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Botanic Ridge Development Plan

Version: 3

Date updated: 16 February 2016

Responsible Department: Strategic Planning & Environment

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1 About this Development Plan

This Development Plan is the approved Development Plan for the Botanic Ridge area subject to Clause 43.04 of the Casey Planning Scheme.

The City of Casey is the planning and responsible authority for administering the Casey Planning Scheme. The Development Plan must be taken into account when assessing planning applications for the use, development and subdivision of land in the area and all planning applications must be generally in accordance with this Development Plan.

This Development Plan is complementary to Clause 56 of the Casey Planning Scheme. The requirements of Clause 56 will normally be met and they must be exceeded where a requirement of this Development Plan requires a higher level/different form of provision (for example with respect to road widths, landscaping).

Both the vision, general objectives and outcomes and the detailed requirements of this Development Plan will normally be met, however the Plan retains some flexibility so that Council may consider alternative design solutions at a more detailed level.

Further information about the preparation, planning context and service provision for the Development Plan is provided in the following documents:

- Botanic Ridge Local Structure Plan - Background Report.
- The Farm: A Strategy for Casey's Non-Urban South, June 1998.
- Botanic Ridge Surface Water Management Strategy, Phase 1 and 2 Reports Stage 2.
- Planning Permit P 86/01 for the Stage 1 area: (Marnebek Estate) including traffic, flora and fauna, aboriginal heritage and landscape details.
- Documentation submitted from the developer to support the request for Amendment C66 to the Casey Planning Scheme and Planning Permit application P865/04.

The City of Casey proposes that suburban development of the Botanic Ridge area is planned and undertaken in three major stages (Plan 1 – Staging Plan):

- Stage 1 is the land currently known as Maintop Farm in the west of the area (approximately 282 hectares). This land has been zoned for suburban development and development is expected to commence in the near future.
- Stage 2 is land adjoining, and to the south of, the existing Junction Village township (over 115 hectares). This area is proposed to be rezoned under Amendment C39 to the Casey Planning Scheme so that development can proceed in the short term. This includes suburban (1,000 square metres), large lot suburban (2,000 square metres) and low density housing (4,000/20,000 square metres).
- Stage 3 is the balance of the development plan area. This area is not proposed to be rezoned for suburban housing until a time in the future (approximately 220 hectares) when genuine demand can be demonstrated.

Plan 1 - Staging Plan

This Development Plan includes the area known as Stage 1 and shown in the Development Plan Overlay Schedule 3 (DPO3) shown on the Planning Scheme Maps of the Casey Planning Scheme.

The purpose of the Development Plan is to provide clear guidance and direction to the use, development and subdivision of the Botanic Ridge area, within the context of the broader Casey Farm Strategy, the growing Cranbourne suburban area and State and local planning policies. The Plan is complimentary to Clause 56 of the Planning Scheme.

The Development Plan is the result of an ongoing, consultative approach involving input from landowners, community representatives, consultants, government agencies, the Royal Botanic Gardens Cranbourne (RBGC) and Casey Council.

1.1 Stage 1

Stage 1 of the Development Plan covers an area of 282 hectares of land in Cranbourne South (See Plan 1). This part of the Botanic Ridge area is bounded by Pearcedale Road to the west, Browns Road to the south, Smiths Lane to the east and the Royal Botanic Gardens Cranbourne to the north-east.

The capacity of Stage 1 is to be 1610 allotments at varying densities providing for an estimated population of approximately 4500 persons.

Stage 1 will include the additional lifestyle component of a world class championship Golf Course, which will have public access and provide landscape treatments complimentary to the Royal Botanic Gardens Cranbourne (RBGC).

To achieve this philosophy, design guidelines will be adopted under an agreement created pursuant to Section 173 of the Planning and Environment Act 1987. This Section 173 Agreement aims to develop a close relationship with the key neighbour, the RBGC. The design goals include minimising the visual impact of housing through siting, architectural and landscape solutions and maximising the opportunities for the protection and establishment of indigenous woodlands, grasslands, wetlands and significant habitat areas throughout the project linked directly to the indigenous woodlands of the Botanic Gardens itself.

The golf course will play a fundamental role in achieving the above design goals as it will facilitate significant areas of indigenous vegetation restoration. Typically the course will consist of approximately 30 hectares of irrigated (using recycled waste water from the South East Irrigation Scheme) and non irrigated mown turf areas. These will comprise specially selected turf varieties (eg Bent grasses, couch, fescues and some native grasses) suitable for creating playing surfaces and natural looking grassed rough. The remaining golf course land has the potential for approximately 50Ha of tree based landscape treatment. The types of planted vegetation throughout the course will respond to natural site conditions of soil type, aspect and soil water regimes. Where possible the developer will collect seed and parent plant material from local plant sources including the RBGC.

The revegetation works of the golf course will involve 10,000 trees and several hundred thousand shrubs, native grasses, hedges, herbs and aquatic species. The golf course strengthens habitat links to surrounding areas and throughout the site. The revegetation of the golf course will involve the latest bushland revegetation techniques and the process will be carefully managed both during and post construction.

2 Vision for Botanic Ridge

The vision for the Botanic Ridge area is to create a quality, landscape responsive, mixed density suburban residential environment which complements the adjoining Royal Botanic Gardens Cranbourne (RBGC) and the remnant vegetation of the land as well as providing an attractive living environment for residents through the promotion of a quality lifestyle and sense of place.

The concept is for a quality residential area, which offers a range of housing types and maximises the opportunities provided by the topography, existing native vegetation and the nearby RBGC. The aim is to create a unique lifestyle environment that is both complementary to the RBGC and distinctive in character to achieve the highest level of design features for residential development in an environmentally sensitive setting.

The Development Plan embraces the significant landscape of the RBGC and surrounds, providing interactive links of landscape and habitat to the Gardens, providing a living environment that can be viewed as an extension of the Gardens. The Development Plan emphasises the principles of Ecologically Sustainable Development by promoting a development that integrates and works with the ecology of the Gardens, water catchments and revegetation programs.

The vision includes the following objectives:

- To develop a unique, quality residential precinct where the management of the environment is the dominant consideration.
- To recognise the Royal Botanic Gardens Cranbourne as a major strategic and planning asset.
- To conserve and enhance the natural landscape qualities of the RBGC and its immediate environs.
- To develop a model precinct for the conservation of urban ecology.

To deliver a design consistent with Casey's C21 Strategy and where applicable, the principles of Melbourne 2030, the following design principles need to be met:

- To revegetate the ridgelines and drainage lines.
- To develop wildlife corridors which link the RBGC with remnant vegetation areas external to the precinct.
- To screen development (including the baffling of street lighting) from the view shed of the RBGC.
- To frame the precinct with a vegetation buffer
- To encourage innovative, site-responsive design.

