZONE (LDRZ)
- INTERFACE 2 - RESIDENTIAL OR LOW DENSITY RESIDENTIAL LAND WITHIN A PSP WITH FARMING ZONE (FZ) / RURAL ACTIVITY ZONE (RAZ)
- INTERFACE 3 - RESIDENTIAL/LOW DENSITY RESIDENTIAL WITHIN A PSP INTERFACE WITH AN IDENTIFIED TOWNSHIP GATEWAY
- INTERFACE 4 - RESIDENTIAL WITHIN A PSP INTERFACE WITH EXISTING CONVENTIONAL RESIDENTIAL

Figure 8. Interface conditions in the UGZ areas in Drouin

Guidelines

01 Interface 1 - Residential within a PSP and Existing Low Density Residential Zone (LDRZ)/Future Low Density within a PSP

Objectives

O1.1 To maintain the spacious and landscape dominated outlook from existing low density residential properties.

O1.2 To ensure development appropriately addresses existing roads and maintains the spacious streetscape character.

Guidelines

Existing direct abuttal between uses (refer to Figure 9)

G1.1 Minimise the number of adjoining properties by providing residential lots of at least 20m in width along the common lot boundary of the LDRZ properties.

G1.2 Provide residential lot depths of at least 36m along the common boundary with the LDRZ properties. New dwellings should be set back from the common lot boundary by at least 10m.

G1.3 Provide a landscape buffer within the lot along the common lot boundary of at least 3m in width. This area should function as a visual buffer and should be planted with canopy trees that can reach up to 6m in height and shrubs up to 3m in height. It should not contain any structures.

Existing road separation between uses (refer to Figure 10)

G1.4 Provide residential lots of at least 20m in width along the road frontage in order to respond to the wider LDRZ lots.

G1.5 Dwellings should have spacious front setbacks of at least 10m. The front setback should be planted with at least two small to medium canopy trees that are consistent with the local streetscape planting themes.

G1.6 Avoid paired driveways and garages to maintain regular spacing of dwellings along the road frontage.

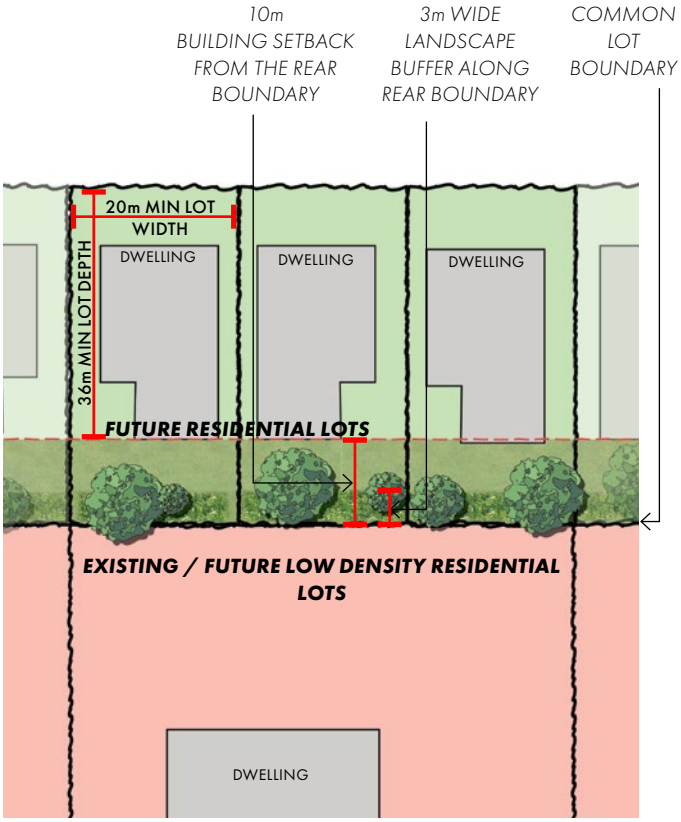


Figure 9. Existing Direct abuttal between Residential within a PSP and Existing Low Density Residential Zone (LDRZ)/Future Low Density within a PSP

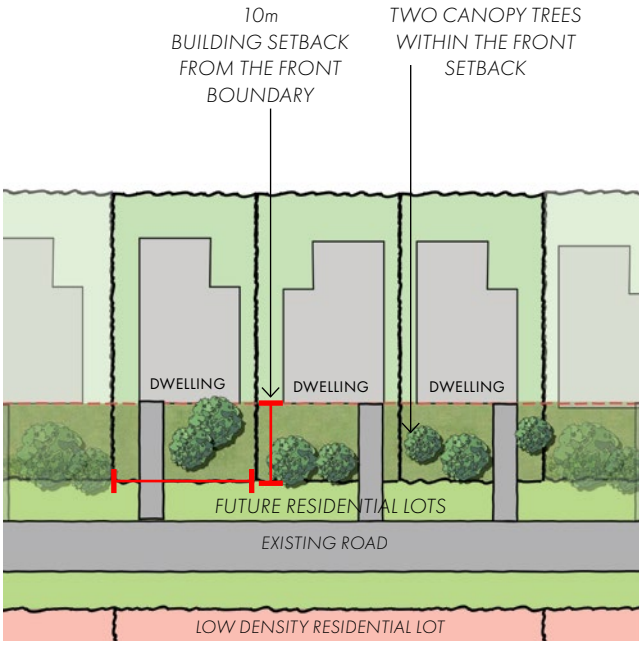


Figure 10. Existing road separation between Residential within a PSP and Existing Low Density Residential Zone (LDRZ)/Future Low Density within a PSP

02 Interface 2 - Residential within a PSP and existing Farming Zone (FZ) / Rural Activity Zone (RAZ)

Objectives

O2.1 **To minimise potential conflict between residential areas and adjacent farming, hospitality or tourism operations.**

O2.2 **To ensure development appropriately addresses existing roads and maintains the spacious and landscape dominated streetscape character.**

Guidelines

Existing direct abuttal between uses (refer to Figures 11 & 12)

G2.1 Where topography and lot configuration allows, provide a road along the interface to allow dwellings to capture views across the rural land. The road reserve should contain a landscape buffer (min. 3m wide) and be planted with shrubs and canopy trees.

G2.2 If it is not possible to provide a road, minimise the number of adjoining properties by providing lots of at least 20m in width along the common lot boundary of the FZ/RAZ properties.

G2.3 Provide lot depths of at least 36m along the common lot boundary of the FZ/RAZ properties. Dwellings should be set back from the common boundary by at least 10m.

G2.4 Provide a landscape buffer along the rear of the properties of at least 3m in width. The buffer should be planted with canopy trees that can reach up to 6m in height and shrubs up to 3m in height and not contain any structures.

G2.5 Where an existing hospitality use is located on the neighbouring property, consider impacts on key views from the hospitality use. Locate open space along the key view lines and maintain existing stands of vegetation which contribute to the view or will screen future residential development and rear fencing at the interface.

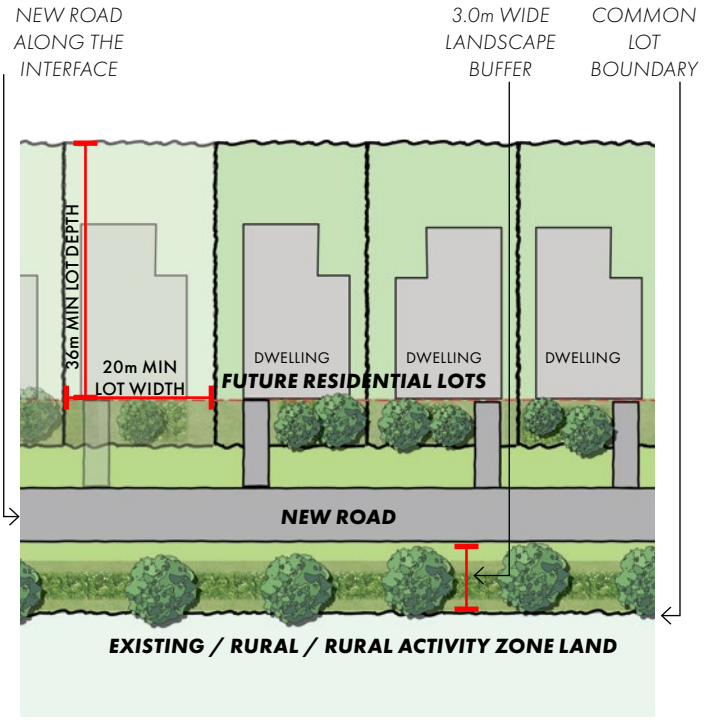


Figure 11. Existing Direct abuttal between Residential within a PSP and existing Farming Zone (FZ) / Rural Activity Zone (RAZ) - new road frontage outcome

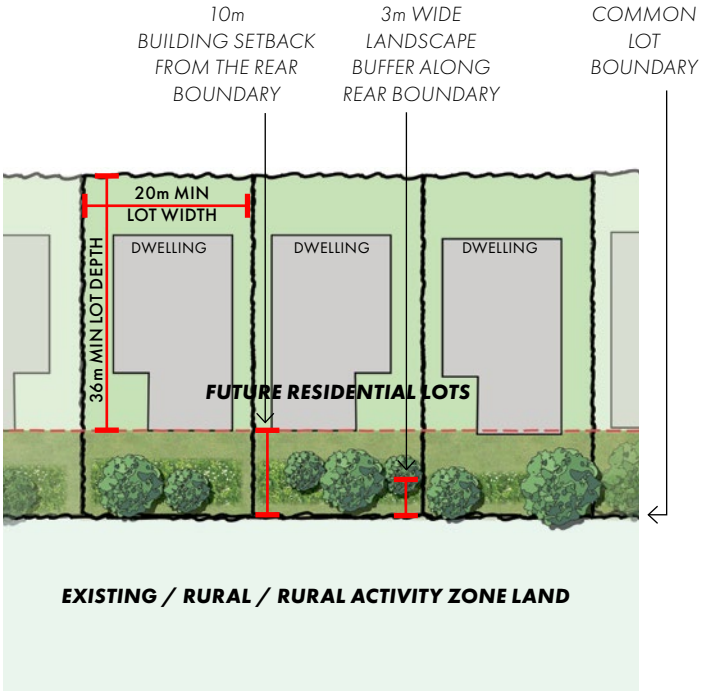


Figure 12. Existing direct abuttal between Residential within a PSP and existing Farming Zone (FZ) / Rural Activity Zone (RAZ) - Abutting lots outcome

G2.6 Where the neighbouring properties are farming land (FZ), design the subdivision to ensure new development is compatible with ongoing farming uses. Consider the use of road frontages with landscape buffers and open space to provide a buffer between the land uses.

Existing road separation between uses

G2.7 For conventional density residential areas, provide lots of at least 20m in width along the road frontage.

G2.8 Avoid paired driveways and garages to maintain regular spacing of dwellings along the road frontage.

G2.9 Conventional residential dwellings should be set back from the front property boundary by at least 10m.

G2.10 Provide a minimum of two canopy trees within the front setback.

03 Interface 3 - Conventional Residential within a PSP and a town approach

Objective

O3.1 To enhance the town arrival experiences by providing high quality residential development that integrates with the spacious and natural streetscape character.

Guidelines

G3.1 Design the road network of future residential subdivisions to ensure that development will front onto the town approach. This may be achieved by utilising service roads or an internal loop road network. Refer to Figures 13 & 14.

G3.2 Encourage new residential development to front onto service roads, rather than directly onto the town approach. This preferred outcome buffers housing from road noise and creates a spacious streetcape appearance, particularly where opposite low density land and farming zone land. Where a service road is provided as the interface to an approach, incorporate the following elements:

- Existing significant roadside vegetation within the road reserve.
- Planting landscaping that integrates with the surrounding natural environment.
- Planting low level shrubs and grasses in conjunction with canopy trees to create a well vegetated under-storey.
- High quality built form outcomes.

G3.3 Where direct access or a service road is not appropriate, residential lots may side onto the approach provided:

- Side fencing is unobtrusive and does not exceed 1.5m in height.
- The length of side fencing does not exceed 60m in length without a break.
- A minimum 5m landscape buffer is provided along this interface to screen side fencing.
- The landscape buffer provides effective screening through the design of landscaped mounding combined with planting of shrubs and canopy trees.

G3.4 Rear fencing fronting the town arrival road should be avoided.

G3.5 Limit vehicle access points along approaches in order to minimise disruption to footpaths and to avoid the need to remove mature street trees and to reduce impacts on vegetation.

G3.6 Provide larger front setbacks to contribute to the spacious character of the entrance. Front setbacks should be planted with a minimum of one canopy tree per lot frontage combined with lower scale planting. The canopy tree should be capable of reaching a minimum of 4m in height. Utilise planting themes that complement the gateway planting.

G3.7 Side setbacks that address and/or are visible from an approach should be a minimum of 3 metres wide to enable sufficient space for landscaping to improve the preferred character of the approach.

G3.8 Retain large canopy trees and provide additional informal planting of canopy trees to strengthen the tree cover within the road reservation in new residential areas.

G3.9 Incorporate low key entry features that utilise landscaping rather than large built elements to define the entry to a residential estate, where appropriate.

G3.10 Fencing along the front boundary, where it interfaces with an approach, should generally be avoided. Utilise landscaping where possible to delineate the front property boundary.

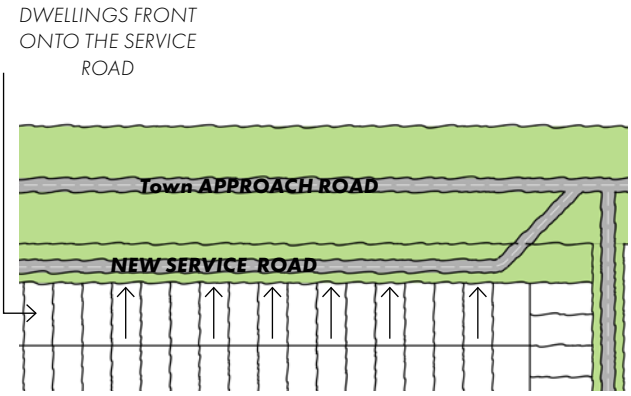


Figure 13. Residential lots fronting onto a new service road

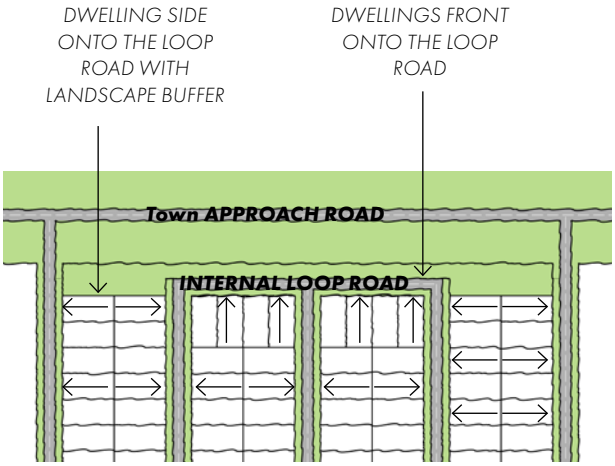


Figure 14. Loop road interface with a mix of lots fronting and siding on

Figure 15. Example where dwellings front onto a service road

3 Slope Response Guidelines

Overview

The Warragul and Drouin Growth Areas are characterised by a range of topographic conditions including undulating hills, ridge lines, creek gullies and flat areas. The varying topography contributes to the distinctive landscape character of the towns however it also presents challenges for designing and developing new residential communities.

Careful design is required to ensure new development complements the natural features and topography of the region. This involves consideration from initial planning of a site through to lot configuration, earthworks and building design.

These Guidelines are focused on the earlier stages of development, which are generally delivered by a land developer. It is important that the street network, lot design, retaining walls and site earthworks are undertaken in a way that supports a range of housing types for new residents. Developers will need to consider and plan for the likely housing types that will be delivered on each lot.

The Guidelines provide design suggestions that will help to create safe and pleasant neighbourhoods and housing, for residents and visitors.

The Guidelines apply to land within the Urban Growth Zones which has a slope gradient of 5% or greater and is classified as Residential or Low Density Residential within the PSPs.

Local Slope Conditions

For the purpose of these Guidelines, slope gradients across Warragul and Drouin have been classified into the following categories:

- **Flat Land:** 0 to 5% gradient (0 to 1:20)
- **Moderate Slope**: 5 to 10% gradient (1:20 to 1:10)
- **Steep Slope:** 10% to 15% gradient (1:10 to 1:6.7)
- **Very Steep Slope**: 15% to 20% gradient (1:6.7 to 1:5)
- **Extremely Steep slope:** 20% or greater (1:5 or greater)

Refer to Figure 16 for an overview of the gradients.

Specific Guidelines and lot size recommendations apply to the slope categories outlined above. Figure 11 maps how these slope categories apply across the future Residential and Low Density residential areas within the Urban Growth Zone of Warragul and Drouin.

Figures 17 and 18 identifies the proportion of conventional residential and low density residential land with land within each slope category for the UGZ areas of Warragul and Drouin.

For both towns there is a significant proportion of flat and moderately sloping areas, which will support a range of housing types with limited earthworks.

For Warragul there is a higher proportion of land within the steep slope and very steep slope categories compared to Drouin. These areas will require careful design to ensure attractive neighbourhoods are delivered with a high level of amenity for residents.

The significant amount of steep and very steep land across the growth areas highlights the importance of ensuring these Guidelines are implemented in a consistent and effective way.

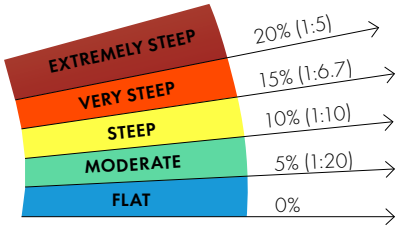


Figure 16. Slope Categories

Warragul - Amount of Residential and Low Density Residential land within each slope category

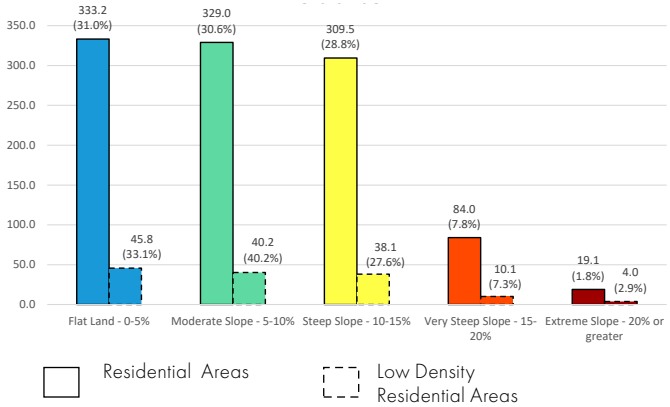


Figure 17. Percentage Distribution of slope across Warragul

Drouin - Amount of Residential and Low Density Residential land within each slope category

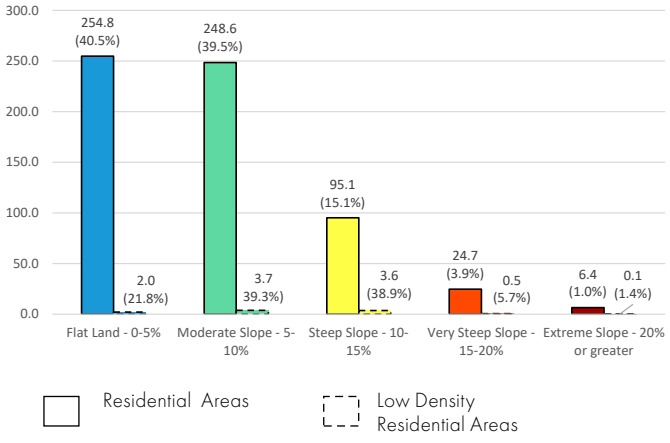


Figure 18. Percentage Distribution of slope across Drouin

Applications Requirements

For sites with development areas over 10% in slope the application for subdivision must be accompanied by a Slope Management Plan. The plan will respond to these Guidelines and provide the following information, as appropriate:

- Lot sizes clearly labelled on the proposed plan of subdivision.
- A slope analysis plan derived from the natural contours of the site.
- A lot density plan showing lot boundaries with dimensions, contours and different colours for medium density housing and each lot size category to indicate how a range of lot sizes have been provided.
- Building envelope dimensions where specified.
- Location and approximate depth of any proposed earthworks.
- The location, approximate height and materials for proposed retaining walls or other methods of retaining soil batters.
- The location and approximate grade of any proposed roads and paths.
- The location of driveway crossovers and estimates of the likely grade of future driveways.
- Written summary outlining how the development application responds to these Guidelines.

Additional technical reports may be required including:

- An engineering report where earthworks exceeding 1metre cut below ground level or 1metre fill above natural ground level are proposed. This report should detail as appropriate, subsurface conditions and materials, an evaluation of the stability of slopes and assessment of risks posed by site conditions, earthworks and built structures.

Figure 19. Slope response categories in the UGZ areas of Warragul

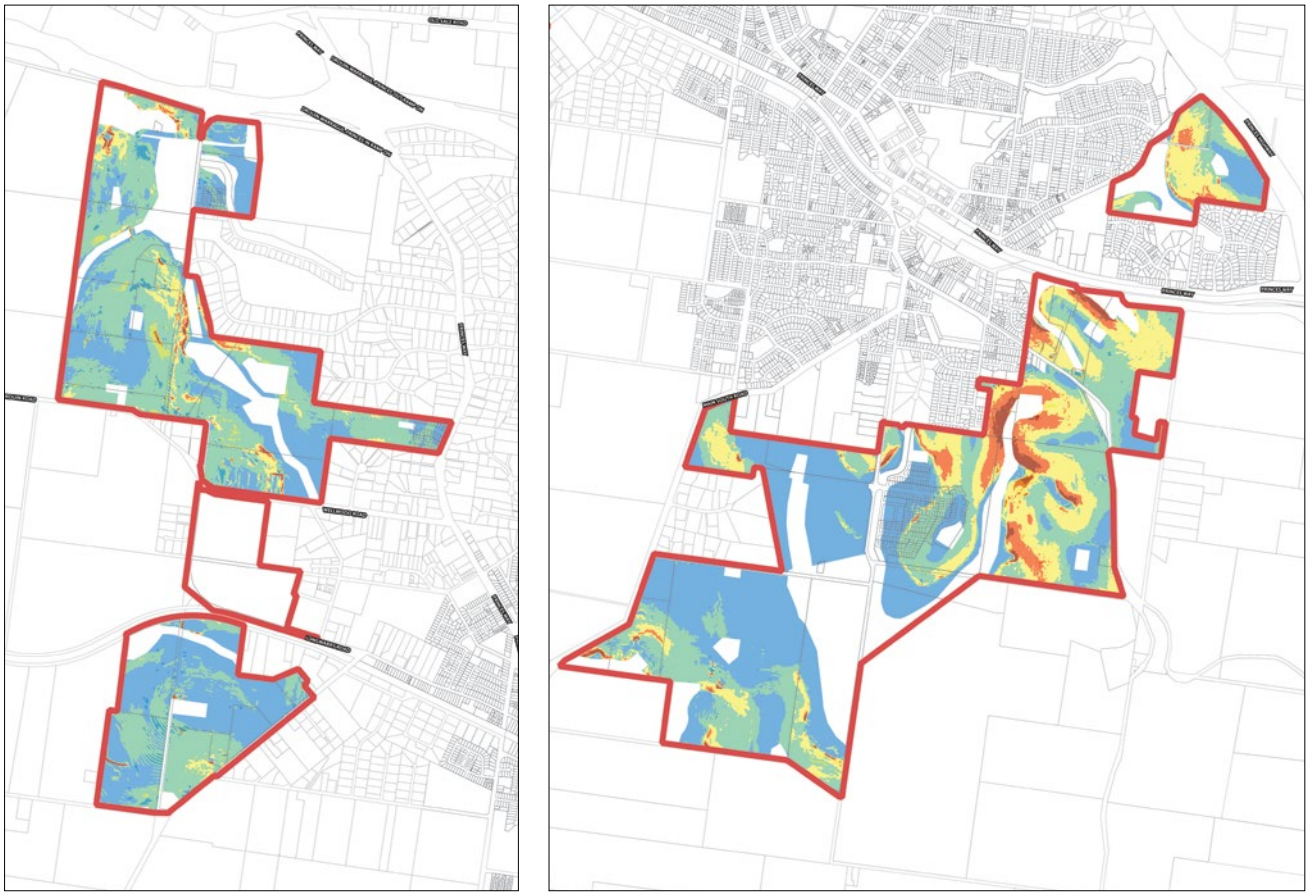


Figure 20. Slope response categories in the UGZ areas of Drouin

Guidelines

04 Street Layout and Design

Objective

O4.1 To ensure new streets are designed to respond to the natural topography and provide safe and convenient access for all.

