BEVIAN ROAD

urban design guidelines

About Roberts Day

Founded in 1993, Roberts Day is known internationally as a consultancy firm renowned for delivering state of the art and commercially sound solutions to the development industry.

Roberts Day pioneered many of the principles and techniques for neighbourhood orientated design used in industry today.

Our scope of projects ranges from regional, metropolitan and town scale, through to new city sectors, and the detailed design and implementation of urban infill projects. It is this diverse portfolio of projects which allows our team to operate at all scales of the development spectrum.

Our reputation is second to none and our people are acknowledged internationally as being the best at what they do: designing and delivering multi-functional places for functioning communities.

Our areas of expertise include urban research, project visioning, development strategy, master planning, urban design and project implementation - services that extend to all sites and settlement types across Australia and internationally.

We make it our business to understand the unique character and objectives of each project while staying ahead of the challenges facing today's development industry.

Many of our projects are well documented in industry literature as exemplars of urban development. Our hallmark project, Ellenbrook in Western Australia, is the most awarded, and one of the fastest growing, master planned communities in the country.

With a steadfast commitment to creative yet practical solutions, we have an established, enviable track record of successful implementation: for balancing our clients' commercial objectives with designs that deliver sustainable social, environmental and economic outcomes.

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Roberts Day acknowledges the body of work known as "traditional neighbourhood design" and "transect based planning" developed by Duany Playter - Zybek which has influenced both the design approach and report format used by Roberts Day.

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EXECUTIVE SUMMARY

The Bevian Road Urban Design Guidelines has been prepared by Roberts Day Town Planning and Design. Roberts Day was engaged by MARSIM to prepare the Concept Plan and accompanying documentation based upon the Constraints Plan which accompanies this Application.

The proposed Urban Design Guideline is based upon the timeless town planning and neighbourhood design principles espoused by the State Government as best practice. Roberts Day is recognized as being at the forefront of delivering these principles on a range of projects across Australia, including Ellenbrook - Australia's most awarded new town.

The Concept Plan proposes a new coastal settlement for 806 residential lots and 20 community lots which will, amongst other things:

- Reflect and reinforce the character of the South Coast of NSW;
- Respond to the site's topography and other natural features;
- Provide a public connection north-south through the site;
- Provide the infrastructure to support public transport;
- Balance the pedestrian and the vehicle;
- Provide a range of housing types;
- Provide a corner store and community facilities.

As part of this report, a set of urban design guidelines relating to buildings and landscape is provided to ensure that delivery of the vision is continued through to detailed design.

Based upon the design principles and techniques proposed for Bevian Road, on a site which has been largely identified for urban development, the proposed concept has the potential to be a benchmark for sustainable development. It provides an alternative to conventional design and establishes a framework which properly balances the natural and human habitat.

Aerial view of the proposed concept. Note the retained knoll as open space

INTRODUCTION

The Bevian Road site is located south of Batemans Bay, north of Tomakin on the South Coast of New South Wales. It is bound by the George Bass Drive to the east, Mogo State Forest to the west, and woodlands to the north and east. At approximately 173.59 hectares, the site has varied topography, is relatively cleared of vegetation and has largely been identified for urban development. It is predominantly vacant with the exception of an existing house and outbuilding which are to be retained. A wetland, two creek systems and associated dams provide a natural amenity for the site. In conjunction with the site's topographic features, particularly the central knoll, a developable footprint (known as the 'Constraints Plan') has been established which responds to the natural and other features of the site. Vehicle access to the site is provided via the existing entries off George Bass Drive.

The Concept Plan for Bevian Rd proposes a new coastal community based upon the principles of Traditional Neighbourhood Design, which are evident in historic settlements along the South Coast of New South Wales. The plan provides for 806 dwellings, 20 community lots, potential mixed-use village centre and community facilities distributed between two distinct neighbourhoods separated by the major creek corridor. The lower neighbourhood incorporates a wide range of housing types, including sideyard houses (semi detached), cottages and a variety of small through to large house types. It also includes the opportunity for dual occupancies. The upper neighbourhood includes larger rural house types able to respond to the steeper topography.

In the event that planning policy and market call for a higher yield on the site, the plan has been designed in a manner which will permit this to happen in an appropriate fashion. Allocating an appropriate zone for Dual Occupancy to occur provides further flexibility for the project to increase in density according to demand.

The overall character of the Bevian Road Project will be reflective of the South Coast. The plan maintains and enhances view corridors, natural greenways throughout the site, significant trees and other natural features, such as dams. Further, the design team has carefully studied architecture and landscape precedents from the surrounding region. The proposed architecture will be low in scale and impact. It will comprise simple building volumes which sit within an informal landscape setting of naturalistically clustered trees and swales. The careful control of these elements through the proposed design guidelines will ensure delivery of this vision in a manner which is environmentally sensitive.

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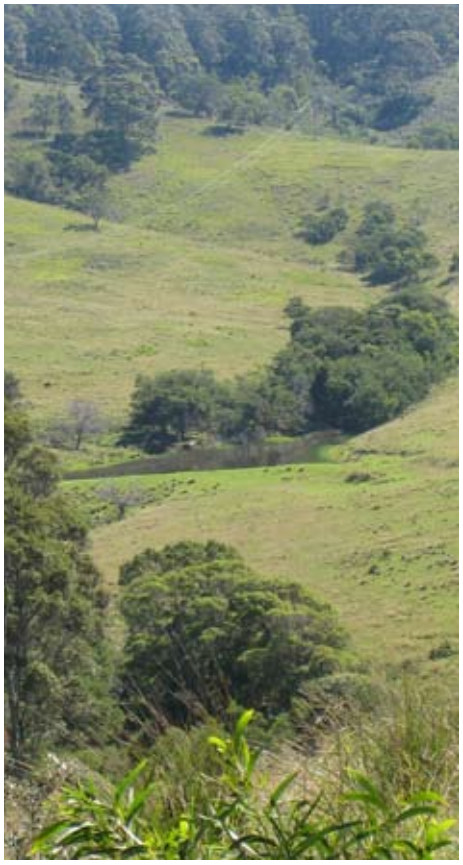

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1 View from the Knoll to Mossy Point Lookout and Mt Guluga
2 Bevian Wetland at southern entry
3 Riparian Corridor at site


MOGO STATE FOREST
George Bass Drive
North Rosedale
South Rosedale
BEVIAN ROAD SITE
George Bass Drive
TOMAKIN
Guerilla Bay
Barlings Beach
Tomakin Beach
MOSSY POINT
Broulee Bay
BROULEE
Broulee Island

UNDERSTANDING
SOUTH COAST CHARACTER

The South Coast boasts some of the most spectacular coastal scenery and native vegetation in NSW. Settlements along the South Coast embrace and are embraced by a variety of rivers, creeks, lagoons, wetlands, forests and beaches.

The character and quality of South Coast towns, villages, neighbourhoods and rural hamlets have been carefully studied to guide the planning, design and building of the Concept Plan.

Character

In general South Coast settlements are areas surrounded by environment with distinctive undulating terrain, they have vantage views and vistas to the ocean. Better organised South Coast developments such as Tomakin and Guerilla Bay morph with topography and the environment to maintain high ecological integrity.

Neighbourhood oriented settlements have small commercial strips with mixed-use commercial, retail and residential buildings sufficient to service day to day needs of the residents. Village centres have formal to semi formal landscape and footpaths.

Thoroughfares

Existing thoroughfares in South Coast settlements generally form a grid informal in character. Main access roads generally follow the topography and connect the settlement to and through the settlements' main street. Buildings gradually increase in setback from the thoroughfares as one moves from the settlements' core to rural areas. Thoroughfares typically direct views onto natural features around or within the site. They define open space areas and separate natural areas from development. The thoroughfares also respond to geographic features.

Built Form

The South Coast character is also expressed in the built form. Pending on proximity to a settlement centre, the lot, building, encroachment, setback and outbuilding sizes vary.

Examining local precedents such as Mogo Main Street , lot sizes are contained. Buildings front close onto the main street. Buildings typically have verandahs over the footpath, whilst others are set back facilitating spaces for outdoor dinning. Buildings do not form a street wall, they have side setbacks to allow for planting and pedestrian passages. In contrast, buildings in more rural settings have large lots with deep front and side setbacks. The ratio between build and open space area within the lot decreases dramatically, generating a more rural character of the area.

Buildings are built with simple and light materials. Fences and boundary walls are visually penetrable. The height of the buildings are generally not more than two storeys high.

Landscape

South Coast settlements draw upon the natural aspirations and consolidate ecological systems while utilising scenic and less sensitive space for recreation. Parklands are equipped with large throw around areas and use simple design elements. Street tree layout and private domain landscape transition from semi formal, mixed informal to mixed dense clusters as one traverse from dense to sparse built areas.

All of the above attributes amalgamated, have established a character of South Coast. The Concept Plan draws upon these inspirations to further reinforce the genuine South Coast style.