As a visual illustration of the objectives, vision and design principles, reference is made to the following Plans:

Plan 2 - "Landscape Determined Development Principles"

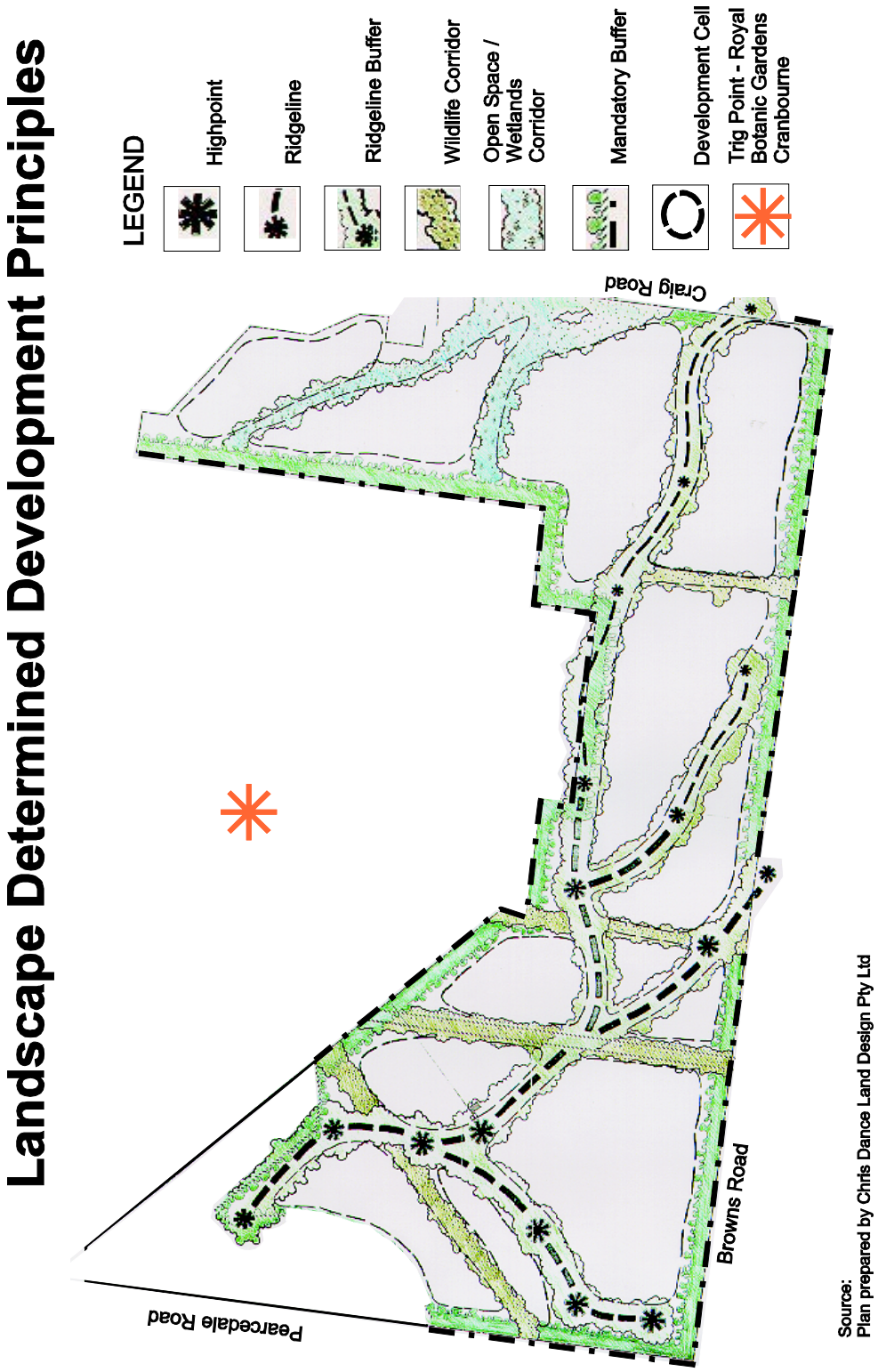
Plan 3 - "Botanic Ridge Development Guidelines Plan – Typical Street"

Plan 4 - "Botanic Ridge Development Guidelines Plan – East West Road Planting"

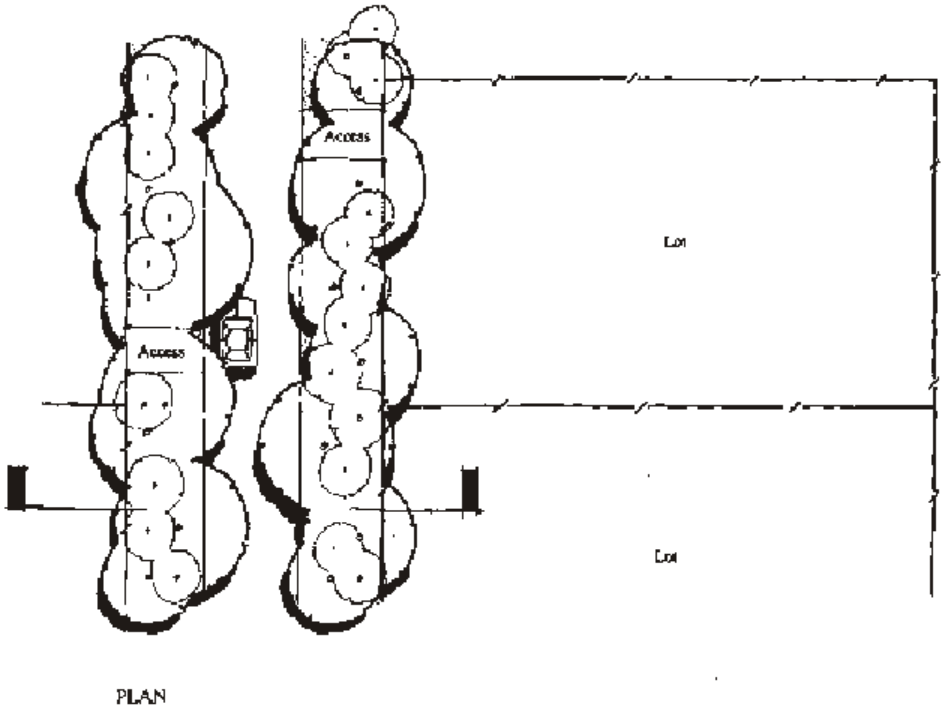
Plan 5 - "Botanic Ridge Development Guidelines Plan – Main Ridge Road Planting"

Plan 6 - "Botanic Ridge – Stage 1 – Viewshed Plan"

Plan 2


Landscape Determined Development Principles
LEGEND
Highpoint
Ridgeline
Ridgeline Buffer
Wildlife Corridor
Open Space / Wetlands Corridor
Mandatory Buffer
Development Cell
Trig Point - Royal Botanic Gardens Cranbourne
Craig Road
Pearcedale Road
Browns Road
Source:
Plan prepared by Chris Dance Land Design Pty Ltd