Guidelines

G4.1 Street layouts should be designed to maximise views to key topographical features such as ridge lines, hilltops, waterways and valleys.

G4.2 Street layouts should respond to the natural topography and be designed to run parallel or perpendicular to the contours of the land where possible. This will result in more consistent fall across future allotments. Refer to Figure 14.

G4.3 Roads should be avoided where land slope is greater than 20%. In these locations, provide larger lots or split-level housing typologies to accommodate the significant slope.

G4.4 Road grades should not exceed 20%.

G4.5 Where road cross-fall is significant and unavoidable, consider split-level carriageways.

G4.6 Where paths exceed 1 in 14 (7%), provide flat rest areas at regular intervals.

G4.7 Locate roads to minimise risks to environmental values, particularly soil and water quality, during both construction and ongoing road use.

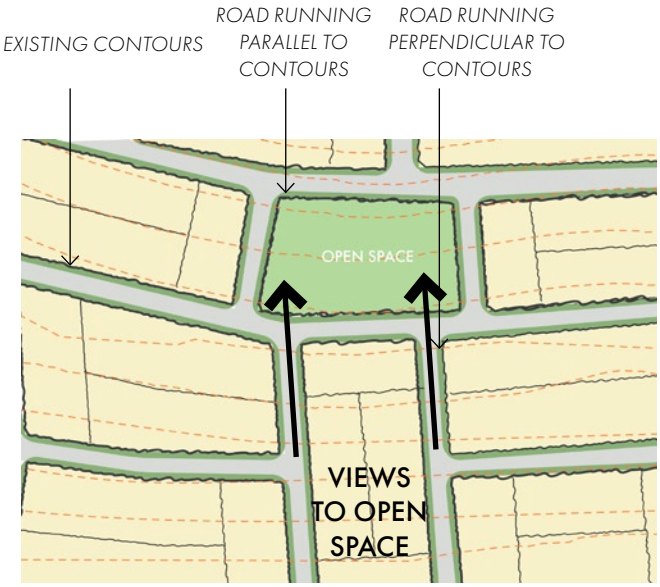


Figure 21. Street layout designed to run parallel and perpendicular to contours

05 Lot and Building Design

Objective

O5.1 To ensure housing lots are designed to create high amenity housing outcomes with good sunlight access, landscaping and useable private open space.

Guidelines

G5.1 Lots should generally be developed adopting dimensions and sizes in accordance with Table 1. Lots should be designed with consideration of the likely housing types that will be provided and the resulting earthwork and retaining wall outcomes. Refer to Figure 15 for potential development outcomes for the identified slope categories.

G5.2 Encourage smaller lot housing including medium density housing in areas where slope is less than 5%. Lots of greater than 500sqm should be discouraged in these areas unless larger lots are required due to an interface condition or gateway frontage.

G5.3 For lots with slope over10%, a minimum 10m x 20m building envelope should be provided on each lot, without compromising adequate useable private open space, retaining walls, landscaping and access around the dwelling

G5.4 Encourage the use of split-level housing for sites with slope of 15% or greater in order to minimise the use of retaining walls and maximise useable private open space. This may not be required for low density lots where there is enough space to manage retaining walls and create useable private open space. .

G5.5 Consider the shadow impacts created by level changes between lots and retaining walls, particularly on south-facing slopes where it is difficult to achieve good solar access. Lots on south facing slopes with a gradient greater than 5% should be large enough to ensure dwellings can be set back from the boundary to achieve solar access to habitable room windows and private open space. Consideration should be given for the need to retain solar access for existing dwelling(s) and open space on adjoining properties.

G5.6 For land where slope is 10% or greater and the general fall on the lot is side to side, provide a 2.0m planting zone within the side setback to support medium to large shrubs. This will help to reduce the visual impacts of roofing, fencing and retaining walls by allowing trees to be visible between dwellings. (Refer to Figure 21 and Figure 22)

G5.7 For land where slope is 10% or greater and the general fall on the lot is front to back or back to front, provide adequate space for the planting of one small to medium canopy tree in the front setback and two small to medium canopy trees within the rear setback. This will reduce the visual impacts of roofing, fencing and retaining walls by allowing trees to be visible between dwellings.

G5.8 Lots where retaining walls are proposed should contain a building envelope that is setback at least 1.0m from the base of the retaining walls.

G5.9 A flat, unobstructed access way of at least 1.0 metre wide should be provided along both sides of the dwelling to provide access between the front and rear yards.

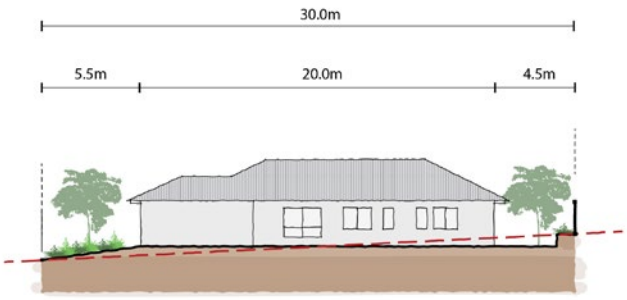
Slope Category	Dwelling type	Predominant fall direction on lot	Preferred minimum lot width	Preferred minimum lot depth	Preferred lot size
Flat Land 0-5%	N/A	N/A	N/A	N/A	Less than 400sqm
Moderate Slope 5-10%	Single level excavation	Front to Rear / Rear to Front	N/A	30-32m	400-450sqm
		Side to side	13-16m	N/A	
Steep Slope 10-15%	Single level excavation	Front to Rear / Rear to Front	N/A	32-36m	450-600sqm
		Side to side	14-16m	N/A	
Very Steep Slope 15-20%	Single level excavation	Front to Rear / Rear to Front	N/A	36-42m	600-750sqm
		Side to side	16-17m	N/A	
	Split-Level Excavation	Front to Rear / Rear to Front		32-34m	450-550sqm
		Side to side	15-16m		
Extremely Steep Slope 20% or greater*	Split-Level Excavation	Front to Rear / Rear to Front		36m +	550sqm +
		Side to side	17m +		

Table 1. Preferred residential lot sizes and dimensions for sloping land

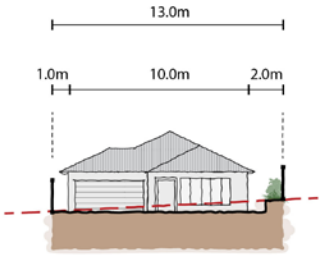
* Single level excavation housing is not recommended for areas where land slope is greater than 20% due to the significant retaining walls required to support this housing type. Single level excavation housing would be supported in low density residential areas where there is sufficient space around the dwelling to accommodate retaining walls

5% Slope Gradient

Single level excavation - Rear to front fall direction

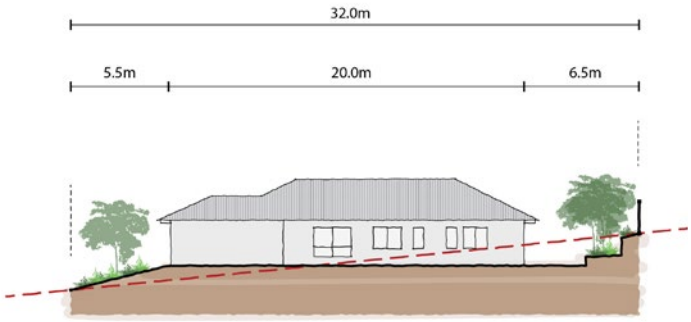


Single level excavation - Side to side fall direction

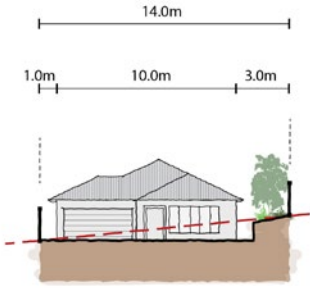


10% Slope Gradient

Single level excavation - Rear to front fall direction

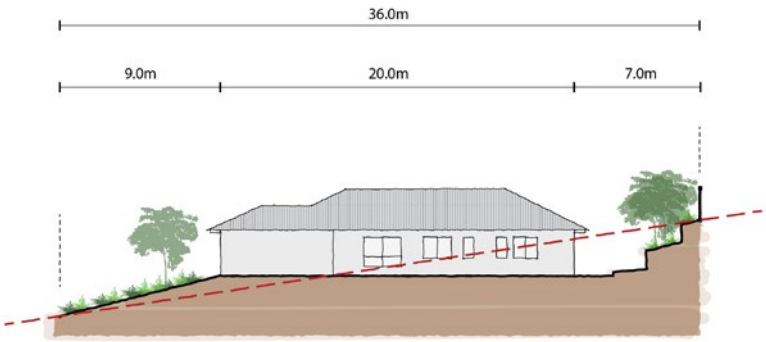


Single level excavation - Side to side fall direction

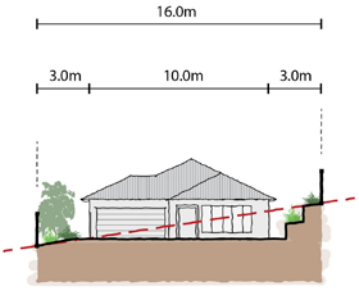


15% Slope Gradient

Single level excavation - Rear to front fall direction

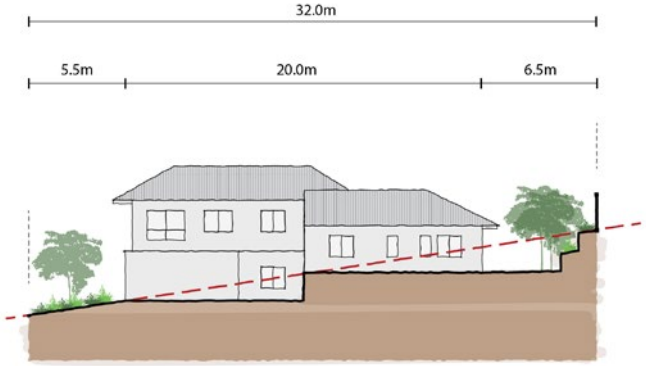


Single level excavation - Side to side fall direction



15% Slope Gradient

Split level excavation - Rear to front fall direction



Split level excavation - Side to side fall direction

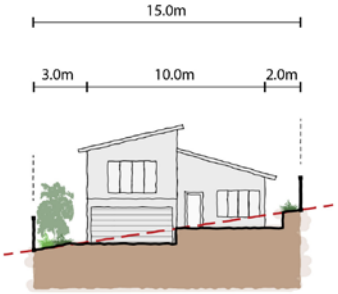
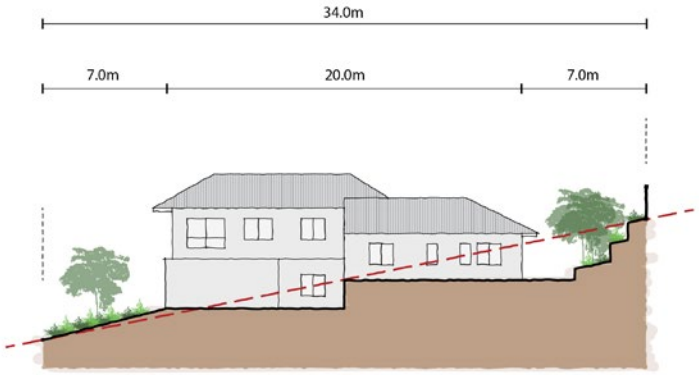


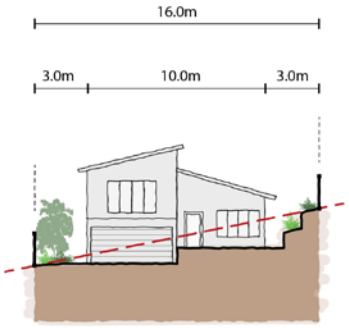
Figure 22. Lot, built form and retaining wall outcomes for slope categories

20% slope Gradient

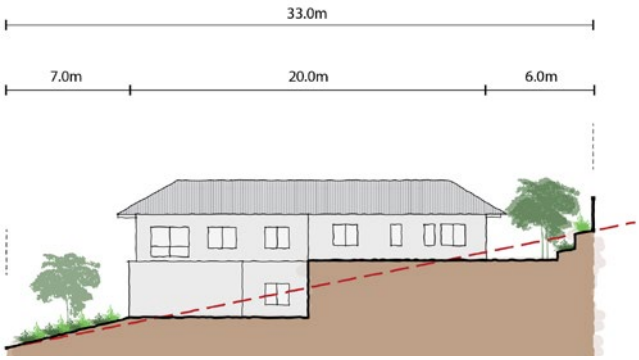
Split level excavation - Rear to front fall direction



Split level excavation - Side to side fall direction



Split level excavation (full-level split) - Rear to front fall direction



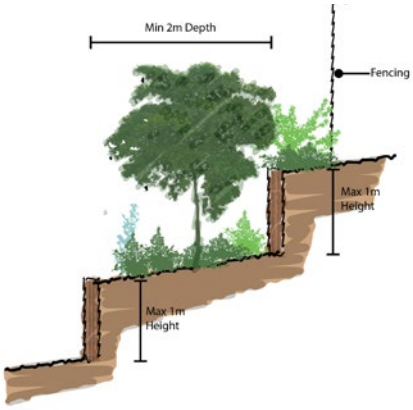


Figure 23. Landscaping zone within the side setback

Examples of split level housing with side to side fall

06 Lot Access

Objective

O6.1 To provide convenient and safe access to dwellings with minimal impacts on the natural landform.

Guidelines

G6.1 Driveways should have a maximum grade of 25%. Further information regarding vehicle access standards are provided in Australian Standard for parking facilities (AS 2890.1) and Baw Baw Shire's infrastructure standards for crossover design.

G6.2 Where slope falls from side to side on a lot, locate the driveway crossover in the low side of the lot to ensure the driveway can be constructed with a minimal grade. Refer to Figure 24.

G6.3 Consider recessing garages in order to reduce the steepness of driveway grades.

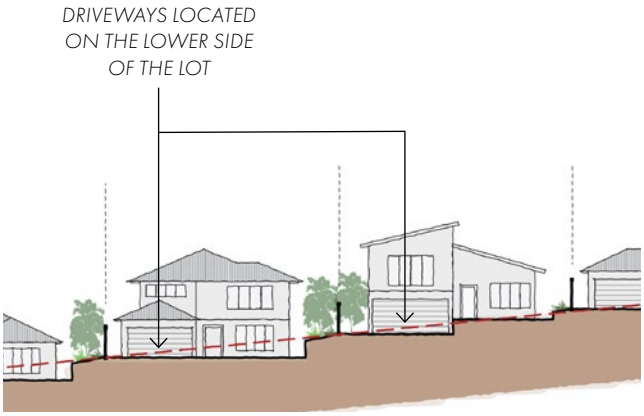


Figure 24. Driveway crossovers to be provided on the lower side of lots to support convenient access

Example of development where the space between dwellings allows for lot access, as well as large trees and vegetation.

07 Earthworks and Retaining Walls

Objective

O7.1 To ensure earthworks consider the natural topography, and create attractive and accessible streets.

O7.2 To ensure retaining walls do not dominate streetscapes and views to new residential areas.

Guidelines

G7.1 Earthworks should be planned across the entire street block to ensure it creates manageable outcomes for each lot within the street. It is preferred that the land developer undertakes the benching of lots to ensure consistent outcomes.

G7.2 Earthworks associated with the subdivision of the land or the construction of buildings should generally be no greater than 2.0 metres in depth above or below natural ground level. Split level housing on very and extremely steep sites may require a greater amount of excavation.

G7.3 A geotechnical investigation and analysis will be required for proposals where earthworks exceeding 1.0 metre cut below ground level or 1.0 metre fill above natural ground level are proposed. This report should detail as appropriate, subsurface conditions and materials, an evaluation of the stability of slopes and assessment of risks posed by site conditions, earthworks and built structures.

G7.4 Slope of batters on site benches should be no greater than 25% (1:4).

G7.5 Earthworks should be designed to ensure dwellings on the lower side of the street are not excessively sunken and has a presence to the street with visible windows. Similarly earthworks should ensure excessive filling does not result in dwellings overwhelming the streetscape on the higher side of the street.

G7.6 Earthworks exceeding 1.0 metre depth in cut or 1.0 metre depth in fill should be avoided within 1.0 metre of any side, rear or front boundary.

G7.7 Where extensive retaining walls are required in new estates, they should be installed by land developers to provide a cohesive treatment for retaining walls across streetscape and ensure a consistent application of these Guidelines.

G7.8 Retaining walls to the street or public open space should be no more than 1.0m in height. They should be consistent and high quality and utilise materials that will enhance the streetscape such as locally sourced stone. As an alternative, provide larger front building setbacks to support more natural retaining outcomes such as rock boulders.

Example of consistent stone retaining walls that contribute positively to the streetscape

Example of a good landscaping outcomes on a sloping site

G7.9 Retaining walls to side and rear property boundaries should be no more than 1.0m in height for each section. Where more than one retaining wall is required they should be staggered with a minimum of 1.0m distance between each stagger to allow for landscaping. The overall height of the retaining walls should not exceed 2.0m.

G7.10 Retaining walls over one metre in height should be avoided. However, if required:

- A building permit is required to construct a retaining wall 1m or more in height.
- A building permit is required to construct a retaining wall on or near site boundaries (any height) in order to maintain the stability of the adjoining property.
- It must be designed by a structural engineer.
- A building permit may also be required for a series of two or more retaining walls next to each other.

G7.11 Retaining walls that step down to side and rear boundary fences should be avoided as these can create redundant, unmaintainable and unsafe drop-offs.

G7.12 If boundary fences are located directly above or within 1m of retaining walls, limit the height of the fence to 1.8m in order to reduce the overall visual impact and overshadowing of the adjoining property.

G7.13 Batters and retaining walls should be designed and constructed to ensure drainage is directed in a controlled manner into the storm water system.

G7.14 Retaining walls should be constructed from materials that have a lifespan of at least 10 years.

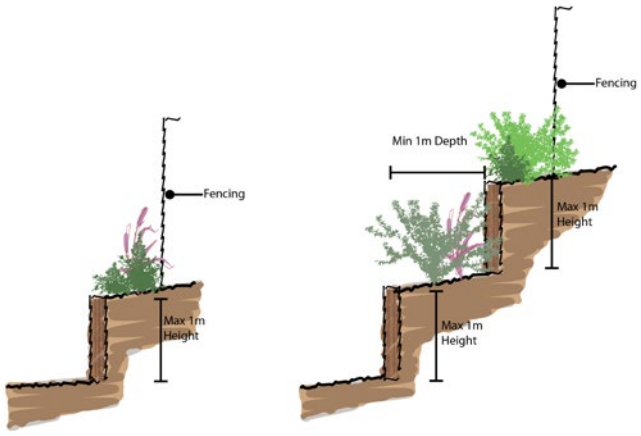


Figure 25. Retaining wall design requirements

Examples of a retaining walls incorporating low level landscaping.

4 Public Realm Guidelines

Overview

Existing trees and vegetation within the growth areas are important elements of the landscape character. As land within the Warragul and Drouin growth areas develops, site responsive subdivision and streetscape design is critical to provide opportunities for tree and vegetation retention within town entrances, streetscapes and local parks.

The PSPs provide a good diversity of public open spaces that will protect existing vegetation, manage important ecological and draining assets, and provide access to key topographical features. However there are additional opportunities for vegetation retention within future streetscapes and pocket parks. This will help to preserve landscape character elements that can be used to create distinctive neighbourhoods.

Streetscapes play an important role in establishing the character of neighbourhoods, as well as providing important ecological functions. Rural town streetscapes generally have an informal character with unmade road edges, swale drains and wide verges that give the sense of the landscape extending into the residential properties.

Compliance with PSP standards and utility and engineering requirements and results in standardised road cross sections being delivered. As a result informal streetscape elements such as unmade verges and swale drains are not always practical to deliver and maintain. However consideration should be given to incorporating these types of treatments to establish more greenery and, a more rural character, in new streetscapes where practical.

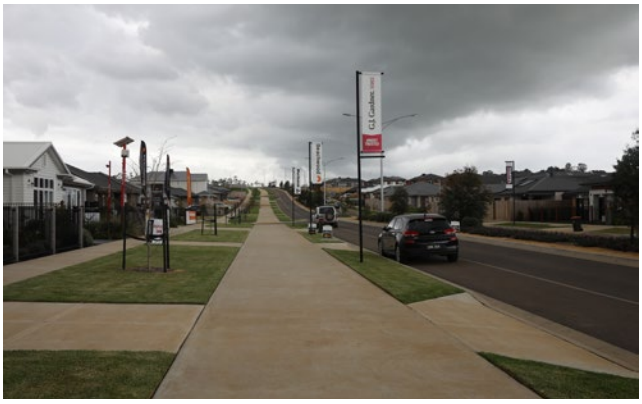
Local streets are the predominant street type in the growth areas and as such have a big impact on the character of new neighbourhoods. The PSPs contain a number of cross section variations for local streets that would support streetscapes with a more rural character. These variations include providing varying tree placement, tree outstands, meandering footpaths and roads.

New developments should be encouraged to adopt variations to the standard cross sections to create more informalised streetscape outcomes across Warragul and Drouin.

The Connector and Boulevard Connector roads play a key role in the sense of arrival into the new growth areas. These roads are not reflecting a desired rural character with a strong dominance of hard surfaces, particularly concrete. This is due to the 3.0m wide cycling path that runs parallel to the 1.5m footpath and limited space separating the shared path from the road pavement.

The lack of meandering of the shared path and absence of tree outstands within the road pavement further increases the dominance of hard surfaces. The Guidelines recommend adopting the PSP variations which support a meandering cycleway and street tree outstands.

In addition, the Design Guidelines also recommend a variation to the Connector and Boulevard Connector cross sections which provides for a shared walking and cycling path and reduces the provision of hard surfaces in the cross section.



An existing Boulevard Connector Street in Warragul. The extensive paved surfaces dominate streetscape and limit opportunities for street tree planting.

08 Vegetation Retention

Objective

O8.1 To ensure landscape quality is the predominant and consistent feature whilst reducing the dominance of built form within the streetscape and wider landscape context.

O8.2 To encourage tree and vegetation retention within subdivision and streetscape design.

Guidelines

G8.1 Encourage the retention of existing trees and vegetation within public space as identified in the PSP Guidelines Plans. This could be achieved by:

- Integrating trees into pocket parks and designing the street network to capture views to the parks.
- Integrating trees into mid-block pedestrian links.
- Aligning roads in new subdivision layouts to incorporate existing large canopy trees within road reserves.
- Meandering the road pavement or widening road reserves in small sections to retain trees.

G8.2 Avoid retaining large trees within private allotments. If this is unavoidable, design the subdivision so that the tree is retained within the front setback so that it contributes to the streetscape. It must be demonstrated that the tree can be sustained while providing for a dwelling and adequate space for private landscaping.

Example of pocket park has been delivered that retains remnant trees

Examples of a streetscape vistas that borrow landscape elements from adjacent pocket parks.

09 Street Design

Objective

O9.1 To create vegetated streetscapes with extensive canopy cover and soft landscaping under storey within wide road verges.

Guidelines

G9.1 For Local Streets, encourage streetscapes that provide for additional opportunities for street tree and under storey planting and deliver less formalised streetscape treatments. This should consider:

- Providing for varied street tree placement within the nature strip to increase the visual appeal of street trees and provide more natural streetscapes. Refer to Figure 26 - PSP Cross Section 1A.
- Meandering the footpath to provide for varied street tree placement and create interest to the streetscapes. Refer to Figure 27 - PSP Cross Section 1B.
- Meandering the carriageway to vary the nature strip width and provide additional street tree planting opportunities. Refer to Figure 28 - PSP Cross Sections 1C.
- Providing kerb outstands within streetscapes to provide additional planting opportunities and increase the visibility of street trees. Refer to Figure 29 - PSP Cross Section in 1D.

G9.2 For Local Streets with low volumes of pedestrian movements and vehicle traffic, consider the removal of the footpath from one side of the street to allow opportunities for additional street tree planting. This should be only be considered if a superior streetscape outcome is provided that delivers additional street tree planting, retention of existing vegetation and a less formalised streetscape outcome.