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1 Aerial View of Site Context
2 Aerial Views of Tomakin
3 Guerilla Bay
4 Mogo

THE CONSTRAINTS MAP

To undertake the preparation of the Concept Plan, an experienced and specialised team of consultants undertook a detailed analysis of the existing ecological, hydrological, bushfire and archaeological constraints on the site in order to establish a viable and sensitive development footprint (referred to as the Environmental Constraints Plan).

The extent of all physical and environmental constraints is summarised as follows:

ECOLOGY

Conacher Travers have conducted detailed Flora and Fauna studies for the entire property, and have identified various ecological features that require protection and / or management. These are:

a). The SEPP 14 "Bevian Swamp" Wetland
b). Endangered Ecological Communities (EEC)
c). Existing creek lines and associated riparian corridors
d). Existing areas of vegetation and habitat

HYDROLOGY

Paterson Britton have investigated the existing water quality and quantity within and from the site, and have proposed a best practice Water Sensitive Urban Design that controls the quality and quantity stormwater run-off from the proposed development within the site, and most importantly to the Bevian Swamp and Saltwater Creek. Riparian corridors are proposed along existing creek lines, and a 50m vegetated buffer is proposed around the Wetland.

ARCHAEOLOGY

Navin Officer have conducted extensive site investigations and have located a number of archaeological sites that require protection and further assessment.

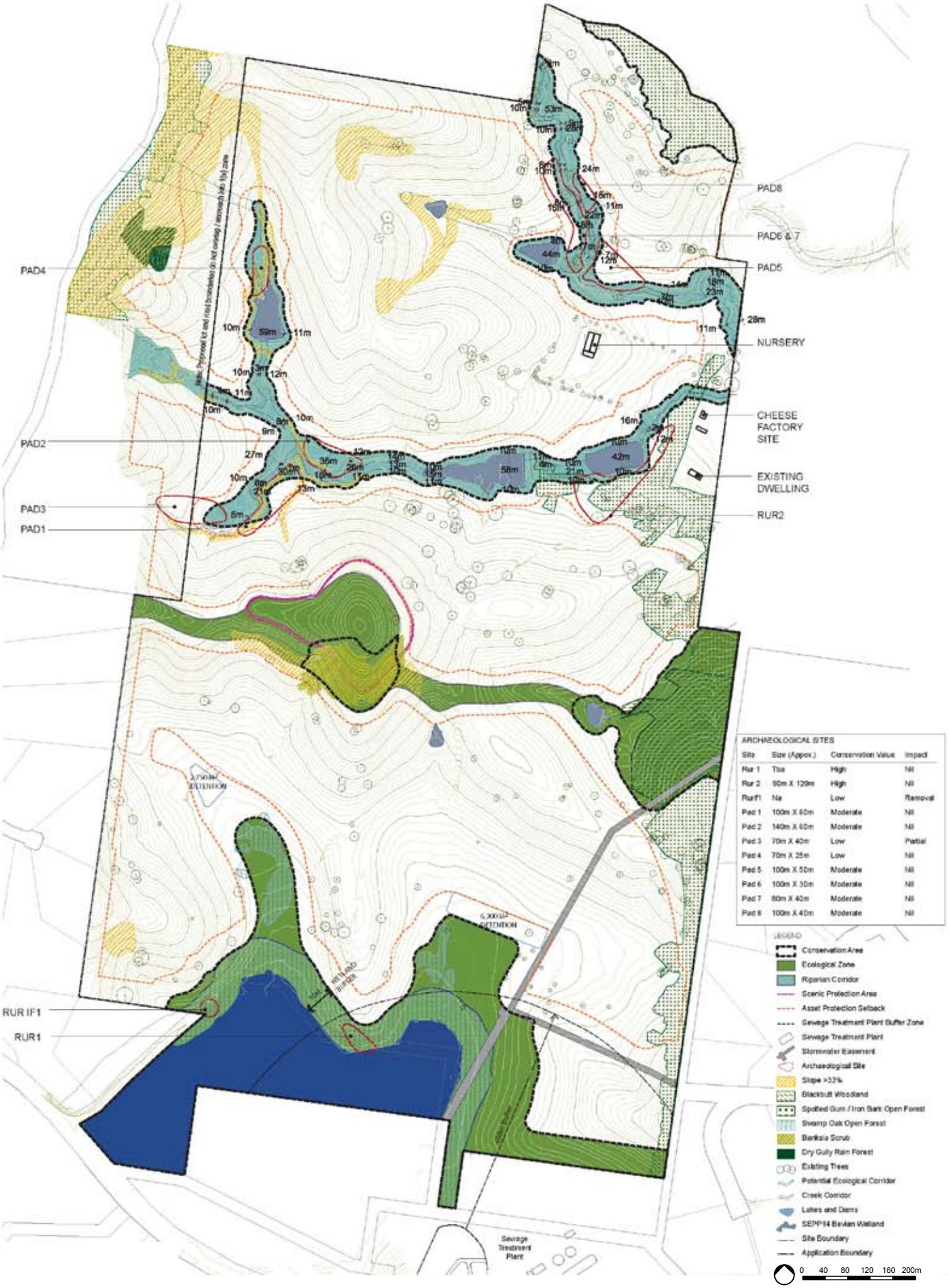
BUSHFIRE

Conacher Travers have proposed Asset Protection Zones that comply with the Planning for Bushfire Guidelines 2006.

OTHER

There are a number of other constraints that have informed the development footprint. These are:

a). A 400m setback buffer to the Sewage Treatment Plant.
b). The existing stormwater easement through the site.
c). The protection of the visual. prominence of the main knoll.
d). The existing zoning of the site.
e). The location of the existing road connections.
f). Limited development within areas. of the site that are steeply sloped or low lying.


PAD8
PAD6 & 7
PAD5
PAD4
NURSERY
CHEESE FACTORY SITE
PAD2
EXISTING DWELLING
PAD3
RUR2
PAD1
RUR IF1
RUR1
Sewage Treatment Plant
ARCHAEOLOGICAL SITES
Site | Size (Approx.) | Conservation Value | Impact
Rur 1 | Tbe | High | Nil
Rur 2 | 90m X 120m | High | Nil
Ruif1 | Na | Low | Removal
Pad 1 | 100m X 60m | Moderate | Nil
Pad 2 | 140m X 60m | Moderate | Nil
Pad 3 | 70m X 40m | Low | Partial
Pad 4 | 70m X 25m | Low | Nil
Pad 5 | 100m X 50m | Moderate | Nil
Pad 6 | 100m X 30m | Moderate | Nil
Pad 7 | 80m X 40m | Moderate | Nil
Pad 8 | 100m X 40m | Moderate | Nil
LEGEND
Conservation Area
Ecological Zone
Riparian Corridor
Scenic Protection Area
Asset Protection Setback
Sewage Treatment Plant Buffer Zone
Sewage Treatment Plant
Stormwater Easement
Archaeological Site
Slope >33%
Blackbutt Woodland
Spotted Gum / Iron Bark Open Forest
Swamp Oak Open Forest
Banksia Scrub
Dry Gully Rain Forest
Existing Trees
Potential Ecological Corridor
Creek Corridor
Lakes and Dams
SEPP14 Beelan Wetland
Site Boundary
Application Boundary
0 40 80 120 160 200m

CONCEPT PLAN

The Concept Plan is based upon the proposed constraints map the principles of traditional neighbourhood design evident in the historic towns, villages, neighborhoods and rural acreage of the New South Wales South Coast. Principles which support the pedestrian and public transport, increase housing choice, provide a mix-of-uses and respond to the natural features of a site.

At the outset, the plan enhances the natural features offered by the site. Creek corridors and associated dams have been incorporated into permanent green ways, stands of important trees preserved, and prominent topographic features, such as the central knoll, also incorporated into the public open space system. Through the understanding and enhancement of these features, the site is naturally divided into two distinct areas by the major creek corridor for development – the lower neighbourhood and upper neighbourhood.

Entry to the site and lower neighbourhood is via the existing access off the George Bass Drive, located adjacent to the Bevian Wetland. Interestingly, the vegetation which exists along the edge of the wetland effectively screens views into the site from the surrounding area.

This entry leads beyond the wetland to the lower neighbourhood. As the focus of this neighbourhood, and located on a gentle rise in topography to take advantage of views, is a mixed-use centre. Inspired by places such as Mogo but on a lower scale, it provides the potential opportunity for a small "main street" grouping of shops, a community hall and public bus stop focused around a village green.

A central boulevard distributes people throughout the lower neighbourhood, and forms the spine of a potential public transport system. Streets and roads have been carefully designed to respond to the topography, and natural features such as knolls set aside for public parks and community structures. In particular, the major knoll which exists within the lower neighbourhood has been set aside as major public parkland with view corridors of regional features carefully retained.

Within the lower neighbourhood, a wide range of housing types is provided including side yard houses, cottages and a variety of small through to large house types. It will ensure that people of all ages, income groups and life stages are provided for by the plan.

Passing the major east-west creek corridor, the boulevard provides access into the upper neighbourhood which is more rural in character, comprising larger rural homes. The character of the road network, private blocks and lots within the upper neighbourhood is more organic in response to the steeper topography and the surrounding forest.