Plan 3 - Botanic Ridge Development Guidelines Plan – Typical Street



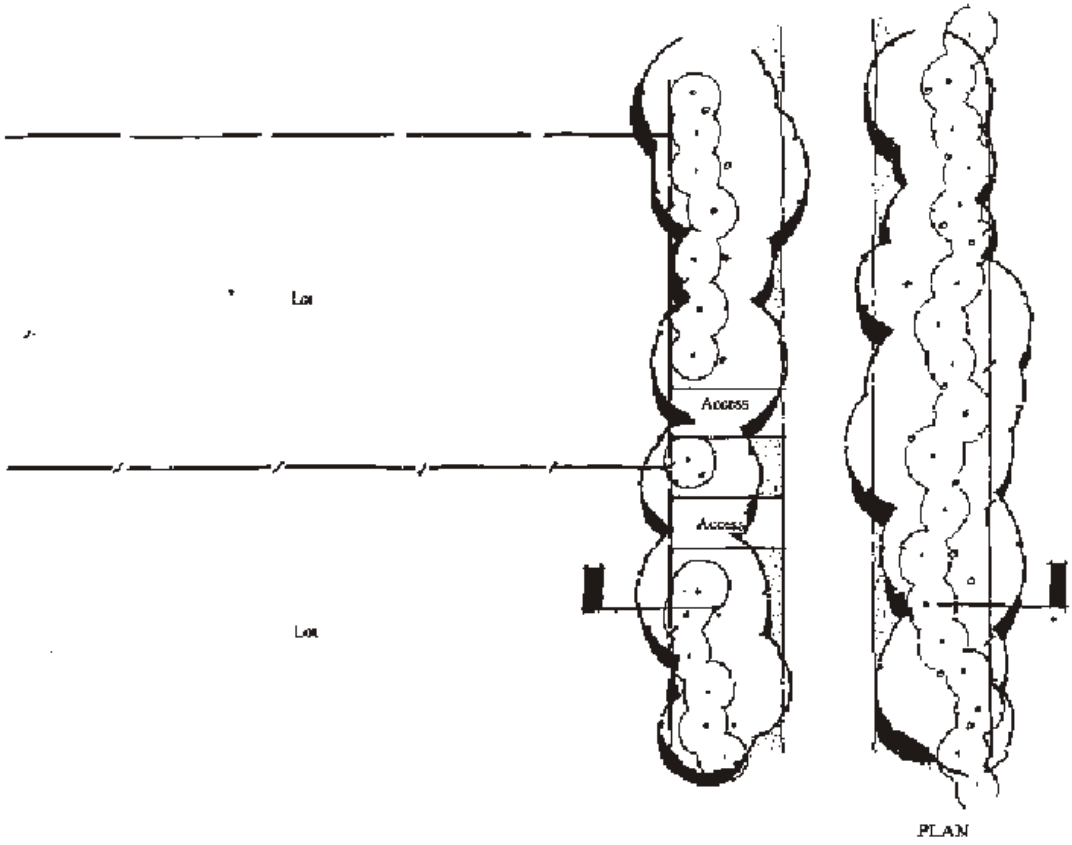
PLAN

SECTION

Typical Residential Street
Road Vegetation Buffer

Fig. 10

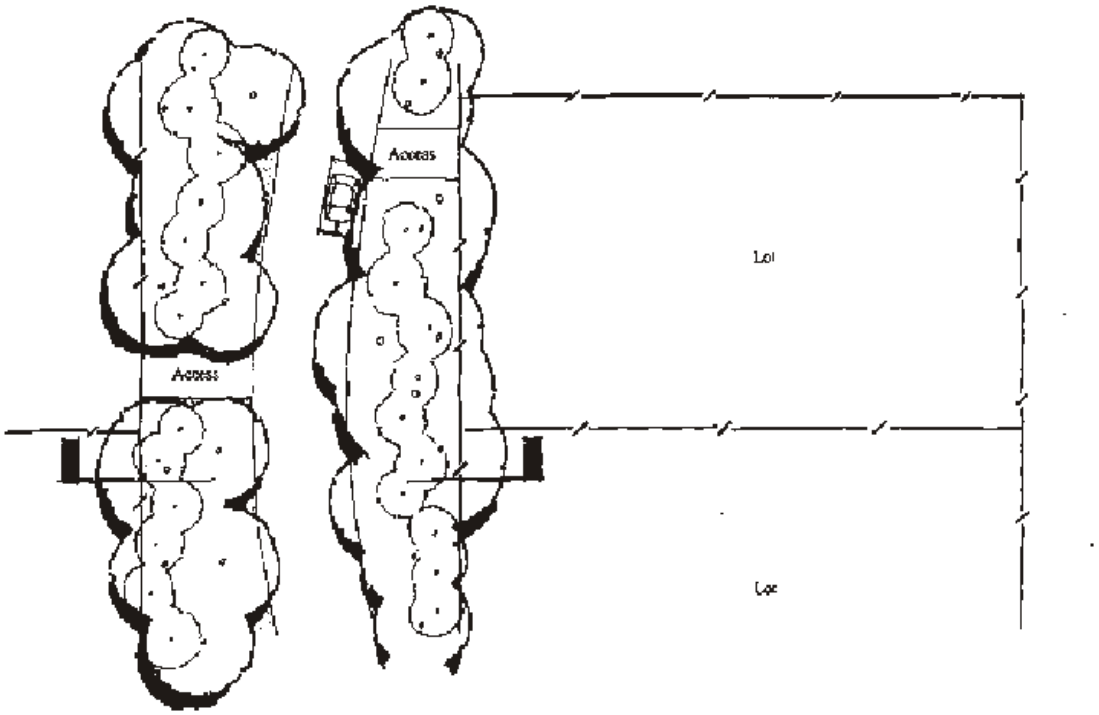
Plan 4 - Botanic Ridge Development Guidelines Plan – East West Road Planting



East West Roads
Road Vegetation Buffer

Fig. 12

Plan 5 - Botanic Ridge Development Guidelines Plan – Main Ridge Road Planting



PLAN

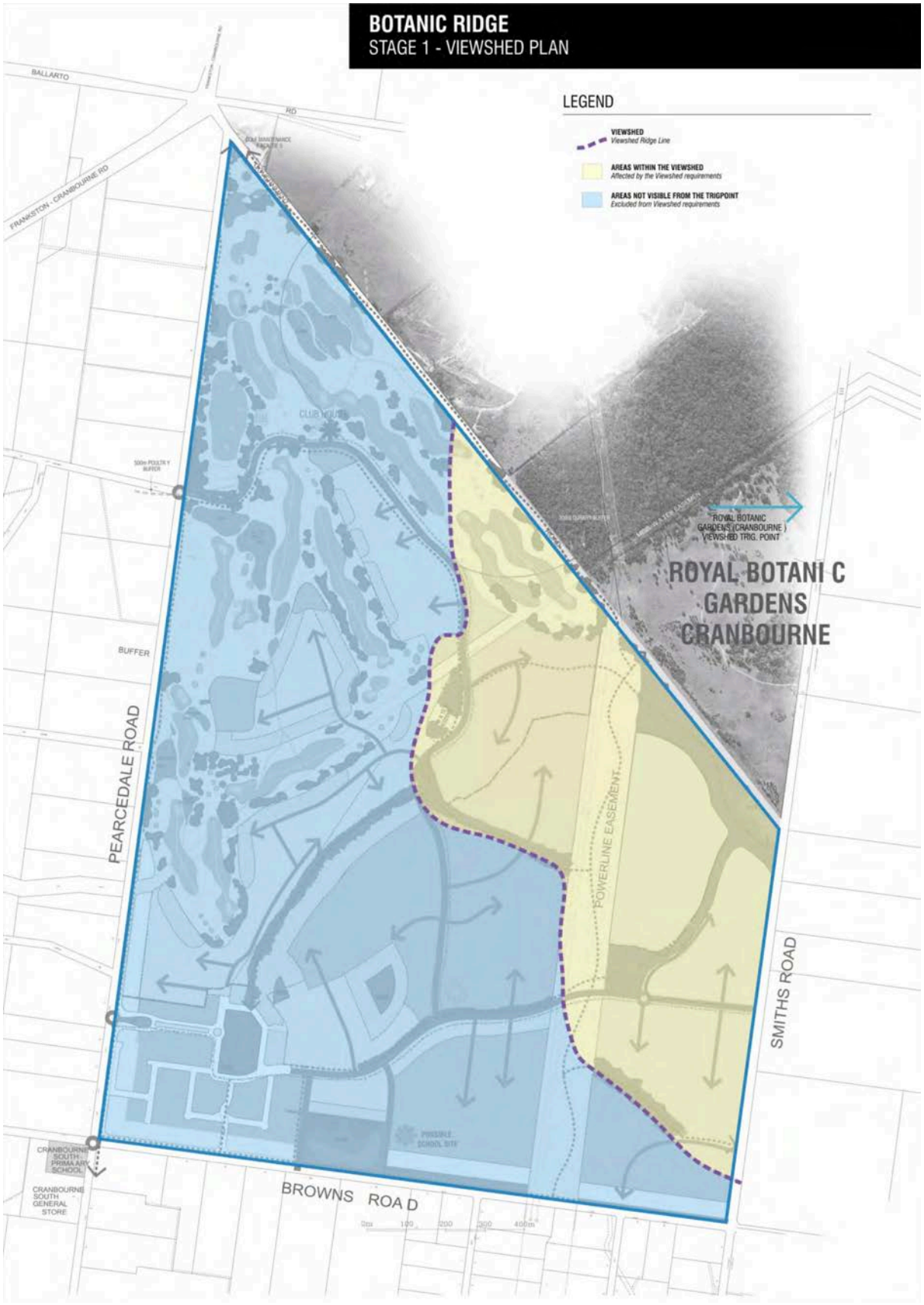
SECTION

Main Ridge
Road / Vegetation Buffer

Fig. 11

Revised Plan

Plan 6 - Stage 1 - Viewshed Plan



From the Farm Strategy (June 1998 version), and information collated in the background report, a number of opportunities were detailed and have since been further refined. These opportunities include:

