



Cranbourne East Precinct Structure Plan

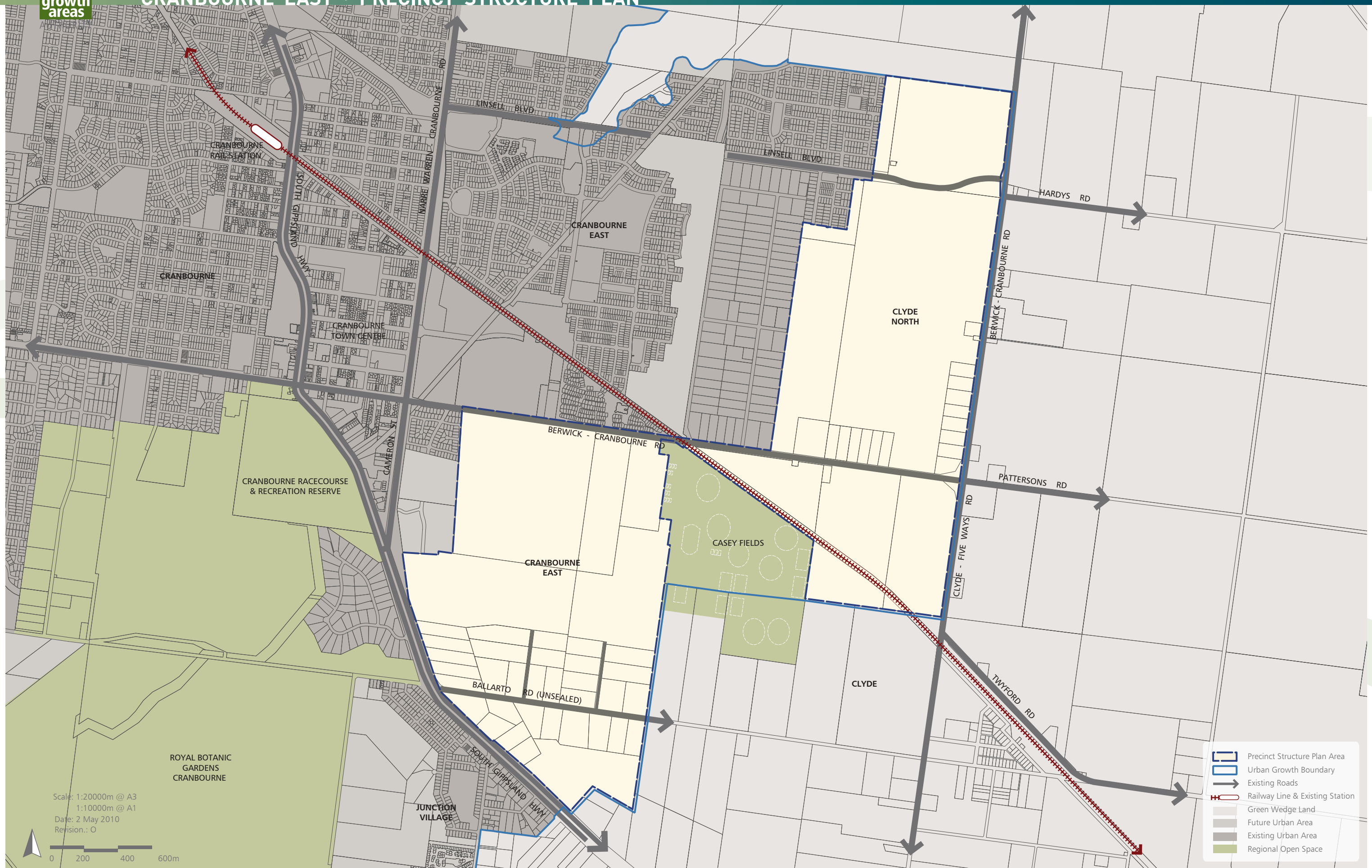
(including Cranbourne East Native Vegetation Precinct Plan)

MAY 2010



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plan 1

precinct structure plan area
cranbourne east precinct structure plan

1.0 INTRODUCTION

1.1 ROLE OF THE PRECINCT STRUCTURE PLAN

The Cranbourne East Precinct Structure Plan (the “PSP”) has been prepared by the Growth Areas Authority with the assistance of the Casey City Council, Government agencies, service authorities and major stakeholders.

The Cranbourne East Precinct Structure Plan Development Contributions Plan has been prepared concurrently with this document. It sets out the requirements for development proponents to make a contribution toward infrastructure required to support the development of the precinct.

This PSP also includes the Cranbourne East Native Vegetation Precinct Plan which sets out requirements for the protection and management of native vegetation within the PSP area and also within the Collison Estate which abuts the PSP area (refer Section 4.4.7 of the PSP).

The PSP is a long-term plan to guide future urban development. It describes how the land is expected to be developed and how and where services are planned to support development.

The PSP:

- Is a strategic plan which guides the delivery of a quality urban environment in accordance with the Victorian Government Guidelines,
- Enables the transition of non-urban land to urban land,
- Sets the vision for how land should be developed and the objectives to be achieved,
- Outlines projects required to ensure that future residents, visitors and workers within the area are provided with timely access to services and transport infrastructure necessary to support a quality, affordable lifestyle,
- Details the form and conditions that must be met by future land use and development,
- Provides the basis for the use and development controls that apply in the Schedule to the Urban Growth Zone and planning permits which may be granted under the Schedule to the Zone, and
- Provides developers, investors and local communities with certainty about future development.

The PSP is informed by:

- The State Planning Policy Framework set out in the Casey Planning Scheme, including the Growth Area Framework Plans and the Precinct Structure Planning Guidelines, and
- The Local Planning Policy Framework of the Casey Planning Scheme.

1.2 LAND TO WHICH THE PRECINCT STRUCTURE PLAN APPLIES

The land to which the PSP applies is illustrated in Plan 1 and shown on the Casey Planning Scheme maps as Schedule 2 to the Urban Growth Zone. The PSP applies to approximately 589 hectares of land.

The Berwick-Cranbourne Road and Leongatha Rail Reserve, together with Casey Fields, create two distinct areas:

- The eastern area located east of the Leongatha rail reserve, and
- The western area is located to the west of Leongatha rail reserve.

1.3 IMPLEMENTATION

The PSP is implemented by:

- Development proponents who develop land generally in accordance with this PSP,
- The Victorian Government and the Casey City Council by funding, delivering and managing a range of infrastructure and services to support the development of the precinct, and
- Non-government service providers and individuals, such as volunteers, who manage and deliver services.

The PSP is implemented through the Casey Planning Scheme including:

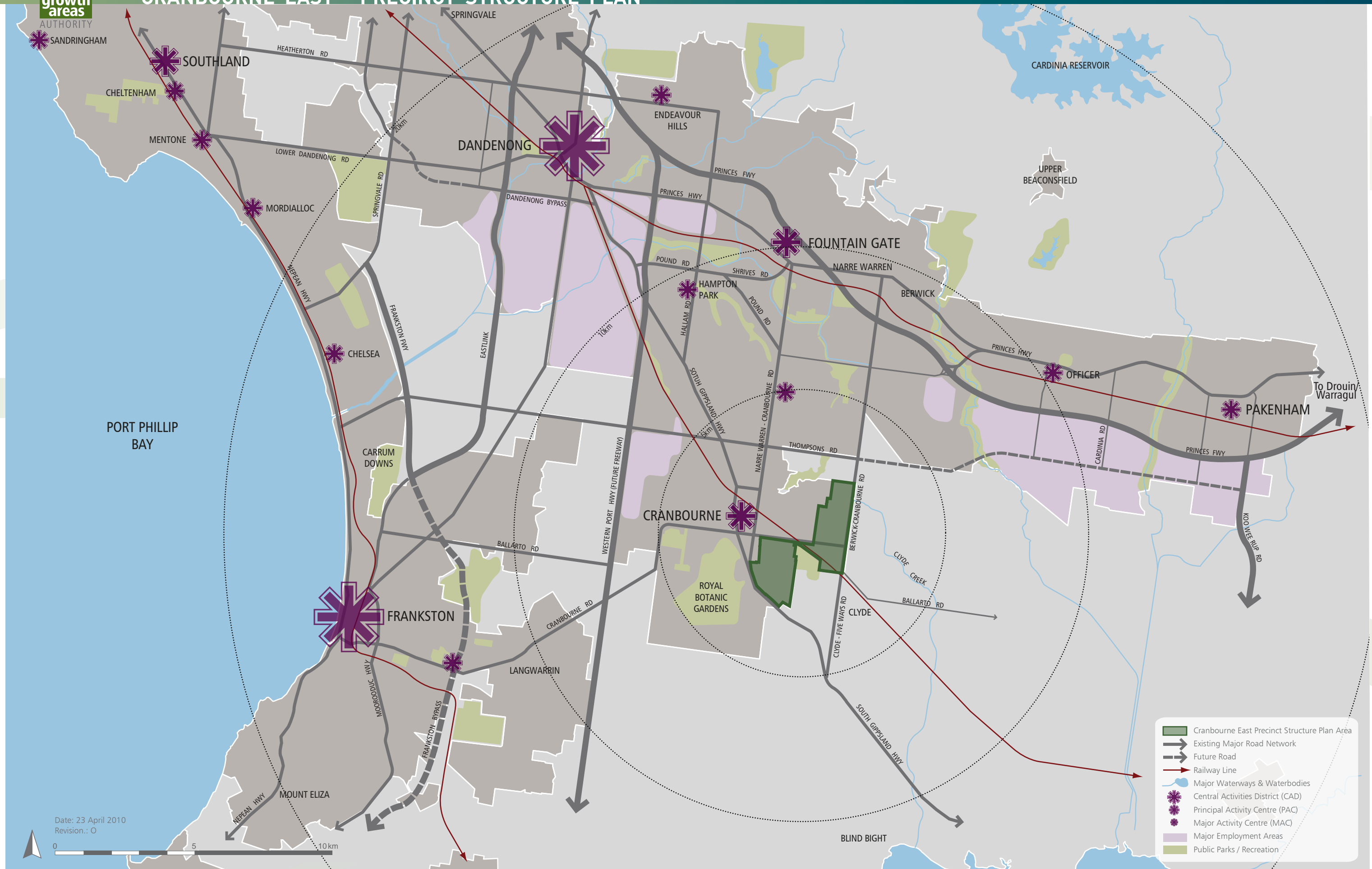
- The Schedule to the Urban Growth Zone in Clause 37.07,
- The Cranbourne East Precinct Structure Plan Development Contributions Plan incorporated in the Scheme at Clause 45.06,
- The Cranbourne East Native Vegetation Precinct Plan (“NVPP”) incorporated in the Scheme at Clause 52.16 (Note: The NVPP document is included within and forms part of this Precinct Structure Plan, refer section 4.4.7 of this PSP),
- Open space requirement under Clause 52.01 of the Scheme, and
- Other requirements of the Casey Planning Scheme.

1.4 FURTHER REFERENCE MATERIAL

A glossary and other information such as technical studies supporting the preparation of this PSP are listed in Section 6.3 – Supporting Information.

1.5 MONITORING AND REVIEW

The Growth Areas Authority and Casey City Council will jointly monitor the implementation of the PSP. Its effectiveness will be evaluated regularly, at least every five years. The PSP may be revised and updated following review.



2.0 LOCAL CONTEXT AND SITE DESCRIPTION

2.1 METROPOLITAN AND REGIONAL CONTEXT

The PSP area is located approximately 45 kilometres south east of Melbourne in the Casey-Cardinia Growth Area as shown in Plan 2.

The Cranbourne region is expected to continue to grow rapidly from around 40,000 people to more than 100,000 people.

A major new employment area projected to provide between 10,000 and 15,000 jobs is planned for Cranbourne West, as well as the C21 Business Park in the north of the municipality. The new employment areas for Casey have a relationship to the Cardinia Employment Corridor and will form part of a greater regional economy.

The Cranbourne East PSP will accommodate approximately 6,600 dwellings and around 17,000 – 20,000 residents and will accommodate around 3,000 jobs as part of the expected growth of the area.

The Cranbourne region of the growth area is served by the Cranbourne metropolitan railway line, which branches from the Pakenham rail line at Dandenong. The 'Victorian Transport Plan 2008' provides for the extension of the metropolitan rail line to Cranbourne East along with the construction of a new rail station. The station will provide an important focus for the future development of the eastern component of the Cranbourne Town Centre and service the new community of Cranbourne East.

Investigations have explored the potential for additional long term urban growth to the east and south of the Cranbourne East PSP area (the potential Clyde growth area). Work to preserve a future transport option for a new railway line to the Clyde growth investigation area is also required. The PSP protects options to extend rail services east along the Leongatha rail reserve in the longer term.

Casey City Council has identified a potential site for a future rail station at Casey Fields. The potential of this proposal requires further discussion between the Council and the Department of Transport. The proposal may be assessed as part of longer term investigations for potential upgrading of rail services to the Clyde area.

The Dandenong and Frankston Central Activities Districts ("CAD") are planned to provide for additional employment to service the growth area over time. There are two designated Principal Activity Centres ("PAC") in the City of Casey; the Cranbourne Town Centre and the Narre Warren - Fountain Gate CBD.

The PSP area adjoins the eastern portion of the Cranbourne Town Centre near the planned Cranbourne East rail station. The Cranbourne Town Centre is a substantial centre which presently has around 200,000sq m of commercial floor space, including about 45,000sq m of retail and about 15,000sq m of office.

The centre is a significant employer, presently estimated to have around 5,000 jobs, which is projected to increase to more than 9,000 jobs in the longer term.

Metropolitan and local planning policy anticipates significant expansion and improvement for the Cranbourne Town Centre.



- Precinct Structure Plan Area
- Railway Line & Existing Station
- Major Road Network
- Activity Centre
- Green Wedge Land
- Future Urban Area
- Existing Urban Area
- Education/Community Facilities
- Significant Open Space



Scale: 1:40000m @ A3
1:20000m @ A1
Date: 23 April 2010
Revision.: O

2.2 LOCAL CONTEXT

2.2.1 HISTORY

The traditional indigenous owners of land within the precinct were clans of the Boon Wurrung people.

Since European settlement of the area land in the Cranbourne area has been predominantly used for farming and agricultural purposes with a long history of agricultural and pastoral activity dating back to the 1850s.

2.2.2 SURROUNDING NEIGHBOURHOODS

A number of residential estates exist within the immediate surrounding context of the Cranbourne East Precinct Structure Plan area (refer to Plan 3). These are described below:

THE HUNT CLUB:

- Is currently under development and is expected to be completed by 2015.
- The Cranbourne East PSP will make road, pedestrian and public transport links into the Hunt Club Estate via continuation of Linsell Boulevard, Heather Grove, Broad Oak Drive and development of a planned new road known as Casey Fields Boulevard.
- The Hunt Club includes a planned neighbourhood activity centre and a State Government P-12 campus school (amongst other features).

THE COLLISON ESTATE:

- Located adjacent to the PSP area, the Collison Estate currently comprises 94 large lots on approximately 85 hectares (typical lot size is around 2 acres or 8,000 square metres).
- The Estate is presently generally un-serviced in terms of sealed roads, drainage, mains water and reticulated sewage.
- The PSP envisages that the Estate will develop in the future and will be connected to urban services when available.
- Further detailed planning is required for the Collison Estate.

CASCADES ON CLYDE:

- A residential estate under construction with up to 800 households. The neighbourhood will include local parks and road and trail links to the PSP area.

BLUE HILLS RESIDENCES AND BLUE HILLS RISE RETIREMENT VILLAGE:

- Located on Berwick-Cranbourne Road the retirement villages provide retirement specific accommodation in over 500 independent living units across two sites, as well as on-site facilities.
- The villages also include aged care nursing homes.

CLYDE TOWNSHIP:

- Clyde is a small rural township established in the past with 50 to 60 households.

JUNCTION VILLAGE:

- Junction Village presently includes around 400 households and was largely established after the Second World War. It includes a recreation reserve and a local activity centre. The village forms part of the Botanic Ridge Precinct Structure Plan area.

2.2.3 TRANSPORT AND MOVEMENT

The existing arterial road system is generally based on the one mile grid (1.6km). This is defined by the South Gippsland Highway, Thompsons Road, Linsell Boulevard, Berwick-Cranbourne Road, Narre Warren-Cranbourne Road and Clyde-Five Ways Road. These roads are planned to be progressively upgraded and duplicated as traffic volumes increase over time (refer Plan 3).

Casey Fields Boulevard is planned to link South Gippsland Highway (and a deviated Craig Road to the south) to Thompsons Road to the north of the precinct. This new road will form part of the one mile grid. The road is planned to generally run along the western edge of Casey Fields and the Collison Estate through the eastern part of the Hunt Club Estate.

Other important roads include:

- Ballarto Road, presently an unsealed rural road, will eventually be constructed as an arterial road,
- Heather Grove, presently an unsealed rural road servicing lots on the Collison Estate, will be upgraded to a sealed connector street which connects to Berwick-Cranbourne Road/Clyde-Fiveways Road and the northern section of Broad Oak Drive through the Hunt Club Estate,
- Adrian and Nelson Streets, presently unsealed rural roads, will be upgraded connecting to Berwick-Cranbourne Road, and
- Broad Oak Drive, a north-south connector street located in the Hunt Club Estate, will be extended south to link to Ballarto Road.

Existing local bus services in the area are generally focussed on the Cranbourne Town Centre and the Cranbourne rail station, with several services located on Narre Warren-Cranbourne Road. An existing local bus service also runs through the precinct, along Berwick-Cranbourne Road to Clyde – Fiveways Road. Another service for the rural hinterland presently runs along the South Gippsland Highway to Cannons Creek, Warneet and Blind Bight on Western Port.

It is anticipated that bus services will be progressively extended and new services introduced as the precinct develops, demand for services grow and funding is made available. It is noted that new and extended public transport services will be required to cater for future needs and it is highly desirable that these are able to be provided early.

2.2.4 EMPLOYMENT AND ACTIVITY CENTRES

The hierarchy of activity centres for the Cranbourne region is established by the Growth Area Framework Plans and Casey planning policies.

The existing hierarchy includes:

- Central Activities District – Dandenong and Frankston.
- Principal Activity Centre – Cranbourne Town Centre and Narre-Warren Fountain Gate.
- Major Activity Centre – Casey Central Town Centre.
- Local Town Centre (Neighbourhood Activity Centre) – Hunt Club Activity Centre.
- Local Centres – Junction Village.
- New residents moving into the Precinct Structure Plan area will form part of the core catchment for the Cranbourne Town Centre.
- The Precinct Structure Plan facilitates the creation of additional activity centres. These are outlined later in Section 4.4 of the Precinct Structure Plan.

2.2.5 OPEN SPACE

The PSP area benefits from being located close to major metropolitan and regional parkland, including the Royal Botanic Gardens Cranbourne ("RBGC") to the south west of the PSP area, Casey Fields and a planned new metropolitan park to the north, the location for which is being investigated by Parks Victoria as part of the Linking People and Spaces initiative.

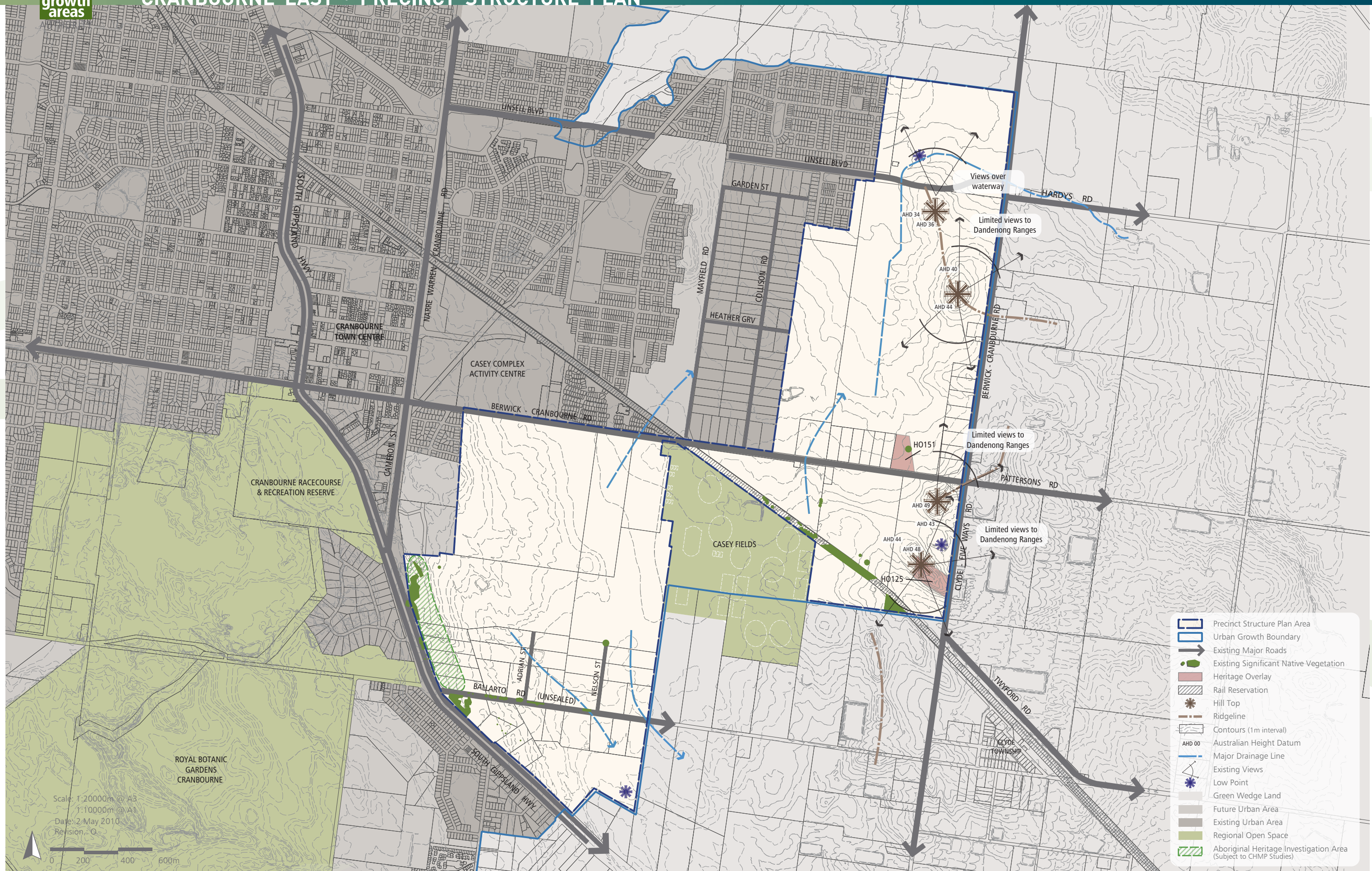
The RBGC, a division of the Royal Botanic Gardens Melbourne, is a 363 hectare site located to the south west of the PSP area. It is an important native bushland and home to a significant fauna population, including a number of rare and endangered species. The strong native and indigenous vegetation character of the RBGC is a feature that influences the design and development of Cranbourne East and inspires the landscape character theme of the PSP.