In addition to the central boulevard and thoroughfare network, the lower and upper neighborhoods are linked by a series of pedestrian paths and trails. Great care has been undertaken with the alignment of these trails to maximize internal views within the site and external views to coastal features.

The overall character proposed will be reflective of the South Coast. The architecture will comprise simple building volumes which sit within an informal landscape setting of naturalistically clustered trees and swales. By carefully controlling the elements, it will provide certainty that the vision is achieved over time.


Note: Proposed lot and road boundaries do not overlap / encroach into 10(k) zone
0 40 80 120 160 200m

INTRODUCTION:
DESIGN PRINCIPLES

The fundamental difference between neighborhoods built prior to the Second World War and residential estates built following is how the vehicle is accommodated. How the vehicle is accommodated determines most the physical attributes of the communities we live in.

Pre-war neighborhoods are still the most valued and sustainable real estate in Australia today, represented by mixed-use, pedestrian friendly communities of varied population.

Post-war estates, which have come to be known as "suburban sprawl", ignore historical precedent and human experience. Designed around the vehicle, single use and of limited housing choice, they produce social problems and exacerbate social inequality.

Councils, government agencies, developers and citizens are all faced with a choice: to continue to grow along the suburban sprawl model, or to reintroduce the principles and techniques of traditional neighbourhood development.

With great foresight, the planning approach for Bevian Road is based upon the principles of neighbourhood design which are illustrated opposite.

On the right hand side of each principle is an "illustrative" segment from the proposed Concept Plan, followed by a photograph of the principle and explanatory text.

WALKABLE NEIGHBOURHOODS

The neighbourhood is limited in size so that the majority of the population is within a 5-minute walk of its centre (400m). Daily needs such as those provided by a corner store, are theoretically available within this area. This centre provides an excellent location for a potential public transport stop. By bringing the activities of daily life into walking distance, all people gain independence of movement, particularly the young and elderly.

CONNECTED NETWORK

Thoroughfares are laid out in a network so there are alternate routes to most destinations. This permits most streets to be smaller with slower traffic, as well as having on street parking, trees, footpaths and buildings. They are designed for both pedestrians and vehicles. People feel comfortable walking and are able to get to know each other and to watch over their collective security.

MIX OF BUILDINGS & USES

There is a mixture of houses (large and small), outbuildings, courtyard houses, cottages, and sideyard houses . These buildings are diverse in function but compatible in size and disposition on their lots. By providing a wide range of housing types and work places, age and economic classes are integrated and the bonds of an authentic community are formed.

QUALITY OPEN SPACE

Open space is provided in the form of specialised squares, playgrounds, greens, parks and reserves. Each type is defined by its size; the landscaping used, if any; and the way the space is surrounded. Open space to be truly public should be overlooked by buildings and fronted by thoroughfares. To be fully functional, it should straddle pedestrian trajectories or be adjacent to meaningful destinations.

CIVIC BUILDINGS & STRUCTURES

Civic buildings, such as meeting halls, churches, gazebo's, museums etc. may be located within open spaces or at the termination of important vistas. By being built at important locations these structures function as important landmarks. Such structures promote democratic initiatives and the balanced evolution of society is facilitated.

DESIGN PRINCIPLES

Responding To The Site

The site is undulating and on an incline towards the sea. It has distinctive natural features such as the Knoll, Bevian Wetland and vantage views into the ocean.

The Concept Plan footprint follows two creek systems which divide the site roughly into upper, middle and lower areas.

It encompasses the Knoll, Bevian Wetland, riparian corridors, remnant vegetation and dams into the open space network. Hill tops are preseved in civc greens. From the civic greens the streets follow ridge lines or work with the contours to preserve and direct open and local views.

The diagram to the right illustrates how various ecological communities and topography have been incorporated into the design. It also demonstrates how the street and open space corridors preserve and channel views into the ocean and local feature areas, such as the Knoll and Bevian Wetland.

Neighbourhood Structure

The size of neighborhoods is determined by the walking distance from centre to edge. This size is based on an average of 400m, which equates to a five minute walk. It is the distance most people will walk before choosing to drive. The diagram opposite shows the neighbourhood structure proposed for Bevian Road. It includes a lower neighbourhood which addresses the wetlands, and an upper neighbourhood focused around a hill top green. Two smaller clusters of residences adjoin each neighbourhood and are fronted by

Each neighbourhood has the following attributes:

1. a balanced set of activities which may include housing, recreation, community and daily needs eg. corner store in lower neighbourhood.
2. a variety of housing opportunities to a broad range of income groups;
3. an interconnected network of thoroughfares which respond to the topography;
4. reservation of prominent sites for public open space and civic structures;
5. provision of public open space in the form of greens, parks, green corridors and reserves.

The configuration of the site in this manner according to the principles of traditional neighbourhood design, in conjunction with the open space corridors, will ensure that walking is not only viable, but an attractive alternative. With this foundation, the proposal is equipped to become a model of sustainable development on the South Coast of New South Wales.

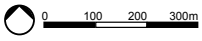
Thoroughfare Network

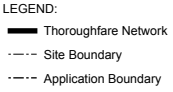
The design of the thoroughfare network is responsive to typography and represents a departure from the vehicle dominant strategies which characterises conventional suburban development. It is a consequence of the underlying neighbourhood design standards that encourage pedestrians and cyclists in an environment shared with vehicles.

The Concept Plan establishes long term, connected, public access through the site in the form of a boulevard. This boulevard utilises the alignment of existing trails and responds to the site's topography.

In terms of topography, all other thoroughfares have also been laid out to respect the site's terrain. Thoroughfares are aligned to follow major ridge or drainage lines, with minor thoroughfares designed to connect in the most responsive way possible. In order to further minimise earthworks, a variety of traditional intersection, types such as forks and triangles, have been employed. In contrast to conventional suburban development, the proposed thoroughfare network does not include cul-de-sacs.

The design of the thoroughfare network in this manner integrates both capacity and character. For each thoroughfare type proposed the main elements comprising the public streetscape, including vehicle and pedestrian lanes, kerb radii, kerb type, landscaping and lighting, have been carefully controlled to achieve a character which is consistent with the best South Coast precedents.





Pedestrian And Cycle Network

All of the thoroughfares proposed for the site have been designed to equally accommodate the need of the pedestrian and driver within a shared environment.

As the diagram opposite illustrates, the pedestrian and cycle paths provided for within the thoroughfare network are substantially expanded by a series of trails integrated into the proposed open space system.

Aligned to connect seamlessly into the thoroughfare network, these trails provide the opportunity for pedestrians and cyclists to move through independently of vehicles, enjoy the site's natural features and connect key destinations. For example, from the upper neighbourhood

It is possible to enter the central creek corridor, climb the knoll and then continue along a pedestrian trail which connects in the neighbourhood centre before passing back out into nature. At key points along the proposed system of trails and paths, it is envisaged that public art will be utilised to add meaning, enjoyment and education to the experience.

Public Transport

The provision of a viable public transport system is a key element of neighbourhood design. The Concept Plan has been designed to be "public transport ready". The neighbourhood structure has the potential to support the provision of a public bus service across the site. It provides for a built-in catchment of people who are within walking distance of, and able to support, this system.

The potential bus route is logical and direct, passing through the centre of the two neighbourhoods. Bus stops are located at the neighbourhood centres. By locating the bus stops at the centres, which include a mix of uses, neighbourhood greens, quality public streetscape and passive surveillance provided by buildings overlooking the public domain, it creates an attractive setting to encourage patronage.

The proposed bus route also provides an alternative means of transport for residents and visitors. Public transport contributes to a reduction in daily car trips and need for multiple car ownership. There are many other benefits associated with the proposed bus route. For example, it gives mobility to the young and elderly, giving them the opportunity to participate in the life and vitality of Bevian Road. The width of the travel lanes and other technical requirements for buses have been incorporated into the proposed bus route.