- The undulating terrain with areas of indigenous vegetation (in the RBGC and vegetated areas to the west and east) presents a unique opportunity to provide complementary, well landscaped low-density suburban housing.
- Use of the natural terrain to maximise landscape compatibility, with the establishment of ridge top roads and parkland areas (with housing below ridge lines), and wetland focal points at the base of individual catchments within the site.
- Careful management of stormwater run-off to adjoining land (refer to the Neil Craigie Phase 1 and Phase 2 Drainage Reports for details of drainage management and requirements).
- Retention of existing indigenous vegetation in open space areas as focal points within the Development Plan.
- Establishment of wetland systems and landscape areas along the north - east boundary of the Stage 1 area and the western boundary of the Stage 2 area to the RBGC providing a physical separation in the form of vegetation and potentially a mounding buffer between the RBGC and Botanic Ridge neighbourhood.
- Establishment of pedestrian, cycle and wildlife links through and around the site using drainage lines, sensitive boundary areas, collector roads and the water pipe reserve land traversing the site.
- Adding to the existing community focus of the South Cranbourne general store and primary school (if retained in long-term) at the south - west of the site, with additional facilities to be focused on the General Store site as identified in the Casey Activity Centres Strategy, May 1999.
- Building on the existing public transport routes along the Cranbourne - Frankston Road and school bus route along Pearcedale Road to service the local area and a long term link through the middle of the estate.
- Providing a suitable interface to the high voltage power lines that are located in the far south-east corner of the site and traverse the site in a north-south manner, to reduce their visual impact from the RBGC, and within the development.

2.1 Botanic Ridge design objectives and outcomes

The following design objectives and outcomes form part of this Development Plan and are listed under the following headings:

- Environment and Landscape.
- Built Form.

- Services, Infrastructure and Staging.
- Education.
- Transport.
- Open Space.
- Drainage.

The purpose of the design objectives and outcomes is to provide clear guidance for the development and use of land in the Development Plan area. They are aimed at further articulating the overall development vision described above and apply to the entire Development Plan area.

2.2 Environment and Landscape

Objectives:

- The underlying objective is for the character of the area to mirror, though not necessarily replicate, the pre-settlement environment. In a sense, the character of the RBGC is diffused into not only the public, but private land.
- The establishment and planting of indigenous vegetation to create wildlife linkages in conjunction with drainage lines, existing vegetation, water pipe track land, power-line easement, open space and the like.
- Protection of existing native vegetation through retention in open space areas and linear parks.
- Entrance treatment to the surrounding road network. The appearance from that network must reflect the high level of design envisaged, must contribute to the identity of the area and must be compatible with the mostly low density rural-residential setting.
- For subdivision and development, retain and enhance remnant vegetation.
- Conservation of environmental values as a prime objective.
- Minimisation of off-site impacts.
- Development is to be designed in a way that is sensitive to the topography, underground water and natural water flows over the land and surrounding area.
- The appearance of development over the medium to long term (i.e. when any planted vegetation has reached maturity) must not detract from the viewsheds of the RBGC.
- The development should seek to minimise any impact on the adjoining RBGC through any waste products (e.g. effluent, stormwater disposal, soil sedimentation) both during construction and on-going use of the land.
- The road system and linear parks are seen as being part of an integrated landscape which begins north of the site in the RBGC and extends through the site south and west to the vegetated areas of Devon Meadows and Langwarrin.

- All road reserves are seen as opportunities to provide re-vegetation, open space and a sense of naturalness.
- For indigenous vegetation to dominate the landscape of both public and private land.

Outcomes:

- Re-vegetation of the precinct with indigenous species on both public and private land.
- Establishment of a plantation, wetland and mounding buffer area adjacent to the RBGC with a minimum width of 40 metres. This buffer, around the RBGC, should address both the visual and general amenity issues.
- Promotion of indigenous planting on private properties through proactive education programs organised in conjunction with the RBGC and funded through a Development Contribution. Planting in most street reservations will be extended into the adjoining allotments to enable group planting of vegetation as part of the streetscape in accordance with the approved landscape plans.
- Subdivision and building design guidelines that achieve the highest levels of landscape sensitive design, within a national context, with particular emphasis on creating a complementary environment to the RBGC. Evidence to this effect must be submitted with development proposals.
- To create an open rural nature approach to landscaping avoiding the 'boulevard and annual bed' approach, with a strong ESD emphasis.
- The establishment of indigenous planting abutting the surrounding road network on tree reserves having a width of at least 12 metres (the pavement of any service road must be located outside these reserves).
- Extensive indigenous planting along all roads, streets and courts.
- Provision of the landscaping of buffer areas at the commencement of development.
- Provision of wildlife corridors along the desire lines shown in the Landscape Determined Development Principles Plan (refer Plan 2).
- Ensure the wildlife corridors are appropriate for habitat purposes.
- No domestic cats or hives of exotic bees.
- Incorporation of fire prevention measures into the design.
- Minimisation of cut and fill activities from an environmental and visual standpoint.
- Recognition and maintenance of standard industry buffers to existing uses such as broilers and extractive industry.
- Alignment of roads to consider headlight impact on the RBGC.

2.3 Built Form

Objectives:

- A fundamental part of the Development Plan is to provide high quality housing on allotments that can integrate with the environment of the RBGC (i.e. allow sufficient size for a dwelling and associated buildings and space for the planting of large canopy trees on housing sites) and, critically, improve housing diversity in Cranbourne.
- Within this context, a diversity of lot sizes must be provided, however Stage 1 cannot achieve a lot mix exceeding 1610 lots.
- The mix of allotment sizes should reflect the landscape themes and overall vision for Botanic Ridge for a high quality, suburban development, which complements the natural qualities of the land.
- What is at stake is the totality of the environment created by the combination of buildings and private/public landscaping, rather than focusing in on the architectural form of a single building.
- From the RBGC, the objective is to achieve a green backdrop within its view shed (refer Plan 6).
- Within the viewshed, subdivision design should adopt widened road reserves to support canopy tree planting, establish public open space along ridge lines and provide an appropriate open space buffer to the RBGC to promote landscaped viewlines from within the RBGC.
- From the south, the objective is to protect the landscaped setting of the area while maintaining opportunities for housing to take advantage of the topography and distant views.
- From within and outside the precinct, the dominant element should be a green ridgeline.
- On the edge of the precinct, the landscape setting is not about the creation of a hard vegetation edge. Articulation of the landscape is important.
- Equally, the concept is not about what type of development should occur on the key road frontages, the objective is that the landscape dominates and has depth.
- It is understood that an important consequence of the delivery of the design objectives is the creation of development cells which are framed by the landscape.
- To recognise the gateway and community place significance of the intersection of Pearcedale and Browns Roads.
- Built form shall be provided to promote the principles of the Botanic Ridge Development Plan and Botanic Ridge Development Guidelines.

Outcomes:

- Subdivision design and approvals is to ensure housing faces public spaces, including roads, parks (including the RBGC) and linear open space. Houses along the

surrounding road network should face these roads, unless this is impractical, and should have access via service roads.