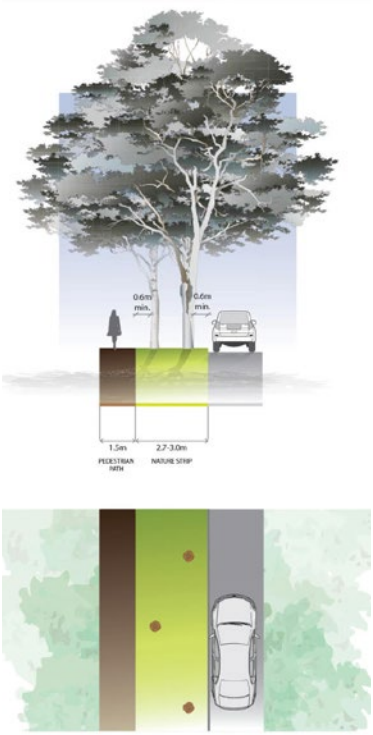


Figure 26. Local Access Street Cross Section 1A - Varying Tree Placement in Nature Strip

Example of how landscaping elements in the streetscape can successfully contribute to local character

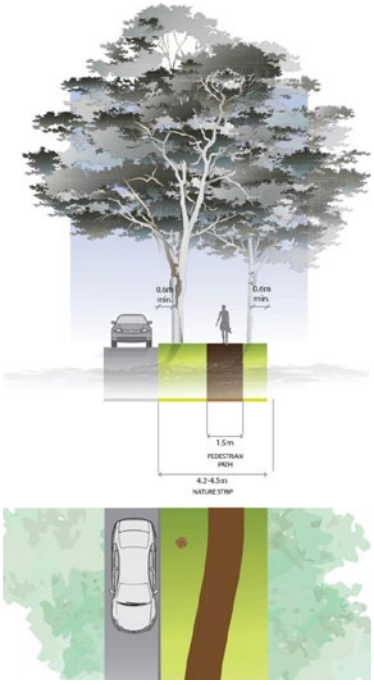


Figure 27. Local Access Street Cross Section 1B - Meandering Footpath in Nature Strip

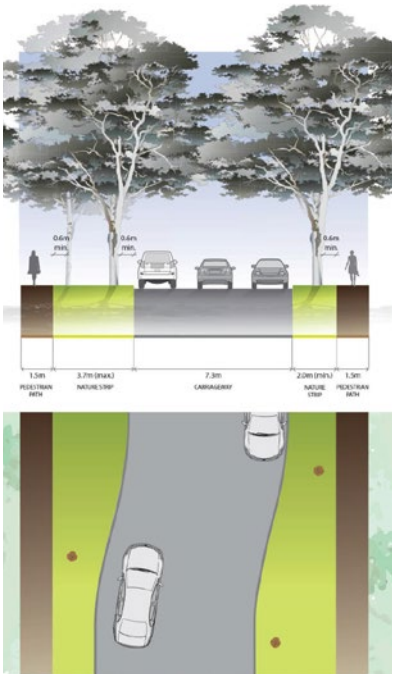


Figure 28. Local Access Street Cross Section 1C - Varying Nature Strip Widths

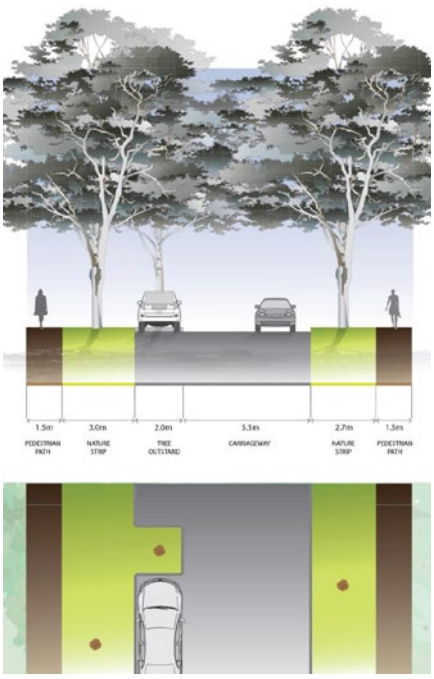


Figure 29. Local Access Street Cross Section 1D - Kerb Outstands

G9.3 For Connector and Connector Boulevard Streetscapes, reduce the visual impact of concrete and asphalt surfaces and deliver less formalised streetscape treatments. This should consider:

- Providing for varied street tree placement within the nature strip to create to increase the visual appeal of street trees and provide more natural streetscapes. Refer to Figure 31 - Cross Section 2A of the PSP.
- Meandering the off-road cycleway to provide for varied street tree placement and reduce the visual impact of the concrete path. This could also be provided at road intersections to provide greater separation from vehicles turning from the Boulevard. Refer to Figure 32 - Cross Section 2B of the PSP.
- Providing tree outstands within the streetscape to reduce the visual impact of the path and provide a less formalise tree planting outcome. Refer to Figure 33 - Cross Section 2C of the PSP.

G9.4 For Connector and Connector Boulevard Streetscapes, consider the removal of the 3.0m off-road cycling path and adjoining 1.5m footpath from cross Sections 2A - 2D and replace with a 3.0m wide shared walking and cycling path that meanders within the nature strip. This would create a 9.8m linear reserve on one side of the street with substantial opportunities for landscaping and street tree planting. This should only be considered where the walking and cycling volumes support a shared path and where a superior steetscape outcome is provided.

Example of a meandering shared path delivered in Timbertop Boulevard, Officer.

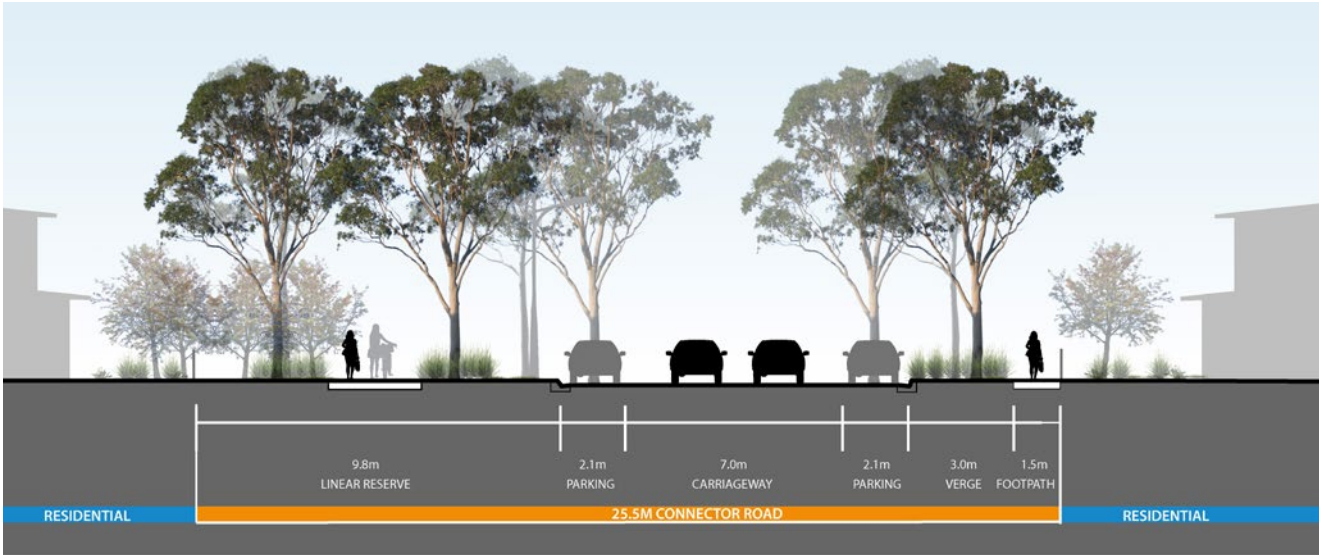
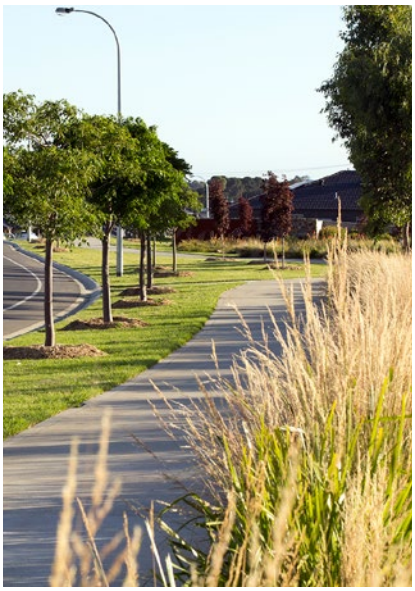


Figure 30. Proposed Connector Boulevard Cross Section



Example of a meandering landscaped shared path that positively contributes to the local character.

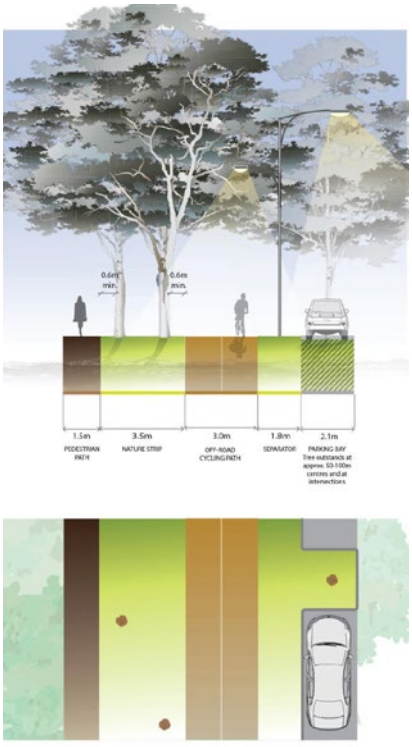


Figure 31. Connector Street Cross Section 2A - Varying Tree Placement in Nature Strip

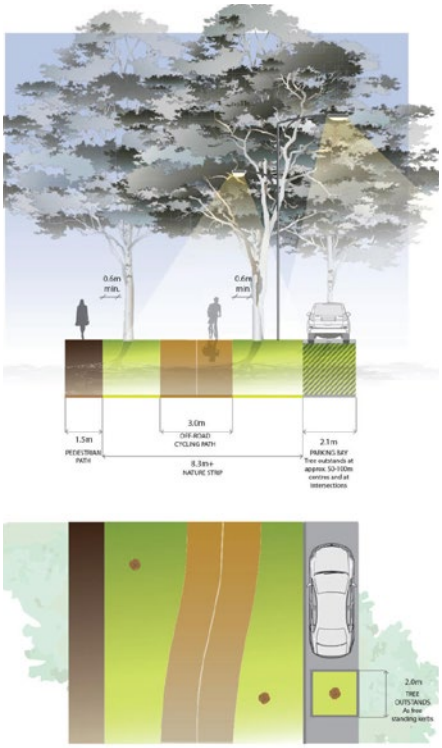


Figure 32. Connector Street Cross Section 2B - Meandering Footpath in Nature Strip

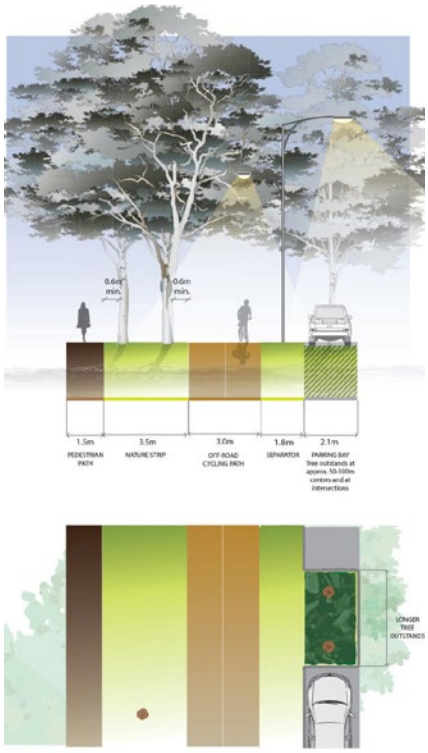


Figure 33. Connector Street Cross Section 2C - Large Tree Outstands

5 Neighbourhood Identity Guidelines

Overview

New housing estates within Warragul and Drouin have a consistent character due to the standardised road cross sections, regular setbacks, predominantly single storey building heights, repetitive roof colours and materials, and similar building forms. Consistency is an important element of neighbourhood character, particularly within an individual street or small neighbourhood. However if consistency extends across entire growth areas it can result in indistinguishable neighbourhoods that lack identity.

Neighbourhood identity can be created by providing unique treatments to streetscapes and landscape theming in the public realm. However, identity is also defined by the contribution of private dwellings and landscaping to the street.

There are opportunities for development in new estates to create distinct identities that respond to the desired rural character of the Baw Baw Shire.

The Neighbourhood Identity Guidelines are aimed at land developers and provide specific guidance for lot design and building design, landscaping and fencing. It is expected that developers would implement housing estate Guidelines in accordance with this section and provide specific detail to deliver a distinctive identity for their residential community.

Successful examples where elements in the public and private realms seamlessly integrate to contribute to the creation of local neighbourhood character.

010 Lot and Building Design

Objective

O10.1 To provide high quality and spacious streetscapes that respect the existing rural character.

Guidelines

G10.1 Provide for a mix of lot widths within a street to create opportunities for diverse housing styles.

G10.2 Encourage larger front setbacks particularly in sloping areas, along town gateways and along boulevards to create a sense of spaciousness and reduce the visual dominance of the built form in new streetscapes.

G10.3 Provide wider lots along key boulevards and town entrances to allow additional opportunities for landscaping within the front setbacks.

G10.4 Provide varied building heights across streetscapes. This could include providing two storey dwellings on prominent corners that mark the arrival into an estate or street.

G10.5 Ensure dwelling designs are contemporary and avoid references to historical styles or reproductive decorative details.

G10.6 Avoid repetitive dwelling façades within a streetscape.

G10.7 Front entries should be clearly visible from the street and should include protruding elements such as covered verandahs or portico treatments to provide a sense of address.

G10.8 Encourage larger than standard verandahs at the front of dwellings to provide greater articulation to the front façade, reflect a rural character and provide opportunities for social interaction in the street.

G10.9 Locate habitable room windows to the front facade to provide a clear view to the primary streetscape.

G10.10 Ensure corner lots address both the primary and secondary street frontages by providing additional side setbacks to the secondary street, continuing the front facade design and landscaping design to the secondary street for the front section (first 4.0m) of the dwelling and ensuring there is no side fencing to the secondary frontage for the front section of the dwelling.

G10.11 Encourage a variety of roof forms and roof colours within a streetscape to provide greater visual interest to the streetscape and also enhance longer distant views to the area. Roof forms should generally be pitched utilising gabled, hipped and skillion roof forms. Support feature flat elements where box guttering is hidden from view.

G10.12 Pitched roofs to dwellings should incorporate eaves of at least 450mm.

G10.13 Garages should be set back from the front building facade and not present as a dominant element of the streestcape. The garage design should match the architectural style, predominate materials and colour scheme.

G10.14 All other structures such as sheds, carports, and outbuildings should be of a consistent style with the overall design theme of the site.

011 Landscape Design

Objective

O11.1 To encourage planting in the private realm that reinforces the existing rural character found in the surrounding context.

O11.2 To minimise the area of hardstand (e.g. driveways and paving) and maximise the amount of soft landscape (e.g. garden beds, turf and permeable surfaces).

Guidelines

G11.1 Retain and protect existing mature trees where possible and integrate into the overall site planning.

G11.2 Front gardens should be planted with a minimum of one canopy tree per standard residential lot frontage combined with lower scale planting. The canopy tree should have a minimum mature height of 4m.

G11.3 The front garden (including driveways and access paths) should consist of a minimum of 60% permeable surfaces and 30% planted garden bed.

G11.4 Front and side gardens should be planted with species that integrate with the surrounding landscape character, and where possible are low maintenance, drought tolerant and do not require irrigation from the potable water supply.

G11.5 Encourage the provision of a selection of guided planting themes and landscape designs within front setbacks. This will support individual identity but also provide an overall planting theme that contributes to local biodiversity.

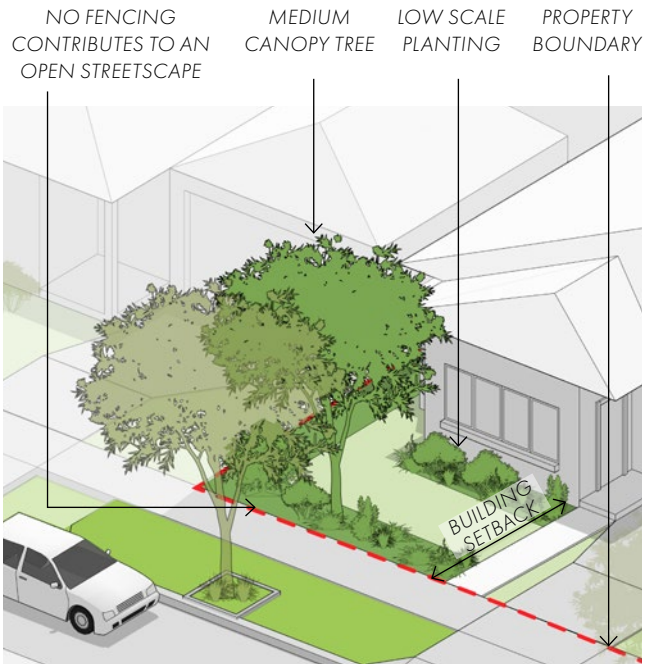


Figure 34. Preferred front yard landscaping outcomes

Example of front and side garden design that positively contributes to the surrounding streetscape character.

012 Fencing

Objectives

O12.1 To ensure the front boundary treatment contributes positively to the appearance of the approach and clearly delineates the public and private realms.

O12.2 To ensure fencing is coordinated with the design of the building and landscaping and the preferred character of the approach.

Guidelines

G12.1 Fencing along the front boundary should generally be avoided to contribute to a sense of spaciousness and openness in the streetscape. Where possible, utilise landscaping to delineate the front property boundary.

G12.2 Fencing along the front boundary can be provided to create a traditional rural town character. This should be provided in a consistent way across the housing estate, should not exceed a height of 1.2m and should consist of transparent materials.

G12.3 For sloping sites, utilise natural materials such large rock boulders or timber sleepers to delineate the front property boundary.

G12.4 Internal lot boundary fencing should not exceed a height of 1.8m.

Low, transparent front fencing is also encouraged as this reflects a traditional rural town setting.

Successful example where on a sloping site a landscape batter has been used as a front fence