Open Space System

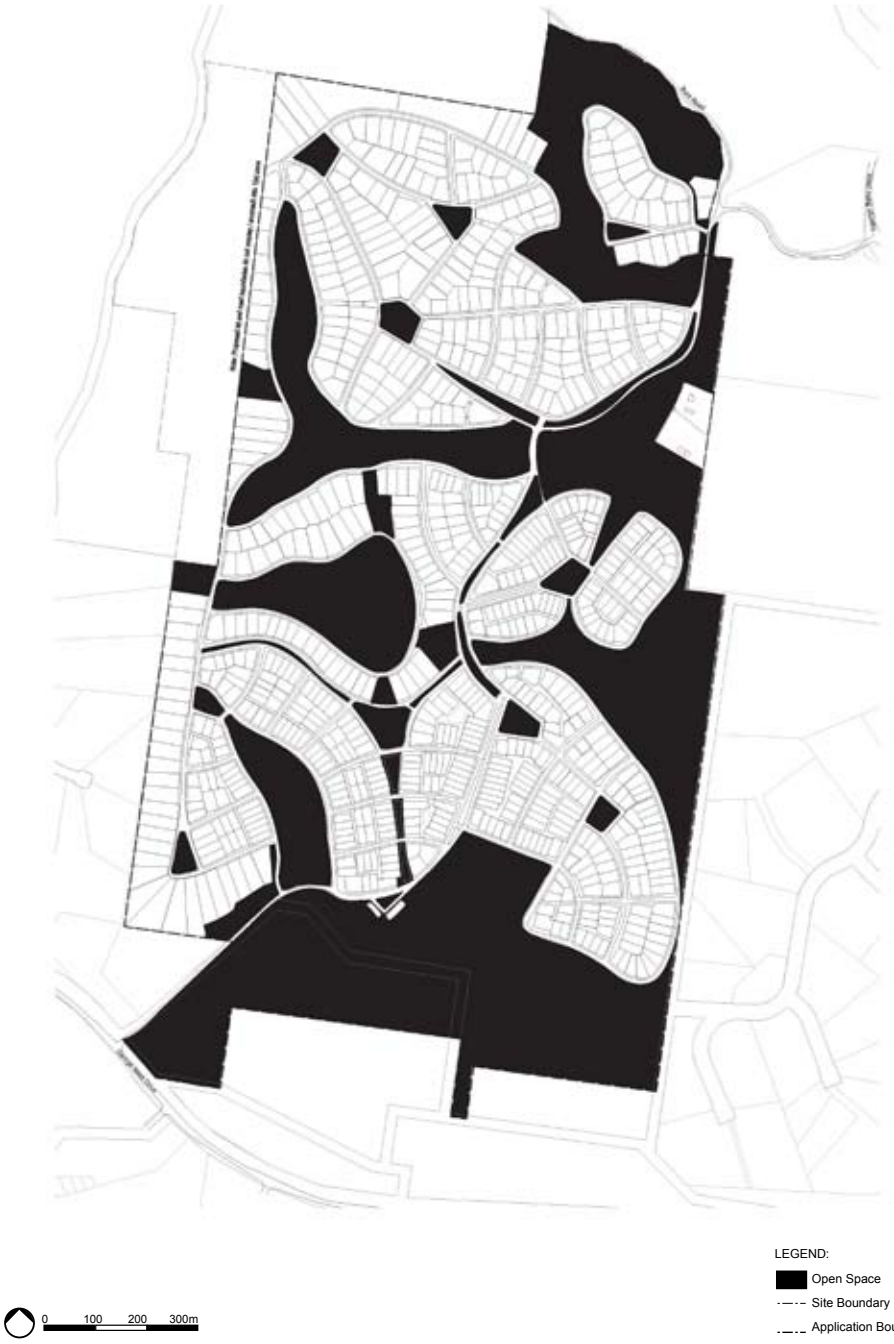
The diagram opposite illustrates the logic and continuity of the open space system. At the outset the plan shows the extent of open space retained around the Bevian Wetland which is to be enhanced as part of the proposal.

The major east-west green corridor is also enhanced and provides a greenbelt between the two neighbourhoods.

In addition, a second east-west corridor is established through the retention of the knoll, whilst a newly established north-south corridor also converges at this point establishing a comprehensive trail system for pedestrians.

Within each neighbourhood, a variety of time tested open space typologies are provided, including attached squares, greens and pocket parks. Each has been sized and located to function properly based on the needs of people within that context. Whilst each open space type will be subtly different in character reflecting its location and function in the community, the overall character of the open space will reflect the character of the South Coast. Public spaces will be simply and elegantly detailed, characterised by naturalistically clusters of regional trees, swales and other landscape elements which are prevalent throughout the South Coast.

This open space system also provides the basis for a water sensitive urban design system, explained under separate cover in the report by Patterson Britton.



Civic Structures

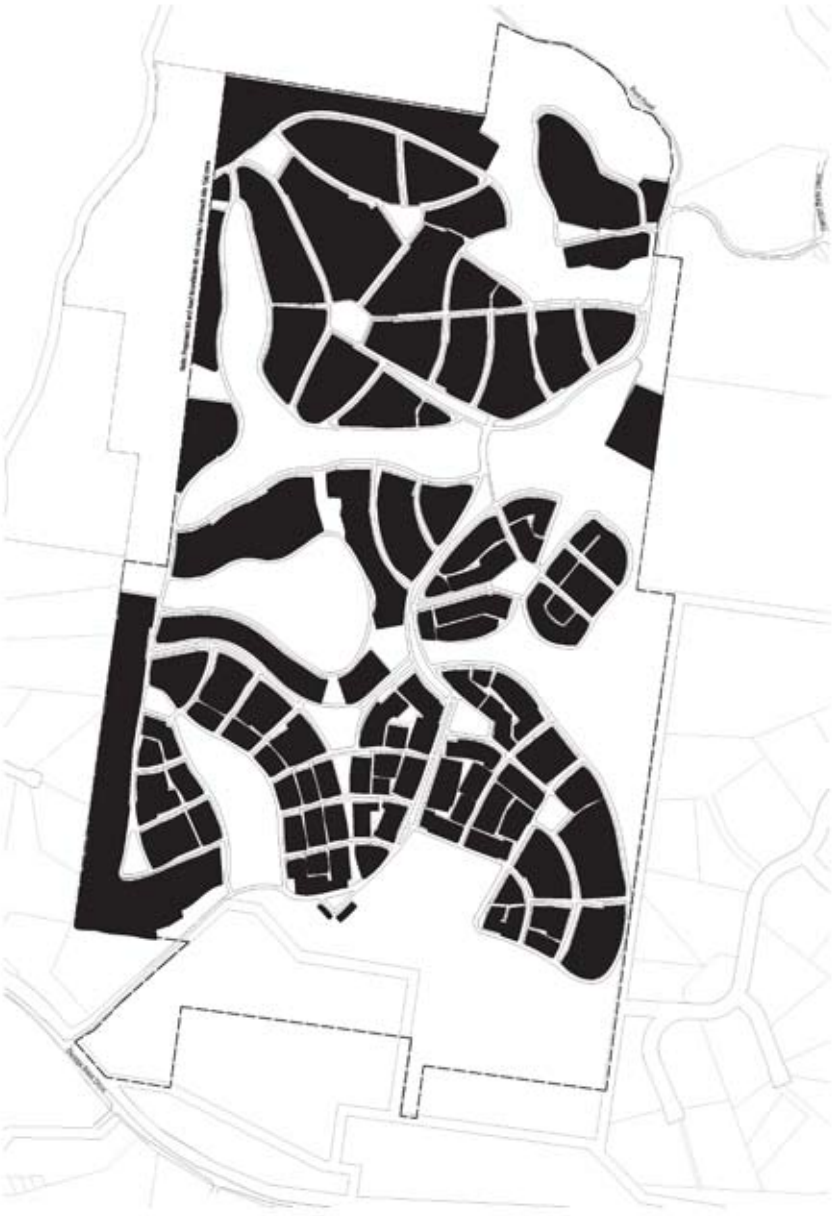
Civic structures are located throughout the open space system proposed by the Concept Plan. These sites play an important role in establishing community identity. The more major structures are located in the lower neighbourhood and are strategically located in the proposed village centre. Structures may include a community meeting hall / performance hall, a potential church, recreation centre and allocated swimming pool, tennis court and other amenities. Other structures distributed throughout the lower and upper neighbourhoods may include more minor meeting halls and gazebos and the like designed to foster community awareness.

The entire build-out of the Bevian Road Project will take many years. It is therefore important to set aside the land for community buildings and spaces from the inception of the project. As the community grows the importance of these sites in stature and places will also. The exact make up of civic structures will be determined in the DA phase of the project.

Private Block Structure

As illustrated by the Concept Plan the overall block structure which establishes the private domain is generally "organic" in response to the topography of the site. The character of this pattern is similar to other settlements along the South Coast. Towards, the village centre of the lower neighbourhood, blocks are squarer and elongated to provide the opportunity for parking off rear lanes to accommodate smaller cottage housing types and mix of uses. As discussed, the other block type used throughout is the irregular organic block which responds to topography. Gently curving to climb and negotiate the terrain it creates picturesque streetscape.

The orientation of blocks has been designed to respond to views towards the wetlands and coast, as well as internal views to natural features such as dams, to ensure that as people move throughout the area a strong visual connection with nature is maintained, and respond to prevailing winds and sun access.



URBAN DESIGN GUIDELINES

The purpose of the proposed Design Guidelines is to ensure the implementation of the principles of the plan in a manner which reflects and enhances the character of the South Coast.

South Coast character is expressed in the architecture which has been modified by local architects and builders over time to respond to the environment in subtle ways.

Whilst the architecture can be described as "eclectic", a variety of recurring themes relating to the treatment of roofs, walls, openings and attachments suggests ways that buildings can continue to evolve a South Coast architecture.

Buildings generally comprise simple volumes, limit the use of materials which are generally lightweight, pitch roofs with eaves and include verandahs or shop front awnings to encourage social contact.