- The alignment of streets with contour lines.
- Tall tree planting in the road reserve to screen development.
- The use of building envelopes, including height restrictions inclusive of the roof.
- Roof and building colour management.
- Tree removal controls.
- Lighting to be baffled and night lighting of tennis courts controlled.
- All services are to be underground.
- Road reserve to include roadside planting.
- Site coverage to maximise landscaping opportunities, particularly in the view shed areas with respect to managing multi-unit development.
- The use of widened nature strips to achieve landscape objectives (refer to Plan 3,4,5).
- The use of winding streets to increase the sense of naturalness.
- Built form provided generally in accordance with the Development Plan and the Botanic Ridge Development Guidelines.

2.4 Services infrastructure

Objectives:

- Achieve an approved Environmentally Sustainable Development (ESD) acknowledging that this is not an area for typical subdivision and specific attention needs to be given to the delivery of infrastructure services to ensure it is environmentally responsive.
- All new development should be connected to all suburban services or provide adequate on site services to the satisfaction of the relevant servicing agency.
- No overhead wires/cabling/powerlines are permitted.
- Adequate infrastructure should be provided commensurate with the development proposed, including sealed access to an adequate sealed road network.
- Pedestrian links be planned and incorporated holistically and filter down to be reflected in the implementation of pedestrian links in the various stages.
- Staging of development will place emphasis on providing vegetated buffer areas to the RBGC and prominent ridge lines, prior to the establishment of housing particularly within the viewsheds of the RBGC.

Outcomes:

» Maximise return of water to natural water table to minimise downstream impacts and create a more sustainable solution.

» All development to include reticulated sewerage.

» Ensure high quality and slow, controlled release of water run-off in accordance with an approved Drainage Strategy for the area.

» Consideration to nutrient run-off to the RBGC.

» Ensure trails and paths reflect the design objectives of the area.

» Use development contributions for the delivery of key infrastructure that are required to service suburban housing.

2.5 Environmental Education

Objectives:

» Recognise the responsibility of all stakeholders to provide dissemination of information.

» Recognise that the achievement of some of the environmental objectives will require a partnership, which in part relies on all parties being aware of the special environmental qualities of the precinct.

Outcomes:

» Provide residents with information on the unique qualities of the RBGC and the benefits of using indigenous vegetation planting and that weed species may be a threat. This is to be aided by the Section 173 Agreement being registered on all lots (refer section 3.7 ‘Owners Obligations” as elaboration on the content of the Section 173 Agreement).

» Residents be informed about the variety of fauna in the RBGC and the wildlife corridors and the threats domestic pets pose to them.

» Residents be informed about their fire protection responsibilities.

2.6 Transport

Objectives:

» Principle roads should follow the contours of the land to minimise excavation and visual impact of the urban components of the development.

» The road layout should reflect the Development Plans unless any alternative layout is approved by Council. The road layout will reflect the principles of the Botanic Ridge Development Guidelines and indicative road cross sections.

» The location and design of new access points to the surrounding road network must be sensitive to the safety and amenity of existing driveways and houses.

» A landscape theme for roads, based on the Botanic Ridge Development Guidelines should be included in any subdivision plan.

» Roads must be coordinated with and facilitate linear pedestrian and cycle links between major destinations.

2.7 Open Space

Objectives:

» The size and landscaping of parks should be based on the principles of the Botanic Ridge Development Guidelines.

» A linear open space system that generally ensures residents are within 400 meters of a network. This network is to also include local parks of 1 hectare in size within 500 meters of residents.

» To accommodate pedestrian and equestrian trail systems.

» Linear parks shall be provided to promote the access of wildlife throughout the area based on the principles of the Botanic Ridge Development Plan and the Botanic Ridge Development Guidelines.

Outcomes:

» Open Space provided generally in accordance with the Development Plan and the Botanic Ridge Development Guidelines.

» Both the water pipe track and the power-line easement which traverse the land should be landscaped in sympathy with the Botanic Ridge Development Guidelines and in accordance with any requirements of the relevant servicing agency which owns or has rights over the land.

» Provision of a pedestrian and perimeter equestrian trail system as shown in the Development Plan.

» Water treatment facilities integrated with the open space network.

2.8 Drainage

Objectives:

» The drainage requirements for Botanic Ridge must be aimed at ensuring that the development incorporates current stormwater drainage best practices, including water quantity and water quality management, so that downstream impacts are minimised and opportunities for productive use of stormwater are promoted.

» The Victorian Urban Stormwater Best Practice Environmental Management Guidelines (USBPEMG, 1999) promote the use of a broad range of water quality and quantity management systems under the banner of Water Sensitive Urban Design (WSUD). Site drainage should be consistent with these guidelines so that stormwater is treated as a resource and vital element of the suburban landscape rather than as a liability to be removed off-site as quickly as possible.

Outcomes:

- Drainage management on the site should be such that the following over-arching WSUD outcomes are achieved:
    - Protect natural systems and remnant indigenous vegetation, in particular such vegetation along significant drainage lines;
    - Integrate stormwater treatment into the landscape so that stormwater is a visible, useful and interesting part of the urban landscape;
    - Protect receiving water quality through use of measures ranging from source controls to stormwater treatment;
    - Reduce runoff and peak flows by use of infiltration, local storage, reuse, landscape areas and other porous surfaces; and,
    - Add value while minimising development costs.

From these over-arching outcomes, more specific outcomes related to water quantity and quality control follow:

Outcomes for Water Quality Control:

- Where downstream drainage systems only have capacity to cater for existing rural flows, control future peak stormwater flows by means such as site storage and retardation, so that downstream peak flows are not increased over existing levels up to and including 100 year ARI events.
- Where current problems exist with waterlogging along downstream drainage lines, control future seasonal volumes of stormwater discharged off the site to existing rural levels, especially in the critical winter/spring period so that problems of waterlogging are not exacerbated. If this is not feasible on site then provision must be made for upgrading of the capacity of downstream drainage lines or alternatively, by diversion to another suitable point of discharge.

Outcomes for Water Quality Control

These outcomes will apply during both the estate development and building construction phases as well as for the long term:

- Mitigate discharge of litter and other gross pollutants from the development; and,

Ensure that the development of the site does not result in increased sediment or nutrient input to downstream waterways compared with existing conditions.

3 Stage 1 Plan

The Plan includes the following elements (refer Plan 7 for “Botanic Ridge – Stage 1 Plan”):

- Location of principal streets which follow the contours of the land to minimise excavation and visual impact of the suburban components of the development.

- Retention of significant remnant vegetation in open space, with a particular focal point around the “billabong” in the south west of the land.
- Provision of pedestrian/cycle routes between open space and local streets, providing clear linkages to the surrounding area including the school (if this proceeds) and local centre at South Cranbourne.
- Enhancing the intersection of Pearcedale and Browns Roads as a local activity centre, with a convenience centre on the south-west corner associated with the existing general store.
- Integrating residential development with a predominantly indigenous planting landscape theme, to create a distinct lifestyle opportunity within the development.
- Locating key open space areas along the boundary to the RBGC through combined wetland and open space systems.

The following principles and guidelines are included as part of the Stage 1 Plan:

- Landuse and housing.
- Transport.
- Open Space.
- Buffers.
- Interface to Royal Botanic Gardens Cranbourne.
- Treatment to key roads.
- Development Contributions.
- Drainage.
- Open Space.

3.1 Landuse and housing

Any permit for subdivision issued for land covered under this Development Plan shall contain a condition requiring that development be generally in accordance with the approved development plan as a whole and any relevant elements particular to that stage within which it is located.

3.2 Transport

The network of pedestrian and cycle paths should reflect those in the Development Plans unless the responsible authority is satisfied otherwise.