Casey Fields is being developed as the premier regional outdoor sports area in Melbourne's south east and is located centrally to the PSP area. Casey Fields is currently a 70 hectare site with plans for extension and more facilities. An extension of the site is facilitated by the PSP.

2.2.6 COMMUNITY FACILITIES

The Cranbourne Town Centre includes significant existing and proposed social, health and community infrastructure, including the Cranbourne Integrated Care Centre, which provides a range of day care health services to the local population.

The Cranbourne Complex (the "Complex") precinct incorporates 45ha of land to the south of the proposed Cranbourne East rail station site. The area includes land owned and/or operated by Chisholm Institute – Cranbourne, Casey Grammar School, Marnebek School and the Salvation Army.



Approximately 21 hectares of the site is owned by the City of Casey. Casey Council has completed a draft Cranbourne Complex Concept Plan which sets a long term strategic vision for the site. The Plan seeks to achieve a mixed-use transport orientated development providing a civic precinct which is supported by ancillary retail to compliment the future Cranbourne East rail station.

The Complex currently incorporates:

- Community Precinct - Balla Balla Centre Community Centre and Neighbourhood House and the Cranbourne Library (and associated community uses),
- Sports & Recreation Precinct comprising: Casey Recreation & Aquatic Centre ("Casey RACE"),
- The Shed: Indoor Skate Park (the re-opening of which is being planned by Council) and the Casey Indoor Leisure Complex including ten pin bowling, indoor cricket, soccer, football and tennis (on multi-purpose courts), indoor beach volleyball courts, six multipurpose netball / basketball courts and a child care for the basketball and netball players, and
- Civic Precinct – The Factory: Performing Arts Rehearsal Centre and a Traffic School.

The vision for the Complex is to create a new urban heart for the City of Casey and to:

- Intensify development within the precinct to create a critical mass of activities, movement and communities to justify and accelerate the delivery of Cranbourne East Rail Station,
- Create a strong sense of place,
- Ensure a holistic experience of place – Mind (education/library), Body (sports and rec), and Spirit (activities that improve well-being such as residential uses as the basic core on the nuclear family, community and civic spaces that engender strong community spirit, and retail therapy to relieve stress),
- Improve the spatial qualities to and from the Complex to create a memorable experience,
- To complement and provide further major regional sports, recreation and educational facilities and opportunities within Cranbourne, and
- Provide for a variety and mix of housing types to ensure 24/7 activity, life and surveillance of the Complex.

(source: City of Casey The Draft Cranbourne Complex Plan).

The Hunt Club Estate is planned to include a State Government P-12 campus school as well as a community centre incorporating a kindergarten, maternal child health centre and community centre rooms and sports fields.

The Clyde township is serviced by the Clyde Recreation Reserve (includes an oval, tennis courts and pavilion), the Clyde Primary School, Public Hall and the Country Fire Authority.

2.3 PRECINCT FEATURES

2.3.1 HERITAGE

The traditional indigenous owners of the precinct were clans of the Boon wurrung people. There are currently two communities which represent traditional Boon wurrung owners. These are the Bunurong Land Council Aboriginal Corporation and the Boonerwung Foundation Pty. Ltd.

Indigenous archaeological artefacts have been found across the area, and it is expected that complex investigations incorporating sub-surface testing will be required throughout the precinct when Cultural Heritage Management Plans are prepared as part of future subdivision proposals.

An area immediately north and east of South Gippsland Highway is expected to include sites of Aboriginal cultural heritage significance because it lies at the intersection of two Boon wurrung pathways and due to the presence of significant native vegetation.

The native vegetation parcel immediately north of Cascades on Clyde and Clyde Creek, is also expected to be of Aboriginal cultural heritage significance. An opportunity exists to develop a trail linking the Parks Victoria future regional park to Royal Botanic Gardens Cranbourne ("RBGC") which can incorporate Aboriginal cultural heritage interpretation.

Post-settlement heritage values (of local significance) in the precinct are:

- Heritage Overlay reference HO125 Hill Farm located at 415 Clyde – Fiveways Road, Clyde, and
- Heritage Overlay reference HO 151 Farmhouse and Trees located at 305 Berwick – Cranbourne Road, Cranbourne East.

2.3.2 BIODIVERSITY

BIODIVERSITY SIGNIFICANCE

As a result of the area's recent history as an agricultural farming district, the precinct has been mostly cleared of significant areas of indigenous flora and fauna habitat. However, patches of remnant vegetation and scattered trees remain. The remaining vegetation in the area is a significant representation of the original landscape with patches of Swamp Scrub and Grassy Woodland being endangered in the Gippsland Plains Bioregion.

The remnant native vegetation is located adjacent to the RBGC which is an important regional site for the conservation of biodiversity. The RBGC is of State Significance, as it protects a number of threatened species which would otherwise be extinct from the area. It is therefore important that where possible biodiversity conservation is achieved and where practical enhanced throughout the Cranbourne East PSP area.

In this regard Cranbourne East will play role in providing additional and enhanced habitat to the surrounding area.

2.3.3 TOPOGRAPHY AND LANDFORM

Most of the PSP area lies between 25m and 45m to the Australian Height Datum ("AHD"), and slopes generally from south-west to north-east. The area is generally very open with only small areas of undulation and large areas of open paddocks. The landscape features a number of areas planted with rows of trees to act as wind breaks during previous years as a farming district.

The open landscape character of the precinct is interrupted by the initial stages of residential development which has occurred in the area and signifies an emerging urban character.

There are a number of gentle rises in the south-east and north-east of the precinct. These highpoints provide reference points with limited views to the Dandenong Ranges. The opportunity exists to incorporate the high points of these rises into passive parkland or to take advantage of them through well considered design response for subdivision.

Clyde Creek runs generally from south to north through the precinct. The creek has a drainage and ecological function, and will provide an important recreation trail.

2.3.4 CATCHMENTS AND DRAINAGE

The Cranbourne East PSP area spans across two regional drainage basins, Port Phillip and Western Port.

The northern sub-catchment drains to Port Phillip, while three southern sub-catchments drain to Western Port. The land surface slopes at a gradient of about 1:100 across the catchment study area.

Melbourne Water's Collison Road Drainage Scheme proposes that the Cranbourne Indoor Leisure Centre, Blue Hills Retirement Village and part of the Hunt Club Estate drain through a pipe that runs west to east through the Collison Estate and on to a new retarding basin north of Linsell Boulevard. The majority of the precinct drains to the north with the exception of part of the Western Neighbourhood draining to the south.



3.0 VISION AND URBAN STRUCTURE

3.1 VISION

The vision is high-level statement of what is envisaged for the new community. The vision will be realised through the implementation of the Precinct Structure Plan.

The vision is:

With an emphasis on affordable and sustainable living, Cranbourne East will be a place where people can enjoy a healthy, quality lifestyle. This is built on the foundations of a walkable street and trail network with access to public transport services, housing and lifestyle choices, local jobs, local schools, and safe, attractive and functional open spaces areas which offer a broad range of recreational pursuits.

Residents of Cranbourne East will benefit from the variety of features in the surrounding area. These include Cranbourne Town Centre, future Cranbourne East train station, Casey Fields and the Royal Botanic Gardens Cranbourne.

Cranbourne East will have a strong sense of character established on a traditional urban structure comprising a grid of streets defined by native and indigenous street tree planting and walking trails set out along a natural water course.

The physical structure supports community engagement and development opportunities that will encourage local employment, participation in community and recreation activities, and contributing positively to the physical and social health and well being of the community.

3.2 URBAN STRUCTURE

The vision will be realised through the development of the future urban structure for the precinct as an integrated neighbourhood design.

The Future Urban Structure (Plan 5) shows how the precinct will be developed over time to achieve the Victorian Government's and Casey City Council's objectives for sustainable growth.

Sections 3.2.1 to 3.2.7 describe how the PSP delivers the vision and an integrated neighbourhood design.

3.2.1 ESTABLISH A SENSE OF PLACE AND COMMUNITY

The Cranbourne East PSP establishes a framework for the development of an environmentally, socially and economically sustainable urban structure. The structural elements of the plan are interlinked and combine to create a built environment which supports the development of a strong community and sense of place for Cranbourne East.

A sense of place and community is fostered through careful planning for the development of the community infrastructure such as schools, sporting fields and other community facilities which have a close spatial relationship with the residential neighbourhoods. The timely provision of sporting/recreation, health, education and related facilities within the Precinct Structure Plan area will help to foster community interaction among residents.

The environment for positive community interaction is further enhanced by the location of the local town centres (NACs). The provision of shops to meet weekly and convenience shopping needs will promote interaction through the provision of formal and informal meeting spaces. This is further enhanced by the specific desire to see the centres develop over time as places that offer more than just retail services. The centres will provide opportunities to establish non-retail related businesses which, service both the immediate community and the broader catchment. The local office component is a critical aspect that helps to boost local employment.

Cranbourne East will be easily identifiable and legible from visitor's point of view with the development of a number of regional facilities and landmarks such as Casey Fields, Cranbourne East rail station, the Cranbourne Complex and the nearby Royal Botanic Gardens Cranbourne. These bigger features will also act to provide something that residents can identify with and take pride in for many years to come.

3.2.2 GREATER HOUSING CHOICE, DIVERSITY AND AFFORDABILITY

The future urban structure provides for a range of lifestyle opportunities to suit the needs of a variety of household sizes and budgets. The PSP encourages the development of diverse living arrangements making it possible to live in a purpose built home-office within a local town centre, a nursing home or a retirement village. More conventional residential living is catered for through the provision of a range of lots sizes throughout the precinct located close to schools, parks and linear reserves.

The PSP supports the provision of a range of lifestyle opportunities through requirements for housing and lot size diversity throughout the precinct. Cranbourne East will be developed at an average density of at least 15 dwellings per net developable hectare across the precinct. Medium and higher density housing in a variety of styles is promoted near services and amenity including the activity centres and community facilities, in close proximity to the public transport services and open space.

3.2.3 CREATE HIGHLY ACCESSIBLE AND VIBRANT ACTIVITY CENTRES

The future urban structure envisaged by the PSP plans for a sustainable network of local shops and services which will provide employment opportunities and community based services.

Local town centres with a more substantial provision of services are planned for key locations in the precinct, including one at the proposed Cranbourne East rail station site (albeit outside the PSP area), the Selandra Rise centre at the intersection of Linsell Boulevard and the north-south connector street and the Ballarto Road centre at the intersection of Ballarto Road and Adrian Street. The Morison Road centre is planned for the south side of Berwick-Cranbourne Road near the intersection of Morison Road.

All of the centres will be street based centres, serviced by public transport and offer a mix of retail, non-retail commercial, small office and other mixed use employment opportunities. In addition, the PSP supports the development of small mixed business/shop fronts on key corner sites within the residential neighbourhoods to further enhance the level of service and convenience available to residents.

The location of the local town centres will reduce the dependency on motorised private transport by developing a variety of destinations within walking distance for most residents.

The centres are linked to the other community hubs through "community spines" which includes a trail network as well as local bus services and cycle lanes.

3.2.4 PROVIDE FOR LOCAL EMPLOYMENT AND BUSINESS ACTIVITY

The local town centres support a variety of local services such as public transport, aged care, child care, medical, financial, legal, retail and accounting and will provide space for other local economic development opportunities by encouraging and supporting the development of small office/home office, higher density housing and community spaces.

The centres are distributed within the precinct in order to ensure their long term economic strength and to generate and add to a diversity of walkable destinations within the precinct. The exposure to passing trade through good connectivity to the arterial road network reinforces their long term viability and encourages more efficient use of motor vehicles by being situated in locations which are easily accessible from a multi-purpose trip perspective.

EMPLOYMENT IN THE PRECINCT

There will be significant growth in demand for jobs in the Casey-Cranbourne across a broad range of industry sectors between 2006 and 2031. Table 1 illustrates the comparison between the types of employment engaged in by Casey residents and the types of employment occurring in the municipality. It shows that in some sectors such as wholesale trade, transport, postal and warehousing and health and social assistance, there is a strong correlation between the types of employment held by residents to the types of jobs available in the municipality. In other sectors it shows that there are greater differences between resident employment and job types within the municipality indicating that there are opportunities for growth in those sectors.

Based on the land uses designated within the PSP area, it is possible to estimate its job creation capacity based on the approximate number of jobs generated by each of the land uses. Table 2 below illustrates that there is strong job creation potential which is generally consistent with the overall job demand illustrated in Table 1.

The employment generating land uses within the PSP will have a positive impact on minimising the travel times and distances for some residents. The urban structure encourages the establishment of localised employment by accommodating employment generating land uses within the precinct. The key employment areas will all be located on public transport routes and will have access to cycling and walking trails providing safe and direct linkages for alternative modes of transport.

In addition to the jobs created from land uses within the PSP area, future residents will benefit from the overall growth in job opportunities associated with the development of the broader region. This includes, Cranbourne West Employment area, Cranbourne North, Narre Warren-Fountain Gate PAC, Cranbourne PAC and the C21 Business Park. Further a field, significant areas of employment development include:

- Dandenong Central Activities District ("CAD"),
- Dandenong South industrial area,
- Monash Technology Precinct,
- Frankston CAD and surrounds, and

The Cardinia Employment Corridor which includes:

- The Pakenham Employment Precinct,
- The Cardinia Road Employment Precinct,
- The Officer Employment Precinct, and
- The Pakenham Town Centre which has significant long term growth opportunities.

The employment precincts and industrial areas planned for Melbourne's south east are expected to fully develop over the next 20 to 30 years and generate approximately 40,000 to 50,000 jobs for the region. The impact of this on the travel patterns for residents in the greater south-east region will result in reduced reliance on centralised employment in the central and inner Melbourne areas. This is expected to have many likely positive flow-on impacts such as reduced congestion on the metropolitan rail and road network, improved travel times and reductions in greenhouse gas emissions due to more efficient vehicle movements. Significant benefits will also flow for families with more leisure and family time being available as well as reduced proportion of family budgets being committed to transport costs.

Table 1: Labor Force to Jobs in Casey Comparison

EMPLOYMENT SECTORS	RESIDENT LABOUR FORCE (%)	JOBS IN CASEY (%)	MSD RESIDENT LABOUR FORCE (%)	MSD JOBS (%)
MANUFACTURING	20	10	13	13
RETAIL TRADE	13	19	6	12
CONSTRUCTION	9	10	7	5
HEALTH CARE & SOCIAL ASSISTANCE	8	10	10	10
TRANSPORT, POSTAL & WAREHOUSING	6	5	5	5
WHOLESALE TRADE	7	6	6	6
EDUCATION & TRAINING	5	11	8	8
ACCOMMODATION & FOOD SERVICES	4	7	6	6
PUBLIC ADMINISTRATION & SAFETY	4	3	5	5
PROFESSIONAL, SCIENTIFIC & TECHNICAL SERVICES	4	4	8	9
OTHER SERVICES	4	4	4	4
FINANCIAL & INSURANCE SERVICES	3	2	5	5
ADMINISTRATIVE & SUPPORT SERVICES	3	2	4	3
INADEQUATELY DESCRIBED/ NOT STATED	3	1	3	1
INFORMATION MEDIA & TELECOMMUNICATIONS	2	1	3	3
AGRICULTURE, FORESTRY & FISHING	1	2	1	1
ARTS & RECREATION SERVICES	1	2	2	2
RENTAL, HIRING & REAL ESTATE SERVICES	1	2	1	2
ELECTRICITY, GAS, WATER & WASTE SERVICES	1	0	1	1
MINING	0	0	0	0

Table 2: Estimated Employment Demand

LAND USE BASED EMPLOYMENT	MEASURE	JOBS	QTY IN PSP	EST. JOBS
KINDERGARTEN	Jobs/centre	5	4	20
PRIMARY SCHOOL	Jobs/school	40	3	120
SECONDARY SCHOOL	Jobs/school	90	1	90
MULTI PURPOSE COMMUNITY CENTRE	Jobs/centre	10	4	40
RETAIL	Jobs/1000 sq m	30	15,000	450
LOCAL TOWN CENTRE (NAC) OFFICE/NON RETAIL COMMERCIAL	Jobs/1000 sq m	25	6,000	150
MEDICAL CENTRE	Jobs/practitioner	3	15	45
PRIVATE CHILDCARE CENTRE	Jobs/100 places	20	2	40
HOME BASED BUSINESS	Jobs/dwelling	0.1	6,600	660
RETIREMENT VILLAGE	Living units/Job	8	400	50
NURSING HOME	Jobs/bed x 3/ 8hr shifts	2.4	50	150
EMPLOYMENT AREA	jobs/ha (Inc. assoc. office)	30	34	1047
TOTAL ESTIMATED				2,862

3.2.5 PROVIDE BETTER TRANSPORT OPTIONS

TRAVEL TO WORK STATEMENT

The urban structure responds to the broadly acknowledged expectation that urban development needs to be more ecologically, socially and economically sustainable. Planning a more sustainable urban structure requires an urban structure which is designed to reduce travel distances, and increase the efficiency of travel movements.

The journey to work statement outlines how the development of land in the Precinct Structure Plan area will positively affect the lives of residents and residents of surrounding areas on a daily basis. The Precinct Structure Plan aims to reduce travel distances to work by providing:

AN EFFICIENT ROAD AND PUBLIC TRANSPORT NETWORK.

The location and distribution of the arterial road network promotes efficient movement within the precinct with multiple connections to the surrounding area in all directions. The arterial grid sets the foundations for a highly permeable precinct which connects directly to the employment and services located in the Cranbourne Town Centre and planned employment areas of Cranbourne West, Cranbourne North and Cranbourne East.

The road network supports efficient movement through the distribution of lower order roads generally forming an 800m Connector Street sub-grid which serves to reduce congestion at arterial to arterial intersections. This in turn provides the basis for the provision of efficient public transport services by creating the ability to locate over 95% of all dwellings within 400m of a future public transport service running along the arterial and connector road grid.

It is noted that new and extended public transport services will be required to cater for the growing community.

The road network established by the Cranbourne East PSP and the surrounding development of the Hunt Club area creates two new crossings of the Leongatha Rail Reserve at Broad Oak Drive and Casey Fields Boulevard. As an interim measure the Department of Transport support the temporary development of these crossings at grade. In the future these crossings will require grade separation and land will need to be set aside for the development of grade separated crossings.

VicRoads are also investigating the potential to realign the Clyde Fiveways Road south of Pattersons Road. As part of investigation of future road alignment options, consideration of land requirements for grade separation of the road and rail is required. An additional potential new road link crossing the rail reservation is proposed with the extension of Morison Road and will also be subject to further investigation. The proposed crossing will need to be grade separated if it is to proceed and the feasibility of the road link will depend on the potential use of land to the south of the Cranbourne East PSP study area.

CASEY FIELDS BOULEVARD

Casey Fields Boulevard will fulfill an important local function which has been determined by a unique set of local circumstances.

While it forms part of the mile grid – its connections to the north and south terminate within the local context (i.e. Thompsons Road and South Gippsland Hwy), as such, the road does not perform a regional function and is not subject to the higher volumes associated with other competing regional connections like South Gippsland Highway, Narre Warren-Cranbourne Road and Berwick-Cranbourne Road. The traffic modelling carried out for Cranbourne East and the surrounding areas supports this conclusion.

The following vision has been established for Casey Fields Boulevard:

“Casey Fields Boulevard is envisaged to form a landscaped central spine for Cranbourne East’s Urban Structure. Its role within the precinct goes well beyond that of moving traffic in and out of the precinct; rather it will create a safe, lower speed environment for a central trafficable spine lined by boulevard street tree planting, public transport cycle lanes and walking paths from which all of the major features of the precinct can be accessed. Opportunities for canopy street tree planting to support the vision of a softer, green and leafy feel for Casey Fields Boulevard will be grasped.

To this end Casey Fields Boulevard will play an important role in enhancing the image of Cranbourne as it will make a grand statement as an entry to the most significant sporting facility in the region.

Casey Fields Boulevard has been designed to complement the arterial road network by completing 800m and the mile grid between Narre Warren Cranbourne Road and Berwick Cranbourne Road. This is achieved by enabling the distribution of traffic across an 800m Collector Street grid which supports bus service provision and lowers traffic volumes”.

Casey Fields Boulevard will be constructed by development proponents as a connector street with boulevard planting. An allowance for land acquisition future capacity (if required) is included in the Cranbourne East Development Contributions Plan, which will provide funds for the purchase of land for an additional carriage way.

A WALKABLE STREET STRUCTURE ORIENTATED TO PROMOTE ENERGY EFFICIENT DWELLING LAYOUT.

The one mile (1,600 metre) and 800 metre grid creates opportunities for an internal street layout which supports passive solar lot orientation and permeable connected residential neighbourhoods. This facilitates and encourages walking with street connections to functional and viable destinations such as schools, shops and passive and active open space.

The PSP includes a Walking and Cycling Plan (refer Plan 15) to illustrate the location and integration of walking and cycling into the precinct. The Walking and Cycling Plan makes provision for safe and direct connections along connector and local streets and on a network of off-road trails linking all the community facilities of the precinct together.