Parking of vehicles occurs in a manner which does not impact upon the visual quality of the public domain. Whether within a village centre or towards the rural edge of a neighbourhood, the architecture is complemented by a natural landscape which varies in its level of informality. It includes verges of varying width, swales and naturalistic clusters of trees of multiple species.

This sense of wholeness which exists is underscored by the interweaving of neighbourhood form, coastal landscape and built elements, each reinforcing an appreciation of the other. The Concept Plan will draw on these images and to establish a character unique to the South Coast which continues to evolve a tradition of community building.

The Design Guidelines comprises a set of interdependent documents which will control development. These documents include:

The **Character Plan** is a graphic document identifying the proposed character zones. It also shows the location and form of public open spaces, civic structures, thoroughfare locations and designates detailed design elements, such as terminated vistas.

The **Thoroughfare Types** illustrates the proposed streets, roads and pedestrian paths in terms of capacity and character. It specifies pedestrian and vehicle lanes, footpaths, planters, planting patterns and other elements.

The **Design Guidelines** provides guidelines for the bulk, setback, parking and other elements of private buildings which contribute to the character of the public streetscape for each character zone. The guidelines do not impose a style, but rather provide a framework for a coastal character to evolve as the project matures.

The **Landscape Plan** lists the proposed tree, shrub and ground cover species. The planting lists are coordinated toward achieving an overall character, which is reflected of each different zone is the overall character of the South Coast.

top to bottom:
1 Lush street palnting in Gureilla Bay
2 Gureilla Bay building setback
3 Tomakin streetscape
4 Mogo village centre

1

2

3

4

CHARACTER PLAN

Drawing upon the precedents of South Coast settlements, the Concept Plan provides for the complete spectrum of lifestyle choices or experience, including main street village, neighbourhood living and rural living. To ensure the authentic delivery of these experiences, the Concept Plan has been organized into a series of internally consistent character zones or "immersive environments", which provides the rationale for organizing the components of the built and natural environment.

Within the Bevian Road Project these character areas include The Centre, The General, The Suburban, The Edge and The Country. For each zone, all of the components of the built and natural environment have been carefully arranged to establish a character, and reinforce an overall transition from coast to country along an east to west trajectory. For example, a more rural farmhouse would not contribute to the immersive quality of the proposed village centre, just as a raised kerb would not positively contribute to the character of the rural edge. By carefully controlling components in this manner, the inappropriate intermixing of elements is avoided; it permits a proper balance to exist between the natural and human environments, and will result in higher-quality places at every point of the development spectrum within the site.

The Plan opposite identifies the five Character Zones allocated to the project ranging from least rural to most rural. The intention is that a comprehensive Design Manual, including standards for Lot and Building Types, Architecture Elements, Thoroughfares and Landscape, will reinforce the character of each Character Zone and overall South Coast rural character.

Proposed Character Zones


LEGEND:
The Centre Zone
(Mixed Residential-Commercial)
The Centre Zone (Retail)
The Centre Zone (Civic)
The General Zone
The Suburban Zone
The Edge Zone
The Country Zone
Conservation Area
Open Space, Recreation and/or Facilities
(Ecological Zone)
Open Space, Recreation and/or Facilities
Contours at 1m Interval
Lakes and Dams
Bevian Wetland
Existing Zoning
Site Boundary
Application Boundary
0 40 80 120 160 200m

CHARACTER ZONES

The Centre Zone

The Centre Zone of Bevian Road greets residents and visitors after passing through the wetlands and country drive. Located on a small knoll to take advantage of sweeping views across the wetlands and natural features, it features a small grouping of "main street" shops and community buildings focused around a village green. Mixed-use buildings are generally built close to the footpath with awnings and verandahs providing protection to pedestrians from the elements, similar in form to the very best South Coast main streets studied as inspiration.

The General Zone

The General Zone occupies lower core area of the site adjacent to the Centre Zone. Lots cluster around four major civic greens and are slightly larger than those in Village Centre. Most residential buildings front closely onto major streets with formal hedge and fencing at the front boudary. Landscape in both the private and public domain is formal in character.

The Suburban Zone

The Suburban Zone occupies mid and lower area of the site between Village General and Rural Edge Zone. Lots are more conventional in size. Residential buildings are setback further from the streets with fencing and informal hedging at front boundary. Landscape in this zone is less formal.

The Edge Zone

The Edge Zone generally provides a transition to public open space. Landscape character is increasingly informal. Lots are larger with deeper setbacks from the streets and informal hedging at front boundary. Landscape in this zone is informal.

The Country Zone

The Country Zone occupies the upper area of the site. It features large lots with a rural character. Residential buildings are set back minimum 12m from the road boundary. Naturalistic clusters of shrubs and groundcoveres act as a buffer along street front.

Landscape in this zone is naturalistc with clusters of tree canopy and shrubs and grasses understorey.

The Open Space Zone

The Open Space Zone encompasses two types of space that differ conceptually: bounded (shaped) space and open space (encompassing light and dark green).

The most urban types of open space – Square, Linear Parks and Pocket Greens – are bounded space, psychologically enclosed by the enfronting buildings and their public frontages (streets, sidewalks and trees). This creates a volumetric void, or "outdoor room".

A Park on the other hand, is typically larger in size and less confined by built form. In case of the Bevian Road Project the open space encompasses riparian corridor, remnant forest, scenic lookout and wetland system.

THOROUGHFARE PLAN

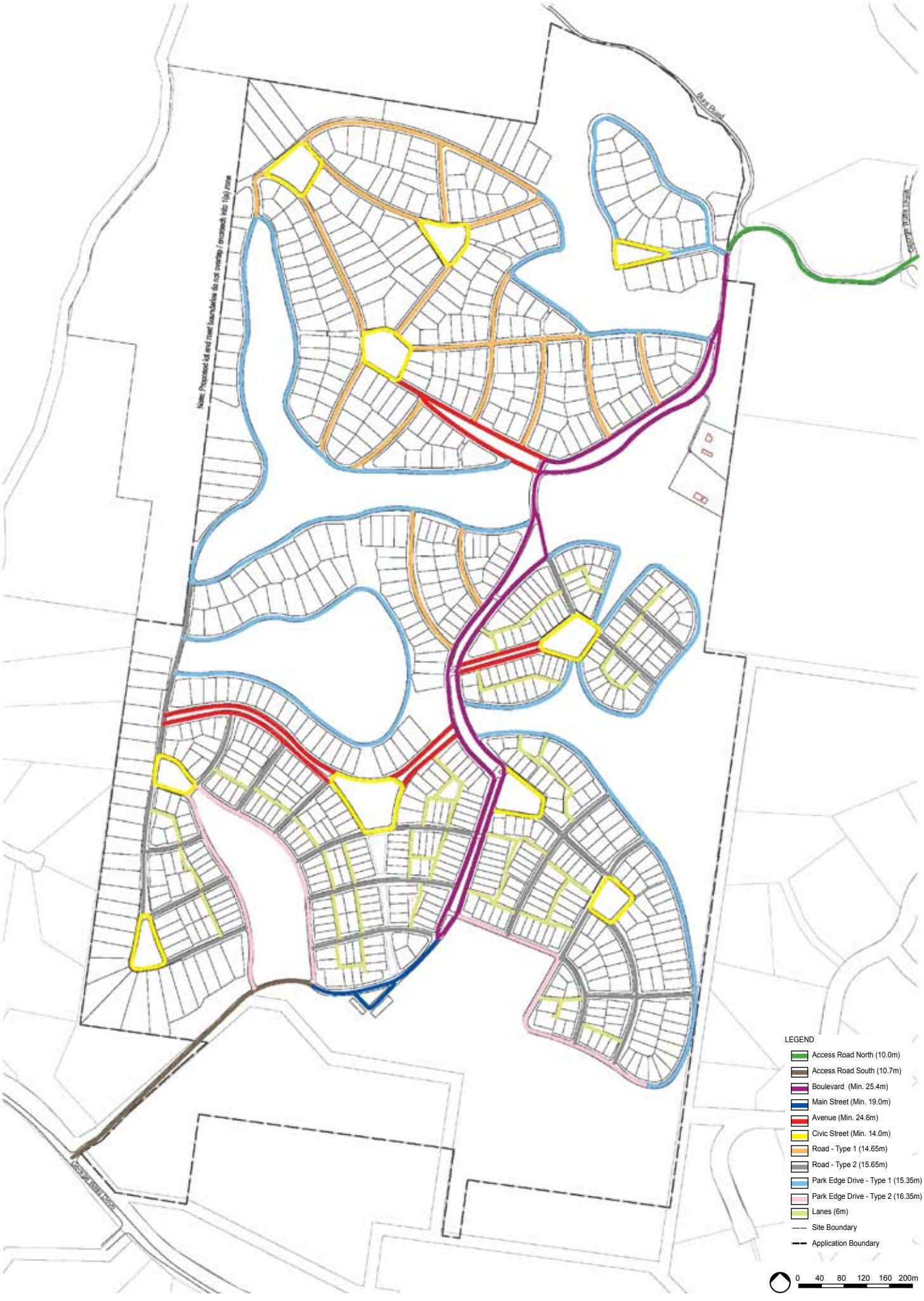
The proposed thoroughfares form the major part of the public domain as well as the moving lanes for vehicles. The proposed thoroughfares include two attributes: Capacity and Character.