Roads

- Unless it can be shown to be impractical, subdivision lots are to front all roadways and open space areas. A range of design options are available to achieve this requirement

- Road design and widths for all roads are to be to the satisfaction of Casey Council in accordance with an adopted standard construction drawing for each road classification (i.e. trunk collector, collector street etc.) and to meet the landscape design objectives of the Botanic Ridge concept in this Plan. Details of approved road reserve widths are set out later in this Development Plan.
- Roads abutting a public open space reserve may be entitled to a reduced road reserve width subject to approval of the responsible authority.
- Local roads are to be designed as access streets (with additional width as required to meet the landscape objectives for Botanic Ridge) with provision for parking on both sides.
- Access places and lanes will be allowed only in very limited circumstances where agreed to be the responsible authority. These streets must provide at least one on street car parking space per lot and adequate provision must be made for garbage collection.
- Roads constructed along existing property boundary lines will be required to provide sufficient road reserve width and road pavement design to allow for the safe and efficient flow of traffic to the satisfaction of the responsible authority. In most cases, this is likely to require the first owner to develop to provide more than 50% of the ultimate road reserve and pavement.

To meet the landscape objectives of Botanic Ridge, the minimum road reserve widths in Table 1 are to be provided. Additional width may be required in sensitive locations to meet the design objectives, for example in proximity to a ridge line.

Table 1 – Road Reserves

Street Type	***Road Reserve Width***	***Road Pavement Width***	***Comments***
Minor Street (adj. to open space)	*13m May need additional width where 7m pavement used.*	*5m or 7m for key links*	*Only applicable where development on single side*
Local Access Street	*18m*	*7m*	*Slight realignment of pavement can allow for wider planting strips on one side of the street to enhance landscape outcomes.*
Local Access Street (within viewshed)	*19m*	*7m*	*Slight realignment of pavement can allow for wider planting strips on one side of the street to enhance landscape outcomes.*
Minor Collector	*22m*	*7.5m*	*Slight realignment of pavement can allow for wider planting strips on one side of the street to enhance landscape outcomes.*
Major Collector	*25m*	*6m + 2 Lanes of indented parking lanes*	*Parking to be provided as indented lane. Tree planting can occur in kerb outstand areas subject to available space.*
Trunk Collector	*30m*	*2 carriageways of 5.5m*	*Should be designed with no direct access for first 50m from the nearest intersection with Pearcedale Road and Browns Road* *6m each carriageway and 6m median*

Notes:

- *Road pavement width is measured from invert to invert.*

Where shared paths are provided in Stage 2 and 3 of the Botanic Ridge Development Plan area the path shall be 2.4m wide and located a minimum of 1.0m offset from the property boundary.

Plan 7 - Botanic Ridge – Stage 1 Plan

Revised Plan

3.3 Open Space

Any permit for subdivision which creates an additional lot must include a condition which requires the provision of land for public open space in accordance with the Development Plan in one of the following methods:

- the provision of land in a location satisfactory to the responsible authority, equivalent to 11% of all the land in the subdivision; or,
- payment of money to the responsible authority of an amount equivalent to 11% of the site value of all land in the subdivision; or
- a combination of the above two methods in a proportion which is satisfactory to the responsible authority.

3.4 Buffers

- A 22-hectare section of land in the north-west corner of the site is nominated for future development (part of the golf course).
- In the event that the nearby poultry farm and the associated buffer ceases operation and the Urban Growth Boundary allows for a rezoning of land this would address a more sensitive land use.
- Development must also recognise the continuance of the use of the adjoining poultry farm to the north-west and the quarry to the north and east. This requires buffer distances to be maintained which intrude within the Botanic Ridge Development Plan. The area is shown as part of the golf course, however residential development cannot proceed until such time as the buffer distances are no longer required.

3.5 Interface to Royal Botanic Gardens Cranbourne

- A buffer of 40 metres is to be provided between the RBGC and the Botanic Ridge neighbourhood.

Planning Referrals to Royal Botanic Gardens Cranbourne:

- All planning applications for subdivision of land must be referred to the RBGC for comment. All comments received from the RBGC must be considered by the responsible authority.
- The responsible authority must consult with the RBGC to determine whether the information submitted under Clause 56.01 of the Casey Planning Scheme is satisfactory.

Subdivision design:

- Subdivision design must respond to the overall objectives and outcomes of the Botanic Ridge Development Plan area and may include landscape measures such as larger lots on ridge lines with vegetation establishment and maintenance agreements on private lots, building envelopes to retain existing vegetation and agreements under Section 173 of the Planning and Environment Act for ongoing management and maintenance of vegetation.

» Street lighting to be baffled so as to prevent spillage of light upwards and onto the RBGC.

Require curvilinear pavements and screen planting within widened road reserves where headlights would otherwise be directed into the RBGC.

Buildings visible from Trig Point:

» All planning applications that would permit buildings that are "*within the View Shed area defined on Map 1* are to be referred to the RBGC for comment. All comments received from the RBGC must be considered by the responsible authority. Additional measures to augment the consideration of the visual impact for dwellings in this more sensitive location include: managing building design, building layout, building massing, building materials (including materials, colours and roofing) and landscaping.

3.6 Treatment to key roads

The following specific provisions apply to housing along the surrounding road network:

» Any lot that is adjacent to either Pearcedale Road or Browns Road (or to reserves along these roads) must have a minimum width of 35 metres to the satisfaction of the responsible authority.

» All lots that front Pearcedale Road or Browns Road (or to reserves along these roads) are to have a minimum setback for buildings and works (excluding access ways and structures that are transparent on 3 sides) of 20 metres from the lot boundary that is closest to Pearcedale or Browns Road to the satisfaction of the responsible authority. The owner must enter into an agreement under Section 173 of the Planning and Environment Act to place this requirement on the title of affected lots.

» No paling or other solid suburban fencing may be constructed within 20 metres from the property boundary that is nearest to the road network. A post and wire or similar rural type fencing is preferred.

» The establishment of indigenous planting abutting the surrounding road network on tree reserves having a width of at least 12 metres (the pavement of any service road must be located outside these reserves).

3.7 Section 173 Agreement

Prior to the gazettal of Amendment C66, Council and the landowner entered into an agreement under section 173 of the Planning and Environment Act. The agreement is made up of two parts, one to stipulate the developer's obligations and the other to stipulate the owner's obligations.

The agreement is summarised below:

Developers Obligations

» A maximum lot yield.

» Requirements for an average lot size.

- Requirement that a Lot Distribution Master Plan be submitted prior to Council receiving any permit applications for the development area.
- Resolution of the ongoing maintenance of any proposed Wetland body.
- Each residential lot greater than 450 square metres to show areas for Tree Planting Zones. A tree planting master plan must also be submitted.
- Contributions to the provision of community infrastructure and an infrastructure implementation plan.
- Siting and Design Controls that ensure a high degree of control over the built form and high quality environmental/landscaping outcomes for each precinct. A Design Panel will be appointed to review the siting and design controls on a quarterly basis and report back to Council. If a proposal is not in accordance with the controls Council must give its' written consent that development can proceed.
- Requirements for public open space, drainage works, investigation for water saving pertaining to dual plumbing and the buffer zone relating to the poultry farm buffer.

Owners Obligations

- Specific obligations for future owners that no cats are allowed, no planting of environmental weeds take place and that the owner be made aware that the Royal Botanic Gardens conducts burn-offs annually or otherwise as required. Tree Planting Zones are also required for each lot and will be protected and maintained in perpetuity by future owner's. Some owners have additional obligations in regards to maintaining landscaped areas that were part of the overall subdivision.
- If the lot has a rear abuttal to a tree reserve; or frontage to a service road which abuts a tree reserve, contiguous with Pearcedale Road or Browns Road:
    - no buildings or works including solid walls or fence structures (other than access ways) may be erected or constructed within 20 metres of the boundary to the tree reserve; and
    - any dwelling upon the lot must be located such that the front of the dwelling is orientated to the tree reserve or the service road.
- Dual Plumbing is to be provided by the owner though the Siting and Design Controls.
- The preferred character of the estate is to be controlled through a document called "Botanic Ridge Neighbourhood Character & Design Commitment" (which forms part of the Section 173 Agreement). This document details the design parameters in which Botanic Ridge will be developed, and includes the vision for the Estate and how this vision is to be achieved.