6 PSP Precinct & Gateway Guidelines

UGZ PSP Precincts in Warragul

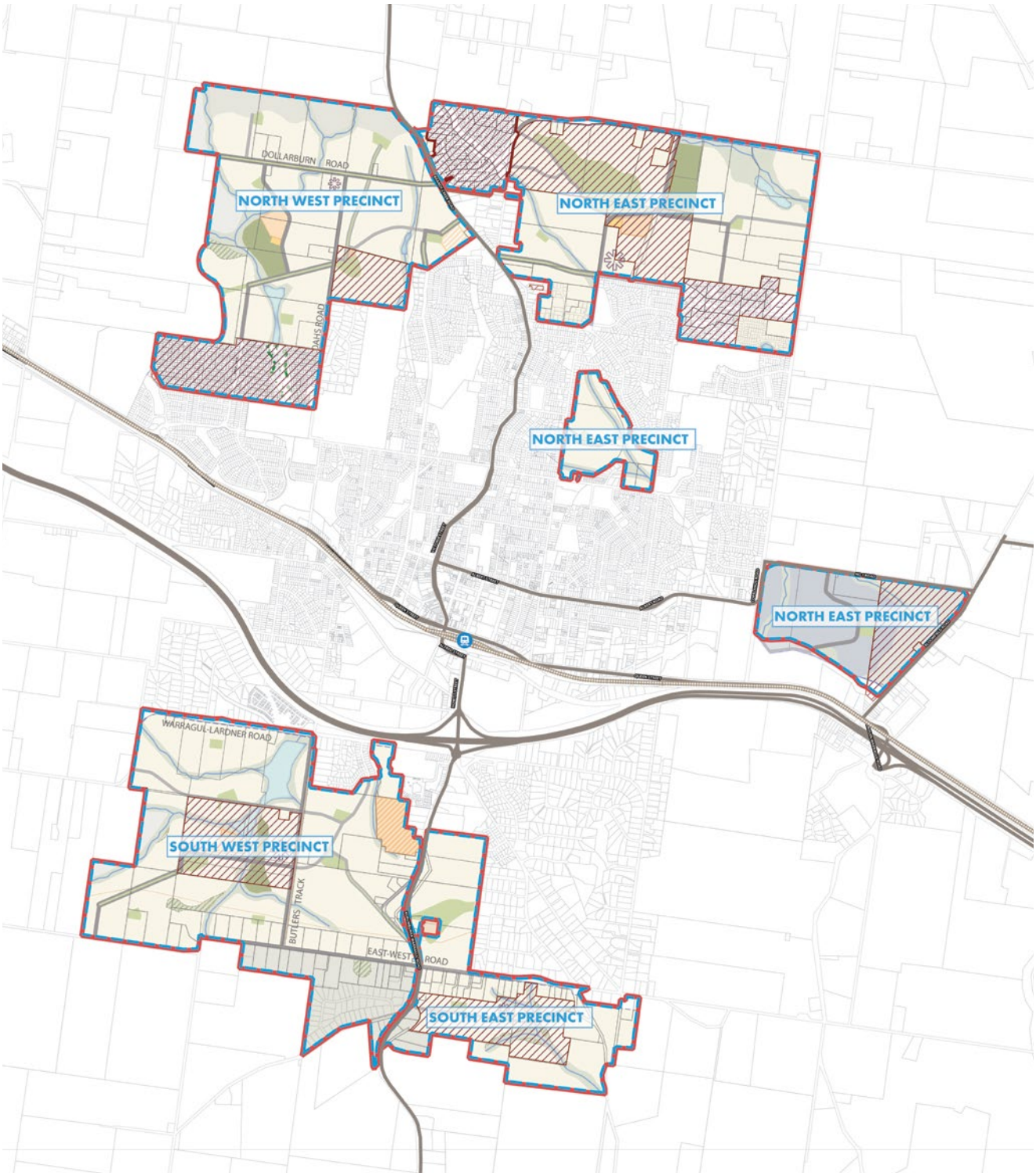


Figure 35. Urban Growth Zones located in Warragul

UGZ PSP Precincts in Drouin

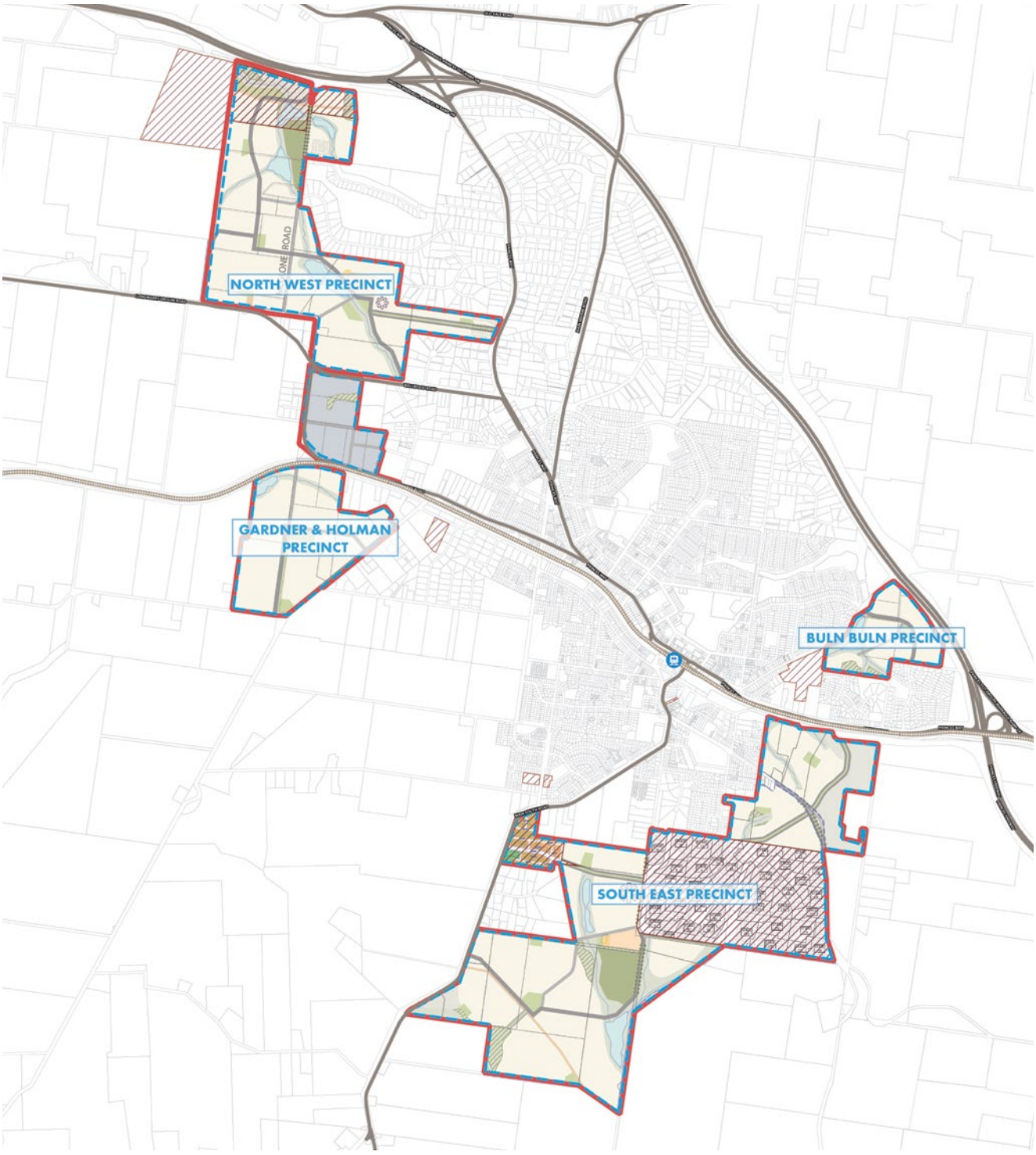


Figure 36. Urban Growth Zones located in Drouin

013 Drouin North West Guidelines:

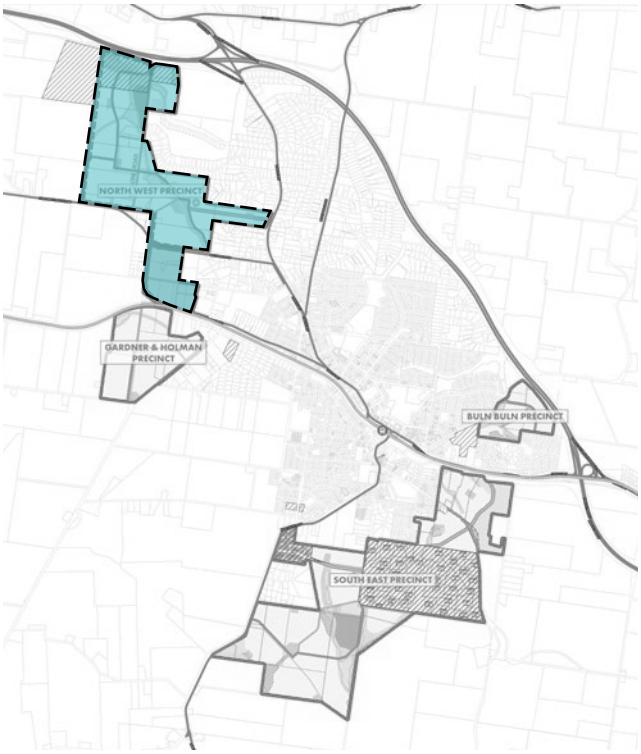


Figure 37. Drouin North West - Key Plan

PSP LOCAL DESIGN CONSIDERATIONS

- Maintain rural character of town gateway along Longwarry - Drouin Road
- Provide alternative routes to McGlone Road to ensure low traffic volumes and enable the existing cross section to be retained.
- Retain significant vegetation along McGlone Road.
- Develop sensitive interfaces with low-density residential areas to ensure amenity of existing properties is maintained.
- Allow for long-term redevelopment of neighbouring low-density areas by making provision for future street and path connections at appropriate locations.

Longwarry Drouin Road Gateway

Longwarry - Drouin Road functions as the western gateway to Drouin and has three distinct characters that contribute to the entry experience. Middle and long distance views reveal scattered native trees as distinct elements on the horizon. On the northern side where conventional residential development is proposed there are some highly visible parts of the residential area. The arrival experience transitions and intermittent views reveals to existing low density housing through to the future conventional residential land use. As the road descends into the town large remnant roadside vegetation and planted screening enclose the views to the north. Breaks in vegetation allow occasional views through to slightly undulating rural land where conventional residential housing will be delivered.

Gateway Guidelines

Refer to interface Guidelines identified in Section 2 for guidance on the design and development of residential properties fronting onto the gateway.

Gateway Section 1

G13.1 Ensure residential development in the Area of High Visibility contributes to the view from Longwarry - Drouin Road by retaining existing vegetation where possible, providing sufficient space within allotments for tree planting and providing a mix of roof materials and colours.

G13.2 Ensure existing canopy trees and under-storey planting is retained with any road widening along McGlone Road.

G13.3 Preserve the informal road edges and where possible locate entries away from stands of roadside vegetation.

G13.4 Retain existing stands of vegetation within the future residential areas to soften the visual impact of housing and provide distinctive neighbourhood elements.

G13.5 Strengthen native roadside vegetation along Longwarry - Drouin Road to complement native vegetation within the rural hinterland.

G13.6 Provide a high quality landscape entry feature at the south western corner of the growth area at the intersection of Ritchie Road.

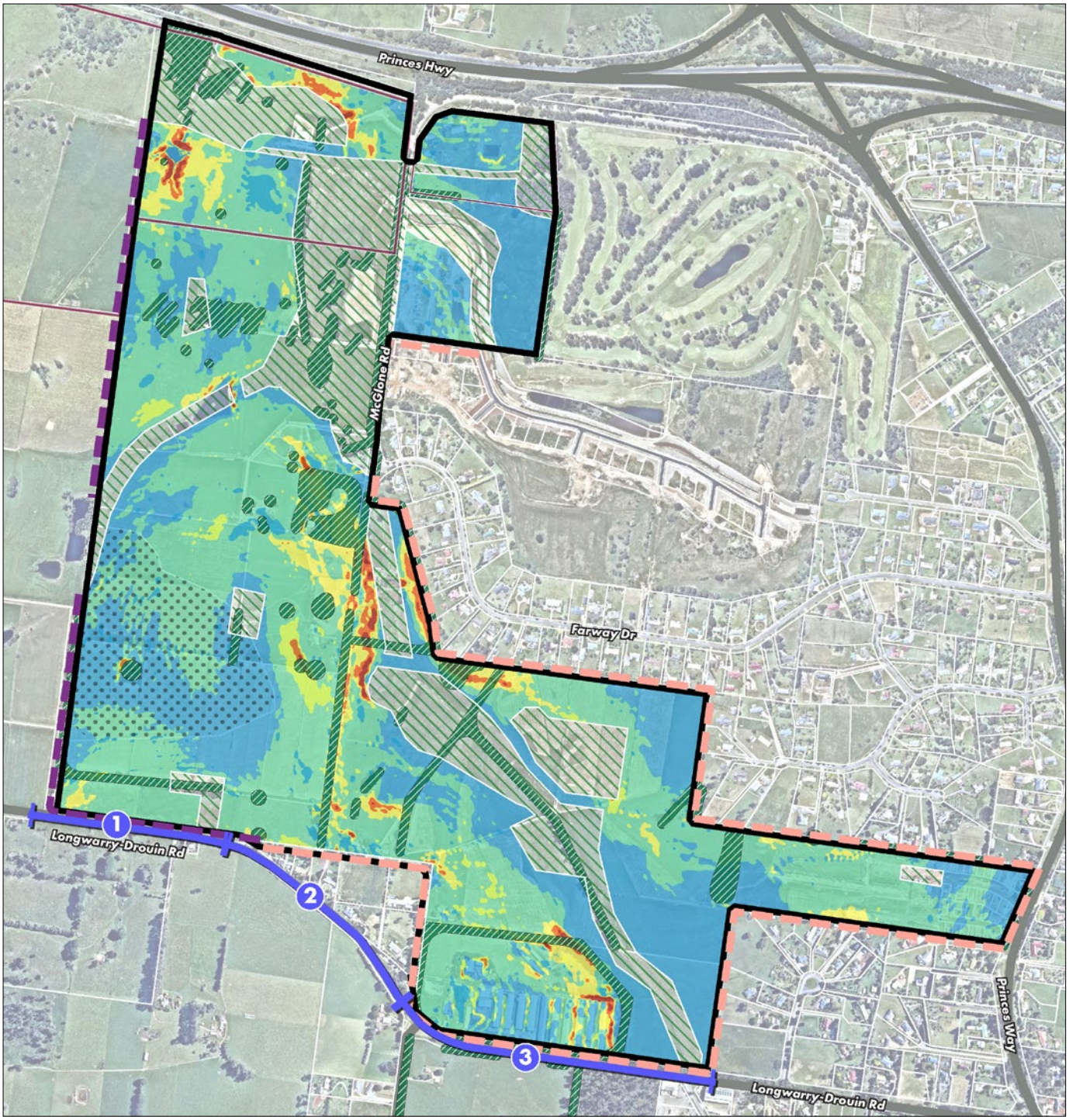


Figure 38. Drouin North West Guidelines Plan

G13.7 Ensure dwellings front onto Ritchie Road along western edge of the growth area and existing roadside vegetation is retained.

G13.8 Maintain the informal road edges along Longwarry - Drouin Road.

Gateway Section 2

G13.9 Retain existing roadside vegetation at the corner of Cook Road and Longwarry - Drouin Road to maintain the landscape dominated view.

Gateway Section 3

G13.10 Retain existing roadside vegetation to maintain the sense of enclosure along Longwarry - Drouin Road.

G13.11 Provide additional canopy native trees where gaps exist.

G13.12 Maintain the informal road edges and small embankments.

G13.13 Minimise vehicle access points from Longwarry Drouin Road and ensure access points and turning lanes are located to minimise removal of large native trees.

G13.14 Open views along the future Stony Creek open space in the south eastern corner of the Precinct through the strategic removal of vegetation.

Precinct Guidelines

- Refer to Interface Guidelines for recommendations on Interface 1 and Interface 3.
- Refer to Slope Response Guidelines for recommendations on delivering housing in areas of flat land (up to 5% slope), moderate slope (up to 10% slope) and steep slope (up to 15%).
- Refer to Public Realm Guidelines for recommendations on how to retain existing trees and vegetation.

Vegetation to be retained in Gateway Section 2 at the corner of Cook Road and Longwarry -Drouin Road

Maintain the significant remnant roadside vegetation located in Gateway Section 3.

014 Drouin Gardner and Holman Guidelines:

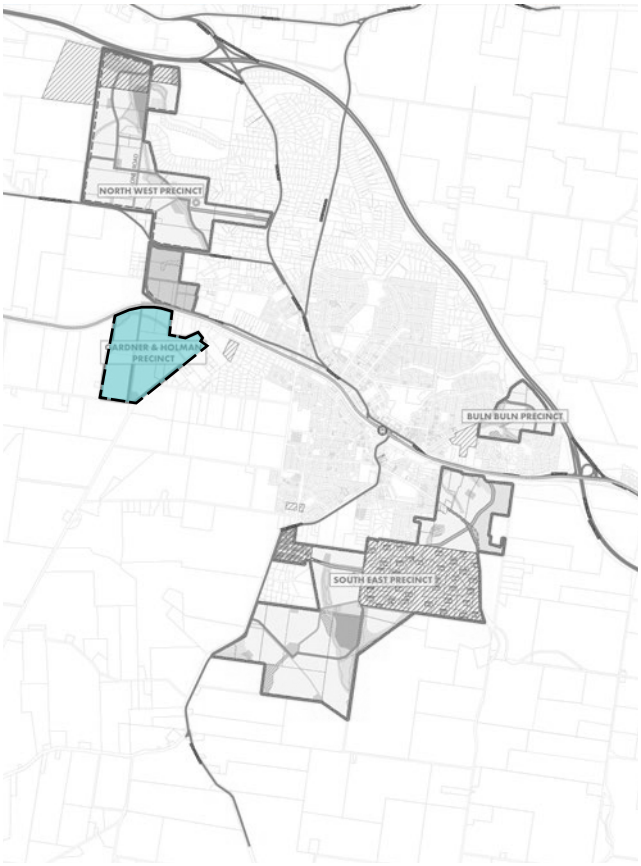


Figure 39. Gardner and Holman -Key Plan

PSP LOCAL DESIGN CONSIDERATIONS

- Allow for long-term redevelopment of neighbouring low-density areas by making provision for future street and path connections at appropriate locations.
- Allow for connection into unmade road reserve along railway line.
- Retain significant vegetation along unmade road reserve.

Gardner and Holman Road Gateway

Gardner and Holman Road functions as a key arrival gateway to Drouin from the south west. Two distinct characters contribute to the entry experience. Clusters of dense roadside vegetation and canopy tree cover creates an intermittent enclosure and reveal of middle and long distance views. As the road gently ascends the rise, glimpse's of rural housing are revealed signifying arrival at to the town's outskirts. New residential development will be delivered to the north west of the gateway.

Gateway Guidelines

Refer to interface Guidelines identified in Section 2 for guidance on the design and development of residential properties fronting onto the gateway.

Gateway Section 1

G14.1 Investigate opportunities for how the open space located on the corner of Old Drouin and Gardner and Holman Road can signify the start of the arrival experience into Drouin.

G14.2 Ensure existing canopy trees and under-storey planting is retained with any road widening along Gardner and Holman Road.

G14.3 Maintain the informal road edges along Gardner and Holman Road.

G14.4 Minimise local road entries from Gardner and Holman Road. Locate entries away from stands of roadside vegetation taking into account the requirement for turning lanes into the site, and where possible provide additional space on the north side of tree root zones to protect the trees.

G14.5 Ensure dwellings front onto Gardner and Holman Road and existing roadside vegetation is retained.

Gateway Section 2

G14.6 Maintain the informal road edges and small embankment along Gardner and Holman Road.

G14.7 Retain existing roadside vegetation where possible to maintain the sense of enclosure along Gardner and Holman Road. Where vegetation can't be retained, consider encouraging the provision of additional native canopy trees in the service road located adjacent to the residential area.

Precinct Guidelines

- Refer to Section 2 Interface Guidelines for recommendations on Interface 1 and Interface 3.
- Refer to Section 3 Slope Response Guidelines for recommendations on delivering housing in areas of flat land (up to 5% slope) and moderate slope (up to 10% slope).
- Refer to Section 4 Public Realm Guidelines for recommendations on how to retain existing trees and vegetation.

View towards future open space from the intersection of Old Drouin Road and Gardner and Holman Road that signifies the start of Gateway Section 1

Example of a typical enclosed view experienced in Gateway Section 2

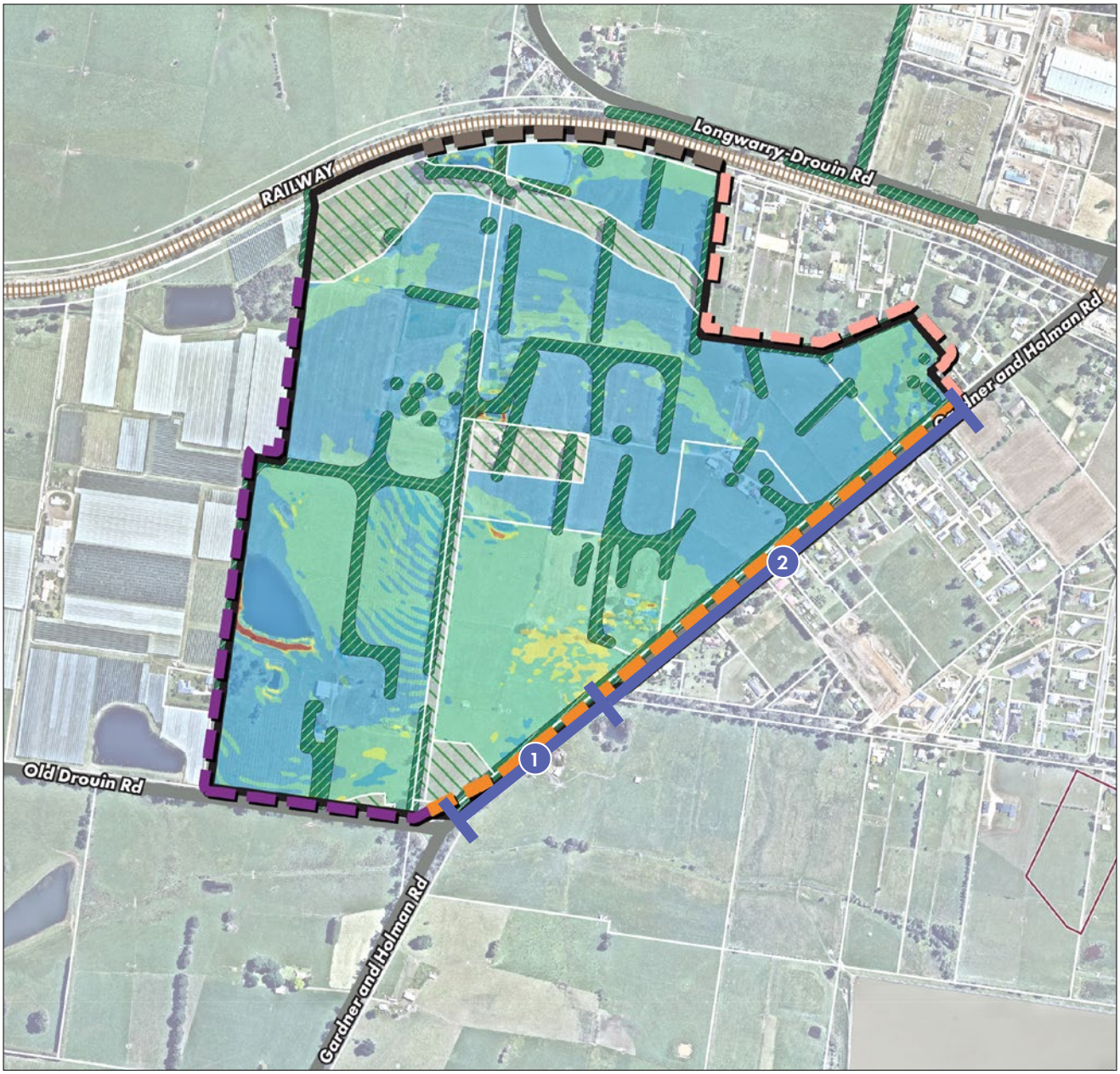


Figure 40. Gardner and Holman Guidelines Plan

015 Drouin South East 1 Guidelines:

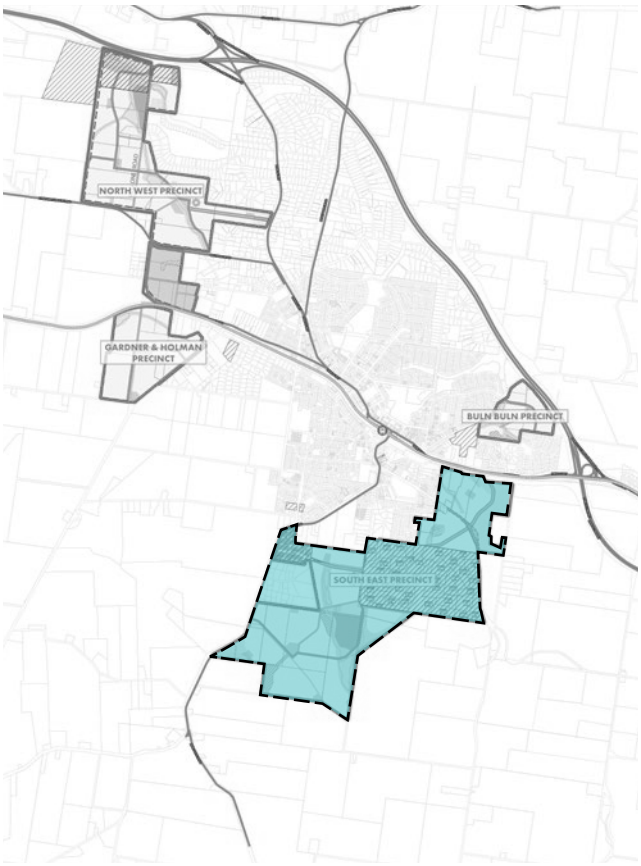


Figure 41. South East 1 - Key Plan

PSP LOCAL DESIGN CONSIDERATIONS

- Maintain rural character of town gateway along Main South Road.
- Retain significant vegetation along Weebar Road.
- Develop utility easements as an extension of the open space network with suitable landscaping and provision of paths.
- Position neighbourhood parks at prominent points in the landscape to maximise views both to and from.
- Allow for long-term redevelopment of neighbouring low-density areas by making provision for future street and path connections at appropriate locations.

Main South Road Gateway

Main South Road is the key arrival gateway to Drouin from the south. Four distinct characters contribute to the entry experience. Approaching from the south, the road rises gently and short and middle distance views are available to the east across rolling rural land with stands of canopy trees. Conventional density development is proposed on the prominent hillsides. Views to the east open up at the top of the hill near Dyall Road.

Conventional density residential is proposed along the eastern side of the road while the western side will remain as rural farmland. After a small plateau, Main South Road rises towards a hilltop and views continue to be contained by predominantly native and remnant road side trees. This section includes areas of low density housing on the eastern side of the road and rural uses on the west side. Views to the east open up through the final section with more sparse roadside vegetation allowing views across rolling farmland. Long distance views at the northern end of this section look south east over new residential areas, a future park along part of the Main South Road frontage and a service road is proposed for the balance of the frontage.

Gateway Guidelines

Gateway Section 1

G15.1 Ensure residential development in the Area of High Visibility and the areas of slope contribute to the view from Main South Road by retaining existing vegetation where possible and provide sufficient space within allotments for tree planting. Also consider delivering dwelling designs that respond to the slope and providing a mix of roof materials and colours.

G15.2 Retain the existing roadside canopy trees, and strengthen the informal clusters planting of native canopy trees located along the Main South Road. A similar theme and style of planting should be adopted for the service road frontage.

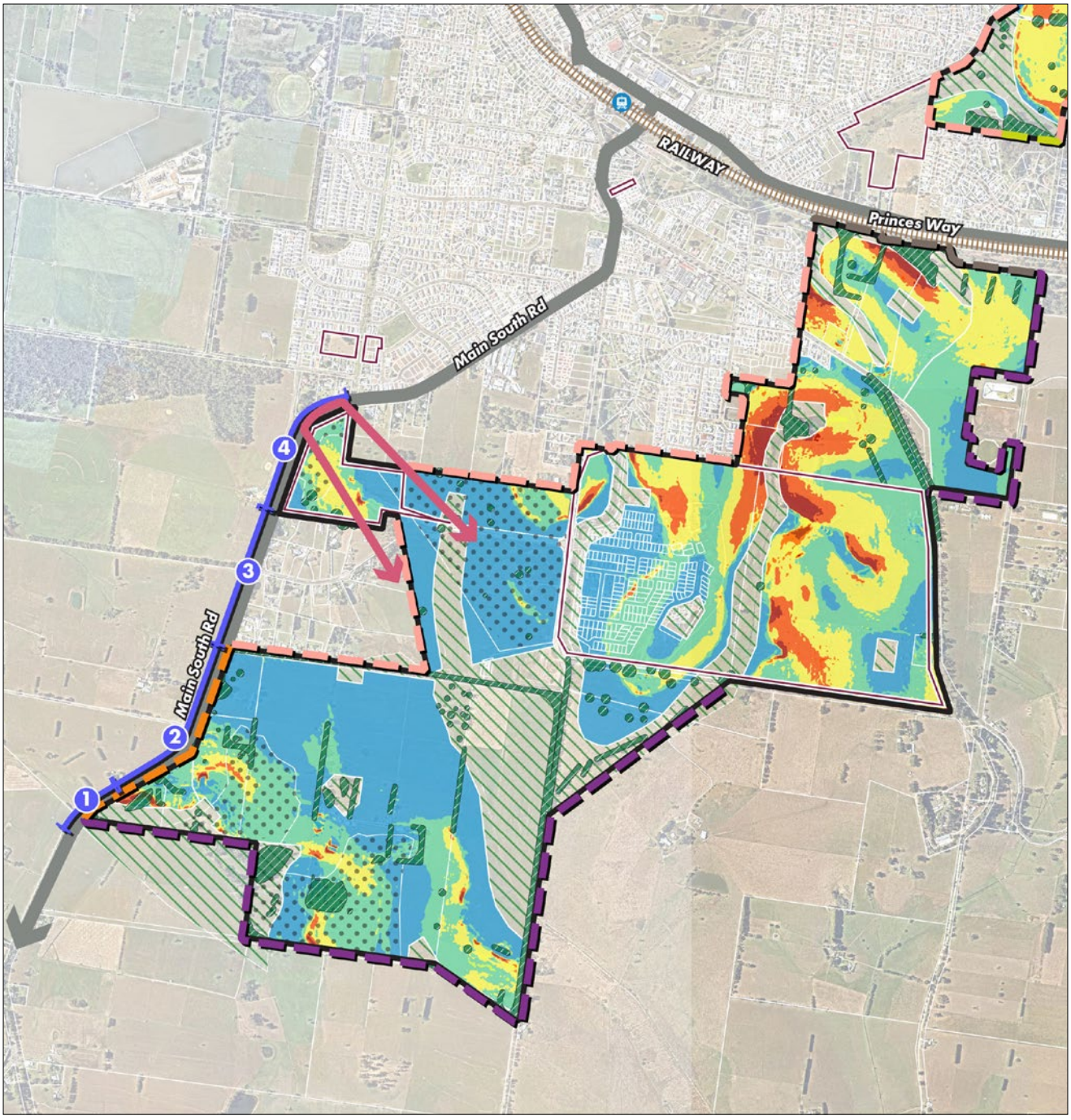


Figure 42. South East 1 - Guidelines Plan

Gateway Section 2

G15.3 Ensure residential development provides sufficient space within allotments for tree planting, particularly on the prominent hillsides.