ATTRACTORS LOCATED TO PROMOTE WALKING TO FREQUENTLY USED SERVICES

The location of activity centres, schools and community facilities, open space and the trail network will promote a local street structure which facilitates safe walking and cycling for all residents. The local town centres and other facilities will be within walking distance for most residents.

LOCAL EMPLOYMENT

The Cranbourne East PSP makes provision for a new local employment area of approximately 34 net developable hectares south of Ballarto Road. The employment area provides access to local employment opportunities within walking or cycling distance for residents of Cranbourne East, Botanic Ridge and Junction Village. Other residents will have the option of public transport, or shorter journey to work distances if choosing to drive.

SUPPORT FOR THE CRANBOURNE TOWN CENTRE

The urban structure is designed to support the intensification of the Cranbourne Town Centre, particularly to support additional employment growth in the centre.

OTHER LOCAL EMPLOYMENT

In addition to the employment area, the provision of local schools and community oriented services along with retail and business opportunities within the local town centres also generate opportunities for local people to work locally. This has the added benefit of building a sense of place and community.

3.2.6 CLIMATE CHANGE AND ENVIRONMENTAL SUSTAINABILITY

ENERGY STATEMENT

The future urban structure responds to climate change and environmental sustainability by:

- Reducing travel distances to 'everyday' services and facilities (refer to Travel to Work Statement),
- Encouraging greater use and effectiveness of the public transport system by intensifying development of housing, shops, offices and other work places, community services and leisure and recreation facilities around the new Cranbourne East rail station,
- Encouraging travel by means other than private car by providing walking, cycling, bus links to new residential neighbourhoods south of Berwick-Cranbourne Road and existing and developing neighbourhoods to north-east of rail line,
- Encouraging efficient movement through a network of roads based on the traditional 1 mile (1.6km) grid of arterial roads and connector streets typically based on an 800m grid. The road network also provides public transport access to key destinations,
- Integrating the road network with the linear open space network to encourage walking and cycling access to key destinations within and outside the precinct. This is facilitated through the provision of connector streets which include dedicated on-road bike paths and wide pedestrian paths,
- Connector streets which are designed to accommodate bus movements,
- Plans to upgrade the metropolitan rail service which is further complemented by new and extended local bus services throughout Cranbourne East (linking to key regional destinations such as Cranbourne Town Centre) along the road network grid,
- Encouraging subdivision layouts which provide for residential lots with passive solar orientation and the ability to reduce carbon dioxide emissions per household, and
- Requiring that energy and water efficient design features be incorporated into the design of non-residential buildings to reduce the need to rely on plant and equipment e.g. air conditioning.

WATER SENSITIVE URBAN DESIGN

Water Sensitive Urban Design ("WSUD") features for the open space network will provide for water quality treatment, retardation and high quality self-sustaining landscapes. An important water sensitive feature of the precinct includes a recreation and drainage corridor in the eastern neighbourhood and water treatment wetlands in both the eastern and western neighbourhoods incorporating recreation, trails and facilities.

Further opportunities for on-street and onsite WSUD will be explored during the detailed subdivision design phase of development to comply with Melbourne Water requirements.

NATIVE VEGETATION

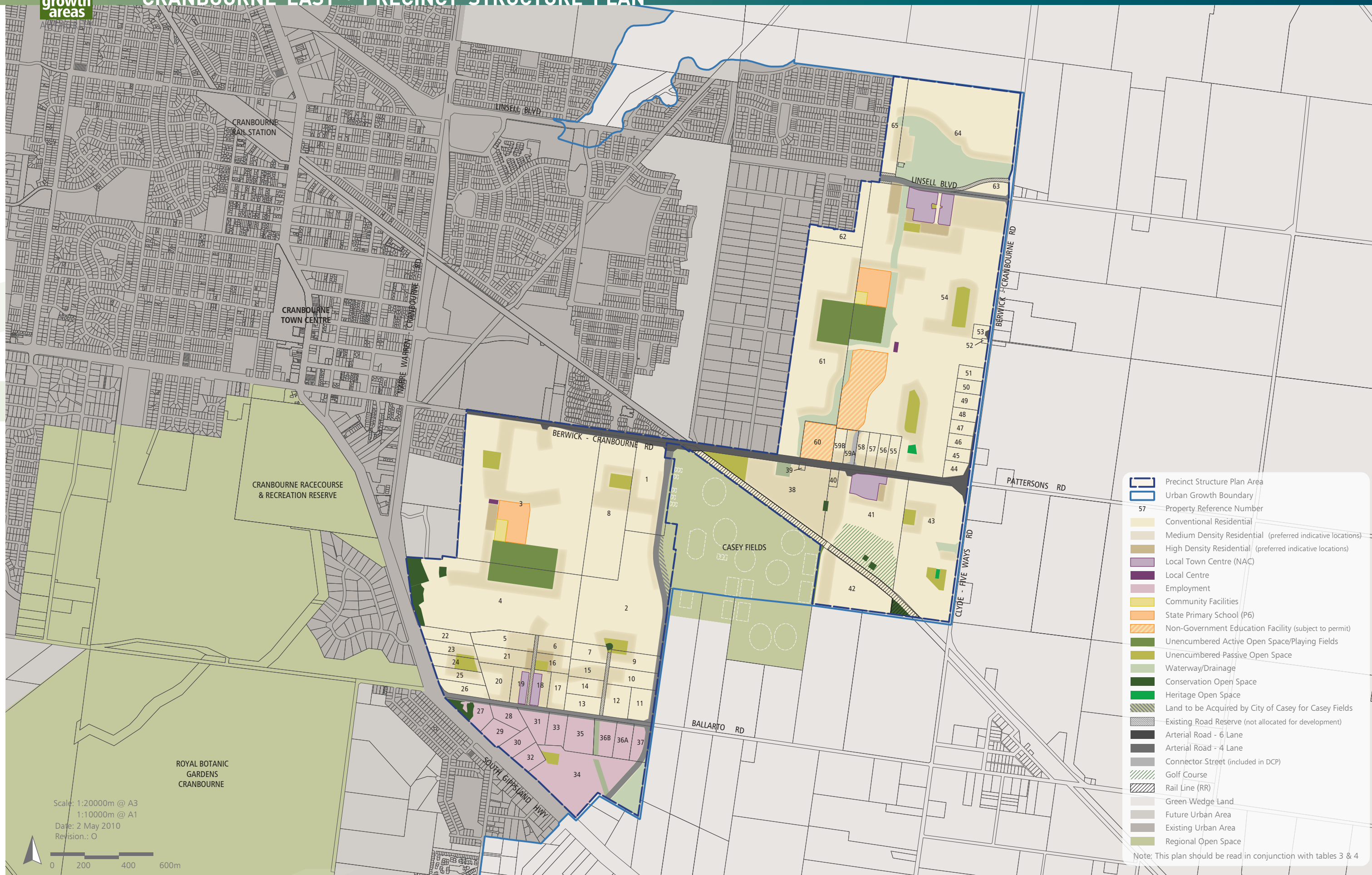
The future landscape character will be predominately native and indigenous drawn from species mix within the RBGC to create distinctive new urban neighbourhoods. This will enhance the biodiversity characteristics of the area through the provision of vegetation which supports habitat for a variety of fauna species, particularly supporting avifauna to move through the area.

3.2.7 DELIVER ACCESSIBLE, INTEGRATED AND ADAPTABLE COMMUNITY FACILITIES

The future urban structure supports walking and cycling links to the RBGC the Cranbourne Town Centre, and Casey Fields via the development of a green community spine of pedestrian trails. These are provided either as linear open space corridors or as dedicated paths within the road reserve. A wide range of local community facilities, sporting and recreational activities will also be linked along these community spines.

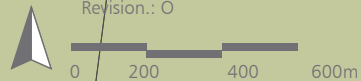
The open space network also contributes to the precinct having a 'city living, country feel' for residents and workers through access to high quality, well located green spaces.

The components of the open space network are the waterway parkland (including drainage corridors), local and linear parks, active playing fields, road verges, local high points and views as well as conservation areas. Regional open space corridors will connect the Cardinia Creek Parklands with the Casey Valley Parklands and the RBGC via Casey Fields and through the Hunt Club Estate. These corridors comprise a network of trails and series of multifunctional open spaces that serve as drainage corridors, passive recreational opportunities, biodiversity habitat areas, and provide a high amenity setting for future residential development.



- Precinct Structure Plan Area
 - Urban Growth Boundary
 - Property Reference Number
 - Conventional Residential
 - Medium Density Residential (preferred indicative locations)
 - High Density Residential (preferred indicative locations)
 - Local Town Centre (NAC)
 - Local Centre
 - Employment
 - Community Facilities
 - State Primary School (P6)
 - Non-Government Education Facility (subject to permit)
 - Unencumbered Active Open Space/Playing Fields
 - Unencumbered Passive Open Space
 - Waterway/Drainage
 - Conservation Open Space
 - Heritage Open Space
 - Land to be Acquired by City of Casey for Casey Fields
 - Existing Road Reserve (not allocated for development)
 - Arterial Road - 6 Lane
 - Arterial Road - 4 Lane
 - Connector Street (included in DCP)
 - Golf Course
 - Rail Line (RR)
 - Green Wedge Land
 - Future Urban Area
 - Existing Urban Area
 - Regional Open Space
- Note: This plan should be read in conjunction with tables 3 & 4

Scale: 1:20000m @ A3
1:10000m @ A1
Date: 2 May 2010
Revision: 0



plan 6

land budget

cranbourne east precinct structure plan

3.3 LAND USE BUDGET

The Cranbourne East PSP covers an area of 578 hectares with a Net Developable Area ("NDA") of 468 hectares, representing approximately 81% of the PSP area.

The land budget demonstrates that the urban structure established by the Cranbourne East Precinct Structure Plan achieves an average lot density of 15 dwellings per Net Developable Hectare ("NDHa"). Overall, based on net residential area, the Cranbourne East Precinct Structure Plan will achieve an average residential lot size of approximately 410 sq-m comprising a variety of larger and smaller lots.

It should be noted that the areas designated for local town centres have been included as part of the NDA, but are discounted (i.e. excluded) for the purpose of calculating the NRHa and anticipated lot yields. It should be noted that higher density housing is encouraged to locate within the town centre sites and estimated housing yields may be exceeded over time as such housing is developed.

3.4 DEMOGRAPHIC PROJECTIONS

The preparation of the Cranbourne East PSP has assumed an average household size of 2.8 persons per household to 2,031 (based on Victoria in Future 2008) as the basis for estimating the future population within PSP area. In the longer term, this household size is forecast to gradually decline towards the current metropolitan average which is around 2.5 people per dwelling.

Characteristics of the community are:

- a higher proportion of families with young children compared to the metropolitan average,
- a higher proportion of families without children compared to the metropolitan average,
- a higher proportion of population in the 0-9 and 30-39 age groups than the metropolitan average, and
- a lower proportion of population in the 55-65 age group than the metropolitan average.
- The proportion of residents at or reaching retirement age by 2031 is projected to increase significantly in line with the metropolitan average.

The Cranbourne area has (based on the 2006 Census):

- a lower proportion of population in the 55-65 age group than the metropolitan average,
- a higher proportion of workers in trades, manufacturing and distribution, and retail employment, and
- a lower proportions of white collar employment.

This is expected to change as the area develops and it suggests that for purposes of creating more self contained employment, a broad range of employment opportunities are encouraged to reflect the anticipated changes in the employment profile of new communities.

In order to achieve the required minimum average housing density, the following dwelling yield guidelines for each property should be met.

Table 3: Summary land use budget

DESCRIPTION	EAST AREA RESIDENTIAL AREA			WEST AREA RESIDENTIAL AREA			RESIDENTIAL AREA TOTALS			WEST AREA EMPLOYMENT AREA			TOTAL PRECINCT		
	Hectares	% of Total Area	% of NDA	Hectares	% of Total Area	% of NDA	Hectares	% of Total Area	% of NDA	Hectares	% of Total Area	% of NDA	Hectares	% of Total Precinct	% of NDA
TOTAL PRECINCT AREA (ha)	314.50	100.00%		220.83	100.0%		535.33	100.0%		42.65	100.0%		577.98	100.0%	
TRANSPORT															
6 Lane Arterial Roads	8.46	2.69%	3.38%	3.92	1.78%	2.14%	12.38	2.31%	2.86%	0.00	0.00%	0.00%	12.38	2.14%	2.65%
4 Lane Arterial Roads	2.65	0.84%	1.06%	7.61	3.45%	4.16%	10.26	1.92%	2.37%	3.05	7.15%	8.98%	13.31	2.30%	2.85%
Connector St (inc. in DCP)	0.62	0.20%	0.25%	0.00	0.00%	0.00%	0.62	0.12%	0.14%	0.00	0.00%	0.00%	0.62	0.11%	0.13%
Railway Corridors / Easements	5.95	1.89%	2.37%	0.00	0.00%	0.00%	5.95	1.11%	1.37%	0.00	0.00%	0.00%	5.95	1.03%	1.27%
Sub-total	17.68	5.62%	7.06%	11.53	5.22%	6.30%	29.21	5.46%	6.74%	3.05	7.15%	8.98%	32.26	5.58%	6.90%
COMMUNITY FACILITIES															
Community Services Facilities	0.80	0.25%	0.32%	0.80	0.36%	0.44%	1.60	0.30%	0.37%	0.00	0.00%	0.00%	1.60	0.28%	0.34%
Sub-total	0.80	0.25%	0.32%	0.80	0.36%	0.44%	1.60	0.30%	0.37%	0.00	0.00%	0.00%	1.60	0.28%	0.34%
GOVERNMENT EDUCATION															
Government Schools	3.50	1.11%	1.40%	3.51	1.59%	1.92%	7.01	1.31%	1.62%	0.00	0.00%	0.00%	7.01	1.21%	1.50%
Sub-total	3.50	1.11%	1.40%	3.51	1.59%	1.92%	7.01	1.31%	1.62%	0.00	0.00%	0.00%	7.01	1.21%	1.50%
OPEN SPACE															
ENCUMBERED LAND AVAILABLE FOR RECREATION															
Power easements	0.00	0.00%	0.00%	0.00	0.00%	0.00%	0.00	0.00%	0.00%	0.00	0.00%	0.00%	0.00	0.00%	0.00%
Waterway / Drainage Line / Wetland / retarding	23.24	7.39%	9.27%	0.00	0.00%	0.00%	23.24	4.34%	5.36%	4.25	9.96%	12.51%	27.49	4.76%	5.88%
Heritage (private lot or transferred to Council)	0.36	0.11%	0.14%	0.00	0.00%	0.00%	0.36	0.07%	0.08%	0.00	0.00%	0.00%	0.36	0.06%	0.08%
Conservation	0.99	0.31%	0.40%	3.14	1.42%	1.71%	4.13	0.77%	0.95%	0.84	1.97%	2.47%	4.97	0.86%	1.06%
Sub-total	24.59	7.82%	9.81%	3.14	1.42%	1.71%	27.73	5.18%	6.39%	5.09	11.93%	14.99%	32.82	5.68%	7.02%
UNENCUMBERED LAND AVAILABLE FOR RECREATION															
Active Open Space	8.75	2.8%	3.49%	11.84	5.4%	6.47%	20.59	3.85%	4.75%	0.00	0.00%	0.00%	20.59	3.56%	4.40%
Passive Open Space	7.64	2.4%	3.05%	4.37	2.0%	2.39%	12.01	2.24%	2.77%	0.55	1.29%	1.62%	12.56	2.17%	2.69%
Sub-total	16.39	5.2%	6.54%	16.21	7.3%	8.85%	32.60	6.09%	7.52%	0.55	1.29%	1.62%	33.15	5.74%	7.09%
TOTALS OPEN SPACE	40.98	13.0%	16.35%	19.35	8.8%	10.57%	60.33	11.3%	13.91%	5.64	13.22%	16.61%	65.97	11.4%	14.11%
OTHER															
Road Reserves not available for development	0.95	0.30%	0.38%	1.53	0.69%	0.84%	2.48	0.46%	0.57%	0.00	0.00%	0.00%	2.48	0.43%	0.53%
Land to be acquired directly by Casey for Casey Fields	0.00	0.00%	0.00%	1.00	0.45%	0.55%	1.00	0.19%	0.23%	0.00	0.00%	0.00%	1.00	0.17%	0.21%
Sub-total	0.95	0.30%	0.38%	2.53	1.15%	1.38%	3.48	0.65%	0.80%	0.00	0.00%	0.00%	3.48	0.60%	0.74%
NET DEVELOPABLE AREA (NDA) ha	250.59	79.68%		183.11	82.92%		433.70	81.01%		33.96	79.62%		467.66	80.91%	
External Apportionment of Open Space	0.00	0.00%	0.00%	0.00	0.00%	0.00%	0.00	0.00%	0.00%	0.00	0.00%	0.00%	0.00	0.00%	0.00%
Effective Open Space delivery taking into account Northern Active Open Space Provision (Ovals = 66% apportionment & tennis / lawn Bowls 68% apportionment to Cranbourne East DCP respectively)							39.88		9.20%	0.55		1.62%	40.43		8.65%

Table 3: Summary land use budget (continued)

Estimated Residential Lot Yield

DESCRIPTION	EAST RESIDENTIAL			WEST RESIDENTIAL			RESIDENTIAL TOTALS		
RETAIL & EMPLOYMENT	Ha			Ha			Ha		
Activity Centre (retail / office / mixed use)	6.13			1.952			8.09		
Other Employment	0.00			0.00			0.00		
Golf Course	7.25			0.00			7.25		
Identified Non Government School	12.40			0.00			12.40		
Sub-total	25.78			1.95			27.74		
RESIDENTIAL	Ha	Dwell / ha	Dwellings	Ha	Dwell / ha	Dwellings	Ha	Dwell / ha	Dwellings
Residential - Conventional Density Residential	152.88	13	1987	128.12	13	1666	281.00	13	3653
Residential - Medium Density	46.10	23	1060	49.53	23	1139	95.63	23	2199
Residential - Medium Density - Retirement	22.33	23	514	0	23	0	22.33	23	514
Residential - High Density	4.58	35	160	2.35	35	82	6.93	35	242
Subtotal Against Net Residential Area (NRA)	225.88	16.5	3721	180.00	16.0	2887	405.88	16.3	6608
COMBINED RES/ RETAIL / EMP / OTHER	NDA (Ha)	Dwell / NDha	Dwellings	NDA (Ha)	Dwell / NDha	Dwellings	NDA (Ha)	Dwell / NDha	Dwellings
TOTALS RESIDENTIAL YIELD AGAINST NDA	251.67	14.79	3721	181.95	15.87	2887	433.62	15.24	6608