These requirements are linked to all titles to the land as binding requirements outside of normal Planning Scheme Requirements.

3.8 Development Contributions

The Schedule in the Development Plan Overlay requires that the owner(s) must enter into an agreement under Section 173 of the Planning and Environment Act to the satisfaction of the responsible authority to provide for a range of infrastructure items. An agreement was entered into covering these and other matters dated 16 March 2003.

3.9 Drainage

The following detailed drainage requirements guide the development of Stage 1.

The following conditions do not refer to payment of contributions by the applicant to Council or Melbourne Water or other agency. In regard to drainage contributions, it is expected that if the applicant is deemed to have fully complied with these conditions, then there should be no expectation of payment of any drainage contribution to Council or Melbourne Water. An exception would be if a contributory drainage scheme was developed by MW or Council covering the costs of construction of the permanent drainage management facilities.

In regard to the period of time that permanent drainage works are required to be maintained by the applicant prior to handover to the ultimate responsible authority, it is indicated at least 18 months after receipt of the statement of compliance on any particular stage of the development.

This is an attempt to strike a reasonable balance between the applicants' responsibilities to demonstrate satisfactory performance of assets before handover, and the practical limit of the applicants' ability to influence the building development stage once the lots are sold. The period specified by Council will be subject to negotiation between the interested parties.

Prior to the commencement of any work on land in the Development Plan area, the applicant shall prepare a detailed Stormwater Management Plan (SMP) for the development and submit to Council and Melbourne Water for approval.

This plan must show the location of proposed drainage infrastructure within the site, including current and proposed drainage patterns, pipes, open waterways, treatment zones, storages, lakes, wetlands, and discharge points. Attached to the plan will be documentation providing:

- water balances for the site, peak flows, and seasonal flow volumes, all for before and after development conditions;
- details of all proposed water quantity and water quality control measures;
- details of water quality control measures and their maintenance needs for the subdivision phase, the building phase and the post development phase, and including predictions of water quality leaving the site;
- details of the expected performance, anticipated operating condition, and both short and long term annual maintenance requirements and costs, for all permanent waterbodies planned for the site;

- proposals for ongoing operation and maintenance responsibility for any constructed permanent drainage management assets, including duration of applicant maintenance period and trigger conditions for handover to Council and/or Melbourne Water.

Performance Requirements for water quality and quantity management are detailed in subsequent conditions.

Tips: it is anticipated that the applicant will be required to operate and maintain all permanent waterbodies constructed as part of the drainage management assets, for a period of at least 18 months after receiving a statement of compliance on the relevant stage. Lesser periods would apply for conventional works such as pipelines, retarding basins and floodways.

More detailed drainage requirements/conditions:

1. **Prior to the commencement of any work on this site, the applicant shall prepare an Environmental Management Plan (EMP) for the full development and submit same to Council for approval.**

   This plan is to cover all works proposed to protect the site and receiving environments during the subdivision construction and building construction stages. In regard to stormwater drainage it will detail:

   - the proposed strategy to manage sediment and litter discharge from the site, including likely location and approximate sizing of primary control measures;
   - the staging/timing of construction of such measures in relation to development staging;
   - appropriate measures, techniques, practices and safeguards in the use of chemicals including fertilisers, herbicides and pesticides at any stage of development;
   - proposed water quality monitoring strategy;
   - maintenance and inspection procedures for all sediment and litter control measures;
   - proposals for timing/staging of reclamation/decommissioning of any temporary sediment/litter control measures;

Performance Requirements The sediment control measures must be capable of trapping and retaining within the boundaries of the property, all particles to the fine sand fraction in the 1 year ARI peak flow (determined for fully developed conditions). Any off-site discharge of stormwater during the subdivision and building construction stages shall be limited to a maximum suspended solids concentration of 50 mg/l. Sediment shall be removed from sediment traps when no more than 50% of their sediment storage capacity has been reached. Litter control measures will prevent the discharge of gross pollutants greater than 20 mm in diameter from the 3 month ARI peak flow (determined for fully developed conditions). All litter traps, whether temporary or permanent, will be regularly inspected and cleaned so that their performance is not reduced.

Any temporary water quality/quantity management assets will remain the property and responsibility of the applicant.

The applicant will be required to carry out water quality testing at agreed discharge points on a monthly basis.

Tips In addition to sediment removal facilities such as traps and/or grassed filter areas, the sediment control criteria will likely require the implementation of source control measures including silt curtains, minimisation of soil disturbance, appropriate location and bunding of soil stockpiles, runoff diversion, control of vehicle access over drains, and prompt revegetation of completed works areas. The planning and implementation of such measures will have due regard to the provisions of Urban Stormwater Best Practice Environmental Management Guidelines (USBPEMG 1999), the EPA publication Construction Techniques for Sediment Pollution Control (1991), and Environmental Guidelines for Major Construction Sites (1995).

2. Permanent litter, sediment and nutrient control measures must be constructed to limit long term pollutant concentrations to existing rural levels.

Performance Requirements At least 80% reduction in suspended solids, and 45% reduction in both total nitrogen and total phosphorus loads, which is consistent with the criteria set out in the USBPEMG (1999). All litter and gross pollutants greater than 20 mm equivalent diameter to be removed in the 3 month ARI peak flow. Full capacity bypass to be provided around all permanent litter traps. Sediment and nutrient removal systems must be capable of fully treating all peak flows up to and including the 1 year ARI event, with suitable protection to be provided to prevent damage to the asset/s or loss of previously deposited pollutants, during larger flood events up to and including the 100 year ARI event.

Tips This may include a combination of stormwater reuse (eg., for irrigation, garden watering, toilet flushing, offsite consumption by others), and treatment including (but not limited to), filter strips, bioretention and vegetated swales, ponds, constructed waterways, sediment traps and constructed wetlands. Where practical, separation of "clean" roof waters from "dirty" pavement waters can significantly reduce drainage treatment requirements.

As a general guideline there should be no free discharge of surface water from any impervious part of the development without appropriate treatment. Roof drainage waters do not require treatment. In general waters discharged from pervious areas do not require treatment unless subject to regular fertilizer application (eg., irrigated areas of golf courses).

Measures constructed to manage sediment and litter discharge during the subdivision and building construction periods may form part of the permanent water quality management system. However such facilities will be required to be "reset" to original design specifications prior to agreements being finalised for handover to the responsible authority. As a general guideline it is expected that the applicant will be required to operate and maintain all permanent waterbodies constructed as part of the drainage management assets, for a period of at least 18 months after receiving a statement of compliance on the relevant stage.

3. Peak stormwater flows from the site must be maintained at no more than current rural levels.

Performance Requirements no exceedance of peak rural flows up to and including the 100 years ARI event.

Tips This may include an combination of storage and retardation. There would be opportunity for subcatchment areas to be combined by diversion systems so as to minimise the number of storages, subject to all other conditions being met.

4. Seasonal runoff volumes and durations must not be increased over current levels.

Performance Requirements No increase in mean winter/spring runoff volumes or duration of runoff, as calculated using local rainfall and evaporation data over a period of at least 10 consecutive years including both above-long term average and below-long term average rainfall years.

Tips The 1981-1990 period is suitable for calculation purposes. The applicant will need to demonstrate that any proposed control measures (which may include storage, reuse and diversion options) will be fully effective during the critical winter/spring period when downstream properties are subject to waterlogging.

Flow volumes over the summer /autumn period could be increased compared with current rural levels subject to all other conditions being met. There are downstream agricultural enterprises that require water in these times.