G15.4 Note the large areas of high visibility along the start of the arrival experience covers area of 15%+ sloping land. The last section of the arrival experience also contains areas of high visibility, including views to open space and district views. Retention of existing trees is critical in these areas.

Gateway Section 4

G15.5 Ensure landscaping within the service road integrates with the existing remnant vegetation.

G15.6 Ensure residential development provides sufficient space within allotments for tree planting, particularly on the prominent hillsides.

Precinct Guidelines

- Refer to Interface Guidelines for recommendations on Interface 1 and Interface 3.
- Refer to Slope Response Guidelines for recommendations on delivering housing in areas of flat land (up to 5% slope) moderate slope (up to 10% slope). Note for areas of very steep slope (15%+) split level dwellings are encouraged - please refer to specific Guidelines.
- Refer to Public Realm Guidelines for recommendations on how to retain existing trees and vegetation.

View of highly visible corner in section 1 of the Gateway where future housing on areas of slope will be visible through the future open space.

View across section 4 of the Gateway showing important remnant roadside trees and vegetation (as well as vegetation to be considered for retention within the subdivision design)

016 Drouin Buln Buln Guidelines:

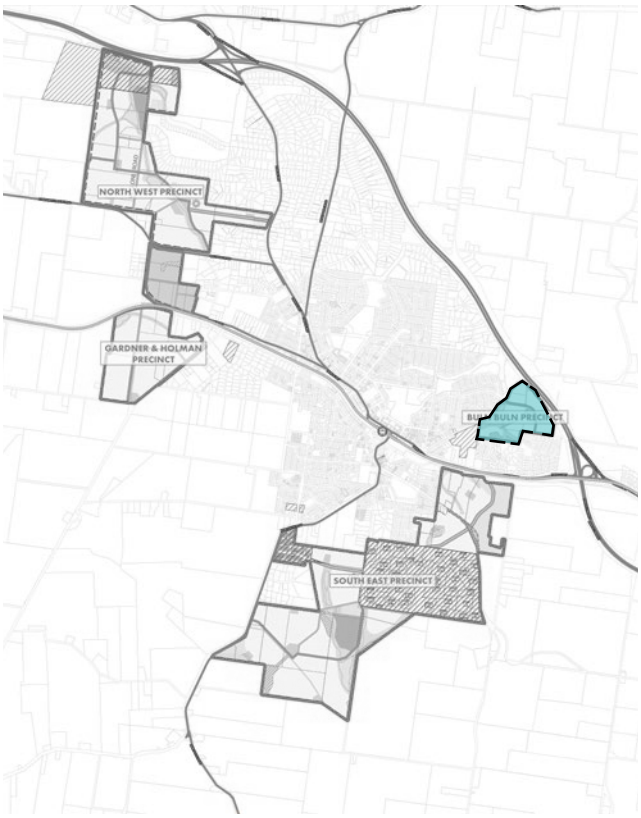


Figure 43. South East 2 - Key Plan

PSP LOCAL DESIGN CONSIDERATIONS

- Retain existing vegetation and maintain rural character of town gateway along Larder Road.
- Retain significant vegetation along Buln Buln Road.
- Allow for appropriate integration with existing and new neighbouring development.
- Present soft residential interface to Princes Freeway.
- Ensure development addresses prominent sections of the town boundary.

Buln Buln Road Gateway

Buln Buln Road is a key arrival gateway to Drouin from the north. It has one consistent character that contributes to the entry experience. On approach from the north, as the road descends into the town, there are breaks in the tree canopy and roadside vegetation providing views of existing residential development. The arrival experience will change as housing is delivered. However from the intersection of Buln Buln Road and Walker Drive, the open space interface along the eastern side of the road will remain, providing foreground and mid-ground views across the undulating hills.

Gateway Guidelines

Gateway Sections 1 & 2

G16.1 Ensure existing canopy trees and under-storey planting is retained with any road widening along Buln Buln Road. Ensure existing canopy trees are retained and strengthen informal planting, particularly in the areas of moderate and steep sloping land.

G16.2 Provide a service road along the entire length of section 1. Roadside vegetation should be retained and dwellings should address the service road providing a consistent streetscape character.

G16.3 Provide shared path along Buln Buln Road within the open space and service road to enhance pedestrian and cycle access into the Town Centre.

Precinct Guidelines

- Refer to the Interface Guidelines for recommendations on Interface 2 and Interface 3.
- Refer to the Slope Response Guidelines for recommendations on delivering housing in areas of flat land (up to 5% slope) moderate slope (up to 10% slope). Note for areas of very steep slope (15%+) split level dwellings are encouraged - please refer to specific Guidelines.
- Refer to the Public Realm Guidelines for recommendations on how to retain existing trees and vegetation, noting the clusters of highly visible trees located in the areas of 10%+ slope.

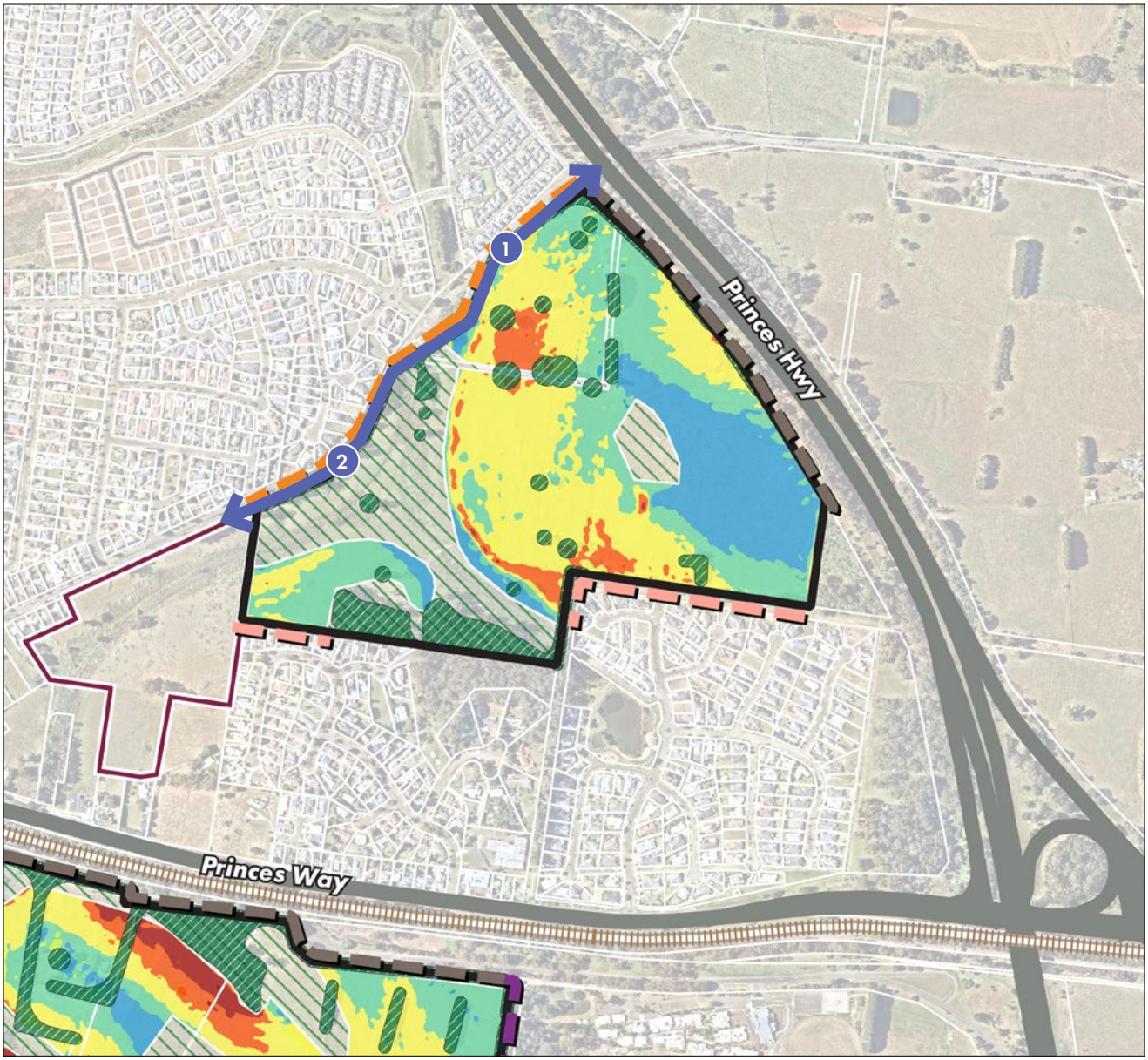


Figure 44. Buln Buln - Guidelines Plan

LEGEND

- Urban Growth Zone Boundary
- Major Road
- Railway Line
- Conventional Residential Area
- Proposed Open Space Network
- Approved Subdivision Development

GATEWAY GUIDELINES

- Gateway Sections
- Areas of High Visibility along The Gateway

INTERFACE GUIDELINES

- Interface 1 - Residential/Low Density Residential within a PSP with Farming Zone/Rural Activity Zone
- Interface 2 - Residential within a PSP with an Existing Low Density Residential Zone
- Interface 3 - Residential/Low Density Residential within a PSP interface with an identified Township Gateway

SLOPE RESPONSE GUIDELINES

- Flat Land 0%-5%
- Moderate Slope 5%-10%
- Steep Slope 10%-15%
- Very Steep Slope 15%-20%
- Extremely Steep Slope Over 20%

PUBLIC REALM GUIDELINES

- Trees to Be Considered for Retention

017 Warragul North West Guidelines:

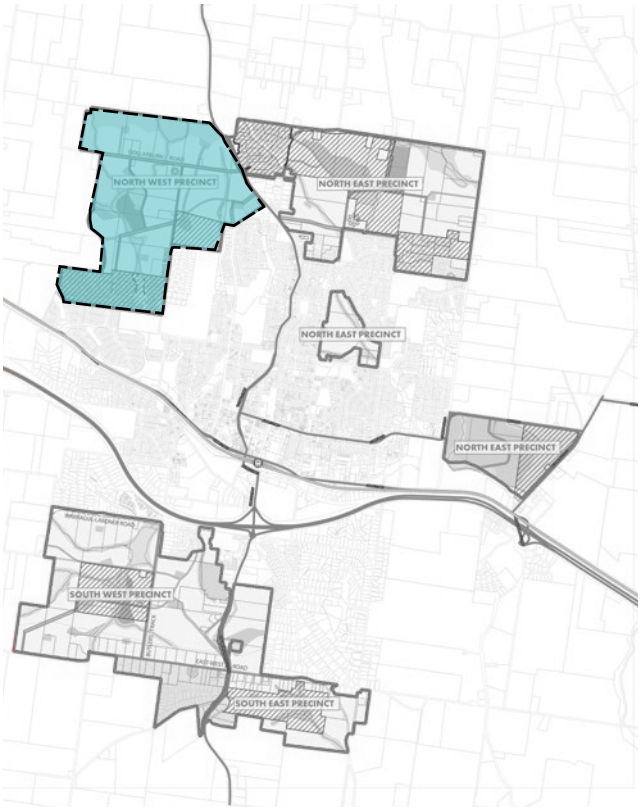


Figure 45. Warragul North West - Key Plan

PSP LOCAL DESIGN CONSIDERATIONS

- Maintain rural character of town gateway along Brandy Creek Road
- Protect prominent hill tops and ridge lines north of Dollarburn Road and along the western edge of the town boundary.
- Emphasise view line between hill tops along connector boulevard east of Pharaohs Road.
- Retain existing scattered trees within waterway corridors.
- Ensure design of Dollarburn Road enables necessary capacity to service intended long-term function extending west to the Princes Freeway and Buln Buln Road.

Brandy Creek Road Gateway

Distant district views of the surrounding hilltops transition to short views of the vegetated roadside embankment when arriving into Warragul from the north via Brandy Creek Road. As the road descends into the town some views to the mountain ranges are revealed. Views along the western side of the road reveal the creek valley and stands of canopy trees and windrow planting. In some sections, future housing will be highly visible along this corridor. In the final section of the gateway the land form drops away and is only visible for a short distance. Views to the east are frequently screened by vegetation. Stands of trees are visible at the intersection of Dollarburn Road signifying an important arrival point into the town centre.

Gateway Guidelines

Gateway Section 1

G17.1 Limit access off Brandy Creek Road to future low density lots. Provide a service road frontage for future lots.

G17.2 Provide a high quality landscape entry feature at the north western corner of the growth area to signify entry into the new residential area.

G17.3 Ensure dwellings are not sited on the prominent hilltop.

Gateway Section 2

G17.4 Ensure residential development in the Area of High Visibility contributes to the view from Brandy Creek Road by retaining existing vegetation where possible, providing sufficient space within allotments for tree planting and providing a mix of roof materials and colours.

G17.5 Ensure existing clusters of roadside vegetation and under-storey planting is retained in the case of any road widening.

G17.6 Retain existing stands of vegetation within the future residential areas to soften the visual impact of housing and provide distinctive neighbourhood elements.

G17.7 Design future roads and lot layouts to support a view corridor across residential development and along the creek open space corridor.

G17.8 Ensure landscaping within the service road integrates with the existing remnant vegetation. Provide larger front setbacks of at least 8m in depth to support the planting of a large canopy tree that will strengthen the gateway's landscape character.

G17.9 Ensure buildings are sited so the roof line does not exceed above the ridge line, particularly in areas of steep slope situated close to proposed open space areas.

G17.10 Ensure service road landscaping is compatible with Brandy Creek Road.

G17.11 Provide larger front setbacks of at least 8m in depth to support the planting of a large canopy tree.

The start of the gateway experience is signified by the bend in the road revealing district views. Future housing will be highly visible when delivered on these prominent hillsides

Gateway Section 3

G17.12 Ensure residential development in the Area of High Visibility contributes to the view from Brandy Creek Road by retaining existing vegetation where possible, providing sufficient space within allotments for tree planting and providing a mix of roof materials and colours.

G17.13 Retain existing stands of vegetation within the future residential areas to soften the visual impact of housing and provide distinctive neighbourhood elements.

G17.14 Design future roads and lot layouts to support a view corridor across residential development and along the creek open space corridor.

Section 2 of the Gateway reveals remnant trees and vegetation scattered along the roadside and ridge lines throughout the north west precinct. This is a key view revealing district views to the mountain ranges.

Precinct Guidelines

- Refer to Interface Guidelines for recommendations on Interface condition 1, 2 and 3.
- Refer to Slope Response Guidelines for recommendations on delivering housing in areas of flat land (up to 5% slope) moderate slope (up to 10% slope). Note for areas of very steep slope (15%+) split level dwellings are encouraged - please refer to specific Guidelines.
- Refer to Public Realm Guidelines for recommendations on how to retain existing trees and vegetation, noting the expansive coverage of trees and vegetation to be considered for retention and the clusters of highly visible trees located in the areas of 10%+ slope.

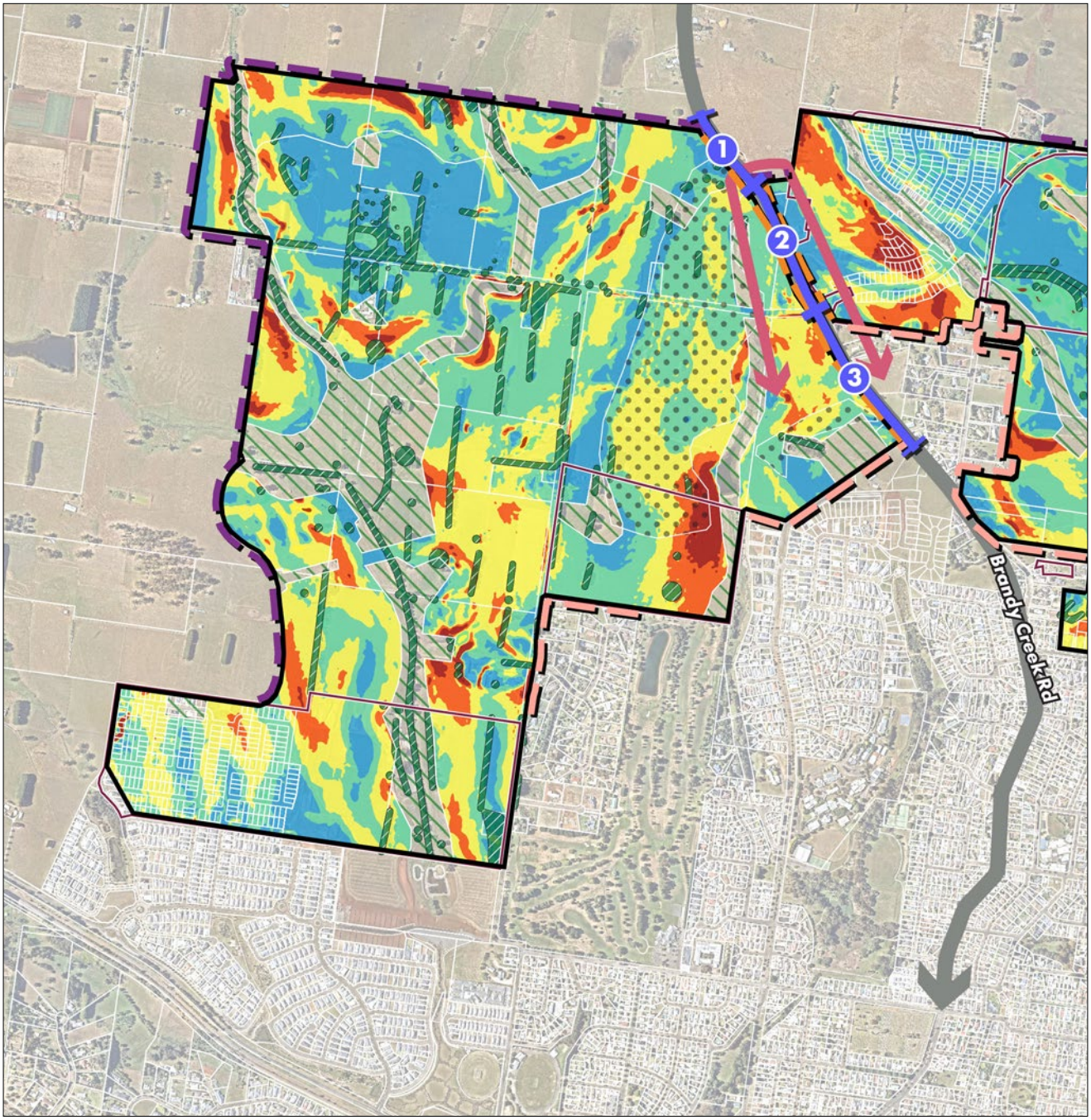


Figure 46. Warragul North West - Guidelines Plan

LEGEND

- Urban Growth Zone Boundary
- Major Road
- Railway Line
- Conventional Residential Area
- Proposed Open Space Network
- Approved Subdivision Development

GATEWAY GUIDELINES

- Gateway Sections
- Areas of High Visibility along The Gateway

INTERFACE GUIDELINES

- Interface 1 - Residential/Low Density Residential within a PSP with Farming Zone/Rural Activity Zone
- Interface 2 - Residential within a PSP with an Existing Low Density Residential Zone
- Interface 3 - Residential/Low Density Residential within a PSP interface with an identified Township Gateway

SLOPE RESPONSE GUIDELINES

- Flat Land 0%-5%
- Moderate Slope 5%-10%
- Steep Slope 10%-15%
- Very Steep Slope 15%-20%
- Extremely Steep Slope Over 20%

PUBLIC REALM GUIDELINES

- Trees to Be Considered for Retention

018 Warragul North East Guidelines:

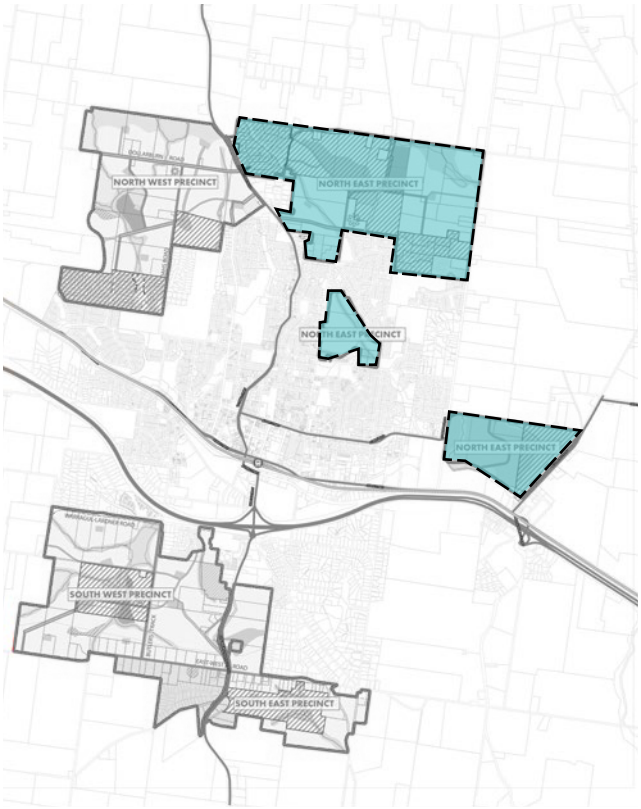


Figure 47. Warragul North East - Key Plan

Warragul North East

Gateway Guidelines

- Refer to the guidelines in the previous section - Warragul North West on pages 77 & 78.

Precinct Guidelines

- Refer to Interface Guidelines for recommendations on Interface condition 1, 2 and 3.
- Refer to Slope Response Guidelines for recommendations on delivering housing in areas of flat land (up to 5% slope) moderate slope (up to 10% slope). Note for areas of very steep slope (15%+) split level dwellings are encouraged - please refer to specific Guidelines.
- Refer to Public Realm Guidelines for recommendations on how to retain existing trees and vegetation, noting the expansive coverage of trees and vegetation to be considered for retention and the clusters of highly visible trees located in the areas of 10%+ slope.

PSP LOCAL DESIGN CONSIDERATIONS

- Maintain rural character of town gateway along Brandy Creek Road and Queen Street
- Ensure new street layouts create views to the Lillico Volcano district park
- Protect open hilltop and retain existing vegetation east of Normanby Road as positive viewshed for existing and new development
- Maintain separation between Warragul and Nilma through protection of farming land along Queen Street and low-density interface along Bloomfield Road.

Examples of the remnant trees scattered throughout the north east precinct.