Table 4: Property Specific Land Budget

		TRANSPORT				COMMUNITY		ENCUMBERED LAND AVAILABLE FOR RECREATION				UNENCUMBERED LAND FOR RECREATION		OTHER		TOTAL NET DEVELOPABLE AREA (HECTARES)	KEY PERCENTAGES				OPEN SPACE DEL TARGET %	DIFFERENCE	EQUIV LAND AREA
PROPERTY NUMBER	TOTAL AREA (HECTARES)	6 LANE ARTERIAL ROAD / WIDENING	SUB-ARTERIAL ROAD (4 LANE)	CONNECTOR ST (INC. IN DCP)	RAILWAY RESERVATION	COMMUNITY FACILITIES	GOVERNMENT SCHOOLS	POWER EASEMENT	DRAINAGE BASINS/LINES & WETLANDS	PRE & POST CONTACT HERITAGE	CONSERVATION AREAS	ACTIVE OPEN SPACE	PASSIVE OPEN SPACE	ROAD RESERVES NOT ALLOCATED FOR DEVELOPMENT	LAND ACQUIRED BY CASEY FOR CASEY FIELDS		NET DEVPT AREA % OF PRECINCT	ACTIVE OPEN SPACE% NDA	PASSIVE OPEN SPACE % NDA	TOTAL PASSIVE & ACTIVE OPEN SPACE %			
WEST AREA RESIDENTIAL																							
Property 1	11.92	0.43	1.61	0	0	0	0	0	0	0	0	0.79	0	0	0	9.09	76.26%	9%	0%	8.69%	7.52%	1.17%	0.1
Property 2	30.46	0	2.19	0	0	0	0	0	0	0	0.08	1.93	0.68	0	1.00	24.58	80.70%	8%	2.77%	10.61%	7.52%	3.10%	0.76
Property 3	64.37	0.41	0	0	0	0.80	3.51	0	0	0	0	5.08	0.98	0	0	53.59	83.25%	9.48%	1.83%	11.31%	7.52%	3.79%	2.03
Property 4	38.43	0	0	0	0	0	0	0	0	0	3.01	4.04	0	0	0	31.38	81.65%	13%	0.00%	12.87%	7.52%	5.36%	1.68
Property 5	3.41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.41	100.00%	0%	0%	0%	7.52%	-7.52%	-0.26
Property 6	2.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.02	100.00%	0%	0%	0%	7.52%	-7.52%	-0.15
Property 7	2.10	0	0	0	0	0	0	0	0	0	0.02	0	0	0	0	2.08	99.05%	0%	0.00%	0.00%	7.52%	-7.52%	-0.16
Property 8	17.75	0.33	0	0	0	0	0	0	0	0	0	0	1.01	0	0	16.41	92.45%	0%	6.15%	6.15%	7.52%	-1.36%	-0.22
Property 9	2.95	0	0.25	0	0	0	0	0	0	0	0	0	0.19	0	0	2.51	85.08%	0%	7.57%	7.57%	7.52%	0%	0.00
Property 10	2.93	0	0.25	0	0	0	0	0	0	0	0	0	0	0	0	2.68	91.47%	0%	0%	0%	7.52%	-7.52%	-0.20
Property 11	2.74	0	0.55	0	0	0	0	0	0	0	0	0	0	0	0	2.19	79.93%	0%	0%	0%	7.52%	-7.52%	-0.16
Property 12	2.74	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	2.73	99.64%	0%	0%	0%	7.52%	-7.52%	-0.21
Property 13	2.12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.12	100.00%	0%	0%	0%	7.52%	-7.52%	-0.16
Property 14	2.11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.11	100.00%	0%	0%	0%	7.52%	-7.52%	-0.16
Property 15	2.12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.12	100.00%	0%	0%	0%	7.52%	-7.52%	-0.16
Property 16	2.02	0	0	0	0	0	0	0	0	0	0	0	0.43	0	0	1.59	78.71%	0%	27.04%	27.04%	7.52%	19.53%	0.31
Property 17	2.14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.14	100.00%	0%	0%	0%	7.52%	-7.52%	-0.16
Property 18	2.12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.12	100.00%	0%	0%	0%	7.52%	-7.52%	-0.16
Property 19	2.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.15	100.00%	0%	0%	0%	7.52%	-7.52%	-0.16
Property 20	3.33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.33	100.00%	0%	0%	0%	7.52%	-7.52%	-0.25
Property 21	3.32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.32	100.00%	0%	0%	0%	7.52%	-7.52%	-0.25
Property 22	2.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.15	100.00%	0%	0%	0%	7.52%	-7.52%	-0.16
Property 23	2.13	0	0	0	0	0	0	0	0	0	0	0	0.15	0	0	1.98	92.96%	0%	7.58%	7.58%	7.52%	0%	0.00
Property 24	2.10	0	0	0	0	0	0	0	0	0	0	0	0.90	0	0	1.20	57.14%	0%	75.00%	75.00%	7.52%	67.48%	0.81
Property 25	2.08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.08	100.00%	0%	0%	0%	7.52%	-7.52%	-0.16
Property 26	2.03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.03	100.00%	0%	0%	0%	7.52%	-7.52%	-0.15
Sub-total	213.74	1.17	4.86	0.00	0.00	0.80	3.51	0.00	0.00	0.00	3.11	11.84	4.34	0.00	1.00	183.11	85.67%	6.47%	2.37%	8.84%	7.52%	1.32%	2.42
Road Reserve 1	2.75	0	2.75	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.00	0.0%	0%	0%	0%	7.52%	-7.52%	0
Road Reserve 2	0.81	0	0	0	0	0	0	0	0	0	0	0	0	0.81	0.0	0.00	0%	0%	0%	0%	7.52%	-7.52%	0
Road Reserve 3	0.78	0	0	0	0	0	0	0	0	0	0.03	0	0.03	0.72	0.0	0.00	0%	0%	0%	0%	7.52%	-7.52%	0
Road Reserve 4	2.75	2.75	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0%	0%	0%	0%	7.52%	-7.52%	0
Sub-total	7.09	2.75	2.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.03	1.53	0.00	0.00	0.00%	0.00%	0.00%	0.00%	7.52%	-7.52%	0.00
TOTAL WEST	220.83	3.92	7.61	0.00	0.00	0.80	3.51	0.00	0.00	0.00	3.14	11.84	4.37	1.53	1.00	183.11	82.92%	6.47%	2.39%	8.85%			
WEST AREA EMPLOYMENT																							
Property 27	2.01	0	0.20	0	0	0	0	0	0	0	0	0	0	0	0	1.81	90.05%	0%	0%	0%	1.62%	-1.62%	-0.03
Property 28	2.03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.03	100.00%	0%	0%	0%	1.62%	-1.62%	-0.03
Property 29	1.87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.87	100.00%	0%	0%	0%	1.62%	-1.62%	-0.03
Property 30	2.32	0	0.24	0	0	0	0	0	0	0	0	0	0	0	0	2.08	89.66%	0%	0%	0%	1.62%	-1.62%	-0.03
Property 31	1.73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.73	100.00%	0%	0%	0%	1.62%	-1.62%	-0.03
Property 32	2.09	0	0.14	0	0	0	0	0	0	0	0	0	0	0	0	1.95	93.30%	0%	0%	0%	1.62%	-1.62%	-0.03
Property 33	17.47	0	0.96	0	0	0	0	0	3.59	0	0	0	0.55	0	0	12.37	70.81%	0%	4.45%	4.45%	1.62%	2.83%	0.35
Property 34	3.54	0	0.20	0	0	0	0	0	0	0	0	0	0	0	0	3.34	94.35%	0%	0%	0%	1.62%	-1.62%	-0.05
Property 35	2.14	0	0.13	0	0	0	0	0	0	0	0	0	0	0	0	2.01	93.93%	0%	0%	0%	0.00%	0.00%	0.00
Property 36A	2.60	0	0.16	0	0	0	0	0	0.60	0	0	0	0	0	0	1.84	70.77%	0%	0%	0%	0.00%	0.00%	0.00
Property 36B	2.15	0	0.78	0	0	0	0	0	0.06	0	0	0	0	0	0	1.31	60.93%	0%	0%	0%	1.62%	-1.62%	-0.02
Property 37	42.65	0.00	3.05	0.00	0.00	0.00	0.00	0.00	4.25	0.00	0.84	0.00	0.55	0.00	0.00	33.96	79.62%	0.00%	1.62%	1.62%	1.62%	0.00%	0.06
Sub-total	42.65	0.00	3.05	0.00	0.00	0.00	0.00	0.00	4.25	0.00	0.84	0.00	0.55	0.00		33.96	79.62%	0.00%	1.62%	1.62%	1.62%	0.00%	0.06
TOTAL EMPLOYMENT	42.65	0.00	3.05	0.00	0.00	0.00	0.00	0.00	4.25	0.00	0.84	0.00	0.55	0.00		33.96	79.62%	0.00%	1.62%	1.62%			

Table 4: Property Specific Land Budget (continued)

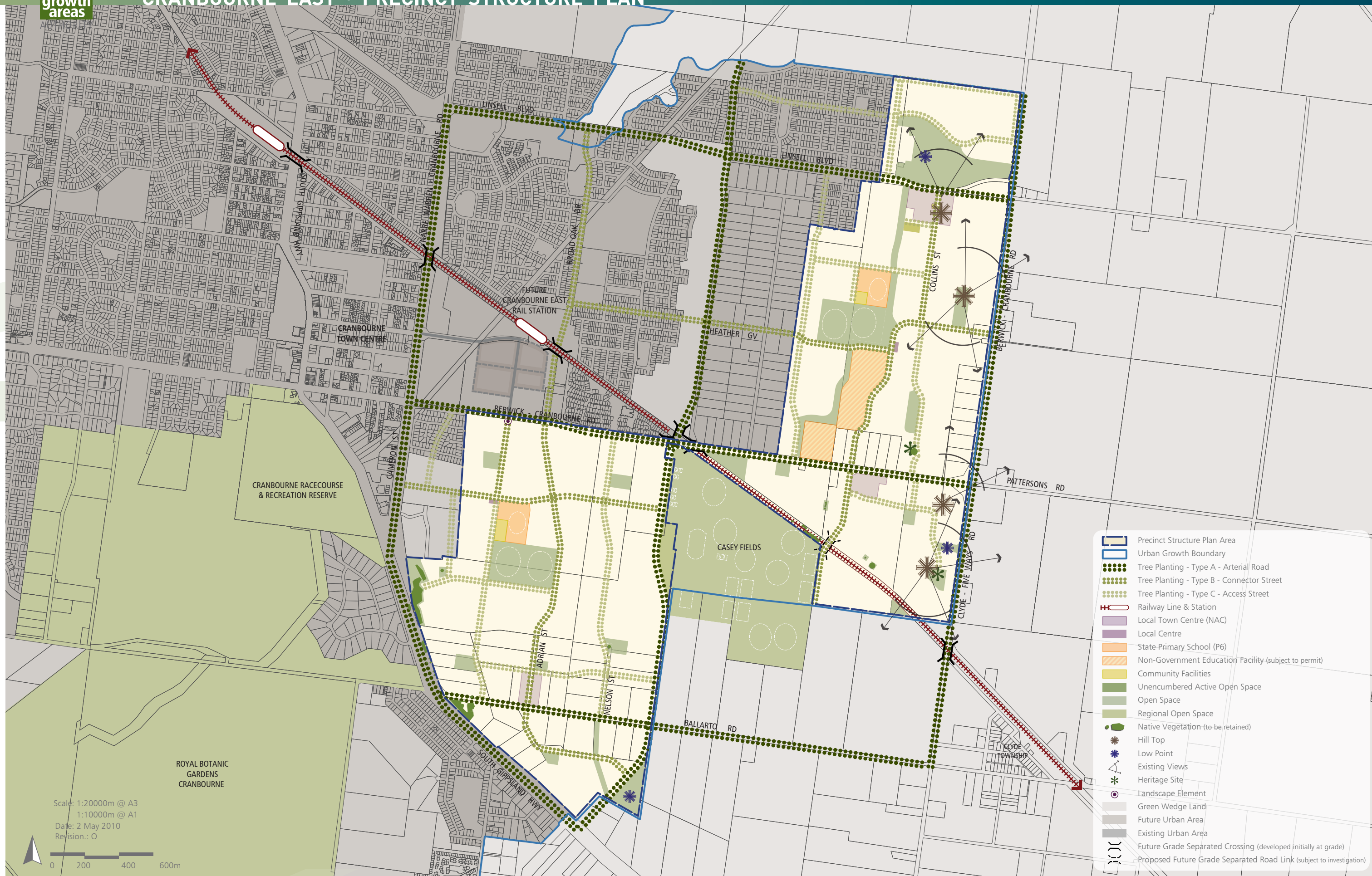
		TRANSPORT				COMMUNITY		ENCUMBERED LAND AVAILABLE FOR RECREATION				UNENCUMBERED LAND FOR RECREATION		OTHER		TOTAL NET DEVELOPABLE AREA (HECTARES)	KEY PERCENTAGES				OPEN SPACE DEL TARGET %	DIFFERENCE	EQUIV LAND AREA
PROPERTY NUMBER	TOTAL AREA (HECTARES)	6 LANE ARTERIAL ROAD / WIDENING	SUB-ARTERIAL ROAD (4 LANE)	CONNECTOR ST (INC. IN DCP)	RAILWAY RESERVATION	COMMUNITY FACILITIES	GOVERNMENT SCHOOLS	POWER EASEMENT	DRAINAGE BASINS/LINES & WETLANDS	PRE & POST CONTACT HERITAGE	CONSERVATION AREAS	ACTIVE OPEN SPACE	PASSIVE OPEN SPACE	ROAD RESERVES NOT ALLOCATED FOR DEVELOPMENT	LAND AQUIRED BY CASEY FOR CASEY FIELDS		NET DEVRT AREA % OF PRECINCT	ACTIVE OPEN SPACE% NDA	PASSIVE OPEN SPACE % NDA	TOTAL PASSIVE & ACTIVE OPEN SPACE %			
EAST AREA RESIDENTIAL																							
Property 38	15.25	0	0	0	0	0	0	0	0.66	0	0.09	0	1.98	0	0	12.52	82.07%	0%	15.82%	15.82%	7.52%	8.30%	1.04
Property 39	0.16	0.05	0	0	0	0	0	0	0	0	0	0	0	0	0	0.11	68.75%	0%	0%	0%	7.52%	-7.52%	-0.01
Property 40	0.49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.49	100.00%	0%	0%	0%	7.52%	-7.52%	-0.04
Property 41	23.95	0.75	0	0	0	0	0	0	0	0	0.30	0	0	0	0	22.90	95.62%	0%	0%	0%	7.52%	-7.52%	-1.72
Property 42	10.14	0	0	0	0	0	0	0	0	0	0	0.37	0	0	0	9.77	96.35%	4%	0%	4%	7.52%	-3.73%	-0.36
Property 43	26.20	0.36	0	0	0	0	0	0	0.61	0.12	0	0	1.61	0	0	23.50	89.69%	0%	6.85%	6.85%	7.52%	-0.67%	-0.16
Property 44	1.22	0.06	0	0	0	0	0	0	0	0	0	0	0	0	0	1.16	95.08%	0%	0%	0%	7.52%	-7.52%	-0.09
Property 45	1.21	0.08	0	0	0	0	0	0	0	0	0	0	0	0	0	1.13	93.39%	0%	0%	0%	7.52%	-7.52%	-0.08
Property 46	1.21	0.09	0	0	0	0	0	0	0	0	0	0	0	0	0	1.12	92.56%	0%	0%	0%	7.52%	-7.52%	-0.08
Property 47	1.22	0.07	0	0	0	0	0	0	0	0	0	0	0	0	0	1.15	94.26%	0%	0%	0%	7.52%	-7.52%	-0.09
Property 48	1.09	0.04	0	0	0	0	0	0	0	0	0	0	0	0	0	1.05	96.33%	0%	0%	0%	7.52%	-7.52%	-0.08
Property 49	1.35	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	1.34	99.26%	0%	0%	0%	7.52%	-7.52%	-0.10
Property 50	1.20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.20	100.00%	0%	0%	0%	7.52%	-7.52%	-0.09
Property 51	1.19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.19	100.00%	0%	0%	0%	7.52%	-7.52%	-0.09
Property 52	0.11	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0.10	90.91%	0%	0%	0%	7.52%	-7.52%	-0.01
Property 53	0.79	0.11	0	0	0	0	0	0	0	0	0	0	0	0	0	0.68	86.08%	0%	0%	0%	7.52%	-7.52%	-0.05
Property 54	114.89	0.01	1.00	0	0	0.80	3.50	0	5.13	0.24	0	4.00	4.05	0	0	96.16	83.70%	4.16%	4.21%	8.37%	7.52%	0.85%	0.82
Property 55	1.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.30	100.00%	0%	0%	0%	7.52%	-7.52%	-0.10
Property 56	1.24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.24	100.00%	0%	0%	0%	7.52%	-7.52%	-0.09
Property 57	1.26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.26	100.00%	0%	0%	0%	7.52%	-7.52%	-0.09
Property 58	1.28	0	0	0.08	0	0	0	0	0	0	0	0	0	0	0	1.20	93.75%	0%	0%	0%	7.52%	-7.52%	-0.09
Property 59A	1.33	0	0	0.53	0	0	0	0	0	0	0	0	0	0	0	0.80	60.15%	0%	0%	0%	7.52%	-7.52%	-0.06
Property 59B	1.33	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	1.32	99.25%	0%	0%	0%	7.52%	-7.52%	-0.10
Property 60	4.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.00	100.00%	0%	0%	0%	7.52%	-7.52%	-0.30
Property 61	36.33	0	0.00	0	0	0.00	0.00	0	2.31	0.00	0	4.38	0.00	0	0	29.64	81.59%	14.78%	0.00%	14.78%	7.52%	7.26%	2.15
Property 62	4.51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.51	100.00%	0%	0%	0%	7.52%	-7.52%	-0.34
Property 63	1.99	0	0.53	0	0	0	0	0	0	0	0	0	0	0	0	1.46	73.37%	0%	0%	0%	7.52%	-7.52%	-0.11
Property 64	37.95	0	0	0	0	0	0	0	14.35	0	0	0	0	0	0	23.60	62.19%	0%	0%	0%	7.52%	-7.52%	-1.77
Property 65	4.86	0	0	0	0	0	0	0	0.17	0	0	0	0	0	0	4.69	96.50%	0%	0%	0%	7.52%	-7.52%	-0.35
Sub-total	299.05	1.64	1.53	0.62	0.00	0.80	3.50	0.00	23.23	0.36	0.39	8.75	7.64	0.00	0.00	250.59	83.8%	3.5%	3.0%	6.54%	7.52%	-0.98%	-2.45
Road Reserve 5	6.82	6.82	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0%	0%	0%	0%	7.52%	-7.52%	0
Road Reserve 6	2.08	0	1.12	0	0	0	0	0	0.01	0	0	0	0	0.95	0	0.00	0%	0%	0%	0%	7.52%	-7.52%	0
Railway Reserve	6.55	0	0	0	5.95	0	0	0	0	0	0.60	0	0	0	0	0.00	0%	0%	0%	0%	7.52%	-7.52%	0
Sub-total	15.45	6.82	1.12	0.00	5.95	0.00	0.00	0.00	0.01	0.00	0.60	0.00	0.00	0.95	0.00	0.00	0.00%	0.00%	0.00%	0.00%	7.52%	-7.52%	0.00
TOTALS EAST	314.50	8.46	2.65	0.62	5.95	0.80	3.50	0.00	23.24	0.36	0.99	8.75	7.64	0.95	0.00	250.59	79.68%	3.49%	3.05%	6.54%			
TOTAL PRECINCT	577.98	12.38	13.31	0.62	5.95	1.60	7.01	0.00	27.49	0.36	4.97	20.59	12.56	2.48	1.00	467.66	80.91%	4.40%	2.69%	7.09%	7.09%	0.00%	0.00

Table 5: Property Specific Dwelling Yield

		TOTAL NET DEVELOPABLE AREA (HECTARES)	DWELLINGS				TOTAL COMBINED	
PROPERTY NUMBER	TOTAL AREA (HECTARES)		CONVENTIONAL DENSITY	RETIREMENT	MEDIUM DENSITY	HIGH DENSITY	Dwellings/NRHa	Dwellings
			13 Dwellings per NRHa	23 Dwellings per NRHa	23 Dwellings per NRHa	35 Dwellings per NRHa		
WEST AREA RESIDENTIAL								
Property 1	11.92	9.09	75.92	0	74.75	0	16.6	151
Property 2	30.46	24.58	284.31	0	62.33	0	14.1	347
Property 3	64.37	53.59	537.42	0	258.29	30.45	15.4	826
Property 4	38.43	31.38	324.48	0	147.66	0	15.0	472
Property 5	3.41	3.41	23.4	0	35.19	2.8	18.0	61
Property 6	2.02	2.02	5.2	0	32.89	6.65	22.1	45
Property 7	2.1	2.08	22.1	0	8.74	0	14.8	31
Property 8	17.75	16.41	163.93	0	87.4	0	15.3	251
Property 9	2.95	2.51	22.75	0	17.48	0	16.0	40
Property 10	2.93	2.68	23.01	0	20.93	0	16.4	44
Property 11	2.74	2.19	28.47	0	0	0	13.0	28
Property 12	2.74	2.73	31.85	0	6.44	0	14.0	38
Property 13	2.12	2.12	27.56	0	0	0	13.0	28
Property 14	2.11	2.11	19.11	0	14.72	0	16.0	34
Property 15	2.12	2.12	7.8	0	34.96	0	20.2	43
Property 16	2.02	1.59	3.64	0	17.02	19.95	25.5	41
Property 17	2.14	2.14	11.44	0	28.98	0	18.9	40
Property 18	2.12	2.12	2.08	0	23	1.05	12.3	26
Property 19	2.15	2.15	1.651	0	25.3	2.8	13.8	30
Property 20	3.33	3.33	15.08	0	49.91	0	19.5	65
Property 21	3.32	3.32	15.73	0	39.56	13.65	20.8	69
Property 22	2.15	2.15	27.95	0	0	0	13.0	28
Property 23	2.13	1.98	14.3	0	20.24	0	17.4	35
Property 24	2.1	1.2	8.97	0	11.73	0	17.3	21
Property 25	2.08	2.08	13.13	0	24.61	0	18.1	38
Property 26	2.03	2.03	26.39	0	0	0	13.0	26
Sub-total	213.74	183.11	1738	0	1042	77	15.6	2857
TOTAL WEST	213.74	183.11	1738	0	1042	77	15.6	2857

Table 5: Property Specific Dwelling Yield (continued)

		TOTAL NET DEVELOPABLE AREA (HECTARES)	DWELLINGS				TOTAL COMBINED	
PROPERTY NUMBER	TOTAL AREA (HECTARES)		CONVENTIONAL DENSITY	RETIREMENT	MEDIUM DENSITY	HIGH DENSITY	Dwellings/NRHa	Dwellings
			13 Dwellings per NRHa	23 Dwellings per NRHa	23 Dwellings per NRHa	35 Dwellings per NRHa		
EAST AREA RESIDENTIAL								
Property 38	15.25	12.52	0	288	0	0	23.0	288
Property 39	0.16	0.11	0	2	0	0	22.5	2
Property 40	0.49	0.49	0	11	0	0	23.0	11
Property 41	23.95	22.90	87	84	54	15	10.5	241
Property 42	10.14	9.77	97	0	54	0	15.4	150
Property 43	26.20	23.50	270	0	63	0	14.2	333
Property 44	1.22	1.16	15	0	0	0	13.0	15
Property 45	1.21	1.13	15	0	0	0	13.0	15
Property 46	1.21	1.12	15	0	0	0	13.0	15
Property 47	1.22	1.15	15	0	0	0	13.0	15
Property 48	1.09	1.05	14	0	0	0	13.0	14
Property 49	1.35	1.34	17	0	0	0	13.0	17
Property 50	1.20	1.20	16	0	0	0	13.0	16
Property 51	1.19	1.19	15	0	0	0	13.0	15
Property 52	0.11	0.10	1	0	0	0	13.0	1
Property 53	0.79	0.68	9	0	0	0	13.0	9
Property 54	114.89	96.16	747	132	397	100	14.3	1375
Property 55	1.30	1.30	11	0	10	0	16.5	21
Property 56	1.24	1.24	11	0	10	0	16.5	20
Property 57	1.26	1.26	11	0	10	0	16.4	21
Property 58	1.28	1.20	6	0	18	0	19.4	23
Property 59A	1.33	0.80	1	0	17	0	22.0	18
Property 59B	1.33	1.32	11	0	10	0	16.4	22
Property 60	4.00	4.00	0	0	0	0	0.0	0
Property 61	36.33	29.64	292	0	166	0	15.4	457
Property 62	4.51	4.51	59	0	0	0	13.0	59
Property 63	1.99	1.46	19	0	0	0	13.0	19
Property 64	37.95	23.60	239	0	121	0	15.2	359
Property 65	4.86	4.69	46	0	26	0	15.4	72
Sub-total	299.05	250.59	2037	518	955	114	14	3624
TOTALS EAST	299.05	250.59	2037	518	955	114	14	3624
TOTAL PRECINCT	512.79	433.70	3774	518	1997	192	14.9	6481



4.0 ELEMENTS

This chapter sets out objectives and planning and design guidelines for the following elements:

1. Image and character
2. Housing
3. Community Facilities
4. Open Space and Natural Systems
5. Employment and Activity Centres
6. Transport and Movement
7. Utilities and Energy

Each element includes:

Objectives: an objective describes the desired outcome to be achieved in the completed development. Objectives must be met.

Plans: the plans are a spatial expression of objectives.