As a general guideline, control measures involving use of pump systems will not be favoured unless satisfactory arrangements can be made to offset the cost of long term operation and maintenance of the pump systems.

5. If Conditions 1,2,3 and 4 cannot be met to the satisfaction of Council and Melbourne Water, the owner must reach an agreement under Section 173 of the Planning and Environment Act with Council and/or Melbourne Water as the case may be, with respect to contribution to the cost of upgrading of the conveyance capability of the relevant downstream waterways, external to the Stage 1 area.

It will be necessary for the applicant to investigate and design such upgrade works and to obtain all necessary landowner agreements and agency construction approvals at own cost.

6. Any proposals for water quantity and quality controls which may be proposed to be located outside of the boundaries of the Stage 1 area must be subject to written agreement between all interested parties before any works commence on the site.

3.10 Education

Objectives:

» Two sites for State primary schools are identified within the Botanic Ridge Precinct Structure Plan area to increase primary school provision proximate to the Development Plan area. Delivery of one of these schools may facilitate the relocation of the existing Cranbourne South Primary School onto a larger site.

3.11 Services infrastructure

Objectives:

» Achieve an approved Environmentally Sustainable Development (ESD).

» All new development should be connected to all suburban services or provide adequate on site services to the satisfaction of the relevant servicing agency.

» No overhead wires/cabling/powerlines are permitted.

» Pedestrian/bicycle and equestrian links be planned and incorporated holistically and filter down to be reflected in the implementation of pedestrian links in the various stages.

Outcomes

» Maximise return of water to natural water table to minimise downstream impacts and create a more sustainable solution. Dual plumbing must be provided for all dwellings with a rainwater tank (minimum 3,000 for lots less land 650 square metres and 4,500 litres for lots greater than 650 square metres) provided and plumbed with a pressurised connection for toilet flushing and garden watering.

» In addition to the tree reservation zones to the rear of lots as required by the S173 Agreement tied to Stage 1, adequate on site services of the relevant servicing agencies, are to be made available. To avoid services encroaching on tree preservation root zones, services are to be laid (including any surrounding soil treatment ie soil compaction and screenings/gravel) so top of service is at a minimum depth of 900mm below finished soil level.

» To minimise future potential conflict between the tree roots and installed services, all developments are to implement the following requirements or an alternative to the satisfaction of the Responsible Authority.:

  » The service pipe is to be of a robust construction type and size (1000mm diameter reinforced concrete).

  » Specifications for trench reinstatement need to be considered in order to deter root growth around the pipes.

  » Compaction of soil to a bulk density of greater than 1.8g/cm3.

  » Where space is available offset the tree planting within the easement as far as possible from the location of the pipes.

Use slow growing but long lived trees that do not have “invasive” roots

4 Requirements for planning applications

The requirements of this Development Plan are both detailed and comprehensive. The vision for Botanic Ridge seeks to achieve clear outcomes with respect to landscape, visual, environmental, open space and drainage. Accordingly, a high standard and depth of information is required to be submitted with all planning applications.

Any application lodged for the use, development or subdivision of the land within the Development Plan area must (as appropriate) be accompanied by the following:

- A detailed assessment of the proposal against this Development Plan and Clause 56.
- Details of preliminary discussions held regarding the application with the Royal Botanic Gardens Cranbourne.
- A detailed site analysis, including an assessment of native vegetation, topography, landscape values and viewsheds relating to the RBGC.
- A Flora and Fauna Assessment to meet the requirements of this Development Plan.
- A drainage report detailing how the proposed development meets the detailed drainage requirements of this development Plan, including details of drainage infrastructure staging.
- A traffic report, including a traffic safety audit.
- An Aboriginal Cultural Heritage Assessment.
- An environmental auditor appointed under the Environment Protection Act 1970 must make a statement in accordance with Section 57AA(5)(b) of that Act that the environmental conditions of the land are suitable for the sensitive use.

Additional requirements for Stage 1 as set out in the agreement under section 173 of the Planning and Environment Act 1987 for the land. In brief, as part of the Design Commitment forming part of the Agreement, a Design Panel will be appointed by Botanic Ridge Estate to review housing design prior to Building Approval. The Design Panel will review whether the design meets the guidelines for the estate. If a proposal is not in accordance with the siting and design controls, Council must give its' written consent that development can proceed. In addition, during the development process, the Design Panel will submit a quarterly report to Council's planning department indicating the typical issues discussed and addressed by the panel, with any recommendations to Council for adjustments that will improve outcomes.

5 Definitions

Council	means Casey City Council, being a body corporate constituted as a municipal Council under the Local Government Act 1989
Councillors	means the individuals holding the office of a member of Casey City Council
Council officer	means the Chief Executive Officer and staff of Council appointed by the Chief Executive Officer.

6 Administrative Updates

It is recognised that, from time to time, circumstances may change leading to the need for minor administrative changes to this document. Where an update does not materially alter this document, such a change may be made administratively. Examples include a change to the name of a Council department, a change to the name of a Federal or State Government department, and a minor update to legislation which does not have a material impact. However, any change or update which materially alters this document must be by resolution of Council.

7 Review

The next biennial review of this document is scheduled for completion by 16 February 2018

Abbreviations and Definitions

Aquifer	Soil formations which store and transmit groundwater
ARI	Average Recurrence Interval. The average length of time in years between two floods of a given size or larger
CC	City of Casey or Casey Council
DNRE	Department of Natural Resources and Environment (Victoria)
EPA	Environment Protection Authority (Victoria)
Ephemeral	Waterways which flow for only short periods of time after significant rainfall events. Also refers to wetlands which are either rarely inundated or only inundated for a very short period of time.
Evapotranspiration	The loss of water to the atmosphere by means of evaporation from free water surfaces (eg. dams or lakes or wetlands) or by transpiration by plants
Groundwater	All water stored or flowing below the ground surface level
ha	Hectare (10,000 square metres)
Intermittent	Waterways which flow generally continuously in the wet seasons of the year but which cease to flow in the dry seasons
km	Kilometre (1,000 metres)
MAR	Mean Annual Runoff (of surface water) in ML
MAV	Municipal Association of Victoria
m^3/s	Unit of discharge = cubic metre/second
ML	Megalitre (1,000 cubic metres)
MWC	Melbourne Water Corporation
Palaeozoic	A period of time between 289 and 575 million years ago.
Perennial	Waterways which flow continuously all year round
Pond	A small artificial body of open water (eg. dam or small lake)
Quaternary	A period of time that covers the last 1.8 million years.
Retarding basin	A flood storage dam which is normally empty. May contain a lake or wetland in its base
RBGC	Royal Botanic Gardens Cranbourne
SCC	Study Consultative Committee
SEPP	State Environment Protection Policy (Victoria)
SRW	Southern Rural Water

Surface water	All water stored or flowing above the ground surface level
Tertiary	A period of time between 5 and 65 million years ago.
Waterlogging	Term used to describe saturated surface soil conditions where some free surface water may also be present
Wetland	A transitional area between land and water systems which is either permanently or periodically inundated with shallow water and either permanently or periodically supports the growth of aquatic macrophytes (eg. swamp, marsh, fen, bog)

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Document Authorisation

Revision	Date	Details	Authorisation Name/Position	Signature
A	16/02/1999	Development Plan adopted by City of Casey	Manager City Development	
B	23/11/2004	Development Plan revised for community exhibition to implement Amendment C66 to the Casey Planning Scheme.	Manager City Development	
C	01/02/2005	Development Plan revised to address submissions received during community exhibition and adopted by Council.	Manager City Development	
D	17/09/2013	Development Plan revised to adopt layout changes to east portion of plan area.	Manager Strategic Development	
E	16-02-2016	Development Plan amended to reflect a revised Development Plan Overlay Schedule 3	Manager Strategic Planning & Development