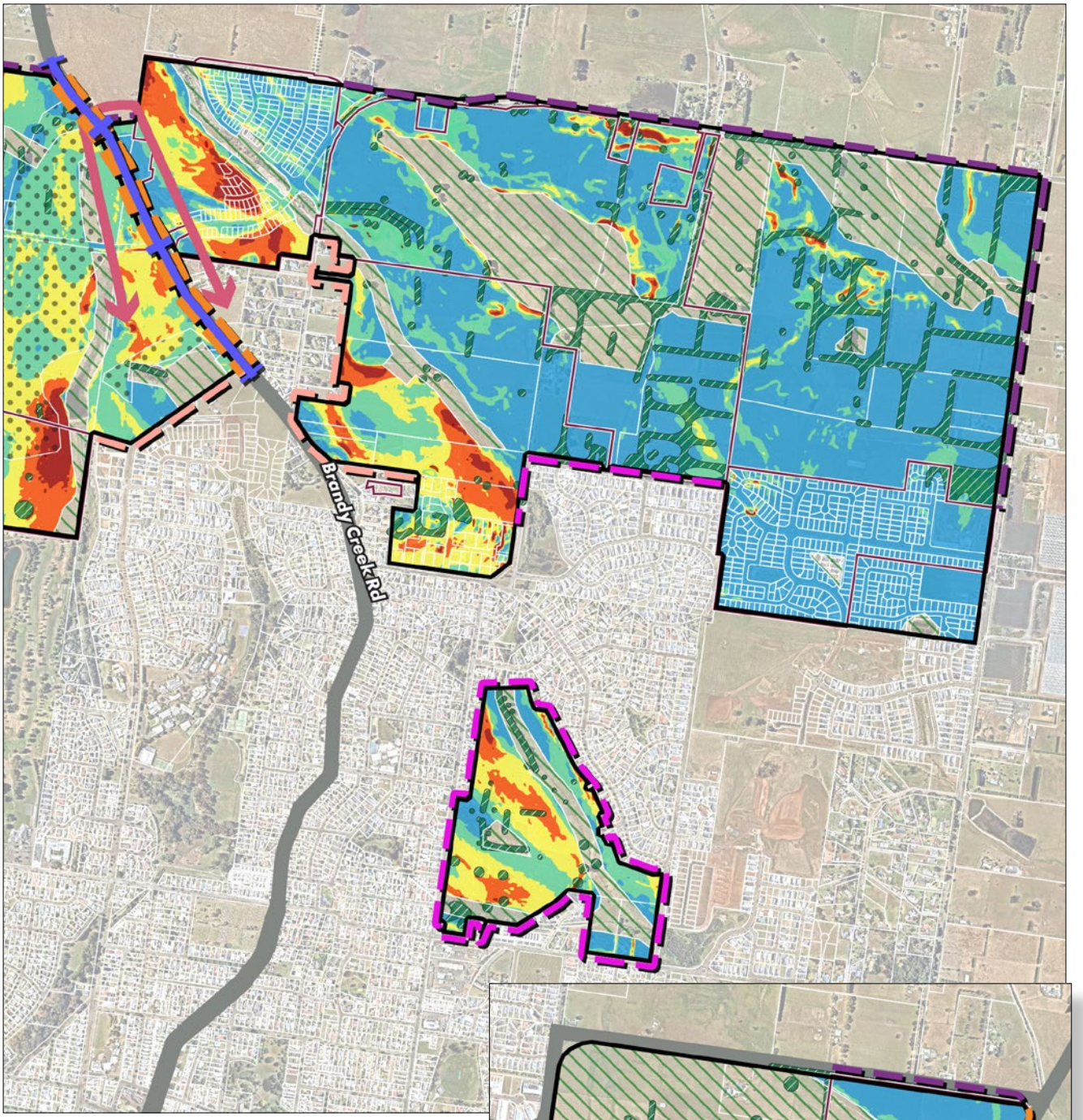


Figure 48. Warragul North East - Guidelines Plan

LEGEND

- Urban Growth Zone Boundary
- Major Road
- Railway Line
- Conventional Residential Area
- Proposed Open Space Network
- Approved Subdivision Development

GATEWAY GUIDELINES

- Gateway Sections
- Areas of High Visibility along The Gateway

INTERFACE GUIDELINES

- Interface 1 - Residential/Low Density Residential within a PSP with Farming Zone/Rural Activity Zone
- Interface 2 - Residential within a PSP with an Existing Low Density Residential Zone
- Interface 3 - Residential/Low Density Residential within a PSP interface with an identified Township Gateway

SLOPE RESPONSE GUIDELINES

- Flat Land 0%-5%
- Moderate Slope 5%-10%
- Steep Slope 10%-15%
- Very Steep Slope 15%-20%
- Extremely Steep Slope Over 20%

PUBLIC REALM GUIDELINES

- Trees to Be Considered for Retention

019 Warragul South West Guidelines:

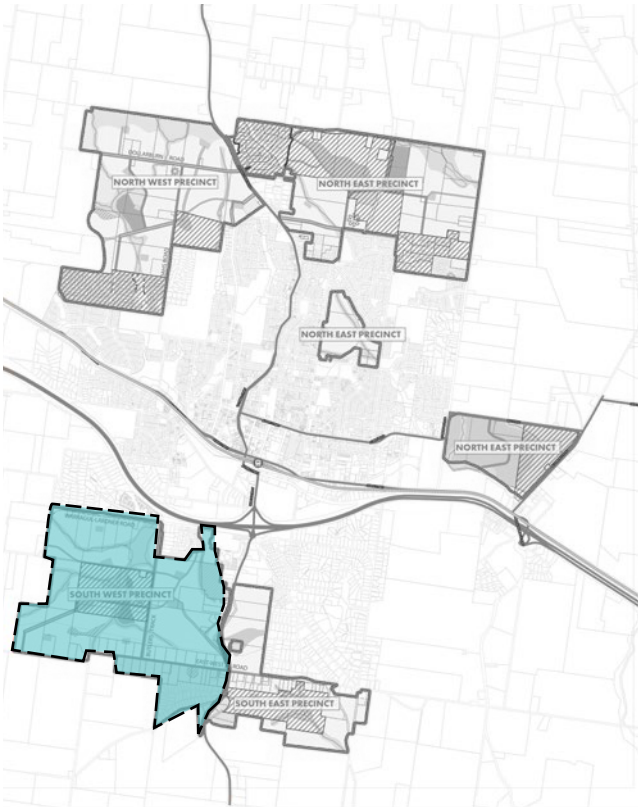


Figure 49. Warragul South West - Key Plan

PSP LOCAL DESIGN CONSIDERATIONS

- Maintain rural character of town gateway along Warragul-Korumburra Road
- Retain existing windrows along Stockdales Road to soften residential interface seen from Warragul-Korumburra Road.
- Create view lines between hilltops on either side of Butlers Track along local streets
- Utilise easements as an extension of the open space network with suitable landscaping and provision of paths.

Warragul South Gateway

Approaching the town from the south along Warragul Korumburra Road, the road rises moderately to East West Road where middle distance views across rolling farmland are revealed. Vegetation along the boundary of private properties screens views in many locations along this first part of the entry experience. There is an expansive, long distance view looking south east just before East-West Road, that frames the extensive vegetation and areas of steep slope. For a large part of this gateway, the interface will be to existing low density housing however, there is also a substantial interface to conventional residential housing.

Korumburra-Warragul Road descends into the town, where views are enclosed by embankments and vegetation on either side of the road. Conventional residential development is proposed either side of the road however it is unlikely to be visible from within the entry road because of the road cutting. Further descent signifies arrival into the established residential areas of the town.

Gateway Guidelines

Korumburra Road Gateway Section 1

G19.1 Where large remnant, native and exotic trees within private land are visible from the road corridor, integrate these trees into adjoining service road streetscapes and pocket parks and in large front setbacks. Use rows of trees that are providing structural organising elements in the landscape to define neighbourhoods.

G19.2 Design future roads and lot layouts to support view corridors along the open space corridors.

G19.3 Ensure buildings are not sited on the hilltops, particularly in the areas of steep slope situated close to the proposed open space areas.

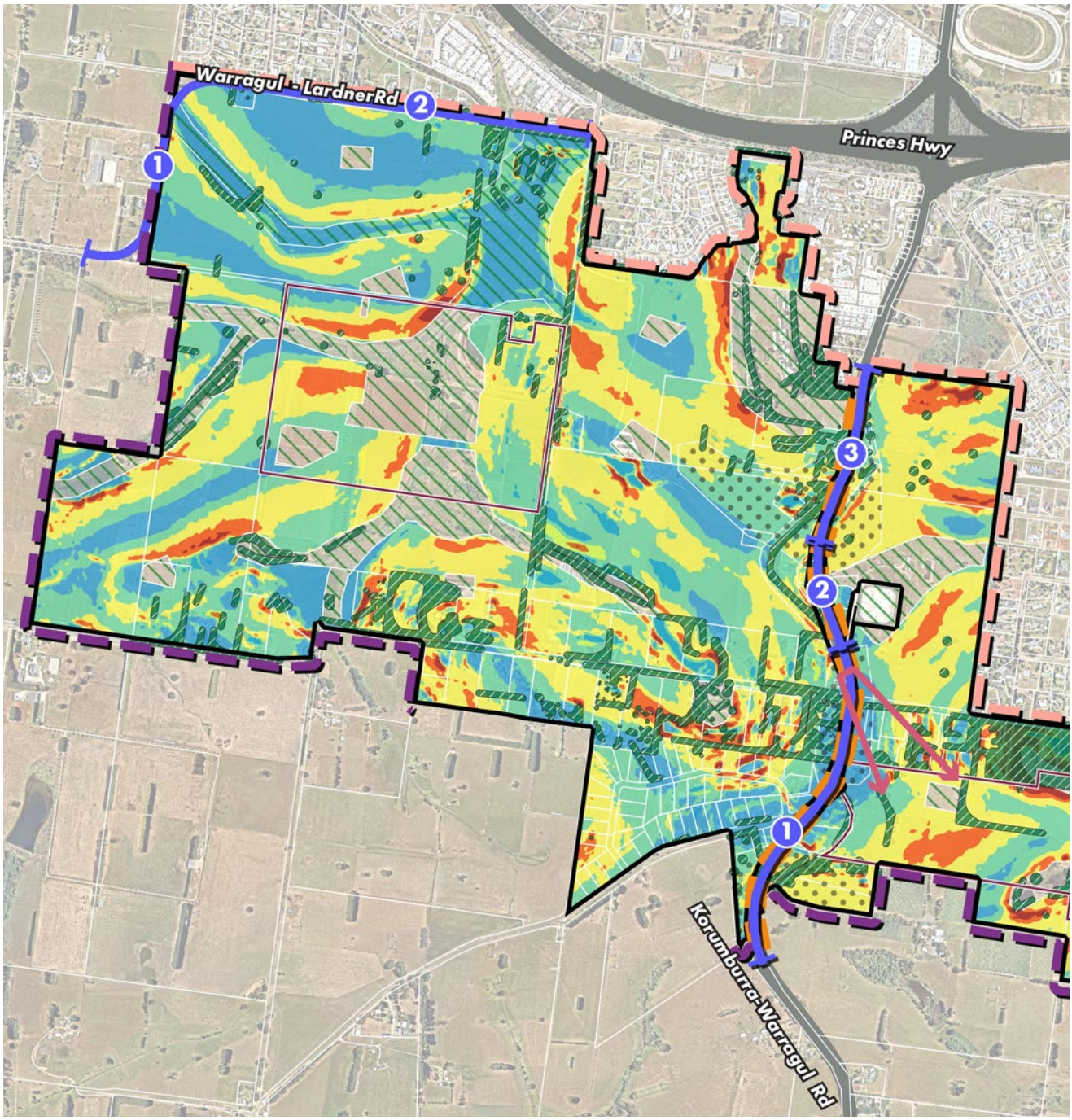


Figure 50. Warragul South West - Guidelines Plan

Korumburra Road Gateway Section 2

G19.4 Strengthen native roadside vegetation along Warragul Korumburra Road to complement native vegetation within the rural hinterland. Noting that residential development is proposed on both sides of the road in the section, however it is unlikely to be visible from within the entry road because of the road cutting.

Korumburra Road Gateway Section 3

G19.5 Ensure residential development located in the areas of high visibility and on sloping land contribute to the view from Warragul Korumburra Road by retaining existing vegetation and providing sufficient space within allotments for tree planting. Also consider delivering dwelling designs that respond to the slope and providing a mix of roof materials and colours.

G19.6 Align roads in new developments to capture views to surrounding hilltops and ridge lines and stands of existing canopy trees.

G19.7 Provide larger front setbacks of at least 8m for properties fronting onto the service roads.

Lardner Road Gateway Section 1

G19.8 Where large remnant, native and exotic trees within private land are visible from the road corridor, integrate these trees into adjoining service road streetscapes and pocket parks and in large front setbacks. Use rows of trees that are providing structural organising elements in the landscape to define neighbourhoods.

Lardner Road Gateway Section 2

G19.9 Provide larger front setbacks of at least 8m for properties fronting onto the service roads.

G19.10 Design future roads and lot layouts to support view corridors along the open space corridors.

An opening in the roadside vegetation reveals expansive distant view to the ranges (Korumburra Gateway Section 1)

On the final decent into the town the roadside views are enclosed by embankments and significant canopy trees and roadside vegetation on either side of the road (Korumburra Gateway Section 3)

Precinct Guidelines

- Refer to Interface Guidelines for recommendations on Interface condition 1, 2 and 3.
- Refer to Slope Response Guidelines for recommendations on delivering housing in areas of flat land (up to 5% slope) moderate slope (up to 10% slope). Note for areas of very steep slope (15%+) split level dwellings are encouraged - please refer to specific Guidelines.
- Refer to Public Realm Guidelines for recommendations on how to retain existing trees and vegetation, noting the expansive coverage of trees and vegetation to be considered for retention located in areas of high visibility along the gateway.

020 Warragul South East Guidelines:

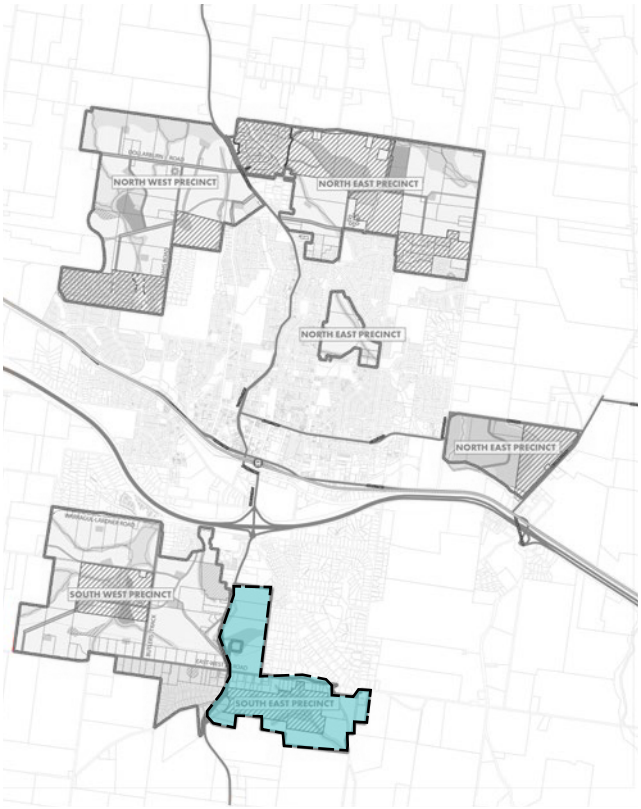


Figure 51. Warragul South East - Key Plan

Warragul South East

Gateway Guidelines

Refer to previous section - Warragul South Gateway for Gateway Guidelines.

Precinct Guidelines

- Refer to Interface Guidelines for recommendations on Interface condition 1, 2 and 3, in particular having consideration for sensitive interface conditions where existing farming operations could be impacted by future residential development.
- Refer to Slope Response Guidelines for recommendations on delivering housing in areas of flat land (up to 5% slope) moderate slope (up to 10% slope). Note for areas of very steep slope (15%+) split level dwellings are encouraged - please refer to specific Guidelines.
- Refer to Public Realm Guidelines for recommendations on how to retain existing trees and vegetation, noting the expansive coverage of trees and vegetation to be considered for retention located in areas of high visibility along the gateway.

PSP LOCAL DESIGN CONSIDERATIONS

- Maintain rural character of town gateway along Warragul-Korumburra Road.
- Create positive interface to existing agricultural uses and use vegetation to soften urban edge as seen from Warragul-Korumburra Road and Bona Vista Road.
- Hill-top park positioned to maintain green backdrop to town centre.
- Retain existing vegetation along East-West Road.

Example of a typical view across undulating hills in Warragul's south east

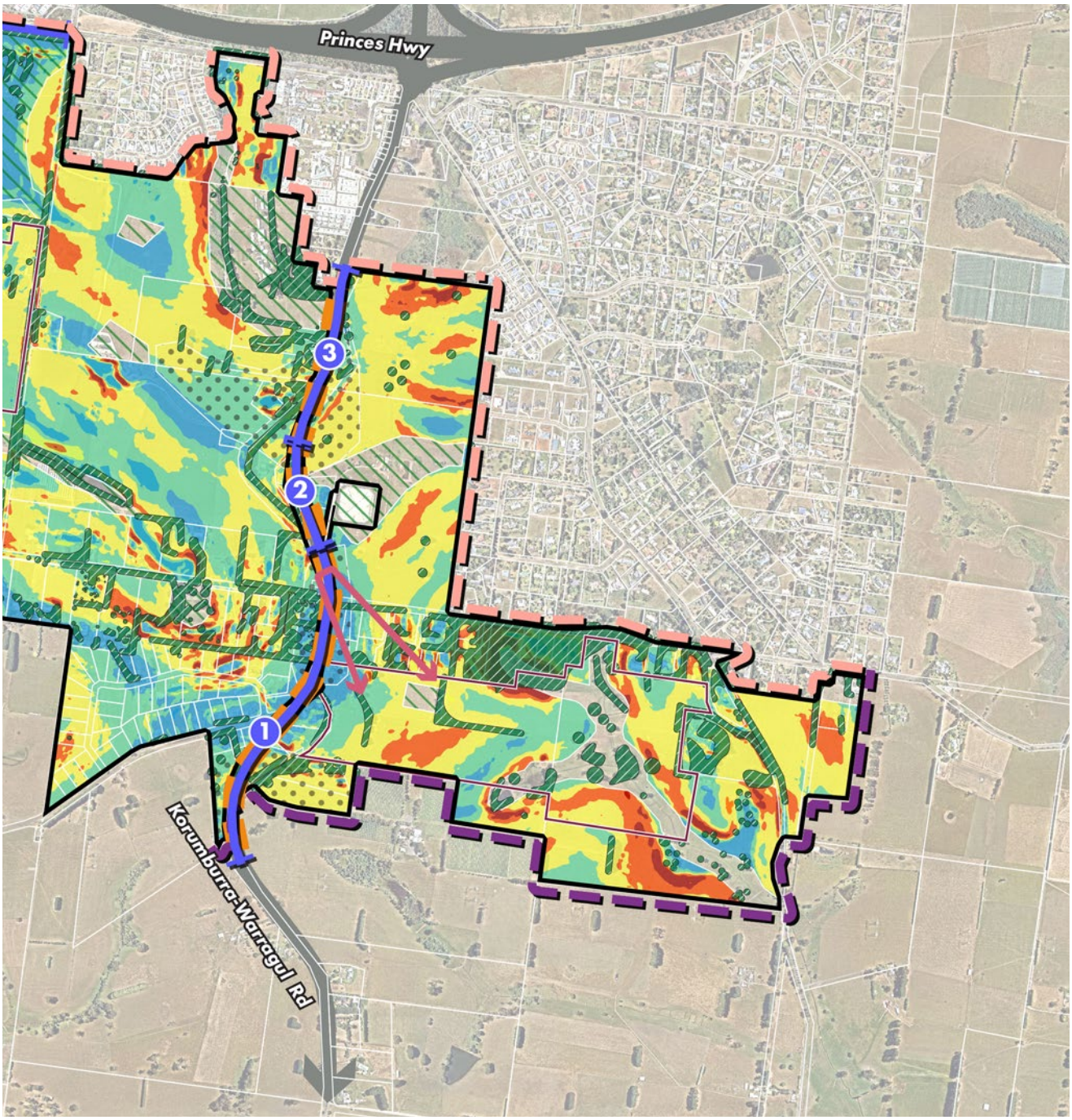


Figure 52. Warragul South East - Guidelines Plan

LEGEND

- Urban Growth Zone Boundary
- Major Road
- Railway Line
- Conventional Residential Area
- Proposed Open Space Network
- Approved Subdivision Development

GATEWAY GUIDELINES

- Gateway Sections
- Areas of High Visibility along The Gateway

INTERFACE GUIDELINES

- Interface 1 - Residential/Low Density Residential within a PSP with Farming Zone/Rural Activity Zone
- Interface 2 - Residential within a PSP with an Existing Low Density Residential Zone
- Interface 3 - Residential/Low Density Residential within a PSP interface with an identified Township Gateway

SLOPE RESPONSE GUIDELINES

- Flat Land 0%-5%
- Moderate Slope 5%-10%
- Steep Slope 10%-15%
- Very Steep Slope 15%-20%
- Extremely Steep Slope Over 20%

PUBLIC REALM GUIDELINES

- Trees to Be Considered for Retention

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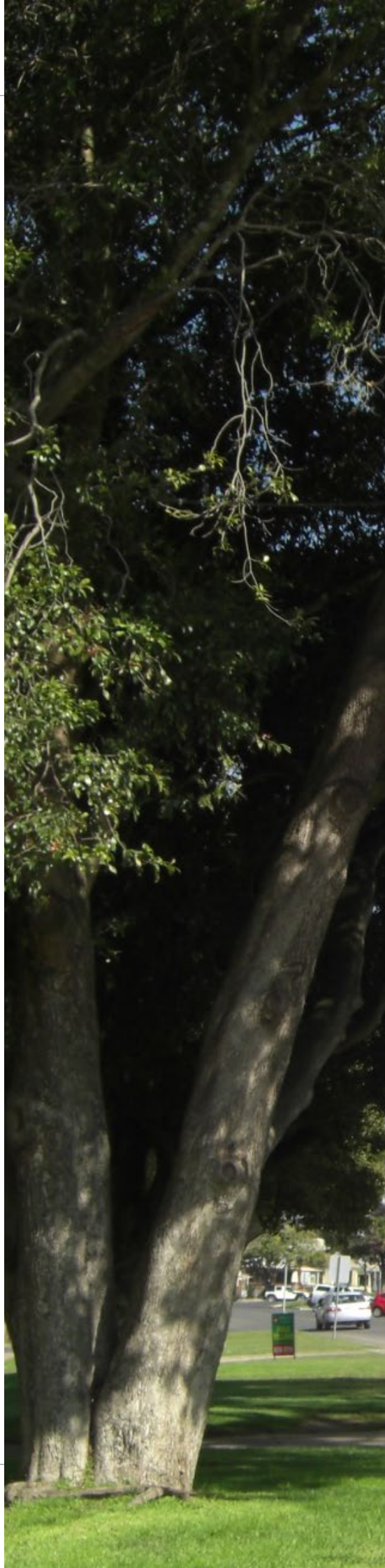
Part C - Design Guidelines for Infill Residential Development.



1 Introduction

What Are We Responding To?

Baw Baw Shire is one of Victoria's fastest growing municipalities. By 2031, it is expected that the Shire's population will have grown by 20,000 people. The two main towns in Baw Baw, Warragul and Drouin will experience the largest amount of growth. It is anticipated that Warragul is likely to grow by 5,600 residents and Drouin by 5,700.

This growth is likely to result in a 37% increase in the supply of dwellings for Drouin and 29% for Warragul. The majority of new housing will be delivered within the Urban Growth Zone, however there are opportunities for some infill development to occur within the established towns.

As the towns grow and infill development occurs, there is a need to ensure that the towns do not lose their valued local character. It can be challenging to define exactly what factors make up a place's local character, however there are some defining elements that are commonly agreed upon. These elements include:

- Natural landforms and features such as topography, views, vistas and skylines.
- Distinctive landscape elements such as ridges, gulleys and undulating hills and watercourses
- Street and subdivision patterns.
- Building scale and form and architectural styles.
- Building setbacks.
- Building materials, building techniques and details.

The established residential areas significantly contribute to Warragul and Drouin's recognised local character. A common characteristic is the generous size of both the lots and the streets. Residential lots have generous setbacks to the front, side and rear boundaries and houses are set in generous gardens. Housing is typically detached and predominately single storey. Together these elements enhance the feeling of spaciousness in the streetscape.

The introduction of infill, higher density housing provides challenges in ensuring that the low scale garden character is respected and the amenity existing residents enjoy, is retained.