Capacity refers to the number of vehicles that can move safely along a thoroughfare within a given time frame. It is primarily determined by the number of vehicle lanes and lane width, as well as kerb radius. Whilst adequately accommodating the requirements of drivers, because the Concept Plan is designed to encourage pedestrian use, traffic movement is carefully controlled through the use of narrower lane widths, shorter intersection spacing, smaller kerb radii, and on-street parking. Traffic calming is inbuilt into the design and consequently, posted speed limits, speed bumps and chicanes are not necessary.

Character refers to aesthetic function of a thoroughfare as a setting for a variety of building types and pedestrian activity. Character is determined by the systematic controlling of thoroughfare width, kerb, footpath, planters, street lights and other furnishing which constitute the public streetscape. All of these elements have been controlled to generate a character ranging from urban to rural. The majority of thoroughfares are characterized by swale or informal kerbs, and naturalistic planting which will generate a character appropriate to the South Coast.

Raised kerbs have been selectively used to enhance the character in the Village Centre and Village General Zones.

The major thoroughfare types proposed include Access Roads, Main Street, the Boulevard, Avenues, Drives, Streets, Roads and Rear Lanes. The plan opposite allocates these thoroughfare types across the proposal.


Note: Proposed cul-de-sac road boundaries do not overlap / encroach into 1(a) zone
LEGEND
Access Road North (10.0m)
Access Road South (10.7m)
Boulevard (Min. 25.4m)
Main Street (Min. 19.0m)
Avenue (Min. 24.6m)
Civic Street (Min. 14.0m)
Road - Type 1 (14.65m)
Road - Type 2 (15.65m)
Park Edge Drive - Type 1 (15.35m)
Park Edge Drive - Type 2 (16.35m)
Lanes (6m)
Site Boundary
Application Boundary
0 40 80 120 160 200m

THOROUGHFARES

Main Street

Main Street is the thoroughfare fronted by shops and community facilities in the Village Centre. It is characterized by the highest vehicular capacity and moderate speed. It is of limited distance and connects to the Boulevard.

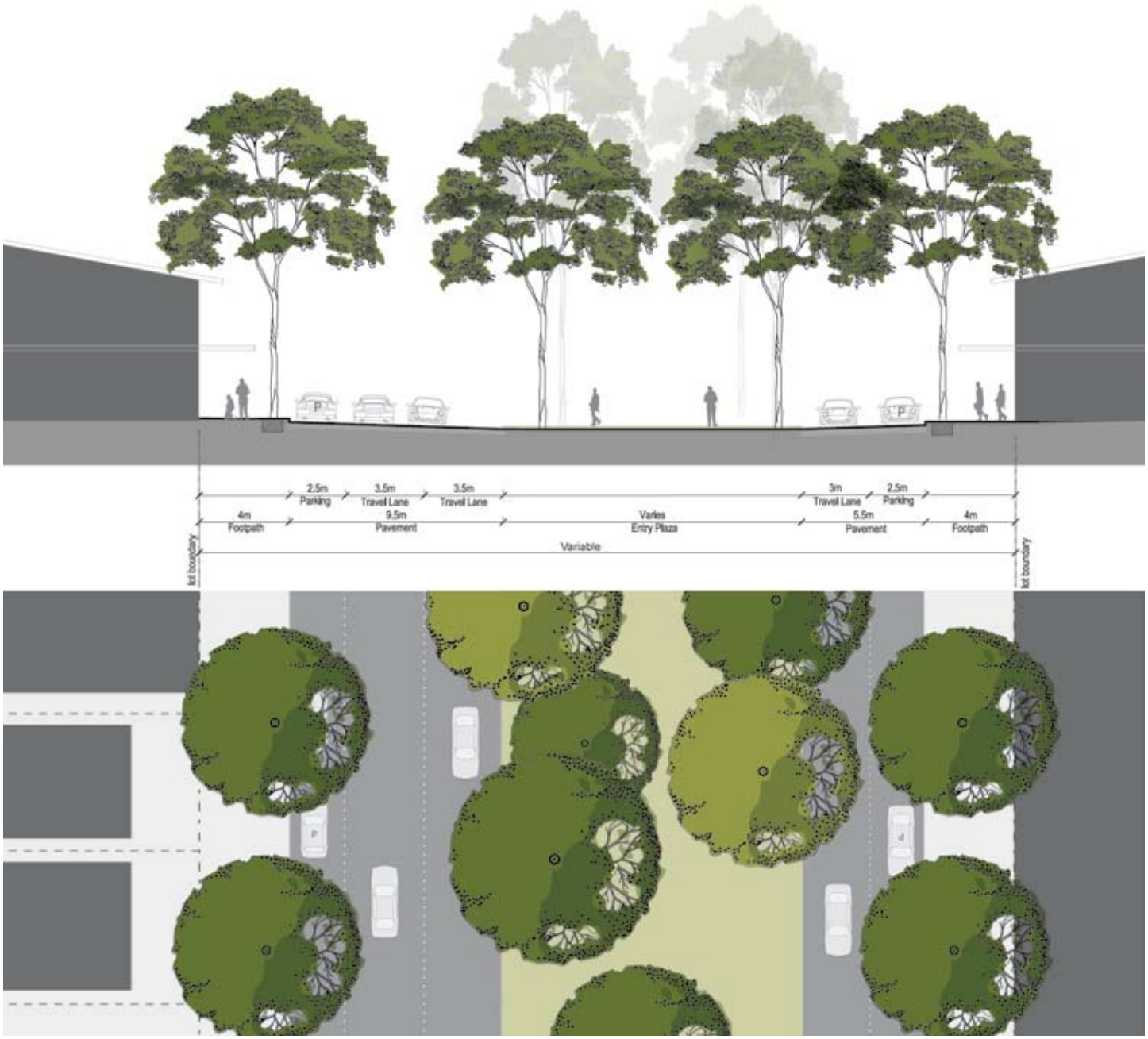
It has wider footpaths to accommodate shop front activities and feature tree *Eucalyptus ficifolia* in planter boxes that adds colour and festivity to the "main street" grouping.

The Village Centre island landscape is simple rural planting of *Eucalyptus ficifolia* Spotted gum on lawn.

MS-V19.0-15	
TYPE	Main Street
MOVEMENT	Free
R.O.W. WIDTH	Variable (Min 19.0m)
PAVEMENT WIDTH	15.0m
TRAFFIC FLOW	Two Ways / One Way
NUMBER PARKING LANES	Both Sides
KERB TYPE	Raised / Flush / Flush / Raised
KERB RADIUS	2.5m
PLANTER WIDTH	1.0m / 5.0m min.-variable / 1.0m
PLANTER TYPE	Individual / Continuous / Individual
PLANTING PATTERN	Allee 10m o.c. Both Sides / Natural Clusters 10m o.c. Median
STREET LIGHT TYPE	3m high pole
STREET LIGHT SPACING	TBD @ Detailed Design
FOOTPATHS	Both Sides
FOOTPATH WIDTH	4.0m
PRIVATE FRONTAGE	Shopfront & Posted Verandah / Awning

SUGGESTED PLANTING SCHEDULE	
TREES	*Corymbia maculata* (Spotted Gum)
	Eucalyptus ficifolia (Red-flowering gum)
SHRUBS	*Grevillea 'Robyne Gordon'* (Grevillea)

*Kerb radius may vary in response to topography during detailed design.


2.5m
Parking
3.5m
Travel Lane
3.5m
Travel Lane
3m
Travel Lane
2.5m
Parking
4m
Footpath
9.5m
Pavement
Varies
Entry Plaza
5.5m
Pavement
4m
Footpath
Variable
kd boundary
kd boundary
0
2m
4m
8m

THOROUGHFARES

Boulevard

Boulevard is the spine road that connects the site from both the north and south. It is characterized by the highest vehicular capacity and moderate speed. There is a footpath on each side of the boulevard separated from the vehicles by a planted verge.

The Boulevard is planted with formal rows of trees, such as Spotted Gum with *Macrozamia communis* understorey in verges and median. The uniformity of the street trees and shrubs along with a defined street edge helps the users quickly recognise the Boulevard as the major thoroughfare through the proposal.

BV-V25.4-12.0	
TYPE	Boulevard
MOVEMENT	Free
R.O.W. WIDTH	Variable Min. 25.4m
PAVEMENT WIDTH	12.0m
TRAFFIC FLOW	Two Ways
NUMBER PARKING LANES	Both Sides
KERB TYPE	Raised / Swale / Swale / Raised
KERB RADIUS	2.5m
PLANTER WIDTH	2.5m / 5.4m min.-Variable / 2.5m
PLANTER TYPE	Continuous
PLANTING PATTERN	Allee 10m o.c. Both Sides and Median / Occasional Alternate/ Naturalistically Clustered 10m o.c. Median
STREET LIGHT TYPE	TBD @ Detailed Design
STREET LIGHT SPACING	TBD @ Detailed Design
FOOTPATHS	Both Sides
FOOTPATH WIDTH	1.5m
PRIVATE FRONTAGE	Hedge & Fence

SUGGESTED PLANTING SCHEDULE	
TREES	*Corymbia maculata* (Spotted Gum)
SHRUBS	*Macrozamia communis* (Burrawang)
HEDGE	*Grevillea 'Robyne Gordon'* (Grevillea)
FERNS	*Dichondra repens* (Kidney Weed)
	Doodia asapera (Rasp Fern)
GRASSES	*Dianella caerulea* (Flax Lily)
	Themeda auatralia (Kangaroo Grass)

*Kerb radius may vary in response to topography during detailed design.