Planning and Design Guidelines: planning and design guidelines including figures and tables that:

- *must* be met, or
- *should* be met.

Where a planning and design guideline is listed as “must be met” no alternative shall be considered.

Where a planning and design guideline is listed as “should be met” an application for an alternative design solution or outcome envisaged by the planning and design guideline, which meets the objectives, may be considered to the satisfaction of the Responsible Authority.

4.1 IMAGE AND CHARACTER

4.1.1 IMAGE AND CHARACTER OBJECTIVES

The image and character objectives are:

- To establish a built environment that is functional, safe, aesthetically pleasing and that promotes a strong sense of place for future residents,
- To establish a strong sense of place that responds to and enhances the landscape character and topographical features of the precinct,
- To capitalise on view corridors to and from significant landscape features and ensure development does not detract from visual amenity of the area,
- To respond appropriately to the natural land form of the area,
- To develop a distinctive neighbourhood character with a strong emphasis on elements which contribute to community identity and sense of place,
- To conserve and enhance recognised heritage places,
- To use a predominantly native and indigenous plant palette in the landscaping of public spaces, drawing inspiration from the nearby Royal Botanic Gardens Cranbourne, and
- To provide road and street cross sections with sufficient width to support large trees with spreading canopies.

4.1.2 IMPLEMENTATION

The objectives for image and character are met by implementation of all the following:

- » *Plan 5: Future Urban Structure Plan,*
- » *Plan 7: Image and Character Plan,*
- » *Table 6: Street tree planting,*
- » *Table 8: Open Space Table,*
- » *Road and Street cross sections in the transport and movement element,*
- » *Planning and design guidelines set out under 4.1.3, and*
- » *4.1.3 Planning and Design Guidelines.*

The following planning and design guidelines **must** be met:

- An application which proposes to transfer a heritage building into public ownership must be accompanied by a Structural Engineering Assessment that provides details of the condition of the building and any works required to bring the building to a standard which complies with relevant building regulations to the satisfaction of the responsible authority.
- The design of a Subdivision of Property 3 is to incorporate an open visual corridor connection free of buildings at the location of the Landscape Element shown on Plan 7.

The visual corridor is to provide for a continuous walking and cycle connection between the Complex in the north and the north-south street connection to the Western Community Hub in the south. The visual corridor is to be landscaped in a manner consistent with providing canopy tree based shade for walkers and cyclists and to allow open north-south views through the corridor.

STREET TREE PLANTING

The following planning and design guidelines **should** be met:

Street trees should:

- support the general native and indigenous landscape vision of the precinct, with targeted use of exotic species on some streets and as highlight plantings,
- be suitable to the scale of the street and the planting space available, with larger tree species chosen for wider roads,
- form strong avenues and canopies to provide shade and definition to streetscapes,
- be suitable for local soil and climatic conditions,
- be selected to provide visual queues and definition to different classes of roads, activity centres, park frontages and key intersections and entrances, and
- be appropriate indigenous trees species suitable for the urban environment, should be used particularly where a street links with, or adjoins conservation areas. Use of indigenous street trees along the key precinct pedestrian and bicycle trails, within wider road reserves, is desirable.
- Later developments will be required to match tree species that have already been approved or planted in roads linking to adjoining development parcels.

Street tree planting on declared arterial roads must be established in accordance with the clear zone guidelines to the satisfaction of the relevant roads authority.

Many factors have contributed to the selection of street trees for the precinct, such as:

- General consistency with the existing City of Casey street tree strategies,
- Proven performance and longevity in a highly modified urban environment,
- Consistency of mature tree sizes which are appropriate to the scale of the street and planting space, with the ability to provide an appropriate shading canopy,
- The need to manage public safety and the potential for limb drop, hazard production (e.g. thorns or slippery berries) and clear site-lines, and
- Positively contributing to the urban design of the precinct through over-all tree form, foliage and flower colour.

The following table provides guidance on the range of tree species considered suitable for the Cranbourne East precinct. The list is based on the various City of Casey tree planting strategies including (but not limited to):

- Casey Local Roads (read access street / place) Tree Strategy,
- Casey Collector Roads (read connector road) Tree Strategy, and
- Casey Arterial Roads Tree Strategy (CARTS).

These strategies should be referred to when selecting trees. The CARTS strategy in particular nominates appropriate tree species for specific roads. Other tree species may be considered, subject to the satisfaction of the responsible authority.

In situations where an alternative street tree is considered by the Responsible Authority, the following indigenous species are considered to be appropriate. Development considering the use of these trees should discuss their use with the City of Casey prior to detailed planning:

- Allocasuarina littoralis,
- Banksia integrifolia,
- Eucalyptus cephalocarpa, and
- Eucalyptus polyantemos.

Table 6: Street Tree Planting

TYPICAL ROAD CLASS	PLANTING SPACE WIDTH	SELECTED FROM: BOTANICAL NAME	SELECTED FROM: COMMON NAME
Arterial Roads	3m-6m	<i>Corymbia maculata</i> <i>Eucalyptus tetracornis</i> * <i>Eucalyptus pauciflora</i> * <i>Quercus coccinea</i> <i>Quercus rubra</i>	Spotted Gum Forest red Gum* Snow Gum* Scarlet Oak Red Oak
Connector Street (collector road)	3m+ (preferably 3.5m+)	<i>Acacia melanoxylon</i> * <i>Corymbia citriodora</i> <i>Angophora costata</i> <i>Eucalyptus tetracornis</i> *	Blackwood* Lemon Scented Gum Smooth Barked Apple Gum Forest red Gum*
Access Street Level 2 (local road)	3m+	<i>Corymbia citriodora</i> <i>Eucalyptus cineria</i> <i>Eucalyptus mannifera ssp maculosa</i> <i>Eucalyptus pryoriana</i> *	Lemon Scented Gum Argyle Apple Red Spotted Gum Coast Manna Gum*
Access Street / Place Level 1 (local road)	2.5-3m	<i>Eucalyptus scoparia</i> <i>Eucalyptus leucoxylon spp megalocarpa</i> <i>Pyrus calleryana 'Chanticleer'</i>	Wallangarra White Gum Large Fruited Yellow Gum Chanticleer Callery Pear
Small streets / laneways / beneath powerlines (local road)	<2.5m	<i>Eucalyptus pauciflora 'Little Snowman'</i> <i>Tristaniopsis laurina</i>	Dwarf Snow Gum Water Gum
Activity Centre Main Streets	Varies	<i>Will vary depending on detailed design – use of exotics appropriate</i>	Will vary depending on detailed design – use of exotics appropriate
Highlight / Nodal Plantings	Varies	<i>Acer x freemanii 'Jeffersred'</i>	Red Maple

Note: Species sourced from Casey adopted street tree strategies

*denotes indigenous species



- Precinct Structure Plan Area
- Urban Growth Boundary
- Arterial Road
- Connector Street (potential future arterial)
- Connector Street
- Access Street
- Railway Line & Station
- Conventional Residential
- Medium Density Residential (preferred indicative locations)
- High Density Residential (preferred indicative locations)
- Green Wedge Land
- Future Urban Area
- Existing Urban Area
- Future Grade Separated Crossing (developed initially at grade)
- Proposed Future Grade Separated Road Link (subject to investigation)
- Regional Open Space

Note: Densities shown on this plan are indicative only. They reflect the preferred location for where increased densities should occur.

Scale: 1:20000m @ A3
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Date: 2 May 2010
Revision: 0

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4.2 HOUSING

4.2.1 HOUSING OBJECTIVES

The objectives for housing are:

- To provide a diversity of lot sizes and housing types to satisfy the needs and aspirations of the new community to provide for the changing needs of the community over time,
- To achieve an average of least 15 dwellings per NDHa throughout the PSP area,
- To provide medium and higher residential housing densities and specialised housing forms such as retirement villages close to services, and amenity by locating them proximate to local town centres, open space and community hubs,
- To provide residential neighbourhoods that promote liveability through high urban design standards, creating attractive streetscapes and a distinctive neighbourhood character,
- To increase conventional lot densities above historical patterns,
- To provide lot sizes and housing types which are responsive to the character of the natural and built environment in the area and respond to principles of environmental sustainability, and
- To provide diverse housing options that achieve higher housing densities within the walkable catchment of the main street core of a local town centre, and

4.2.2 IMPLEMENTATION

The objectives for housing are met by implementation of all the following:

- » *Plan 5: Future Urban Structure,*
- » *Plan 8: Housing Plan,*
- » *Table 7: Distribution of Housing Densities,*
- » *Planning and design guidelines set out in 4.2.3,*
- » *Plan 10: Open Space Plan, and*
- » *Planning and design guidelines*

The following planning and design guidelines *should* be met:

- The lot/dwelling yield estimated for each existing property as outlined in Table 5 should be achieved. Where a development proponent owns or controls more than one property in the PSP area, the property specific yields may be met across the various landholdings provided the housing objectives can be met, and
- Residential development should include a full range of residential dwelling densities, including:
 - 'conventional' lots (average 500 sq m),
 - 'medium' density lots (average 300 sq m) and
 - 'higher density lots/specialised housing (average 210 sq m).

These terms are defined in the glossary in Section 6.1.

Flexibility has purposefully been provided to support alternative lot distribution patterns to promote greater housing diversity throughout the precinct.

The housing density distribution patterns shown on Plan 8 represent preferable locations for conventional, medium and higher density housing. Table 5 estimates the lot mix required to meet the property specific dwelling yield. An alternative lot mix and spatial distribution may be considered if the number of total combined dwellings for each specific property contained in Table 5 is still able to be achieved and the housing objectives are met.

Housing Density Notes:

In accordance with the definitions in this PSP, an average of 15 dwellings per hectare across the PSP area is calculated on net developable area being the:

"total amount of land within the precinct that is made available for development of housing and employment buildings, including lots, local and connector streets. Total precinct area minus community facilities, schools and educational facilities and open space, arterial roads and encumbered land"....

Net Residential Area has been established in order to accurately calculate dwelling yields on land which has been identified as land to be developed for residential lots. For example, areas of land identified for non-residential land uses have been excluded from the dwelling yield projections for each parcel. The dwelling mix required to achieve the dwelling yield estimates should be achieved using the definition for Net Residential Area in this PSP.

This PSP defines the average densities for conventional, medium and high density based on achieving an overall density of 15 dwellings per hectare (NDA). In order to achieve the overall average density, the following is required.

Conventional Density Housing:

- Conventional density housing must achieve an average of 13 lots per NRHa.

Medium and Higher Density Housing:

- Medium density housing must achieve a average of 23 dwellings per NRHa,
- High density housing should be greater than 35 dwellings per NRHa, and

Development of medium density housing is encouraged in the following circumstances:

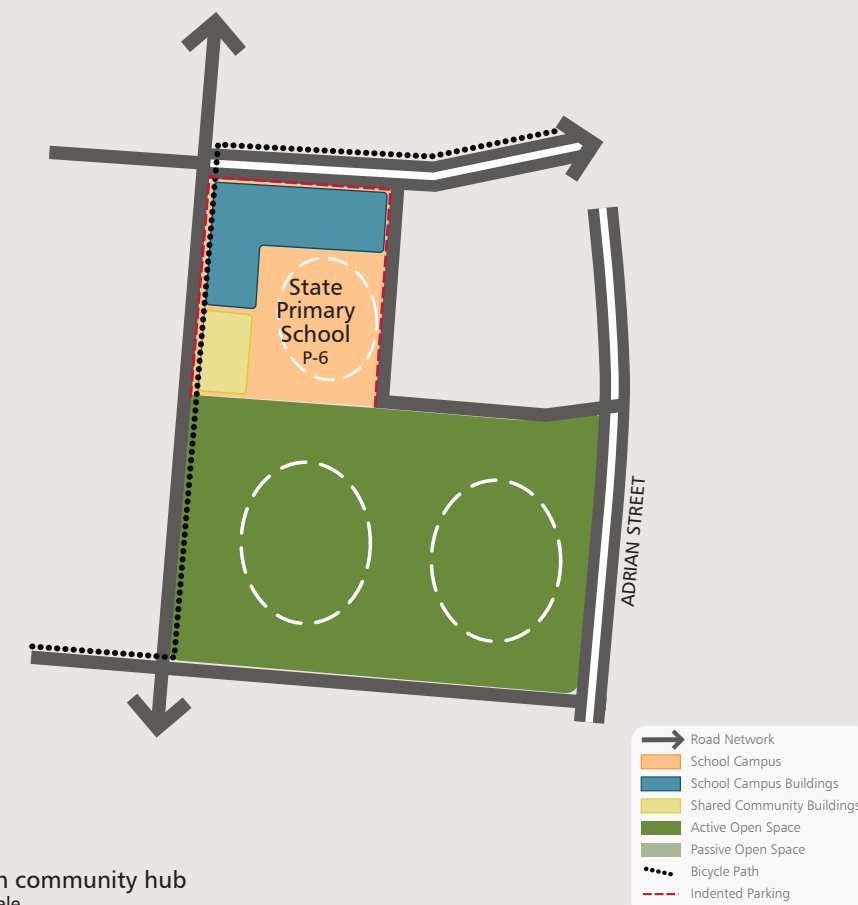
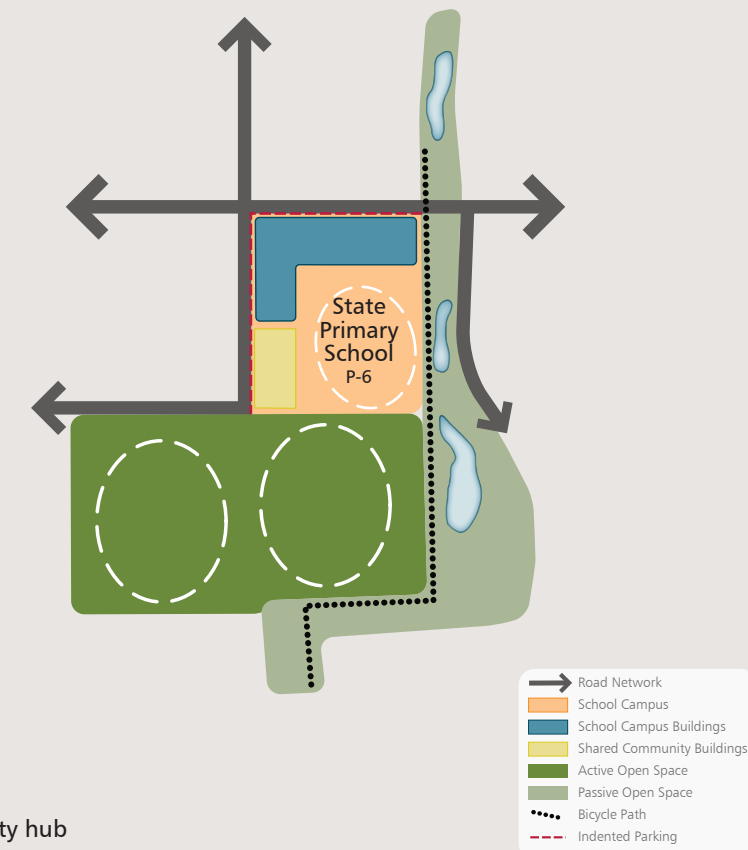
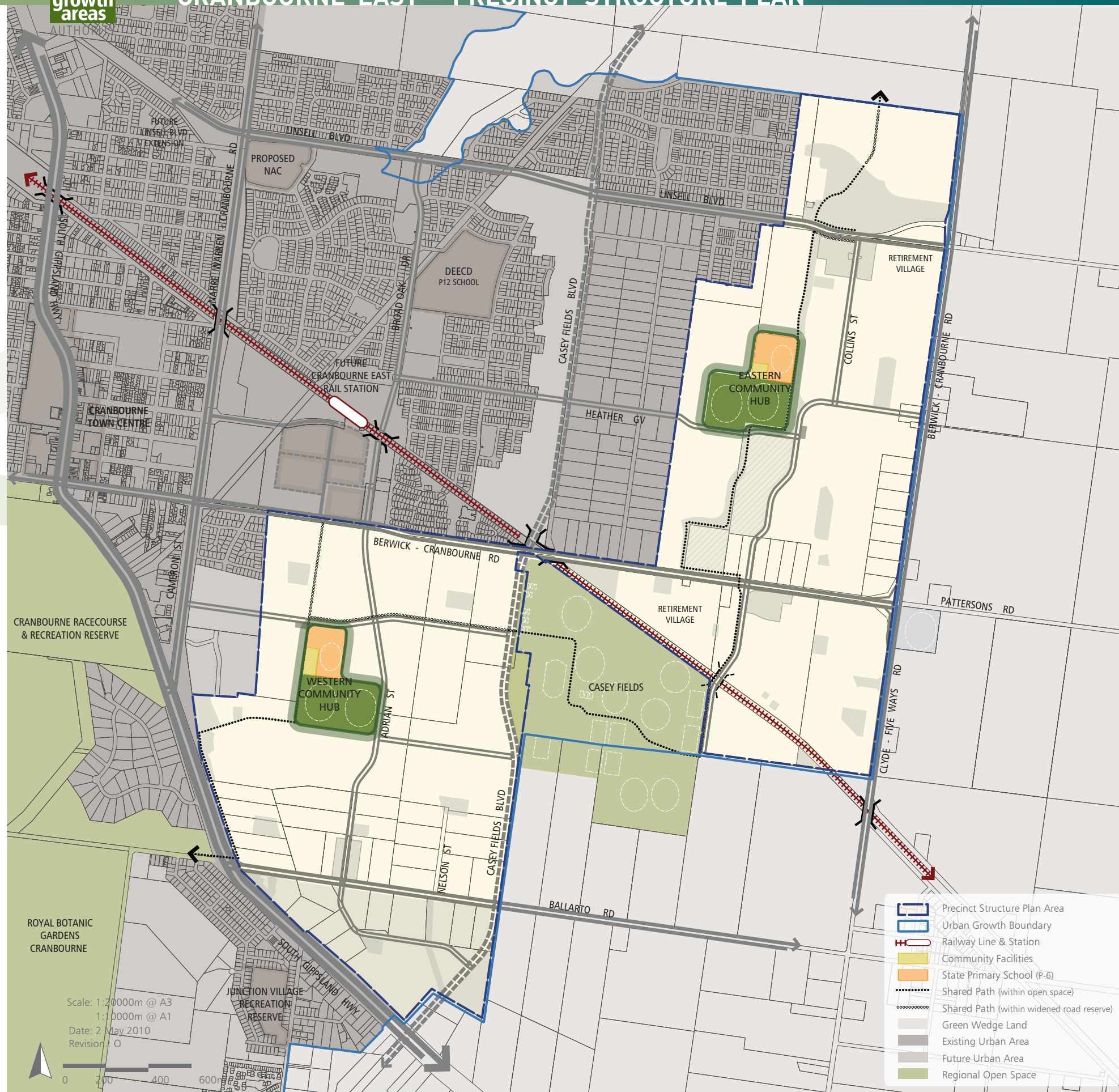
- As part of an integrated development site,
- As part of a specialised housing project such as retirement living or an aged care facility,
- Generally in areas within 400m walkable catchment of the main street core of a local town centre or the planned rail station,
- Overlooking, abutting or within close proximity of public open space and community hubs, and
- Be provided in a variety of forms such as shop top, terrace / townhouse development, smaller 'town' lots, shared driveway housing, integrated development sites as well as retirement villages / nursing home care facilities.

The PSP encourages higher housing density to be achieved for individual development sites above the minimum requirements specified.

Dwelling and lot densities are distributed across the PSP area as a percentage of the total area available for residential development. Table 7 illustrates that the Precinct Structure Plan can achieve the objectives for housing diversity.

Table 7: Distribution of Densities

DENSITY TARGET	EASTERN AREA HA	WESTERN AREA HA	TOTAL HA	TOTAL NO. OF DWELLINGS	% OF TOTAL NET RESIDENTIAL AREA	% OF TOTAL LOTS	AV. LOT SIZE M ²
NET DEVELOPABLE AREA	250.59	183.11	433.70				
NET RESIDENTIAL AREA	223.97	181.19	405.16				
Conventional Residential Density (Av. of 13 lots per NRHa)	156.67	133.67	290.33	3,774	71.66%	58.24%	500
Medium Density Housing (inc retirement) (Av. 23 dwellings per NRHa)	64.04	45.31	109.35	2,515	26.99%	38.81%	304
High Density/Specialised Housing (Av. 35 dwellings per NRHa)	3.27	2.21	5.48	192	1.35%	2.96%	214



4.3 COMMUNITY FACILITIES

4.3.1 COMMUNITY FACILITIES OBJECTIVES

The objectives for community facilities are:

- To provide for a network of community hubs throughout the precinct at specified locations as the focal point for community activity and interaction within each neighbourhood,
- To support the local town centre built form objectives,
- To support the early provision of facilities such as local parks, playgrounds and community meeting places in each neighbourhood,
- To support the timely delivery of community facilities such as schools, health and children's services and formal recreation facilities as population thresholds are reached and funding becomes available,
- To plan for a range of community facilities, cultural venues and services to meet the varying needs of local residents,
- To plan and design for community facilities which represent quality architecture and offer flexible designs to accommodate a range of uses and meet the changing needs of the community,
- To locate community facilities within proximity of local town centres, and co-located with active and passive open space, and
- To plan for community facilities which are accessible by public transport, walking and cycling.

4.3.2 IMPLEMENTATION

The objectives for community facilities are met by implementation of all the following:

- » *Plan 5: Future Urban Structure Plan,*
- » *Plan 9: Community Facilities Network,*
- » *Plan 13: Public Transport Network,*
- » *Table 8: Community Facilities Table,*
- » *Table 9: Open Space Table,*
- » *Figures 1 and 2: Indicative Community Hub Plans, and*
- » *Planning and design guidelines set out in 4.3.3.*

4.3.3 PLANNING AND DESIGN GUIDELINES

The following planning and design guidelines *should* be met:

General

- Community facilities should be integrated with other council facilities and/or open space, and be co-located with proposed children's playgrounds, recreation infrastructure and kindergartens, and
- Education and community services (public and private) and other activities (such as childcare centres) should be:
 - Within and or adjoining community hubs.
 - Within and or on the edge of activity centres, or
 - On either connector streets or arterial roads where access can be provided safely.