It is recognised that with new development comes the risk of inappropriate housing design outcomes that can detrimentally impact on, or contribute to the loss of the established neighbourhood character. However if managed in the right way, new development will provide the opportunity to design and deliver a variety of housing types to meet the various community needs, whilst enhancing local character.

The objectives of the Design Guidelines are to:

- Facilitate the development of high quality, amenable, and attractive multi dwelling housing outcomes that has regard for the local context and established neighbourhood character.
- Encourage the provision of a diversity of dwelling types that sit appropriately in their local context.
- Ensure that the highest level of amenity is provided for existing and new residents.
- Provide certainty to the community that appropriate levels of tree planting and landscaping are delivered in new developments.
- Facilitate development that provides excellence in architecture and ESD standards.
- Support existing State and Local planning objectives.
- Provide certainty for applicants in understanding Council's expectations in the preparation of planning permit applications and the assessment process.

How To Use The Design Guidelines

The Guidelines are applied to land in the General Residential Zone (GRZ) in Drouin and Warragul. Guidance is provided in relation to achieving best practice design outcomes for infill development, that is, the development of more than one dwelling on a lot. The likely housing typologies that would be delivered in this zone are dual occupancy where the second dwelling is located at the rear of an existing dwelling, townhouses or villa units.

The Guidelines must be considered for development when a permit application is required for:

- Construction of an additional dwelling if there is at least one dwelling existing on the lot.
- Construction of two or more dwellings on a lot.

The following Guidelines are organised according to:

- Section 1 - Provides overarching guidance on achieving best practice design outcomes with consideration of how residential development should respond to dwelling siting, scale, form, materials and detailing.
- Section 2 - Outlines the preferred character statements for Significant Character Areas, as identified in the Warragul and Drouin Neighbourhood Character Study 2011.

The Approvals Process

The Baw Baw Planning Scheme outlines specific provisions in relation to the development of dwellings on a lot and residential subdivision of land.

The Design Guidelines do not seek to replace, override or vary the objectives, standards and decision Guidelines that are set out in Clauses 54 and 55 of the Scheme. All development should be delivered in accordance with ResCode provisions. The Design Guidelines provide further detail on how to achieve best practice site specific outcomes. The Guidelines aim to exceed ResCode requirements to provide improved building and amenity outcomes in the established residential neighbourhoods in Warragul and Drouin.

2 Site Layout

Guidelines

01 Building Siting & Orientation

Objectives

O1.1 To ensure new infill development complements the existing residential pattern and the established scale, rhythm and character of the adjacent street.

O1.2 To ensure existing trees within the public and private land are retained and appropriate tree protection zones are applied.

O1.3 To ensure buildings are adequately set back from the property boundary to allow for planting of canopy trees.

O1.4 To ensure dwellings are sited to maximise solar access opportunities and consideration is given for solar access for adjoining sites.

Guidelines

G1.1 Ensure the siting and design of new dwellings responds to existing neighbourhood conditions including consideration of topography, key view corridors and vistas, retaining established trees and vegetation and respecting the privacy and amenity of neighbouring dwellings.

G1.2 Ensure the siting and design of new dwellings maximises landscaping opportunities on the site, including the retention of existing canopy trees and the planting of new canopy trees and vegetation, where practical.

G1.3 Encourage the front setback to reflect the prevailing streetscape condition to maintain the established built form and streetscape character. The minimum setback from the front street should be the average distance of the front setbacks of the adjoining dwellings, in accordance with RecCode provisions.

G1.4 Encourage front yards to positively contribute to the surrounding streetscape. Front setbacks should achieve a minimum of 50% permeability to encourage landscaping, and where possible, existing trees and vegetation should be retained. In the case where rainwater tanks and/or rubbish/recycling bins need to be stored in the front yard ensure aesthetically pleasing screening (such as timber battening) is provided.

G1.5 A minimum of one 4.5m x 4.5m deep soil planting zone should be provided adjacent to side or rear boundaries for each new dwelling to allow for the planting of a small to medium canopy tree. Balconies and shading devices may encroach into side boundary deep planting zones by up to 1m. Ensure the adequate root zone is allowed for and suitable species are planted to prevent root damage to the dwelling.

G1.6 Buildings on consolidated lots should be set back by at least 3m to one side boundary and at least 1m to the other side boundary for the first 5 metres of the buildings that front the street to create a sense of spaciousness and reduce the visual dominance of the built form from the streetscapes.

G1.7 Encourage new buildings to be sited and oriented to maximise solar access to living areas and private open space and to benefit from cross ventilation, where practical. New buildings should be sited away from main habitable rooms and private and communal open space of adjoining properties, and have consideration for the provision of adequate light and sun penetration to existing development.

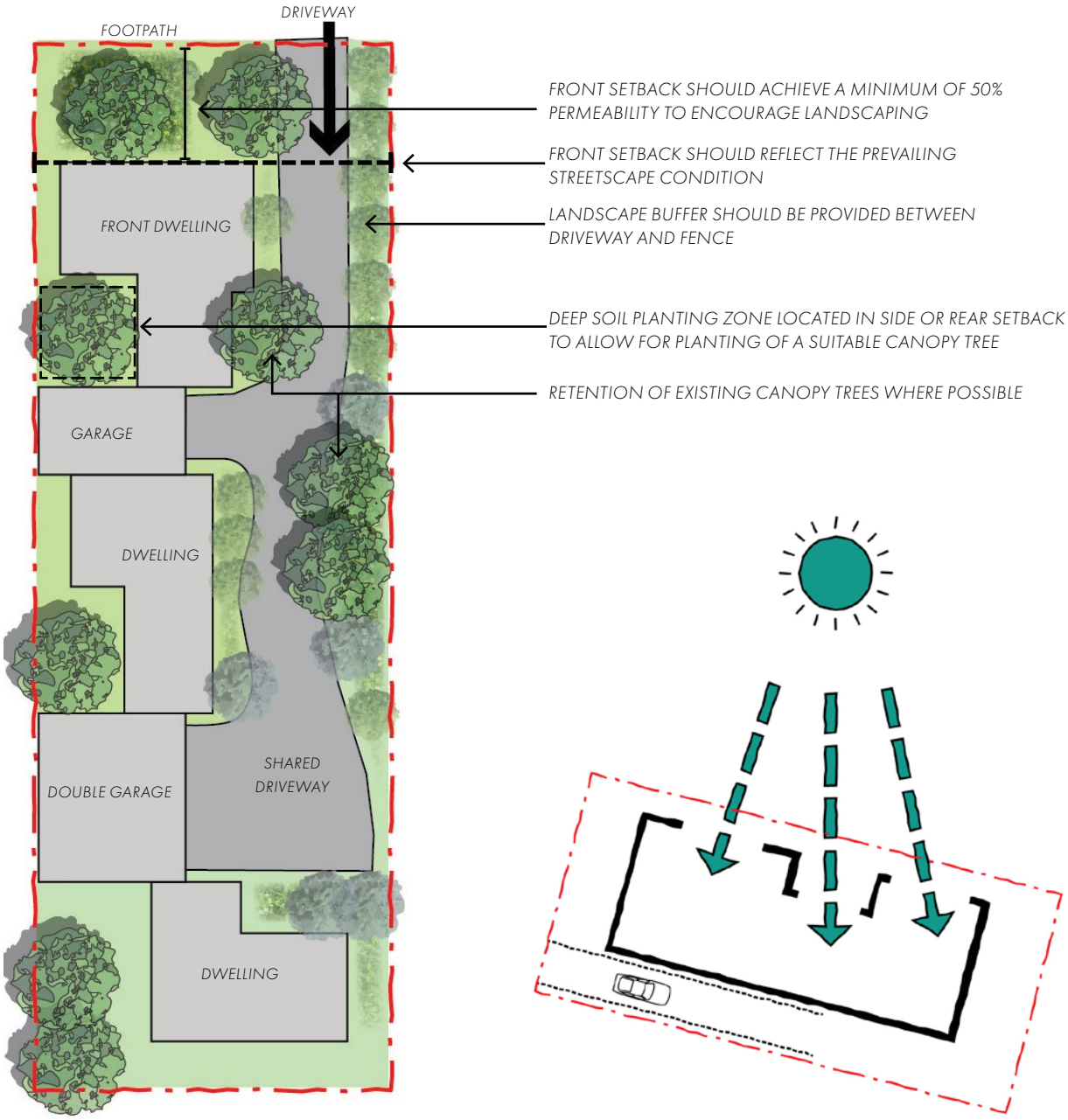


Figure 53. Demonstration of preferred setback outcomes in the case of a dual lot development.

Figure 54. Demonstration of how to orientate dwellings to achieve solar access in habitable rooms and private open space

02 Slope Response

Objective

O2.1 To ensure earthworks and buildings are designed to respond to sloping land with minimal impact on the natural landform.

O2.2 To provide convenient and safe access to dwellings with minimal impacts on the natural landform.

Guidelines

G2.1 Ensure the built form responds to the site conditions, particularly the grade of the lot. This will minimise the amount of site excavation and earthworks required.

G2.2 For land where slope is greater than 10%, consider the use of split-level dwelling design to minimise earthworks and retaining walls.

G2.3 Earthworks should be designed to ensure dwellings on the lower side of the street are not excessively sunken and have a presence to the street with visible windows. Similarly, earthworks should ensure excessive filling does not result in dwellings overwhelming the streetscape on the higher side of the street.

G2.4 Earthworks exceeding 1m depth in cut, or 1m depth in fill, should be avoided within 1m of any side, rear or front boundary.

G2.5 Provide adequate separation between dwellings on south-facing slopes to ensure future dwellings will achieve good solar access and landscaping outcomes.

G2.6 Ensure buildings have a 1m minimum setback from the base of any retaining wall.

G2.7 Encourage the use of vegetation to stabilise sloping areas.

G2.8 Ensure dwellings have safe and convenient access from the street to the front entrance via appropriately graded pedestrian access ways and driveways. The maximum grade for residential driveways and pedestrian paths leading to dwellings is 1:5 (20%). Where possible shape pavements to drain towards mass planting beds to provide passive irrigation.

Examples of appropriate dwelling and landscape design for a sloping site.

03 Vehicle Access and Car Parking

Objectives

O3.1 To provide safe and secure car parking and access from the street that does not adversely affect streetscape character.

O3.2 To minimise the amount of vehicle cross-overs and manage potential conflict between vehicles, building occupants, pedestrians and cyclists.

O3.3 To ensure the location, design and layout of car parking and access is integrated with the overall site planning and building design.

Guidelines

G3.1 Parking, vehicle entries and garages should not present as a dominant element when viewed from the street. Garage doors should not exceed 50% of the dwelling frontage.

G3.2 Ensure only one garage is visible from the street and it is setback a minimum 0.5m behind the dwelling frontage.

G3.3 Clearly define car parking areas to avoid parking occurring in front setbacks and on verges and nature strips.

G3.4 Utilise existing vehicle crossovers where practical and provide one single vehicle crossover for new, multi-dwelling developments. Two crossovers may be acceptable on consolidated lots or corner lots. New crossovers should be located to avoid impact on established street trees.

G3.5 For east-west orientated lots, locate driveways on the southern side of the lot, where possible, to minimise overshadowing from new buildings on neighbouring properties.

G3.6 Design shared access with the aim of minimising the visual dominance of hardscaped areas. Where possible, meander the driveway and locate landscaping nodes on view lines.

Example of a typical contemporary townhouse where the garage design does not visually dominate the dwelling facade.

Driveway designed to provide substantial landscape areas.

3 Building Design

04 Street Interface, Building Form & Articulation.

Objectives

O4.1 To ensure built form appropriately engages with the street, provides a sense of address and respects the preferred neighbourhood character.

O4.2 To enable passive surveillance of streets and public space through considered window composition and active uses facing the street.

O4.3 To provide front building entries that are easily identifiable and complement the overall architectural design.

Guidelines

G4.1 The design of new dwellings should respond to the surrounding built form, particularly building scale, the front and side setbacks and the percentage of site coverage of adjacent dwellings.

G4.2 Where development proposes multiple dwellings fronting the street (such as townhouses or units), ensure building mass and form is broken up through spacing between dwellings and/or facade articulation and landscaping.

G4.3 Ensure facade articulation respects the rhythm and grain of adjacent buildings. Articulate building façades through the considered design of openings, balconies, varied materials, recessed and projected elements, and revealing structural elements such as columns and beams.

G4.4 Ensure the front dwelling present to the street with a clearly defined and legible front entrance to the street. Dwelling entries should generally be recessed within the overall facade and form a clearly identifiable element in the facade composition. Projected entry porticos should be integrated into the overall building design and provide weather protection.

G4.5 For corner allotments, dwellings should be designed to address both street frontages. Both interfaces should be articulated with windows and openings where appropriate.

G4.6 Dwellings should be designed to provide passive surveillance of the surrounding public realm, and where practical, adjacent open space. Semi-transparent fencing is encouraged.

G4.7 Window proportions and alignment should respect neighbouring buildings. Encourage a minimum of two windows positioned on the front facade.

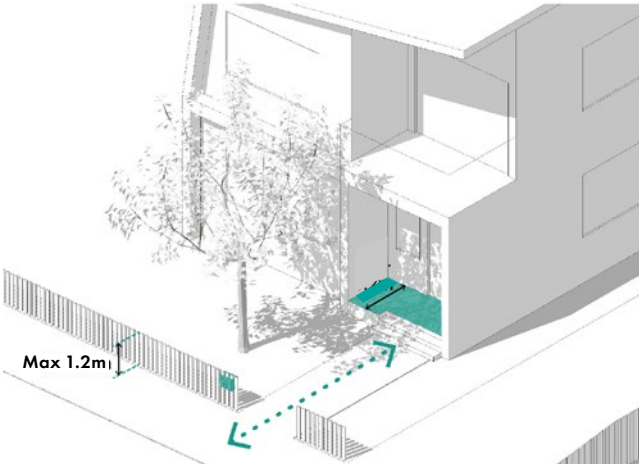


Figure 56. Demonstration of how to design the dwelling entrance as a clearly identifiable element in the facade composition.

Example of a contemporary townhouse with a well articulated front entrance.

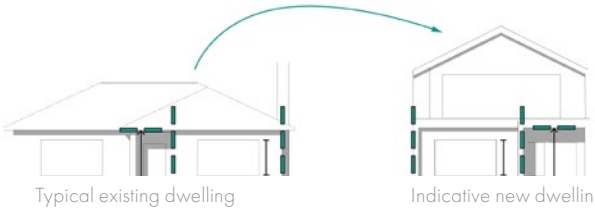


Figure 55. Demonstration of how the facade on a new dwelling can be articulated to respect the proportions of an existing adjacent dwelling.

Dwellings designed with habitable rooms and windows overlooking adjacent public open space providing passive surveillance opportunities.

05 Materials and Detailing

Objectives

O5.1 To ensure that building materials, colours and architectural details complement and respect the predominant neighbourhood character and enhance the streetscape composition.

O5.2 To encourage buildings to be designed and constructed with a unique sense of identity.

O5.3 To encourage the use of environmentally sustainable design practices and materials to deliver energy efficient dwellings.

Guidelines

G5.1 Ensure dwellings achieve high quality architectural design and detailing outcomes. Architectural styles should be guided by contemporary living arrangements, response to local climate and township characteristics. Dwelling design should incorporate building elements of human scale that articulate the facade and provide weather protection. Dwelling design should respond to local context, however should not seek to replicate the past.

G5.2 Dwelling façades should be clad with predominantly non monolithic materials, such as brickwork, weather boards or other articulated cladding. Highlight elements, accent colours, or materials including concrete and stone masonry and render can be strategically used for architectural feature elements, however it is recommended a maximum of three different primary cladding materials are used. Incorporate materials, textures and colours that respond sensitively to the defining characteristics of the streetscape.

G5.3 Provide legibility and visibility of entrances from the street, with prominent design features, good lighting, weather protection and separation for pedestrians from driveways.

G5.4 Arrange building façades to identify individual dwellings.

G5.5 Ensure the design of dwelling façades sensitively incorporate key architectural elements such as verandas, windows and eaves. Use verandahs and pergolas to reduce the mass of the building and give depth to the elevation. Incorporate post or pier support to verandahs and pergola structures. The location of servicing elements such as downpipes should be thoughtfully integrated into the building design.

G5.6 Provide visual interest to upper levels of dwellings. This can be achieved through varied setbacks and the location of overhangs, balconies, windows, verandahs, eaves and awnings.

G5.7 For corner sites detail both street façades and reinforce with changes in setbacks, materials, colour, roof form or height.

G5.8 Ensure garages are integrated into the overall dwelling design. Select materials to clad the garage to compliment, rather than compete with, the adjoining dwelling.

G5.9 Design dwellings with appropriately sized eaves to shade windows in summer and allow sun to penetrate into the dwelling in winter.

G5.10 Locate windows to capture cross ventilation and allow for passive cooling of dwellings.

G5.11 Encourage the specification of double glazed windows to reduce energy consumption.

G5.12 Roof materials must be matte finish and non reflective.

Contemporary examples of considered use of multiple materials within the facade.

06 Roof Design

Objectives

O6.1 To encourage roof forms that compliment the predominant neighbourhood character.

O6.2 To ensure roof design is integrated with the proportions and facade of the building.

Guidelines

G6.1 Consider site orientation in the design of roof forms so that elements such as eaves and solar panels can respond to solar access.

G6.2 Design and construct roofs with a minimum 22.5 degree pitch. Roof forms may include gable, skillion or hipped designs and these forms may be combined with flat roof forms to provide articulation.

G6.3 On larger buildings, articulate or divide roof forms into distinct sections in order to minimise visual bulk and respond to the roof proportions of existing buildings.

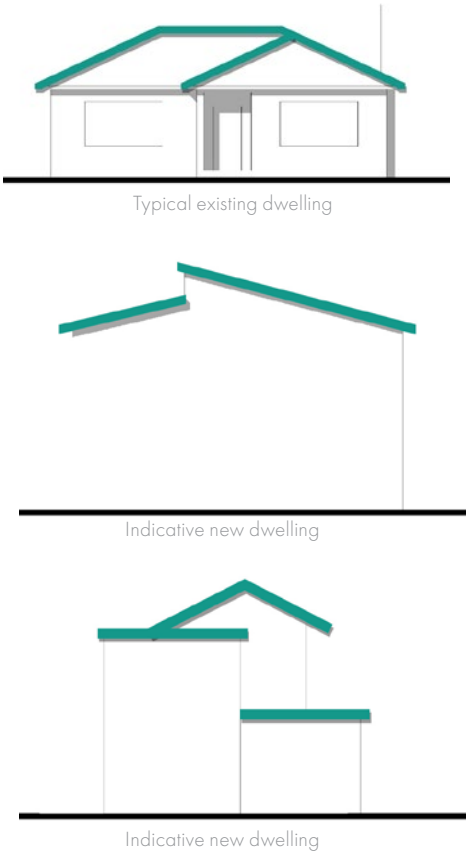


Figure 57. Demonstration of acceptable gable and pitched roof form designs.

07 Site Services

Objectives

O7.1 To ensure that site services are incorporated into the design of developments and can be easily accessed and maintained.

O7.2 To encourage the use of sustainable technologies to provide water, power, gas, and waste.

Guidelines

G7.1 Provide adequate and appropriately sited space within developments to accommodate dwelling services for ease of installation, access and maintenance.

G7.2 Provide adequately screened space for rubbish and recycling bin storage.

G7.3 Screen services and equipment such as heating and cooling within the roof form or screen behind a parapet so that they are not visible.

G7.4 Consult early with the relevant authorities to understand specific requirements in order to achieve the best integrated design outcome solution for incorporating site services into new dwellings/development.

G7.5 Incorporate rainwater tanks on each building of at least 5,000 litres to collect runoff from roof areas. The water should be used for landscape irrigation, cleaning and toilet flushing. Where practical, incorporate grey water treatment and re-use systems (in accordance with EPA requirements).

G7.6 Incorporate solar boosted hot water systems where practicable.

Examples of well integrated housing and landscape outcomes.

4 Landscaping

08 Landscape Design

Objectives

O8.1 To ensure new development provides generous landscape responses that enhance the streetscape and maintain the existing rural character.

O8.2 To maximise the amount of soft landscape areas and minimise the areas of hard stand.

Guidelines

Public Realm:

G8.1 Street tree planting should be in accordance with Council's approved street tree species. Nature strips and verges should be planted and maintained as lawn.

Private Open Space:

G8.2 Development applications must provide a landscape plan that demonstrates how the Minimum Garden Area Requirement will be achieved and specifies hardscape and softscape finishes (i.e. paved areas, trees, garden beds).

G8.3 Retain and protect existing mature trees where possible and integrate into the overall site planning. Existing trees are considered appropriate for retention if they are recognised for individual importance and/or healthy specimens with ongoing viability and greater than 4m tall.

G8.4 Design new multi dwelling developments with front gardens that can comfortably accommodate a minimum of one small to medium canopy tree per standard residential lot frontage. In the case where there are multiple dwelling frontages, one canopy tree should be provided per dwelling facing the street. The canopy tree should have a minimum mature height of 4m and be combined with under storey planting. Refer to the specifications outlined in the tables in Figures 58 and 59.

G8.5 Front and side gardens should be planted with species that integrate with the surrounding landscape character, are drought resistant, and where possible, do not rely on irrigation from the potable water supply.

G8.6 Ensure hard surfaces do not dominate the front set back area. Front yards including driveways and access paths, should consist of a minimum of 50% permeable surfaces and 30% planted garden bed area.

G8.7 Provide a landscape strip between the driveway and the side fence to soften the driveway expanse. Low level vegetation such as tall , skinny shrubs will increase visual amenity and site permeability.

Example of small front garden that positively contributes to the streetscape.

Suggested Surface Area	Recommended Minimum Canopy Dimensions	Minimum Distance from Truck to Wall
More than 20m^2	Small - 4x6m	0.6m
More than 47m^2	Medium - 8x8m	1.2m

Figure 58. General guidance for planting canopy tree in front setback.

Mature Tree Diameter (cm)	Minimum Distance (m)	Minimum Distance from Truck to Wall	Maximum Tree Size
10	0.5	0.6m	Small (more than 24m^2 canopy dimensions)
20	1.0		
30	1.5	1.2m	Medium (more than 64m^2 canopy dimensions)
40	2.0		

Figure 59. Suggested planting offsets from buildings and structures.

09 Retaining Walls

Objective

O9.1 To ensure retaining walls do not dominate streetscapes.

Guidelines

G9.1 Retaining walls to the street or public open space should be no more than 1.0m in height. They should be consistent and high quality and utilise materials that will enhance the streetscape such as locally sourced stone. As an alternative, provide larger front building setbacks to support more natural retaining outcomes such as rock boulders.

G9.2 Retaining walls to side and rear property boundaries should be no more than 1.0m in height for each section. Where more than one retaining wall is required they should be staggered with a minimum of 1.0 distance between each stagger to allow for landscaping. The overall height of the retaining walls should not exceed 2.0m.

G9.3 Retaining walls of one metre or more in height are to be designed by a structural engineer. A building permit is required to construct a retaining wall 1m or more in height and to construct a retaining wall on or near site boundaries (any height) in order to maintain the stability of the adjoining property. A building permit may also be required for a series of two or more retaining walls next to each other.

G9.4 If boundary fences are located directly above or within 1m of retaining walls, limit the height of the fence to 1.8m in order to reduce the overall visual impact and overshadowing of the adjoining property.

Example of consistent stone retaining walls that contribute positively to the streetscape

Examples of a good landscaping outcomes on a sloping sites.

010 Fencing

Objectives

O10.1 To promote an open and spacious streetscape whilst maintaining private amenity.

O10.2 To minimise the visual impact of high fences on streets, parks and other open space areas.

Guidelines

G10.1 Design front fencing with consideration of the prevailing streetscape condition. In the case where fencing is provided in adjoining properties then provide street fencing to a maximum of 1.2m in height. In the case where no front fences are provided then design landscaping to define the front yard.

G10.2 Construct street facing fencing using predominantly lightweight materials, ensuring transparency allows for visual permeability between the streetscape and front yard.

G10.3 Where fences are provided they should extend across the frontage of the lot with the exclusion of the driveway.

G10.4 Ensure the front fence of a corner lot returns and terminates in line with the front façade.

Example of a suitable contemporary timber batten fence.

Successful example where on a sloping site a landscape batter has been used as a front fence.