1.5m
Footpath
2.0m
Planter
2.5m
Parking
3.5m
Travel Lane
0.7m
Clear Zone
0.7m
Clear Zone
3.5m
Travel Lane
2.5m
Parking
2.0m
Planter
1.5m
Footpath
4m
Footpath
6m
Pavement
Min 5.4m
Median with Bio-swale
6m
Pavement
4m
Footpath
lot boundary
25.4m
lot boundary
P
P
P
P
0
2m
4m
8m

THOROUGHFARES

Avenue

A thoroughfare of high vehicular capacity and moderate speed. It is of limited distance and connects the major entry at the edge of the neighbourhood to the neighbourhood centre. A civic structure is located at the neighbouhood centre to terminate the entry vista. This improves the legibility of the neighbourhood for pedestrians and motorists. It is equipped with a landscaped median of variable width. Footpaths exist within each verge for pedestrians.

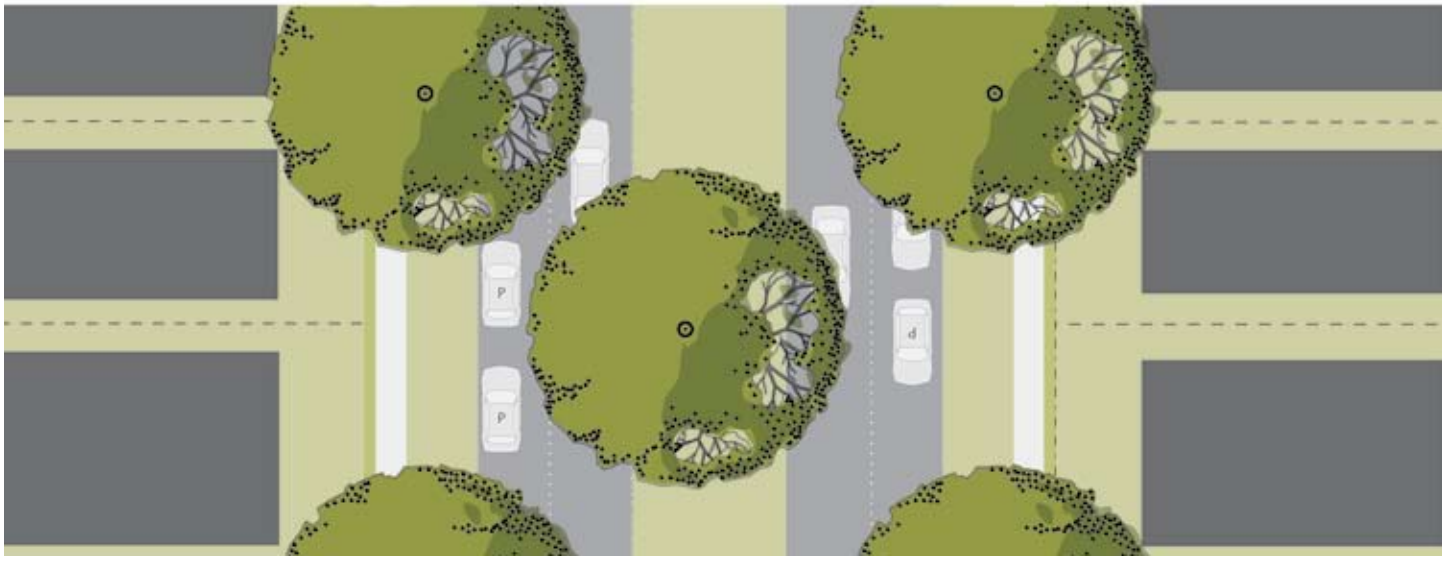
The Avenue is planted with alternating rows of trees, such as, *Eucalyptus pilularis* and informal shrubs and grasses understorey. It is detailed with raised kerbs. The street corridor is flanked by picket fences and Blueberry Ash hedge fronting residential lots. The character of the street echoes that of the Avenue and indicates its secondary hierarchy in the thoroughfare system.

AV1-V24.6-11.0	
TYPE	Avenue
MOVEMENT	Free
R.O.W. WIDTH	Variable (Min. 24.6m)
PAVEMENT WIDTH	11.0m
TRAFFIC FLOW	Two Ways
NUMBER PARKING LANES	Both Sides
KERB TYPE	Raised / Swale / Swale / Raised
KERB RADIUS	2.5m
PLANTER WIDTH	2.5m / 5.4m min.-10.0m max. / 2.5m
PLANTER TYPE	Continuous
PLANTING PATTERN	Allee 10m o.c. Both Sides / Alternate Clusters 10m o.c. Median
STREET LIGHT TYPE	3m high poles
STREET LIGHT SPACING	TBD @ Detailed Design
FOOTPATHS	Both Sides
FOOTPATH WIDTH	1.5m
PRIVATE FRONTAGE	Hedge & Fence

SUGGESTED PLANTING SCHEDULE	
TREES	*Eucalyptus pilularis* (Blackbutt)
SHRUBS	*Acacia flouribunda* (Sally Wattle)
	Pittosporum undulatum (Sweet Pittosporum)
HEDGES	*Elaeocarpus reticulates* (Blueberry Ash)
FERNS	*Dichondra repens* (Kidney Weed)
	Doodia asapera (Rasp Fern)
GRASSES	*Dianella caerulea* (Flax Lily)
	Themeda auatralis (Kangaroo Grass)

*Kerb radius may vary in response to topography during detailed design.


1.5m
Footpath
2.0m
Planter
2.5m
Parking
3m
Travel Lane
0.7m
Clear Zone
0.7m
Clear Zone
3m
Travel Lane
2.5m
Parking
2.0m
Planter
1.5m
Footpath
4m
Footpath
5.5m
Pavement
Min 5.4m
Median with Bio-swale
5.5m
Pavement
4m
Footpath
lot boundary
Min 24.6m
lot boundary


P
P
d

0 2m 4m 8m

THOROUGHFARES

Civic Street

It is a local urban thoroughfare with the attributes of a street, except that it traverses a civic space. It brings the civic square into view from a distance to improve the legibility of the neighbourhood. The detailing of the street and space is to be integrated to create a streetscape that consists of paved walks, lawns, feature trees and civic structures. A combination of vertical elements such as building façade, fence and hedging further define the open space.

CS-V14.0-11.0	
TYPE	Civic Street
MOVEMENT	Slow
R.O.W. WIDTH	Variable (Min.14.0)
PAVEMENT WIDTH	11.0m
TRAFFIC FLOW	One Way
NUMBER PARKING LANES	One Side
KERB TYPE	Raised / Swale / Swale / Raised
KERB RADIUS	2.5m
PLANTER WIDTH	NA
PLANTER TYPE	NA
PLANTING PATTERN	NA
STREET LIGHT TYPE	TBD
STREET LIGHT SPACING	TBD @ Detailed Design
FOOTPATHS	One Side
FOOTPATH WIDTH	1.5m
PRIVATE FRONTAGE	Hedge & Fence

*Kerb radius may vary in response to topography during detailed design.

*Lane may include retaining wall.


2.5m
Parking
3m
Travel Lane
4.3m
Bio-Swale
2m
Footpath
Varies
1.5m
Footpath
5.5m
Pavement
Varies
Civic Space / Park
lot boundary
park boundary
P
P

0 2m 4m 8m

THOROUGHFARES

Road 1

These local roads have a more rural character than the proposed streets. They are of moderate vehicular capacity and moderate speed.

The rural character is created by a dense, informally planted verge and narrower, travel lanes. Roads drain into bio-swales in the verge. Houses along these roads are set back further to establish a more rural setting of open yards with informal hedges and fencing.