Eastern Area Community Hub - Concept Plan

The preliminary concept plan is provided as an indicative design solution. Alternative approaches that meet the objectives for Community Infrastructure may be considered to the satisfaction of the Responsible Authority.

Western Area Community Hub – Concept Plan

The preliminary concept plan is provided as an indicative design solution. Alternative approaches that meet the objectives for Community Infrastructure may be considered to the satisfaction of the Responsible Authority.

4.3.4 COMMUNITY FACILITIES DELIVERY STATEMENT

It is important that community facilities are delivered in an integrated and co-ordinated manner to maximise both early and cost effective provision. The following statements guide these outcomes:

Integrated, efficient and timely facility provision

- Funding opportunities and partnerships should be sought to support the early provision of community facilities.
- The Growth Areas Authority will work with the City of Casey through infrastructure working groups to explore and pursue opportunities for partnership approaches to support integrated and timely provision of key community facilities.

Potential funding sources to be considered include:

- Cranbourne East Development Contributions Plan.
- Casey Council Capital Works Program.
- Development Proponent Funding. This may include an injection of additional funding, or potential for a development proponent to deliver an item in the Development Contributions Plan through in-kind works. Provision of in-kind works requires approval by the City of Casey as the Collecting Agency (refer to the Cranbourne East Precinct Structure Plan Development Contributions Plan 2009).
- State Grants Programs. The State Government has many grants programs with funding potential across a broad range of community facilities and services.
- Non-government organisations. Some community infrastructure may be able to be delivered by the Council working in partnership with non-government organisations.

Community Hub Concept Planning

- Delivery of integrated and timely community facilities is a complex and evolving task that takes place in stages over a long period of time given the involvement of many stakeholders with priorities that are subject to change over time. It is expected that models for service delivery will change over time as new approaches are adopted and the PSP has been designed to be flexible enough to enable this change to occur.

Co-ordination and delivery will be greatly assisted by the establishment of:

- A coordinated governance model for the concept and master planning.
- The development of community hub concept plans.
- Master plans that provide detail for the delivery of the concept plans.
- The opportunities for integrated facility delivery apply equally to sporting facilities as they do to items such as community centres and schools. Opportunities for shared use of clubhouse and pavilion buildings should be investigated and if appropriate accommodated through flexible facility design and integration through hub master planning.
- Where facilities are associated with schools, they should be designed concurrently to ensue integrated facility delivery and maximise sharing opportunities.

Eastern maternal and child health services planning

At the time of the approval of this PSP, Casey City Council's approach to planning for maternal and child health services for the Eastern precinct was being reassessed. A preference for co-location of the services within the Eastern Community Hub adjacent to the school was emerging and likely to be the delivery model. This PSP and the DCP is retains sufficient flexibility to allow delivery either at the Eastern Community Hub or at the Selandra Rise Local Town Centre.

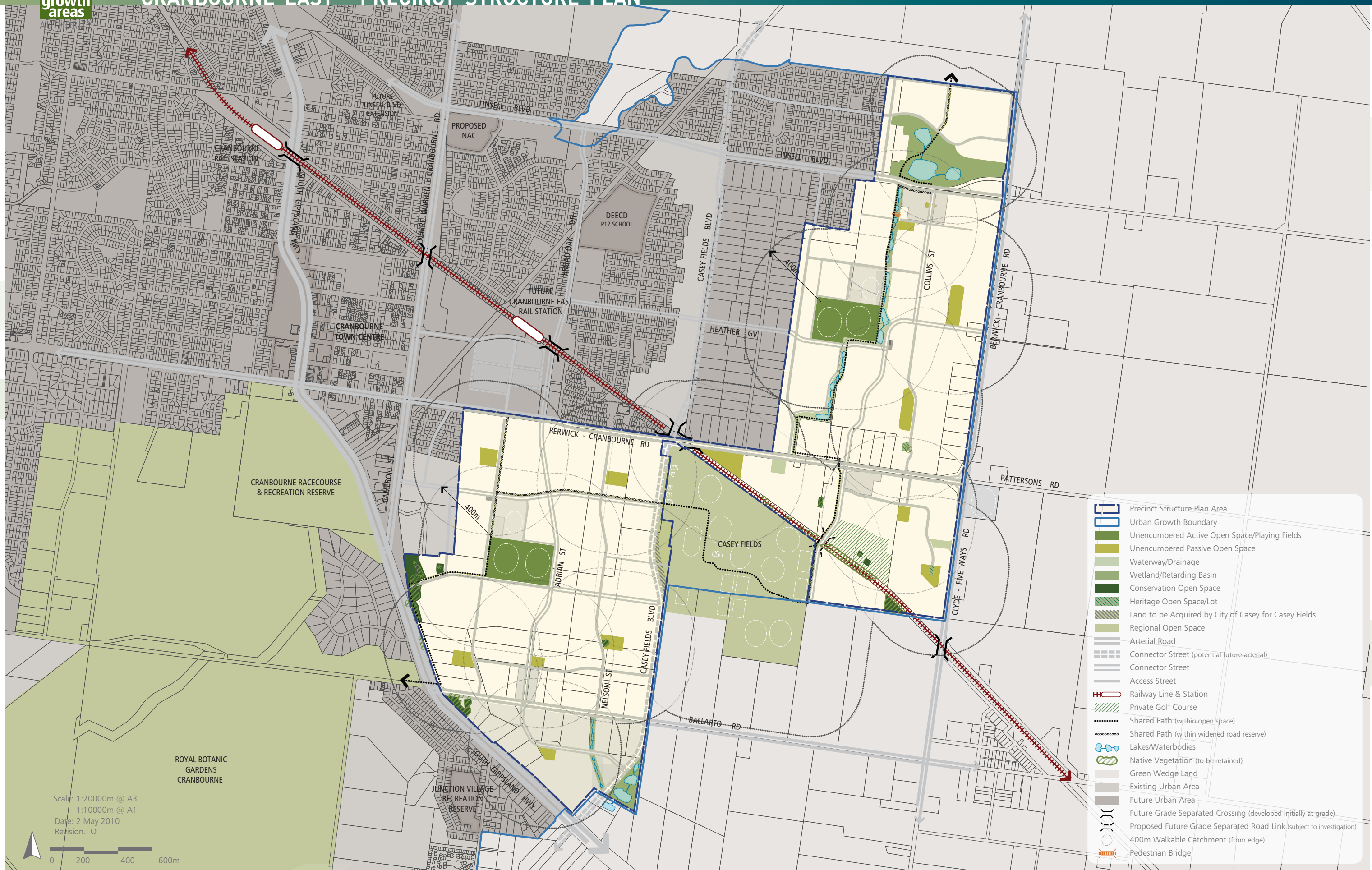
Open space improvements

- Individual development proponents are required to provide basic improvements to local parks and passive open space including earthworks, fencing, water tapping, grassing, tree planting, local playgrounds and shared paths and footpaths, furniture and paving.
- The City of Casey may add to these basic improvements over time with the provision of additional facilities through its Capital Works Program.
- The active open space areas will benefit from the preparation of master plans by Casey City Council to guide their staged delivery over time. Consistent with the establishment of the community hubs discussed above, these processes will benefit from a governance model being established to support the master planning and the ongoing implementation and management of the reserves consistent with other approaches across the municipality.

Table 8: Community Facilities

WESTERN AREA		
FACILITIES AND SERVICES	LOCATION	RESPONSIBILITY
State Primary School P-6	Western Community Hub	DEECD
Double Kindergarten	Western Community Hub	Casey City Council (potential DEECD funding grant)*
Maternal & Child Health	Western Community Hub	Casey City Council (potential DEECD funding grant)*
Community meeting space & Non Government organisation (NGO) consulting rooms	Western Community Hub	Casey City Council
Active Open Space: <ul style="list-style-type: none"> 2 x full size AFL/cricket ovals Cricket Nets Pavilion 2 x netball courts 	Western Community Hub	Casey City Council
Passive Open Space (inc. but not limited to: Skate/BMX facility, Playgrounds, Basket Ball ½ court, BBQ facilities, shelters and walking trail)	Distributed throughout the precinct and generally within 400 m of most residents	Casey City Council / Development proponents
EASTERN AREA		
FACILITIES AND SERVICES	LOCATION	RESPONSIBILITY
State Primary School P-6	Eastern Community Hub	DEECD
Double Kindergarten	Eastern Community Hub	Casey City Council (potential DEECD funding grant)*
Maternal & Child Health (Capacity)	Eastern Community Hub	Casey City Council (potential DEECD funding grant)*
Public health facility (subject to further assessment). The need for a site of 0.3 hectares is under investigation as part of a neighbourhood level community health facility. The facility would be integrated with the NAC based community facility. However, any future provision of a larger integrated health facility would be located at or near a significant public transport hub such as the Cranbourne East rail station.	Selandra Rise Local Town Centre	Southern Health/Casey City Council
Community meeting space & Non Government Organisation consulting rooms with potential maternal child health centre capacity	Selandra Rise Local Town Centre	Casey City Council constructed by development proponents
Local Business Support Office (mini business accelerator)	Selandra Rise Local Town Centre	Casey City Council
Active Open Space: <ul style="list-style-type: none"> 2 x full size AFL/cricket ovals Cricket nets 3 x Soccer fields Pavilion 	Eastern Community Hub	Casey City Council
Supplementary Active Open Space: <ul style="list-style-type: none"> 2 x full size AFL/cricket ovals Cricket Nets Pavilion 	Location to be determined by Casey City Council	Casey City Council
Passive Open Space (inc. but not limited to: Skate/BMX facility, Playgrounds, Basket Ball ½ court, BBQ facilities, shelters and walking trail)	Distributed throughout the precinct and generally within 400 m of most residents	Casey City Council / Development proponents

*Funding grants available from DEECD to support facility enhancement or service provision to be consistent the Development Contributions Plan.



4.4 OPEN SPACE AND NATURAL SYSTEMS

4.4.1 OPEN SPACE AND NATURAL SYSTEMS OBJECTIVES

The objectives for open space and natural systems are:

- To provide a variety of open spaces to meet the active and passive recreation needs of the community and to integrate, protect and restore environmental values and features,
- To establish a network of appropriately sized, connected and distributed open spaces to meet local and district open space needs,
- To establish an attractive urban environment with a strong sense of place through the provision of well designed landscaping of open spaces as well as the road and corridor networks,
- To implement open space development standards which provide for a sustainable future maintenance regime,
- To support the early development of open space through a range of funding sources, and
- To facilitate regional bike trails linking the proposed Casey Valley Parklands and the Cardinia Creek Parklands in the north to the RBGC, Cranbourne Town Centre in the south east.

4.4.2 IMPLEMENTATION

The objectives for open space and natural systems are met by implementation of all the following:

- » *Plan 5: Future Urban Structure Plan,*
- » *Plan 9: Community Facilities Network Plan,*
- » *Plan 10: Open Space Network Plan,*
- » *Plan 11: Biodiversity Plan,*
- » *Plan 14: Walking and Trails Plan,*
- » *Table 8: Community Facilities Table,*
- » *Open Space Planning and Design Guidelines set out in Section 4.4.3,*
- » *Table 9: Open Space Table,*
- » *Cranbourne East Native Vegetation Precinct Plan set out in Section 4.4.7,*
and
- » *Open Space Planning and Design Guidelines outlined in Table 9*

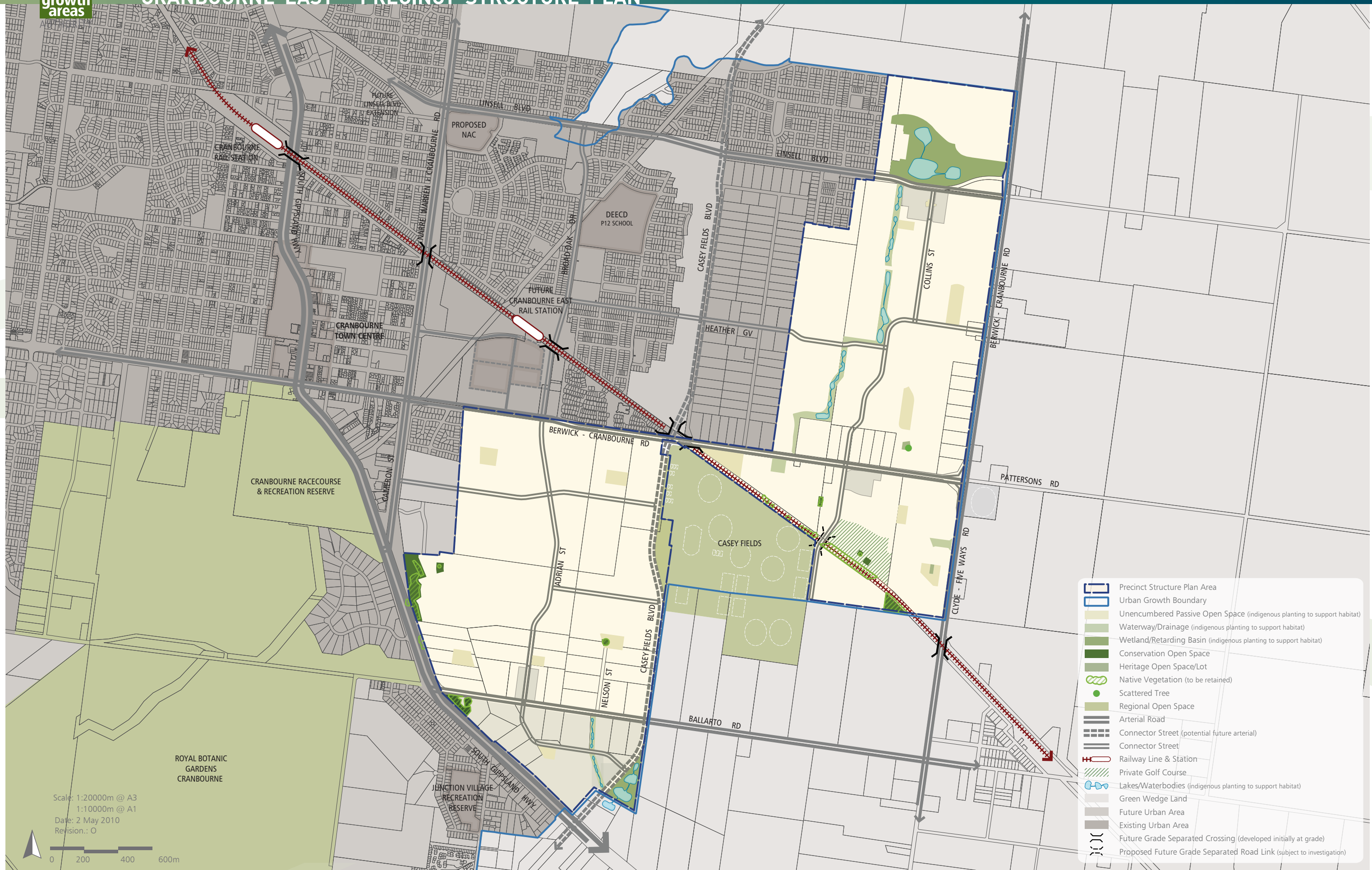
Table 9: Open Space Planning and Design Guidelines

DESIGN ISSUE	PLANNING AND DESIGN GUIDELINES
GENERAL	<ul style="list-style-type: none"> Open spaces should be designed and constructed to a fit for purpose standard with an appropriate mix of facilities. Design of open spaces should be contemporary in nature, innovative and draw upon the design themes used at the RBGC or local history. Passive parks should cater for a broad range of users by providing a mix of spaces and planting to support both structured and informal recreational activities. Active recreation reserves should be designed to maximise co-location and sharing opportunities between complementary sports and adjoining school facilities. Sharing of Council managed facilities with schools will require a formal management agreement. Parks should contain both cleared open areas for unstructured activities, as well as areas for shade and shelter. The appropriate mix of infrastructure in parks should be provided to the satisfaction of the Responsible Authority. Any pedestrian link through a drainage reserve or adjoining the road network should include provision of park seating at appropriate intervals to the satisfaction of the Responsible Authority.
INTERFACE WITH ROAD NETWORK	<ul style="list-style-type: none"> Open spaces should have a road frontage to all edges except where these are otherwise addressed by active frontage from careful design of residential, commercial or community facility development. Streetscape planting and paths should complement and integrate with the adjoining parkland design.
INTERFACE WITH ADJOINING DEVELOPMENT	<ul style="list-style-type: none"> The open space network should be enhanced by careful design of residential, community and commercial development adjacent to it. The primary frontage of development that immediately abuts open space areas should address and promote use and surveillance of the parkland. Development abutting open space should be well articulated and facilitate passive surveillance with windows, balconies, and pedestrian access points. Development should avoid the rear of properties or blank walls abutting parklands. Where fencing is required it should be low scale and permeable to facilitate public safety and surveillance. Landscaping of adjoining development should complement the park landscape design.

DESIGN ISSUE	PLANNING AND DESIGN GUIDELINES
INTERFACE WITH CONSERVATION AREAS	<ul style="list-style-type: none"> The design of parks and open space corridors should enhance and preserve areas of conservation significance. Landscape master planning of open space containing native vegetation conservation areas should be designed to protect sensitive areas from vehicle or pedestrian traffic. Appropriate buffer zones should be provided between native vegetation conservation areas and 'hard' infrastructure such as paths, furniture, picnic shelters. Passive or low impact activities should occur closest to offset/conservation areas, with more high impact or formal activities to be located further away. Planting should support the enhancement of areas of ecological vegetation classes prevalent in the area including: <ul style="list-style-type: none"> » Grassy woodland (EVC 55), » Heathy woodland (EVC 48), and » Swamp Scrub (EVC 53).
INTERFACE WITH DRAINAGE SYSTEM	<ul style="list-style-type: none"> Pedestrian and bicycle paths should be incorporated into the drainage system to connect the open space and street network. Pedestrian bridges and boardwalks should be incorporated into the path network of the drainage system to facilitate permeability of neighbourhoods. Paths, bridges and boardwalks should be designed to be above a minimum of the 1:10 year flood line to the satisfaction of the relevant authority.
PARK BUILDINGS	<ul style="list-style-type: none"> Park buildings should be sited and designed to integrate with and complement landscaping and should not dominate the parkland. Park buildings should be sited to frame park spaces and should avoid splitting up otherwise usable and effective spaces. Park buildings should be contemporary in design with orientation, materials and design detail planned to minimise resource use and maximise sustainability performance or heritage themes. Selected materials should complement the proposed landscape character.
PUBLIC SAFETY & LIGHTING	<ul style="list-style-type: none"> Open spaces should be designed to be safe and comfortable places that encourage use by a wide range of people. The use of the design principles known as "Crime Prevention Through Environmental Design" ("CPTED") should guide the design of open spaces and the infrastructure it contains: Surrounding land uses should provide passive surveillance to adjoining open space and planting design should promote a highly visible public realm. The detailed design of open spaces that immediately abut development should complement and enhance the function and safety of that development. Open space path systems facilitate clear, direct and easy movement to and from key destinations. Lighting in open spaces should be restricted to key pedestrian thoroughfares to encourage safe pedestrian movement throughout the network, but discourage inappropriate use of main parkland areas after dark. Light fittings should be energy and cost efficient and 'cut-off' type to direct light where it is required and reduce unnecessary spill to sides or above. Light fittings should be compact fluorescent or similar that emits white light.

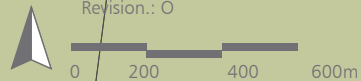
DESIGN ISSUE	PLANNING AND DESIGN GUIDELINES
LANDSCAPE CHARACTER AND VEGETATION	<ul style="list-style-type: none"> • A predominantly indigenous and Australian native planting theme supporting the biodiversity values of the precinct should characterise the open space network. Exotic species may be supported in key locations with the approval of the responsible authority. • Species chosen should be appropriately robust to perform adequately in the local urban environment prior to finalising planting schemes. • Use of exotic species and Australian native species and cultivars to achieve particular planting effects should be limited to areas requiring highlight planting for entries and key focal points. • Advice should be sought from qualified botanic gardens and Council officers regarding the suitability of proposed species prior to confirming the planting scheme. • Species associated with local Ecological Vegetation Classes (“EVC”) found in the area should be considered in opens space planting schemes.
OTHER PARK LANDSCAPE ELEMENTS AND INFRASTRUCTURE	<ul style="list-style-type: none"> • The design and siting of landscape elements and infrastructure should compliment the area. • Park infrastructure such as playgrounds, shelters, BBQs picnic tables, toilets etc should be clustered in nodes. Park planting themes should enhance and complement these nodes. • Park seating should be provided to the satisfaction of the Responsible Authority. • Public toilet facilities should be integrated with pavillions and clubhouses where possible. • Park infrastructure should be contemporary in design with materials and design detailing complementing the planting character and drawing upon themes being utilised at the RBGC. • Use of bollards and fencing should be well targeted, maximise transparency and generally kept to a minimum. • Where car parking is required within parks it should be sensitively designed to minimise large areas of hard surfaces and maximise tree and ground level planting. Safe pedestrian access should be integrated within car park designs. • Bicycle parking should be located in highly visible locations and close to pedestrian desire lines/gathering spaces.
SIGNS	<ul style="list-style-type: none"> • Parks and sports fields should be clearly signed. • Generally, signs within parks should be kept to a minimum with locations focussed on key access or interpretation points and major pedestrian / cycle routes. • Design and materials choice should be contemporary and should complement other park design elements.
WATER SENSITIVE URBAN DESIGN (“WSUD”)	<ul style="list-style-type: none"> • The design and layout of open spaces should maximise water use efficiency, stormwater quality and long term viability of vegetation through the use of WSUD initiatives. • WSUD principles should be used so that excess run-off water from within, or where appropriate, external to the park, is directed to support park planting and / or rain gardens rather than being diverted to drains. • Warm season grasses should be used within passive reserves and sports fields to minimise potable water use.