5 Significant Character Areas

Council undertook strategic work in 2011 to assess pre 1970 residential development in Drouin and Warragul as part of the Baw Baw Heritage Study. The purpose of the work was to identify residential areas that would benefit from further planning controls to ensure new development responds to existing neighbourhood character. The outcomes of the 2011 study included:

- Identification of Garden Suburban and Garden Court character precincts for both Warragul and Drouin.
- Drafting of preferred character statements for each of the precincts to provide direction for preferred development outcomes in each precinct.
- Drafting of Character guidelines for each precinct.
- Identification of potential significant character areas, including four areas with potential Heritage Overlay Controls (subsequently the four heritage areas have been implemented into the Planning Scheme through Heritage Overlays).

The GRZ Design Guidelines build on the outcomes of the 2011 study. Given a key objective of the GRZ Guidelines is to guide residential infill development to preserve the existing neighbourhood character, part of the scope of developing the GRZ Guidelines was to reassess the potential significant character precincts. The purpose was to evaluate if these areas would benefit from further planning controls to ensure future infill residential redevelopment retains the identified neighbourhood character in these areas.

The 2011 study identified nine significant character areas within Warragul and four within Drouin. Assessment of these areas was undertaken as part of this study. It is recommended that five of the areas are considered for further planning controls.

The five precincts recommended for recognition through the Baw Baw Planning Scheme are:

- Albert Road Drouin, the section between the Princes Highway and Victoria Street, due to the level of intactness of the inter-war dwellings, the established gardens and the high quality streetscape.
- Alford Street Warragul, the section between Victoria Street and Hope Street, due to the consistency in housing styles – predominately post war bungalows, the garden setting and the avenue of English Oak street trees are the key elements that contribute to the streetscape character.
- Bowen Street Warragul, the section between Albert Road and Clifford Street, due to the level of intactness of the Inter-war dwellings and the established front setbacks.
- Windsor Avenue Warragul because of the amount of intact bungalow style dwellings, many of which have been renovated, and their contribution to a distinct streetscape character.
- Church Street Warragul, due to the level of intactness of the Inter-war dwellings and the established garden character.

It was determined that the other precinct areas did not warrant further protection because they do not present the same level of contribution to local character.

The following section outlines:

- A summary of the key findings from the assessment of the potential special character areas.
- A Preferred Character Statement for Albert Road, Drouin, which should be read in conjunction with the other Guidelines outlined in this document.
- A consolidated Preferred Character Statement for Alford Street, Bowen Street, Church Street and Windsor Avenue, Warragul, which should be read in conjunction with the other Guidelines outlined in this document.

Preferred Character Statement - Albert Road Drouin

Objective

To maintain the original character of the Significant Character Precinct and the treed, spacious feel.

This will be achieved by:

- Encouraging the retention of original dwellings.
- Ensuring and dwelling extensions are sympathetic to the existing dwellings.
- Maintaining large front setbacks to provide opportunities for the planting of canopy trees.
- Retaining existing canopy trees within front, side and rear setbacks.
- Ensuring buildings are set back from side boundaries to maintain the detached streetscape rhythm.
- Utilising building materials that are compatible with predominant building materials in the streetscape
- Providing pitched roofing consisting of hipped and gable forms.
- Providing low or open front fences.
- Ensuring car parking structures do not dominate the streetscape.

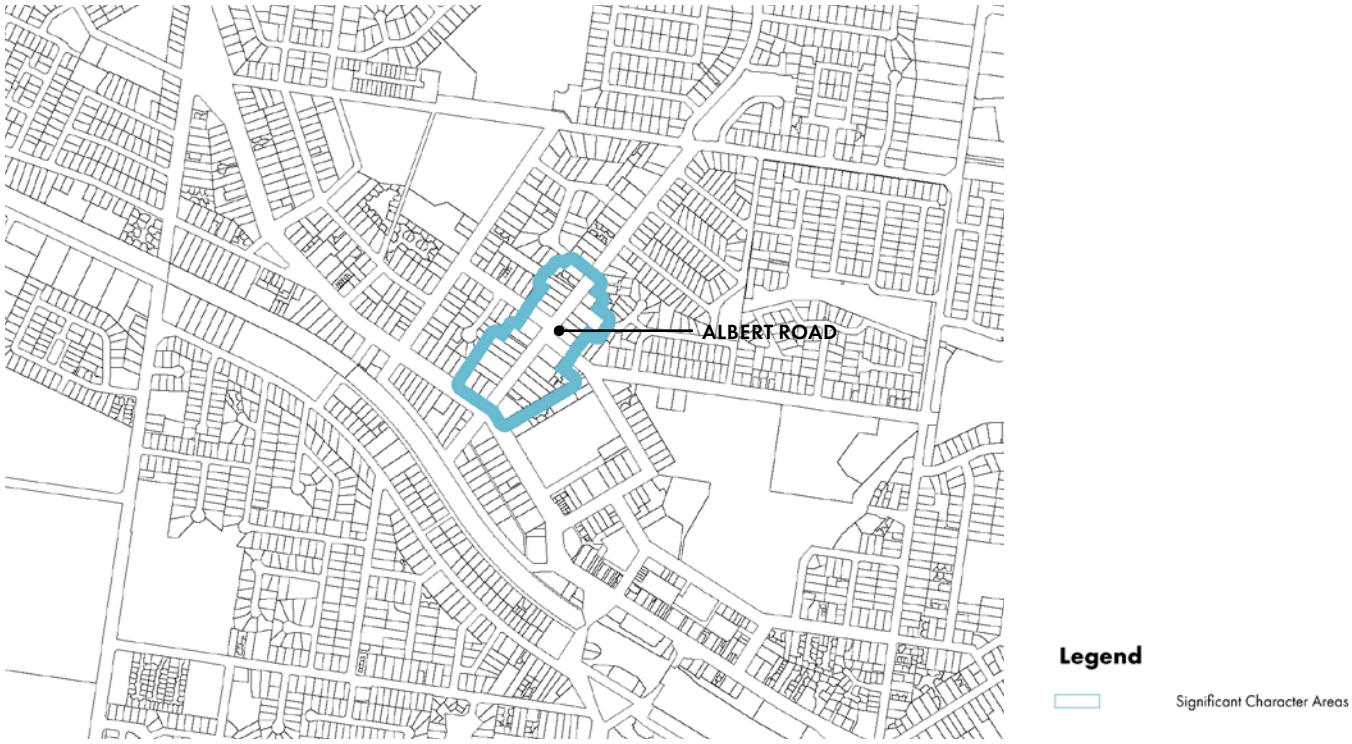


Figure 60. Drouin - Significant Character Areas (As defined in the Drouin and Warragul Neighbourhood Character Study 2011)

Albert Road, Drouin - Significant Character Assessment

The wide road reserve provides a spacious feel to the Albert Road Significant Character area. Large trees line the street and Inter-war and Post-war dwellings are set back significantly from the street behind established front gardens. The precinct includes a number of larger lots allowing for substantial side setbacks. Building materials include a mix of brick and weatherboard, and pitched roof forms utilise iron and tile materials. Low timber picket and brick fencing is a key characteristic of the street.

Potential Threats to Character:

- Loss of the level of intactness of the original dwellings.
- Increase in building scale within the street.
- Development that disrupts the established and distinct rhythm created by the single story development pattern.
- Reduced front and/or side setbacks, particularly if it results in loss of established garden area.
- Introduction of multiple crossovers and driveways, particularly if it results in loss of established trees and garden area.
- Introduction of high, visually impermeable fencing styles.
- Loss of large street trees.

Recommendations & Suggested Planning Mechanism:

Albert Road has a distinctive feel that positively contributes to Drouin's valued local character. There are no planning policies or controls in place that protect the street from the identified potential threats to character. It is recommended that controls are implemented that encourage:

- Retention of original dwellings.
- New dwellings and/or additions to existing dwellings to present as single storey when viewed from the street.
- Roofs that respond to the established form and style.
- Garages that are not visually prominent.
- Retention of established front and side setbacks to provide opportunities for the planting of large canopy trees.
- Retention of established trees and vegetation, where healthy and not-deemed to be a weed species.
- Fencing styles that are visually permeable and up to 1.2m in height.
- Implementing an Neighbourhood Character Overlay.
- Rezoning identified area in street to NRZ.

Existing Character Elements

Architectural Style	Predominately a mix of inter-war and post war dwelling styles with the exception of a few later modern brick veneer dwellings.
Building Materials	The majority of the dwellings are constructed of clinker brick and render, or brick veneer. There are some weatherboard dwellings.
Building Form and Layout	Dwellings are predominately double fronted, single storey buildings with a projecting front room and/or porch to the front door. There are two examples of two storey modern dwellings within the area and a single storey services building (located on the corner of Albert Road and Grant Street). All buildings are parallel to the lot frontage.
Roofing	Dwellings have hipped roofs that utilise iron and tile materials.
Front Setbacks	Buildings with large front setbacks establish a consistent character element in the streetscape. Front setbacks range in depth from approximately 6m to 10m. All dwellings have large established gardens located in the front setback.
Side Setbacks	Lots have consistent side setbacks that allow for landscaping on one side and driveway and single garage on the other.
Front Fences	Fencing styles are typically low and transparent allowing visual permeability. They are predominately timber pickets or brick. In some cases there is no front fence and landscaping is the dominant visual element.
Garden Styles	All lots have established gardens that vary in types of plantings. Vegetation ranges from low to medium exotic shrubs to large established exotic trees. Front gardens are a dominant visual element in the streetscape.
Street Trees	Large scale exotic canopy trees create a distinctive visual element in the streetscape.
Footpath Treatment	1.5m wide concrete footpath on either side of the road. Both sides of the street have wide grassed verges.
Topography	The street slopes down to the western side creating an elevated view of the dwellings located on the eastern side of the street.

Preferred Character Statement - Significant Character Areas, Warragul

The Warragul Significant Character Areas share similar characteristics, therefore a Preferred Character Statement has been developed for all areas.

Objective

To maintain the original character of the Warragul Significant Character Precincts and the treed, spacious feel.

This will be achieved by:

- Encouraging the retention of original dwellings.
- Ensuring dwelling extensions are sympathetic to the existing dwellings.
- Maintaining large front setbacks to provide opportunities for the planting of canopy trees.
- Retaining existing canopy trees within front, side and rear setbacks.
- Ensuring buildings are set back from side boundaries to maintain the detached streetscape rhythm.
- Utilising building materials that are compatible with predominant building materials in the streetscape
- Providing pitched roofing consisting of hipped and gable forms.
- Providing low or open front fences.
- Ensuring car parking structures do not dominate the streetscape.

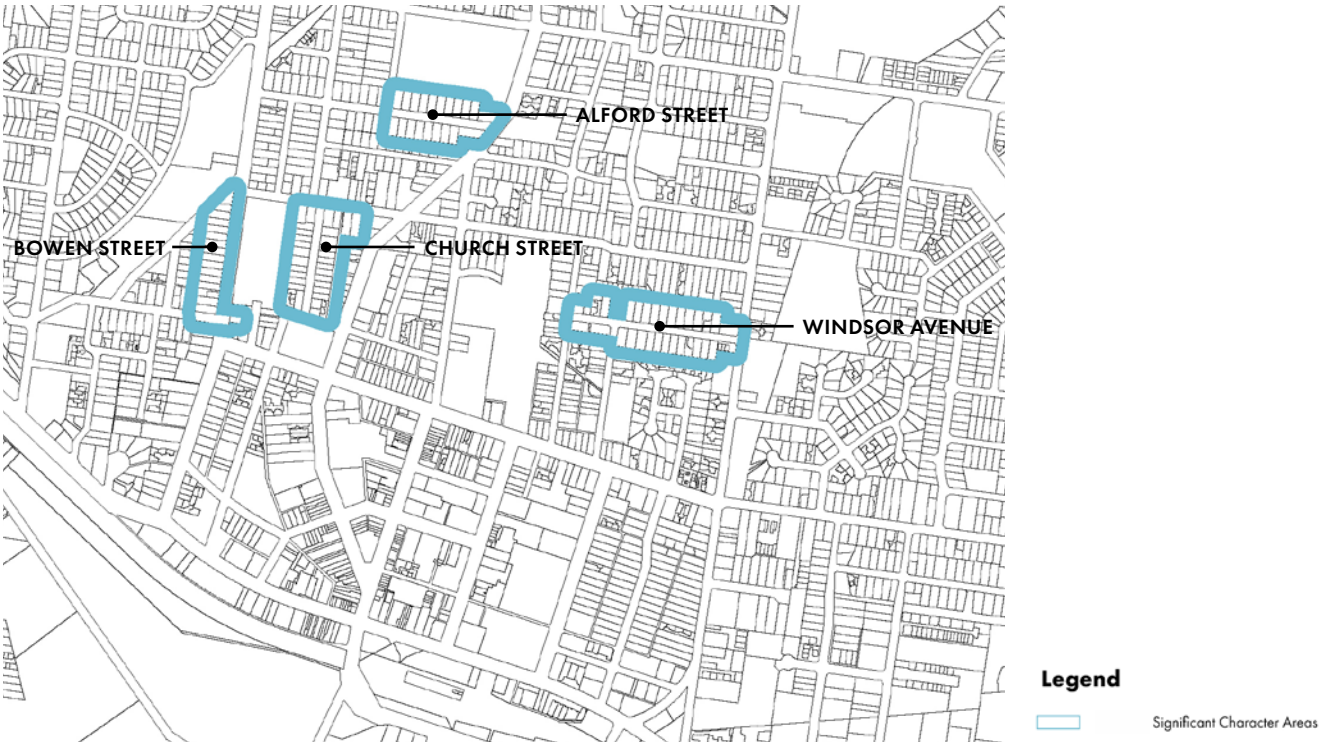


Figure 61. Warragul Significant Character Areas (As defined in the Drouin and Warragul Neighbourhood Character Study 2011)

Alford Street, Warragul - Significant Character Assessment

The section of Alford Street between Victoria and Hope Streets is characterised by its heritage protected English Oak street trees which enclose the streetscape. Dwellings are generally Inter-war with timber materials and pitched, iron roofing. Front setbacks are generous and consistent side setbacks provide for a detached streetscape rhythm.

Potential Threats to Character:

- Change to the relationship between the built form and the landscaping – a reduction in dominance of the street trees as key visual elements in the street would significantly impact on the look and feel of the street.
- Increase in building scale within the street.
- Development that impacts on the health of the English Oak Street trees.
- Development that disrupts the established and distinct spacious rhythm created by the single story detached development pattern.
- Reduced front and/or side setbacks, particularly if it results in loss of established garden area.
- Introduction of multiple crossovers and driveways, particularly if it results in loss of established trees and garden area.
- Introduction of high, visually impermeable fencing styles.

Recommendations & Suggested Planning Mechanism:

Alford Street has a distinctive feel that positively contributes to Warragul's valued local character. There are no planning policies or controls that currently protect the street from the identified potential threats to character. It is recommended that controls are implemented that encourage:

- New dwellings and/or additions to existing dwellings to present as single storey when viewed from the street.
- Roofs respond to the established form and style. Garages that are not visually prominent.
- Retention of the established front and side setbacks to provide opportunities for the planting of large canopy trees.
- Retention of established trees and vegetation, where healthy and not-deemed a weed species.
- Fencing styles that are visually permeable and up to 1.2m in height.
- Rezoning street to NRZ with complementary local policy if needed.

Existing Character Elements

Architectural Style	Predominately a mix of inter-war and post war bungalow style dwellings. There are two examples of Victorian/Edwardian cottages.
Building Materials	The majority of the dwellings are weatherboard dwellings, however there a several clinker brick houses.
Building Form and Layout	Dwellings are predominately double fronted, single storey buildings with a projecting front room and/or porch to the front door.
Roofing	Dwellings have hipped or gable roofs that utilise iron and tile materials. The consistent roof forms are a dominant visual element in the streetscape.
Buildings with large front setbacks	Buildings with large front setbacks establish a consistent character element in the streetscape. Front setbacks range in depth from approximately 6m to 10m. All dwellings have large established gardens located in the front setback.
Side Setbacks	Lots have consistent side setbacks that allow for landscaping on one side and driveway and single garage on the other. Often the garage is setback from the dwelling.
Front Fences	Fencing styles are typically low and transparent allowing visual permeability, and typical materials are timber pickets, brick, and stone. In some cases there is no front fence and landscaping is the dominant visual element.
Garden Styles	All lots have established gardens that vary in types of plantings. Vegetation ranges from low to medium exotic shrubs to large established exotic trees. Front gardens are a dominant visual element in the streetscape.
Street Trees	The street is characterised by heritage protected English Oak trees that create a substantial canopy enclosing the streetscape between Victoria Street and Hope Street.
Footpath Treatment	1.5m wide concrete footpath on either side of the road.
Topography	The street has an east west orientation, with the highest point at the eastern end. There is a significant decline in slope towards the western end of the street which creates an elevated district view framed by the large canopy trees.

Bowen Street, Warragul - Significant Character Assessment

The section of Bowen Street between Albert Road and Clifford Street comprises of Inter-war dwellings set within spacious gardens with canopy trees visible in front and rear setbacks. A consistent characteristic is the weatherboard materials and pitched, iron roofing. Fencing is low in height and generally constructed from timber pickets.

Potential Threats to Character:

- Development that disrupts the established scale and rhythm of the streetscape.
- Contemporary dwelling design and form that does not relate in scale, form, articulation, or materiality to the established character.
- Garages that are visually prominent.
- Reduction in front setback size.
- Loss of established trees and vegetation.
- Introduction of high, visually impermeable fencing styles.

Recommendations & Suggested Planning Mechanism:

This section of Bowen Street contributes to the recognised character established at the southern end of the street. There are no planning policies or controls that currently protect the street from the identified potential threats to character. It is recommended that controls are implemented that encourage:

- New dwellings and/or additions to existing dwellings to present as single storey when viewed from the street.
- Roofs that respond to the established form and style.
- Garages that are not visually prominent.
- Retention of the established front and side setbacks to provide opportunities for the planting of large canopy trees.
- Retention of established trees and vegetation, where healthy and not-deemed to be a weed species.
- Fencing styles that are visually permeable and up to 1.2m in height.
- Updating the schedules to the GRZ (could be multiple schedules if desired outcomes re different areas warrant targeted protection) with complementary local policy if needed.

Existing Character Elements

Architectural Style	Predominately post war bungalow style dwellings, of varying conditions.
Building Materials	Predominantly weatherboard dwellings.
Building Form and Layout	Dwellings are double fronted, single storey buildings with a projecting front room and/or porch to the front door and/or verandas.
Roofing	Dwellings have hipped or gable roofs that utilise iron materials.
Front Setbacks	Buildings with large front setbacks establish a consistent character element in the streetscape. Front setbacks average approximately 6m in depth.
Side Setbacks	Lots have consistent side setbacks that allow for landscaping on one side and driveway and single garage on the other. Often the garage or car port is setback from the dwelling, in some cases it is not visible.
Front Fences	Fencing styles are typically low and transparent allowing visual permeability, and typical materials timber pickets and brick. There is some hedge fencing.
Garden Styles	Garden styles vary between dwellings, however, most have some level of vegetation in the front yard. Vegetation ranges from low to medium exotic shrubs to some large established exotic trees.
Street Trees	Medium canopy trees are planted in the grass verge on the western side of the street.
Footpath Treatment	1.5m wide concrete footpath is located on the western side of the street between the front dwelling boundary and the greased verge.
Topography	The slope falls across the street to the west. The dwellings are set on the lower side of the street.

Windsor Avenue, Warragul - Significant Character Assessment

The Windsor Avenue Significant Character Area includes a mix of early Post-war and Inter-war dwellings. Generous front and side setbacks provide for a detached streetscape rhythm and established gardens. Building materials are generally weatherboard with hipped tile and iron roofing.

Potential Threats to Character:

- Development that disrupts the established and distinct rhythm created by the single storey development pattern.
- New dwellings and/or additions to existing dwellings that are larger in scale and form.
- Contemporary roofs that do not respond to the established form and style.
- Garages that are visually prominent.
- Loss of established trees and vegetation.
- Introduction of high, visually impermeable fencing styles.

Recommendations & Suggested Planning Mechanism:

Windsor Avenue has a distinctive feel created by the level of intact bungalow style dwellings with established gardens. There are no planning policies or controls that currently protect the street from the identified potential threats to character. It is recommended that controls are implemented that encourage:

- New dwellings and/or additions to existing dwellings to present as single storey when viewed from the street.
- Roof design that responds to the established form and style.
- Garages that are not visually prominent.
- Retention of the established front and side setbacks to provide opportunities for the planting of large canopy trees.
- Retention of established trees and vegetation, where healthy and not deemed to be a weed species.
- Fencing styles that are visually permeable and are a maximum height of 1.2m.
- Updating the schedules to the GRZ (could be multiple schedules if desired outcomes re different/areas warrant targeted protection) with complementary local policy if needed.

Existing Character Elements

Architectural Style	Predominately a mix of inter-war and post war bungalow style dwellings, however there are some examples of modern brick veneer single and multi unit dwellings dispersed throughout this section of the street.
Building Materials	There are a mix of weatherboard, clinker brick dwellings and several brick veneer dwellings.
Building Form and Layout	Dwellings are double fronted, single storey buildings with a projecting front room and/or porch to the front door and/or verandas.
Roofing	Dwellings have hipped or gable roofs that utilise iron and tile materials.
Front Setbacks	Buildings with large front setbacks establish a consistent character element in the streetscape. Front setbacks range in depth from approximately 6m to 8m.
Side Setbacks	Lots have consistent side setbacks that allow for landscaping on one side and driveway and single garage on the other. Often the garage is setback from the dwelling, in some cases there is no garage visible.
Front Fences	Fencing styles are typically low and transparent allowing visual permeability, and typical materials timber pickets and brick.
Garden Styles	All dwellings have large established gardens located in the front setback. Established gardens vary in types of plantings. Vegetation ranges from low to medium exotic shrubs to large established exotic trees.
Street Trees	There a medium sized street trees planted in the grass verges.
Footpath Treatment	1.5m wide concrete footpath on either side of the road and grassed nature strip.
Topography	The street has a slight difference in levels, with the northern side being the higher elevation.

Church Street, Warragul - Significant Character Assessment

The Church Street Significant Character Area includes predominantly Inter-war dwellings with some Edwardian and Victorian dwellings set in established gardens with spacious front and side setbacks. Building materials are predominantly weatherboard and roof forms are pitched with iron materials.

Potential Threats to Character:

- Loss of the level of intactness of the original dwellings.
- Development that disrupts the established and distinct rhythm created by the single storey development pattern.
- New dwellings and/or additions to existing dwellings that are larger in scale and form.
- Contemporary roofs that do not respond to the established form and style.
- Garages that are visually prominent.
- Loss of established trees and vegetation.
- Introduction of high, visually impermeable fencing styles.

Recommendations & Suggested Planning Mechanism:

Church Street has a distinctive feel created by the level of intact bungalow style dwellings with established gardens. There are no planning policies or controls that currently protect the street from the identified potential threats to character. It is recommended that controls are implemented that encourage:

- New dwellings and/or additions to existing dwellings present as single storey when viewed from the street.
- Roof design that responds to the established form and style.
- Garages that are not visually prominent.
- Retention of the established front and side setbacks to provide opportunities for the planting of large canopy trees.
- Retention of established trees and vegetation, where healthy and not deemed to be a weed species.
- Fencing styles that are visually permeable and are a maximum height of 1.2m.
- Rezoning area to NRZ with complementary local policy if needed.

Existing Character Elements

Architectural Style	Predominately a mix of inter-war, post war and modern brick veneer dwellings.
Building Materials	There are a mix of weatherboard and clinker brick dwellings.
Building Form and Layout	Dwellings are double fronted, single storey buildings with a projecting front room and/or porch to the front door and/or verandas.
Roofing	Dwellings have hipped or gable roofs that utilise iron and tile materials.
Front Setbacks	Buildings with large front setbacks establish a consistent character element in the streetscape. Front setbacks range in depth from approximately 6m to 10m.
Side Setbacks	Lots have consistent side setbacks that allow for landscaping on one side and driveway and single garage on the other. Often the garage is setback from the dwelling, in some cases there is no garage visible.
Front Fences	Fencing styles are typically low and transparent allowing visual permeability, and typical materials timber pickets and brick.
Garden Styles	All dwellings have large established gardens located in the front setback. Established gardens vary in types of plantings. Vegetation ranges from low to medium exotic shrubs to large established exotic trees.
Street Trees	There a medium sized street trees planted in the grass verges.
Footpath Treatment	1.5m wide concrete footpath on either side of the road and grassed nature strip.
Topography	The street has a slight difference in levels, with the eastern side being the higher elevation.

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