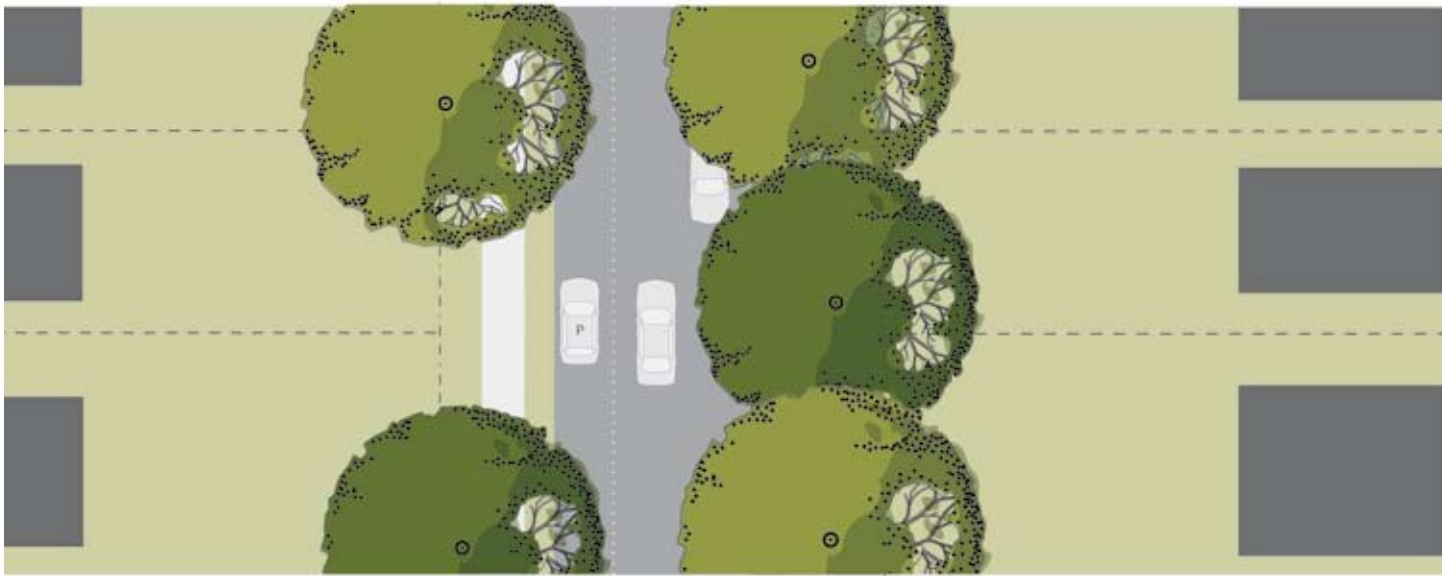
There is a variation in vegetation mix for roads that link two Civic greens to set them apart from the rest of the roads and create sense of approach to public spaces.

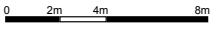
RD1-15.65-6.95	
TYPE	Road 1
MOVEMENT	Slow
R.O.W. WIDTH	15.65m
PAVEMENT WIDTH	6.95m
TRAFFIC FLOW	Give Way
NUMBER PARKING LANES	Alternate
KERB TYPE	Flush / Swale
KERB RADIUS	2.5m
PLANTER WIDTH	4.0m /4.7m
PLANTER TYPE	Continuous
PLANTING PATTERN	Naturalistic Clusters 10.0m o.c.
TREE TYPE	Mixed planting, Refer Z3 plant schedule
STREET LIGHT TYPE	3.0m High Poles
STREET LIGHT SPACING	TBD
FOOTPATHS	One side
FOOTPATH WIDTH	1.5m
PRIVATE FRONTAGE	Open Yard / Hedge & Fence

*Kerb radius may vary in response to topography during detailed design.

*Lane may include retaining wall.


0.5m
1.5m
Varies
2.1m
Parking
2.75m
Travel Lane
2.1m
Yield Lane
lot boundary
4m
6.95m
Pavement
4.7m
Verge Planting
lot boundary
15.65m




0
2m
4m
8m

THOROUGHFARES

Road 2

These local roads are similar to Road 1 however have a slightly more formal character to reflect their location within the proposal.

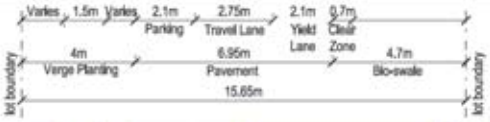
Houses along theses roads are set back closer to the front property line to generate a more urbanised chararcter.

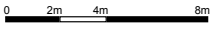
There is a variation in vegetation mix for roads that link two Civic greens to set them apart from the rest of the roads and create sense of approach to public spaces.

RD2-15.65-6.95	
TYPE	Road
MOVEMENT	Slow
R.O.W. WIDTH	15.65m
PAVEMENT WIDTH	6.95m
TRAFFIC FLOW	Give Way
NUMBER PARKING LANES	Alternate
KERB TYPE	Flush / Swales
KERB RADIUS	2.5m
PLANTER WIDTH	4.0m / 4.7m
PLANTER TYPE	Continuous
PLANTING PATTERN	Alternative planting at 10m o.c.
TREE TYPE	Tree Height <18m, Refer Z1 & Z2
STREET LIGHT TYPE	3.0m High Pole
STREET LIGHT SPACING	TBD
FOOTPATHS	One side
FOOTPATH WIDTH	1.5m
PRIVATE FRONTAGE	Hedge & Fence

*Kerb radius may vary in response to topography during detailed design.

*Lane may include retaining wall.


Varies
1.5m
Varies
2.1m
Parking
2.75m
Travel Lane
2.1m
Yield
Lane
0.7m
Clear
Zone
4m
Verge Planting
6.95m
Pavement
4.7m
Bio-swale
15.65m
lot boundary
lot boundary


0
2m
4m
8m

THOROUGHFARES

Drive 1

These are local roads of moderate vehicle capacity and low speed. Vehicle movement is under a give way condition. The trjectory of these drives follow the boundary between a developed area and open space.

The Drive has a dense, informally planted verge and narrow travel lanes with parking. The paved area drains into bio-swale in the park verge. Houses along the drives are set back closer to the street to provide surveillance to open spaces across.

DR1-15.35--6.95	
TYPE	Drive
MOVEMENT	Slow
R.O.W. WIDTH	15.35m
PAVEMENT WIDTH	6.95m
TRAFFIC FLOW	Give Way
NUMBER PARKING LANES	Both Sides
KERB TYPE	Swale Both Sides
KERB RADIUS	2.5m
PLANTER WIDTH	2.5m / 4.4m
PLANTER TYPE	Continuous
PLANTING PATTERN	Informal Clumps Both Sides 10.0m o.c
TREE TYPE	Height >18m, Refer Z3 plant schedule
STREET LIGHT TYPE	3.0m High Pole
STREET LIGHT SPACING	TBD a Detailed Design
FOOTPATHS	None
FOOTPATH WIDTH	1.5m
PRIVATE FRONTAGE	Hedge & Fence

*Kerb radius may vary in response to topography during detailed design.

*Lane may include retaining wall.


2.1m
Parking
2.75m
Travell Lane
2.1m
Yield
Lane
Bio-swale
4.4m
Verge
4m
Verge
6.95m
Pavement
15.35m
Varies
Open Space / Reserve
P
0
2m
4m
8m

THOROUGHFARES

Drive 2

These are local roads of moderate vehicle capacity and low speed. Vehicle movement is under a give way condition. It follows the boundary between a developed area and nature.

These drives have a more formal planting within the footpath and informal cluster planting in park verge.

DR2-16.35—7.35	
TYPE	Drive
MOVEMENT	Slow
R.O.W. WIDTH	16.35m
PAVEMENT WIDTH	7.35m
TRAFFIC FLOW	Give Way
NUMBER PARKING LANES	Both Sides
KERB TYPE	Swale Both Sides
KERB RADIUS	2.5m
PLANTER WIDTH	4.0m / 5.0m
PLANTER TYPE	Continuous
PLANTING PATTERN	Semi Formal /Naturalistic Clusters
TREE TYPE	Height <18m, Refer Z1 & Z2
STREET LIGHT TYPE	3.0m High Poles
STREET LIGHT SPACING	TBD
FOOTPATHS	One Side
FOOTPATH WIDTH	1.5m
PRIVATE FRONTAGE	Hedge & Fence

*Kerb radius may vary In response to topography during detailed design.

*Lane may include retaining wall.


1.5m
Footpath
2.5m
Planting
2.1m
Parking
2.75m
Travel Lane
2.5m
Yield Lane
Bio-swale
4m
Verge Planting
7.35m
Pavement
5.0m
Verge Planting
Varies
Open Space / Reserve
16.35m
lot boundary
road boundary
P
P

0 2m 4m 8m

THOROUGHFARES

Lane

These are slow moving streets providing vehicle access at the rear of properties. Where possible there is informal planting in meter wide verge.

LN-6.0—4.0	
TYPE	Lane
MOVEMENT	Slow
R.O.W. WIDTH	6.0 m
PAVEMENT WIDTH	Min. 2.75 Max. 4.0m
TRAFFIC FLOW	Give Way
NUMBER PARKING LANES	NA
KERB TYPE	NA
KERB RADIUS	2.5m
PLANTER WIDTH	1.0m Both Sides
PLANTER TYPE	Continuous
PLANTING PATTERN	Naturalistic Clusters
TREE TYPE	Height <18m, Refer Z1 & Z2
STREET LIGHT TYPE	NA
STREET LIGHT SPACING	NA
FOOTPATHS	NA
FOOTPATH WIDTH	NA
PRIVATE FRONTAGE	Garage & Rear Fence

*Kerb radius may vary In response to topography during detailed design.

*Lane may include retaining wall.