DESIGN ISSUE	PLANNING AND DESIGN GUIDELINES
TRANSFER OF LAND REQUIREMENTS	<ul style="list-style-type: none"> • All parks must be finished to the following level of development to the satisfaction of the Responsible Authority prior to the transfer of land: <ul style="list-style-type: none"> » Removal of all existing disused structures, foundations, pipelines or stockpiles, » Cleared of rubbish and environmental weeds, levelled, topsoiled and grassed with warm climate grass (unless a conservation reserve), » Provision of water tapping, potable and recycled water connection points. Sewer and gas connection points must also be provided to land identified as an active reserve, » Drought resistant plantings, » Vehicles exclusion devices (fence or other suitable method) and maintenance access points, » Construction of a 2.5 metre concrete shared path around the perimeter of the reserve, connecting and linking into any other surrounding paths or points of interest, and » Installation of park furniture including BBQs, shelters, tables, playgrounds and rubbish bins.



- Precinct Structure Plan Area
- Urban Growth Boundary
- Unencumbered Passive Open Space (indigenous planting to support habitat)
- Waterway/Drainage (indigenous planting to support habitat)
- Wetland/Retarding Basin (indigenous planting to support habitat)
- Conservation Open Space
- Heritage Open Space/Lot
- Native Vegetation (to be retained)
- Scattered Tree
- Regional Open Space
- Arterial Road
- Connector Street (potential future arterial)
- Connector Street
- Railway Line & Station
- Private Golf Course
- Lakes/Waterbodies (indigenous planting to support habitat)
- Green Wedge Land
- Future Urban Area
- Existing Urban Area
- Future Grade Separated Crossing (developed initially at grade)
- Proposed Future Grade Separated Road Link (subject to investigation)

Scale: 1:20000m @ A3
1:10000m @ A1
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4.4.3 BIODIVERSITY OBJECTIVES

- To plan for the long term conservation management of areas of significant native vegetation and fauna habitat in accordance with the Cranbourne East Native Vegetation Precinct Plan,
- To plan for biodiversity values to be retained within the precinct as they function in part to link habitats across the landscape and provide a focus for revegetation activities, and
- To enhance the biodiversity of the area to provide habitat and ecological connectivity throughout the precinct as the area develops in accordance with the Cranbourne East PSP.

4.4.4 IMPLEMENTATION

The objectives for biodiversity are met by implementation of all the following:

- » *Plan 11: Biodiversity Plan,*
- » *Section 4.4.6: Biodiversity Conservation Planning and Design Guidelines,*
- » *Clause 52.16 of the Casey Planning Scheme,*
- » *Section 4.4.7: The Cranbourne East Native Vegetation Precinct Plan,*
- » *Table 5: Street Tree Planting, and*
- » *Table 9: Open Space Planning and Design Guidelines.*

4.4.5 BIODIVERSITY CONSERVATION PLANNING AND DESIGN GUIDELINES

Actions

The following planning and design guidelines **should** be met

- Street trees and public open space landscaping should contribute to habitat for indigenous fauna species in particular arboreal animals and avifauna (birds),
- The use of indigenous trees in streets and open space reserves and the use of lower level indigenous planting should be considered where it can be demonstrated that it is compatible with the planning and design guidelines for street tree planting and delivery of public open space,
- Planting of drainage areas should promote the establishment of habitat suitable for local species such as the Growling Grass Frog (*Litoria raniformis*), and
- Linear parks, water ways and widened road reserves should support the connection of areas capable of supporting flora and fauna habitat through appropriate design and planting.

Conditions

The following planning and design guidelines **must** be met to the satisfaction the Department of Sustainability and Environment and the Responsible Authority:

- The management of subdivisional and open space drainage to support the health of vegetation nominated for protection in the Cranbourne East Native Vegetation Precinct Plan, and
- Design requirements for fauna habitat where a planning permit includes areas of public open space and /or drainage works.

4.4.6 CRANBOURNE EAST NATIVE VEGETATION PRECINCT PLAN

This is the Cranbourne East Native Vegetation Precinct Plan (“NVPP”) listed under the Schedule to Clause 52.16 of the Casey Planning Scheme.

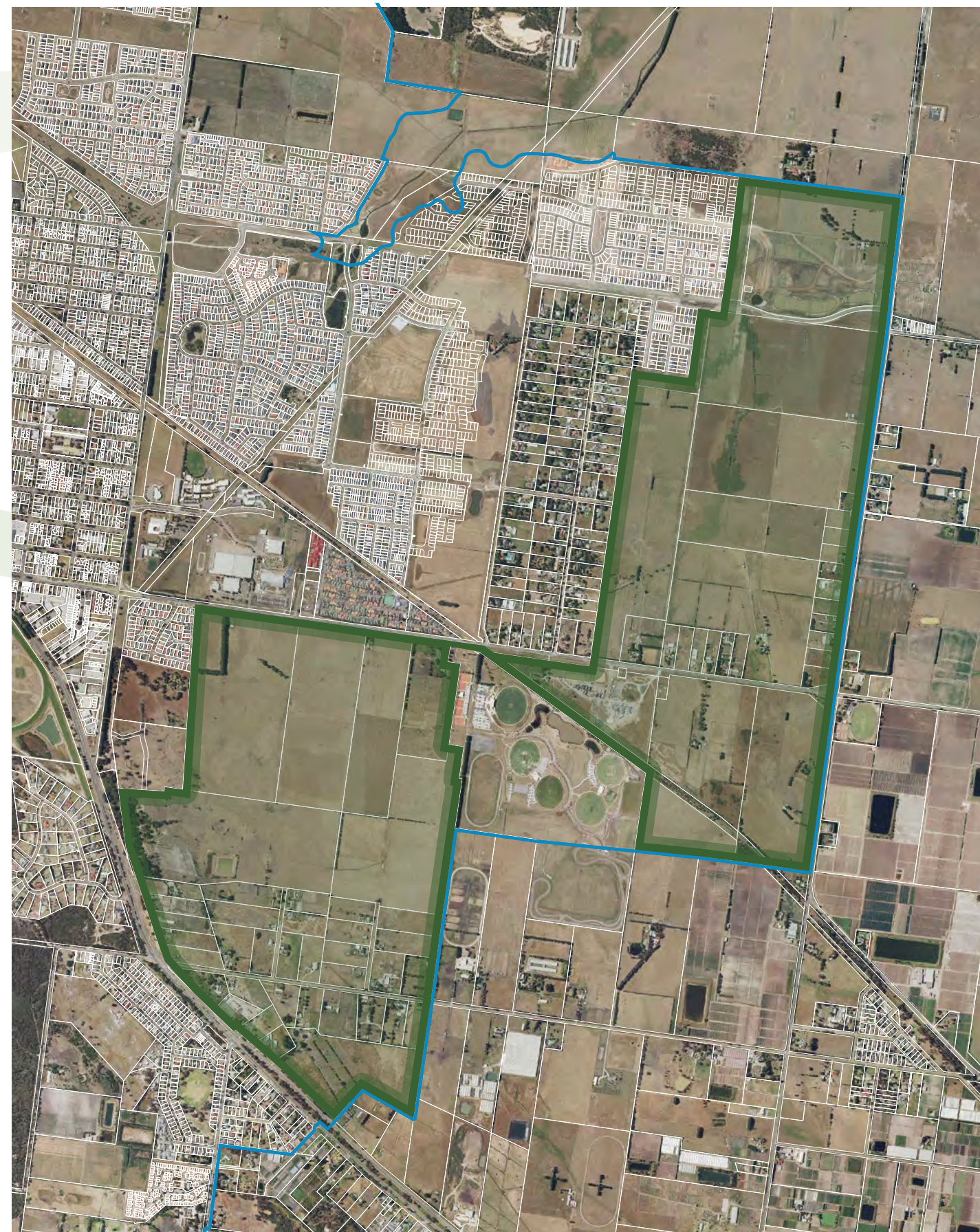
The Cranbourne East NVPP applies to all land shown in Map 1.

Purpose

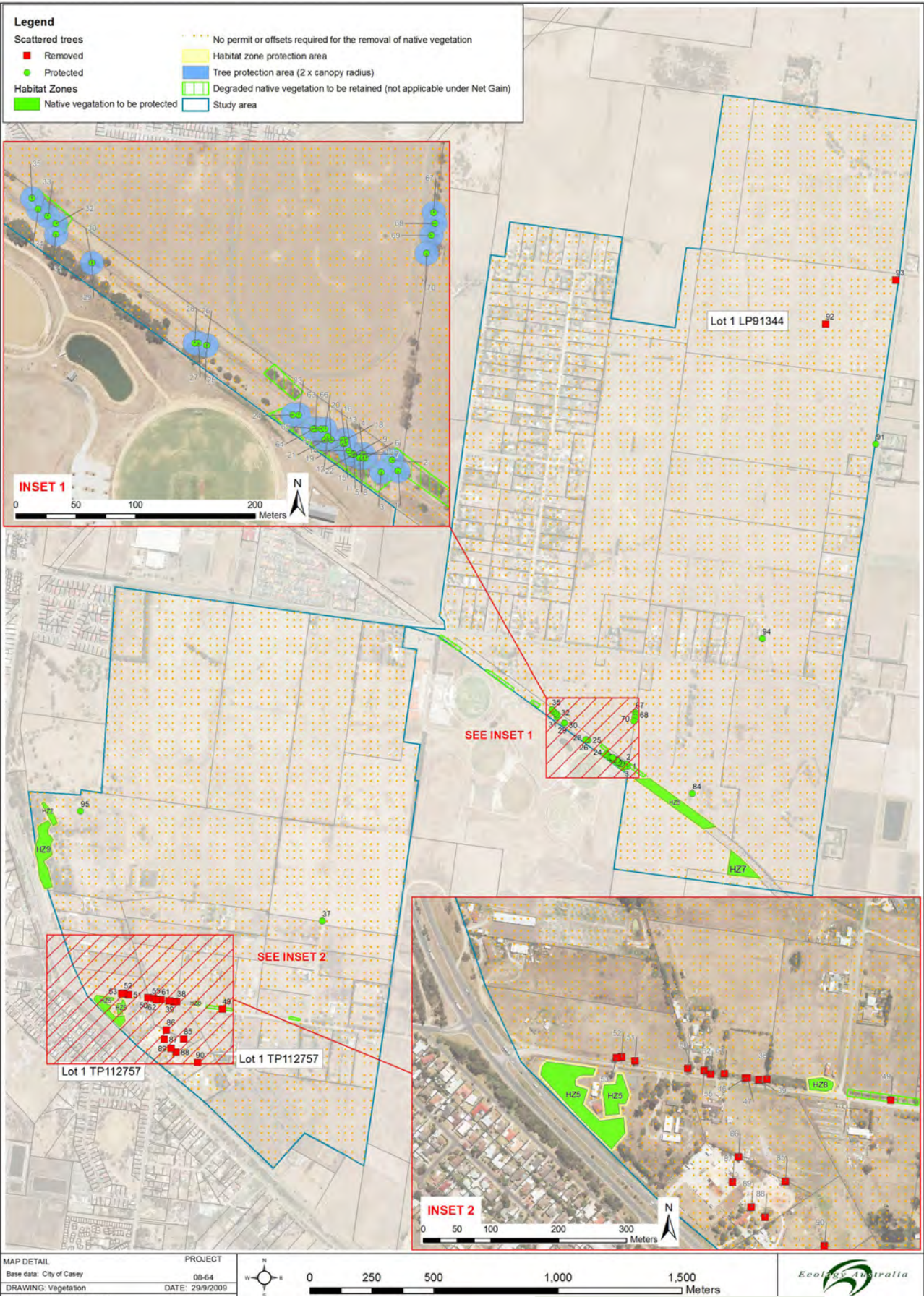
The purpose of the Cranbourne East NVPP is to:

- Specify the native vegetation to be protected and the native vegetation that can be removed, destroyed or lopped,
- Ensure that areas set aside to protect native vegetation are managed to conserve ecological values in accordance with the Cranbourne East PSP,
- Ensure that the removal, destruction or lopping of native vegetation specified to be protected is consistent with conserving the ecological values of these areas and is in accordance with the three-step approach to net gain as set out in Victoria’s Native Vegetation Management – a Framework for Action 2002,
- Set out the works or other necessary actions required to offset the removal, destruction or lopping of native vegetation, and
- Streamline the planning approvals process through a precinct wide landscape approach to native vegetation protection and management.

Map 1: Area to which the Native Vegetation Precinct Plan applies



Map 2: Native vegetation to be protected



Vegetation Protection Objectives

- To manage the vegetation to be retained for conservation and allow for passive recreation on the periphery of habitat zones, without damaging native vegetation, such as walking and cycling tracks,
- To protect and manage the habitat zones and scattered trees identified to be retained as they represent the genetic lineage of site-adapted local plant species and communities, provide existing habitat for indigenous fauna species, function to link habitat across the landscape, and provide a focus for revegetation activities.

[Note: Grassy Woodland (EVC 175) and Swamp Scrub (EVC 53) are both endangered in the Gippsland Bioregion as little of these ecological vegetation classes remain and Heathy Woodland (EVC 48) is of Least Concern in the Gippsland Bioregion],

- To improve the long-term health and habitat value of the native vegetation specified to be retained and identified offset areas, and
- To provide for the protection of revegetation areas of native vegetation as required by the Responsible Authority.

Native vegetation to be protected

The native vegetation to be protected is described in NVPP Tables 1 and 2 and shown in Map 2.

Native vegetation which can be removed, destroyed or lopped.

The native vegetation described in NVPP Table 3 and shown in Map 2 may be removed, destroyed or lopped subject to the requirements and conditions set out under "The works, payment or other actions necessary to offset the removal, destruction or lopping of native vegetation" being met.

NVPP Table 1: Habitat Zones to be protected

Property Details	EVC Description	Habitat Zone Id	Size	Conservation Significance	Conservation Status
Lot No. 1, TP830754, 1555 South Gippsland Highway, Cranbourne East	Heathy Woodland (48)	HZ 2	0.21 ha	Low	Least Concern
		HZ9	1.22 ha	Low	Least Concern
Lot 1, TP112755, 1240 Ballarto Road, Cranbourne East	Heathy Woodland (48)	HZ 5	0.95 ha	Low	Least Concern
Lot 1, TP599870, Parish of Cranbourne, 365 Tooradin Station Road, Tooradin, (Leongatha Rail Reserve)	Heathy Woodland (48)	HZ 6	1.27 ha	High	Endangered
Lot 1, TP548555, 365 Tooradin Station Road, Tooradin	Grassy Woodland (175)	HZ 7	0.75 ha	High	Endangered
Lot 7, LP51866, 1 Adrian Street, Cranbourne East	Swamp Scrub (53)	HZ 8	0.06 ha	High	Endangered

NVPP Table 2: Scattered Trees to be protected

Tree ID	Species	EVC	Conservation Status	Conservation Significance	X - latitude	Y - longitude
Property Details: Lot 1 PS600134 - 280 Berwick Cranbourne Road, Clyde						
67	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 10.6	E145 19 03.3
68	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 10.9	E145 19 03.3
69	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 11.2	E145 19 03.2
70	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 11.7	E145 19 03.0
84	<i>Eucalyptus pauciflora ssp. pauciflora</i>	175 Grassy woodland	Endangered	High	S38 07 21.3	E145 19 12.5
Property Details: Lot 1 TP599870 - 365 Tooradin Station Road, Tooradin						
1	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 17.6	E145 19 01.9
2	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 17.3	E145 19 01.7
3	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 17.6	E145 19 01.3
4	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 17.2	E145 19 00.7
5	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 17.2	E145 19 00.6
6	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 17.2	E145 19 00.8
7	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 17.1	E145 19 00.7
8	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 17.1	E145 19 00.7
9	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 17.1	E145 19 00.4
10	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 17.1	E145 19 00.4
11	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 17.1	E145 19 00.4
12	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 17.1	E145 19 00.4
13	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 17.1	E145 19 00.3
14	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 17.0	E145 19 00.2
15	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 16.8	E145 19 00.0
16	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 16.8	E145 19 00.1
17	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 16.7	E145 19 00.0
18	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 16.7	E145 19 00.1
19	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 16.8	E145 19 00.0
20	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 16.8	E145 18 59.6
21	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 16.7	E145 18 59.4
22	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 16.6	E145 18 59.5
23	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 16.0	E145 18 58.5
24	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 16.0	E145 18 58.3
25	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 14.1	E145 18 55.4
26	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 14.1	E145 18 55.4
27	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 14.0	E145 18 55.1
28	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 14.0	E145 18 55.0
29	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 11.8	E145 18 51.5
30	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 11.8	E145 18 51.5
31	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 11.0	E145 18 50.3
32	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 10.7	E145 18 50.3
63	<i>Eucalyptus fulgens</i>	175 Grassy woodland	Endangered	High	S38 07 16.4	E145 18 59.1
64	<i>Eucalyptus fulgens</i>	175 Grassy woodland	Endangered	High	S38 07 16.4	E145 18 59.0
65	<i>Eucalyptus fulgens</i>	175 Grassy woodland	Endangered	High	S38 07 16.4	E145 18 59.3
66	<i>Eucalyptus fulgens</i>	175 Grassy woodland	Endangered	High	S38 07 16.4	E145 18 59.4
33	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 10.5	E145 18 50.0
34	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 10.3	E145 18 49.7
35	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 10.0	E145 18 49.5

NVPP Table 2: Scattered Trees to be protected (continued)

Tree ID	Species	EVC	Conservation Status	Conservation Significance	X - latitude	Y - longitude
Property Details: Lot 1 TP830754 - 1555 South Gippsland Highway, Cranbourne East						
95	<i>Eucalyptus viminalis ssp. pryoriana</i>	48 Heathy Woodland	Least Concern	Low	S38 07 22.2	E145 17 31.4
Property Details: Lot 1 TP854043 - 305 Berwick Cranbourne road, Clyde North (Lot 1)						
94	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 07 01.3	E145 19 24.5
Property Details: Lot 2 LP91344 - 305 Berwick Cranbourne Road, Clyde North (Lot 2)						
91	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy woodland	Endangered	High	S38 06 36.1	E145 19 43.9
Property Details: Plan PC360550 - 11 Nelson Street, Cranbourne East						
37	<i>Eucalyptus camaldulensis</i>	175 Grassy woodland	Endangered	High	S38 07 37.1	E145 18 10.8

NVPP Table 3: Scattered Trees which can be removed, destroyed or lopped.

Tree ID	Species	EVC	Conservation Status	Conservation Significance	X - latitude	Y - longitude
Property Details: Ballarto Road Reserve, Cranbourne East						
38	<i>Eucalyptus cephalocarpa</i>	48 Heathy woodland	Least Concern	Low	S38 07 47.3	E145 17 46.5
39	<i>Eucalyptus cephalocarpa</i>	48 Heathy woodland	Least Concern	Low	S38 07 47.3	E145 17 46.0
46	<i>Eucalyptus cephalocarpa</i>	48 Heathy woodland	Least Concern	Low	S38 07 47.2	E145 17 45.2
47	<i>Eucalyptus cephalocarpa</i>	48 Heathy woodland	Least Concern	Low	S38 07 47.2	E145 17 45.3
49	<i>Eucalyptus viminalis ssp. pryoriana</i>	48 Heathy woodland	Least Concern	Low	S38 07 48.4	E145 17 54.0
50	<i>Eucalyptus viminalis ssp. pryoriana</i>	48 Heathy woodland	Least Concern	Low	S38 07 46.7	E145 17 41.7
51	<i>Eucalyptus viminalis ssp. pryoriana</i>	48 Heathy Woodland	Least Concern	Low	S38 07 46.3	E145 17 38.5
52	<i>Eucalyptus viminalis ssp. pryoriana</i>	48 Heathy Woodland	Least Concern	Low	S38 07 46.1	E145 17 37.7
53	<i>Eucalyptus viminalis ssp. pryoriana</i>	48 Heathy Woodland	Least Concern	Low	S38 07 46.1	E145 17 37.4
55	<i>Eucalyptus viminalis ssp. pryoriana</i>	48 Heathy woodland	Least Concern	Low	S38 07 46.8	E145 17 42.7
61	<i>Eucalyptus viminalis ssp. pryoriana</i>	48 Heathy woodland	Least Concern	Low	S38 07 47.0	E145 17 43.9
62	<i>Eucalyptus viminalis ssp. pryoriana</i>	48 Heathy woodland	Least Concern	Low	S38 07 47.0	E145 17 43.1
Property Details: Lot 1 TP107088 - 1635 South Gippsland Highway, Cranbourne East						
85	<i>Eucalyptus viminalis ssp. pryoriana</i>	48 Heathy Woodland	Least Concern	Low	S38 07 52.2	E145 17 47.5
86	<i>Eucalyptus viminalis ssp. pryoriana</i>	48 Heathy Woodland	Least Concern	Low	S38 07 52.2	E145 17 47.5
87	<i>Eucalyptus viminalis ssp. pryoriana</i>	48 Heathy Woodland	Least Concern	Low	S38 07 51.0	E145 17 44.7
88	<i>Eucalyptus viminalis ssp. pryoriana</i>	48 Heathy Woodland	Least Concern	Low	S38 07 52.2	E145 17 44.3
89	<i>Eucalyptus viminalis ssp. pryoriana</i>	48 Heathy Woodland	Least Concern	Low	S38 07 53.9	E145 17 46.2
Property Details: Lot 1 TP112757 - 1645 South Gippsland Highway, Cranbourne East						
90	<i>Eucalyptus viminalis ssp. pryoriana</i>	48 Heathy Woodland	Least Concern	Low	S38 07 53.4	E145 17 45.4
Property Details: Lot 2 LP91344 - 305 Berwick Cranbourne Road, Clyde North (Lot 2)						
92	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy Woodland	Endangered	High	S38 06 20.3	E145 19 35.9
93	<i>Eucalyptus ovata ssp. ovata</i>	175 Grassy Woodland	Endangered	High	S38 06 14.7	E145 19 47.5

NVPP Table 4: Offset requirements for scattered trees which can be removed, destroyed or lopped

Property Details	EVC no & name	Conservation Significance	Loss of VLots	Loss of LOTs	Loss of MOTs	Loss of Small Trees	Offset to be achieved Recruitment / Vegetation	Offset to be achieved Protection of Trees
Lot 1 TP107088, 1635 South Gippsland Highway, Cranbourne East	48 Heathy Woodland	Low	-	-	5, (Tree No. 85, 86, 87, 88, 89)	-	50	-
Lot 1 TP112757, 1645 South Gippsland Highway, Cranbourne East	48 Heathy Woodland	Low	-	-	1, (Tree No. 90)	1, (Tree No. 47)	10	-
Ballarto Road Reserve, Cranbourne East	48 Heathy Woodland	Low	-	-	11, (Tree No. 38, 39, 49, 50, 51, 52, 53, 55, 61, 62)	-	348	-
Lot 1 LP91344, 305 Berwick-Cranbourne Road, Clyde North	175 Grassy Woodland	High	-	1, (Tree No. 92)	-	1, (Tree No. 93)	150	-

This table includes scattered trees not in a patch and large and very large old trees within patches of native vegetation (VLOT = very large old tree, LOT = large old tree, MOT = medium old tree).

The Works, Payment or Other Actions Necessary to Offset the Removal, Destruction or Lopping of Native Vegetation

The following requirements must be met.

- Prior to any subdivision;
- With respect to all land identified in Table 3:

The following requirements set out the general conditions for meeting offset requirements:

- A planning permit must not be granted to use or subdivide the land or to construct a building or carry out works until the Offset Plan in a and with Table 4 has been prepared to the satisfaction of the Department of Sustainability and Environment and the approval of the responsible authority;
- The landowner must enter into an agreement with the Responsible Authority prior to subdivision or building and works which provides for the management and ongoing protection of the offset in accordance with the approved Offset Plan and must include, as appropriate:
 - the Offset Plan;
 - the on-going land use commitments to manage the offset primarily for protection of the native vegetation values in perpetuity;
 - specification of the identity of the responsible monitoring authority and the reporting responsibilities of the land owner; and
 - specification of the terms in which the responsible authority can visit and monitor the site.

If the Offset Plan varies from the Cranbourne East Native Vegetation Precinct Plan (NVPP): Background Report, Golder Associates, June 2009., proposed changes will need to be to the satisfaction of DSE.

Offsets must commence within one year of the approval of the Offset Plan (except for Very High Conservation Significance vegetation where initiation of the Offset Plan must commence prior to vegetation removal. Implementation must be completed according to the schedule of works in the Offset Plan, to the satisfaction of the Responsible Authority.

Planning Permit Conditions and Requirements for Subdivision, Buildings and Works

- A planning permit granted for subdivision, buildings and works that relates to the removal and/or protection of native vegetation must include the following conditions as appropriate:
 - All earthworks must be undertaken in a manner that will minimise soil erosion and adhere to Construction Techniques for Sediment Pollution Control (EPA 1991).
 - No grazing may occur on native vegetation to be protected (unless it is permitted by an approved Management Plan approved by the responsible authority).
 - Soil must not be stockpiled on native vegetation that is to be protected.
 - Only indigenous plants of local provenance may be used in revegetation works.
 - Any native vegetation to be removed (in accordance with this NVPP) must be clearly marked on site.
 - The placement of fill must be designed to ensure that it does not compromise native vegetation to be protected.
 - A Vegetation Protection Zone should be established at a distance of twice the canopy of each scattered tree and more than 2 metres from native vegetated areas identified to be protected.
- Prior to commencement of any works during the construction phase, a highly visible vegetation protection fence must be erected around the Vegetation Protection Zone.

Exemptions

The exemptions at Clause 52.16-4 of the Casey Planning Scheme, native vegetation may be removed, destroyed or lopped to the minimum extent necessary without approval if any of the following apply:

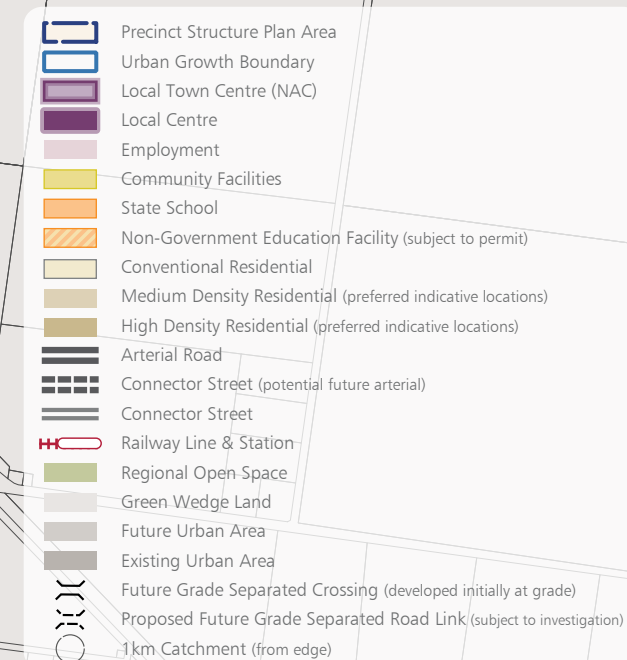
- There are no additional exemptions for Cranbourne East Native Vegetation Precinct Plan applies. There are no other exemptions.

Procedures for the collection of any payment

No payments are necessary or specified.

Reference Documents

Cranbourne East Native Vegetation Precinct Plan (NVPP): Background Report, Golder Associates, June 2009.



4.5 EMPLOYMENT AND ACTIVITY CENTRES

4.5.1 EMPLOYMENT AND ACTIVITY CENTRES OBJECTIVES

The objectives for employment areas and activity centres are:

- To increase opportunities for employment in the precinct and the broader region, in order to:
 - Move away from historical trend of the 'dormitory suburb',
 - Promote a quality of life and community participation,
 - Reduce transport costs for households and businesses, and
 - Reduce the imposition of demand on existing metropolitan road and rail transport infrastructure.
- To facilitate the development of services and small offices located within and at the edge of the local town centres,
- To encourage the development of home based businesses,
- To boost local employment opportunities through:
 - The development of a network of local town centres (NACs) and local centres providing a mix of retail, commercial, leisure and community services activities,
 - The establishment of community services network within each neighbourhood along with the provision of other activities (such as childcare centres, mixed business and convenience stores, retirement and aged care facilities), which provide employment as well as services to the local community, and
 - The creation of a new employment area with exposure to the South Gippsland Highway (the Ballarto Road Employment Area).
- To make provision for the development of retail, commercial, leisure and other support services required to meet the needs of local workers, business and industry.

Objectives specific to the Ballarto Road Employment Area are to:

- To promote a wide range of office, industrial/commercial and warehouse land uses to maximise job densities,
- To take advantage of exposure to passing traffic on the South Gippsland Highway, for the promotion of commercial enterprise,
- To minimise the potential amenity impacts between existing industrial activity and adjoining residential development,
- To manage vehicle traffic impacts associated with industrial development south of Ballarto Road so it does not adversely impact upon the amenity of residential neighbourhoods,
- To plan for a diverse range of building types and uses to contribute to a vibrant and viable economic environment,
- To promote the establishment of fine grained business and industrial activities, office/warehouse, restricted retail and a combination of service industries and related business services,
- To locate appropriate uses on Ballarto Road to provide a complimentary interface with the Adrian Street Local Town Centre as well as exposure to the South Gippsland Highway,
- To provide for other land uses and services to meet the day to day needs of workers (where these can not be readily provided in the abutting Adrian Street Local Town Centre), and
- To provide for alternative mixed use development which does not undermine the primacy of commercial and industrial land uses in the employment area in accordance with the planning and design requirements of this section.

4.5.2 IMPLEMENTATION

The objectives for employment areas are met by implementation of all the following:

- » *Plan 5: Future Urban Structure Plan,*
- » *Plan 11: Employment Areas and Activity Centres Plan,*
- » *Table 10: Ballarto Road Employment Area Planning and Design Guidelines, and*
- » *Table 11: Activity Centres Hierarchy.*

The Urban Design Framework is designed to guide the integrated development of the Local Town Centres (NACs). The precise boundary of the Business 1 Zone and Mixed Use Zone will be determined by the approved Urban Design Framework Plans. In the case of the Selandra Rise Local Town Centre, and urban design framework is not required to be prepared. In this case, the precise boundary between the Business 1 Zone and the Mixed Use will be determined by the planning permit for the first stage of the development.

4.5.3 ACTIVITY CENTRE PLANNING AND DESIGN GUIDELINES

The following planning and design guideline *should* be met when preparing a Local Town Centre Urban Design Framework.

- The provisions regarding preparation of an urban design framework do not apply to the Selandra Rise Local Town Centre as an urban design framework is not required to be prepared for that centre. However, the first permit for the centre must include all development shown in Figure 1 as being the Stage 1 of the local town centre. An application for a permit for the first stage of the Selandra Rise Local Town Centre should address, as appropriate, the material set out below.

An urban design framework should:

- Be generally consistent with the role and function for the centre set out in Table 11: Hierarchy of Activity Centres,
- Address the whole of the site,
- Address any relevant design guidelines prepared by the Victorian Government or Casey City Council,
- Demonstrate an appropriate design response that addresses the Local Town Centre Urban Design Framework Guidelines outlined in Table 12 and the relevant Indicative Local Town Centre Plan illustrated in either figure 3, 4 or 5,
- Explain how the Framework responds to feedback received following consultation with infrastructure agencies including VicRoads and the Department of Transport or landowners within the centre,
- Show how the proposal relates to existing or approved development in the area,
- Include an overall landscape concept for the centre,
- Set out guidelines to positively address environmental sustainability including integrated water management and energy conservation,
- Set out provisions for car parking including the location and design of car parking areas and car parking rates for proposed uses within the centre,
- Set out design guidelines for the provision of advertising signs,
- Set out arrangements for the provision of service areas for deliveries and waste disposal including access for larger vehicles and measures to minimise the impact on the amenity of the centre and adjoining neighbourhoods, and
- Show how opportunities for medium and higher density housing and future commercial expansion can be incorporated into the centre.

Table 10: Ballarto Road Employment Area Planning and Design Guidelines

PLANNING AND DESIGN GUIDELINES
GENERAL DESIGN RESPONSE
<ul style="list-style-type: none"> Applications should address any design guidelines or urban design framework adopted for the area by the City of Casey. Applications for future subdivision should demonstrate a diversity of lot sizes through out the precinct, as appropriate. Key view lines / sight lines into and out of the area should be considered and incorporated in the overall design. Manufacturing and industrial uses with adverse amenity potential should be located suitable distances from residential interfaces and incorporate management measures. Accessible and safe pedestrian and cycling links to, from and within the employment area, should be linked to the broader walking and cycling network.
OPEN SPACE
<ul style="list-style-type: none"> Development fronting public open space should be well articulated and facilitate passive surveillance with windows, balconies, and, where possible direct pedestrian access and egress points. Development consisting of uses typical to a highway service centre including convenience retail, restricted, petrol filling station and convenience restaurant could be located with an emphasis on exposure to the intersection of South Gippsland Highway and Casey Fields Boulevard. The interface between the southern retarding basin and the employment area south of Ballarto Road should be treated to create a high amenity visually attractive environment conducive to development of land uses with higher density employment (such as office warehouse or smaller office developments).
INTERFACES
<ul style="list-style-type: none"> Quality and fine grained façade articulation should be incorporated to all facades fronting roads and open spaces (presentation of long blank walls with minimal visual interest is not acceptable). Facades should be activated to provide visual interest through the introduction of elements such as windows, display areas entrances and/or other architectural treatments. Two storey built form elements are encouraged along all road frontages. Sites in prominent locations, particularly on corners intersecting with an arterial or connector road, should be developed with significant buildings or landmark structures (taller forms such as 3 storeys or higher are encouraged). Building design to corner sites should consider the relationship to the buildings proposed for the Adrian Street Local Town Centre. The visibility of side and rear blank facades from roads should be minimised by a combination of appropriate architectural detailing, siting and orientation and integrated landscape treatments. Corner sites, where streets meets an arterial road, are considered to be critical development sites and are not suitable sites for standard single storey fast food outlets. Potential amenity impacts at the interface between the industrial precinct and residential development should be minimised through the provision of appropriately designed landscaping treatments, setbacks and buffers. Landscaping of the interface building setbacks and any car parking should be of a high standard and is considered to be an important element to complement the built form design. Car parking located between the street and buildings should be landscape d to a high standard, integrating with other landscaping and providing space for successful long term canopy tree planting. Land use located in proximity to the Adrian Street Local Town Centre should be complimentary to the centre and could include the development of professional suites, show rooms and office. Development in this area should reflect a higher standard of design and built form.
SIGNS
<ul style="list-style-type: none"> Signs should be within the built form of the building structures.
WATER SENSITIVE URBAN DESIGN
<ul style="list-style-type: none"> All building proposals should include an integrated stormwater and servicing solution. WSUD solutions which contribute to greener and more viable landscapes should be considered. WSUD solutions such as large storage tanks, which can supplement the potable water needs of industry, should be considered.
SERVICE AREAS
<ul style="list-style-type: none"> Service areas should be internalised wherever possible. Where internalised service areas cannot be provided, they should be secured and screened at the rear of buildings. Where service areas are accessible from car parks, they should present a well designed and secure façade to public areas.

Table 11: Hierarchy of Activity Centres

ACTIVITY CENTRE	ROLE AND FUNCTION
Cranbourne East Rail Station Local Town Centre Neighbourhood Activity Centre <i>Note: this activity centre is external to the PSP Area, however its role and function is outlined as it is important to understand the development of the precinct.</i>	<ul style="list-style-type: none"> Indicative retail floorspace 5,000 to 7,000 square metres. Provides a supermarket and a variety of shops, offices with opportunities for a tavern and hotel and conference accommodation. Will anchor activity along the main street that connects Berwick-Cranbourne Road to the train station. Forms part of a larger Transit Oriented Development built around the planned site for the Cranbourne East rail station and the development of the RACE. The development of this area also allows for opportunities to maximise the intensity of development on this important parcel of land. The centre would have capacity for around 6,000sq m of typical NAC floor space. The opportunity exists in the medium to longer term to develop additional retailing that compliments the cultural, tertiary education and leisure uses of the area.
Selandra Rise Local Town Centre Medium Neighbourhood Activity Centre	<ul style="list-style-type: none"> Indicative retail floorspace 6,000 to 8,000 square metres. Indicative office floorspace of 2,000 square metres. Anchored by one full line supermarket with potential for a small secondary retail anchor and supported by specialty shops. Make provision for public health and other community facilities, private medical and allied medical services. (Refer Cranbourne East DCP). Include provision for the development of non-retail commercial uses which include office and small office/home office development. Council operated Business Accelerator to provide economic development/business support services as part of the sustainability hub proposal.
Adrian Street Local Town Centre Small Neighbourhood Activity Centre	<ul style="list-style-type: none"> Indicative retail floorspace 4,000 to 5,000 square metres. Indicative office floorspace of 2,000 square metres. Anchored by a smaller format supermarket, medical rooms, commercial office and a provision of local shops and conveniences. Has a strong relationship with and plays an important role in the development of the Ballarto Road Employment Area and commercial hub for the southern portion of the precinct. The centre will also provide important services for residents living in the northern part of the Botanic Ridge and Junction Village area. The centre has a strong bike and walking link to the proposed State Primary School and active open spaces.
Morison Road Local Town Centre Small Neighbourhood Activity Centre	<ul style="list-style-type: none"> Indicative retail floorspace 4,000 to 5,000 square metres. Indicative office floorspace of 2,000 square metres. Anchored by a smaller format supermarket, medical rooms and small provision of local shops and conveniences. Has strong links and interface with the Blue Hills Rise retirement village and aged care facility. A main street to promote community interaction.
Western Community Hub Local Neighbourhood Activity Centre	<ul style="list-style-type: none"> General store and related services.
Eastern Community Hub Local Neighbourhood Activity Centre	<ul style="list-style-type: none"> General store and related services.

Table 12: Activity Centre Urban Design Framework Guidelines

PLANNING AND DESIGN GUIDELINES		
PUBLIC REALM		
<ul style="list-style-type: none"> Footpaths widths should be sufficient to provide for pedestrian and mobility access, outdoor dining and gathering spaces along the 'main street' frontages. The main street through the centre should be generally in accordance with the NAC Connector Road Cross Section in the Transport and Movement Element. The design of building frontages should incorporate the use of a consistent covered walkway or verandah to provide for weather protection. Screening of centralised waste collection points should minimise amenity impacts with adjoining areas and users of the centre. Long building facades and continuous concrete walls, with minimal articulation, activity or visual interest should be avoided. Sites in prominent locations should be identified for significant buildings or landmark structures. The NAC urban structure should provide a permeable network of streets, walkways, and public spaces that provide linkages throughout the centre. Bus stops should be provided in accordance with the Department of Transport Guidelines. Urban art should be incorporated into the design of the public realm. Streets, public spaces and car parks should be well lit with pedestrian-friendly light. Street furniture should be located in areas that are highly visible and close to or adjoining pedestrian desire lines/gathering spaces and designed to add visual interest to the centre. Public toilets should be provided in locations which safe and accessible. The design of each building should contribute to a cohesive and legible character for the centre as a whole. Street facades and any exposed side or rear facades should be visually rich and interesting. All public spaces should respond appropriately to the design for mobility access principles. 		
DESIGN RESPONSE		
<ul style="list-style-type: none"> Building design guidelines should set out building heights, materials and architectural features. A street network through the centre should facilitate safe pedestrian and cycling links to the surrounding area. The design of the centre should facilitate development with a high degree of community interaction and provide a vibrant and viable mix of retail, recreation and community cohesion. The built form should be aligned with the property boundary of the "main street". Development should complement and enhance the character of the surrounding area by responding appropriately to key visual cues associated with the topography of the site and surrounds. Development should not adversely impact on the amenity of the surrounding residential areas. Key view lines / sight lines into and out of the activity centre should be incorporated in the overall design. Plant structures on the roof should be included within roof lines or otherwise hidden. 		
INTERFACE WITH THE ROAD NETWORK		
<ul style="list-style-type: none"> The design of buildings should respond appropriately to the street network. Landscaping of the interface should be of a high standard and is considered to be an important element to complement the built form design. Corner sites, where the "main street" meets an arterial road: <ul style="list-style-type: none"> Should be designed to provide built form that anchors the "main street" to the arterial road, this could be achieved through the use of a substantial multi-storey building located at the corner, Should not be developed for standard single storey fast food outlets, and, Should be developed to have a ground floor retail floor space component to the "main street" frontage. 		
DISTRIBUTION OF USES		
<ul style="list-style-type: none"> Retail and other commercial or community anchors or secondary anchors within the centre should be located diagonally opposite one another across the 'main street' to promote 'desire lines' that maximises pedestrian movement along the length of the street. Building frontages should address the 'main street' to maximise exposure to passing trade, promote active frontages and pedestrian inter-action. Shopfronts should have varying widths and floor space areas to promote a diversity of trading opportunities throughout the centre. Flexible floorspace (including floor to ceiling heights) should be incorporated into building design to enable localised non-retail commercial uses to be integrated within the 'main street'. A variety of employment and business opportunities should be planned through the provision of community, retail and non-retail commercial activities. A mix of uses should include retail and office at ground level, and office, non-retail commercial and residential above ground level. Childcare, medical centres and specialised accommodation (e.g. aged care/nursing home, student accommodation, serviced apartments) should be located within the NAC and at the edge of centre. The creation of land use precincts within centre is encouraged to facilitate the clustering of uses. For example a 'medical precinct' where similar or synergistic uses should be sited together to promote stronger trading patterns. 		
SUPERMARKET AND OTHER 'LARGE BOX USES'		
<ul style="list-style-type: none"> Supermarkets should not impede the movement of people within the centre. Supermarkets or large floorplate shops with a frontage to the 'main street' should use clear glazing to allow view lines in the store from the street. (Planning permits for buildings and works should condition against the use of white washed windows and excessive window advertising). The design and siting of supermarkets and other 'large box uses' should provide an appropriate response to the entire public domain. This includes but is not limited to car parking areas, pedestrian routes and streets. The supermarket and secondary anchors should have frontage that directly addresses the 'main street' or town square so that the use integrates with and promotes activity within the 'main street'. Secondary access to the supermarket from car parking areas should be considered where it facilitates convenient trolley access and does not diminish the role primary access from the 'main street'. Small access malls that address a supermarket / other 'large box uses' can form part of the overall design. Such access malls may have a limited number of internalised shops. The primary access to these malls must be from the 'main street'. 		
'MAIN STREET' TRAFFIC		
<ul style="list-style-type: none"> Traffic should be managed to ensure pedestrian safety. The 'main street' cross section must priorities pedestrian movement and be generally in accordance with the NAC Cross Section shown in Section 4.6.3. A speed environment of 40km/h should be designed for. Bus stops located within the 'main street' should be designed in accordance with the Department of Transport Guidelines and provided in locations which promote the efficient movement of pedestrians and vehicular traffic to the satisfaction of the Director of Public Transport. An urban design framework must be accompanied by a Traffic Impact Assessment Report ("TIAR") to the satisfaction of the responsible authority. The TIAR, including functional layout plans and a feasibility / concept road safety audit must be to the satisfaction of VicRoads for any connection to an existing or potential future VicRoads arterial road. 		
PARKING		
<ul style="list-style-type: none"> Parking areas should be located centrally to the site and to the rear and or side of street based retail frontages. Vehicle parking areas should be designed to ensure passive surveillance and public safety through adequate positioning and lighting. Vehicle parking areas should be designed to accommodate flexible uses. The retail strips should include on-street parking provided as either parallel or angled parking to encourage short stay parking. Vehicle parking ingress and egress crossovers should be grouped and limited. Vehicle park ingress and egress and car parking areas including heavy vehicle movements should be designed to limit the pedestrian/vehicle conflict. Heavy vehicle movements (i.e. loading and deliveries) should be located to the rear and or side of street based retail frontages. Vehicle parking areas should provide for appropriate landscaping and planting of canopy trees consistent with the City of Casey Landscape Policy. Bicycle parking should be provided within the street network in highly visible locations and close to pedestrian desire lines and gathering spaces. 		
PUBLIC TRANSPORT		
<ul style="list-style-type: none"> Access to bus stops within the 'main street' should be designed to incorporate the public transport network outlined in Plan 13 in consultation with the Department of Transport. Public transport infrastructure / facilities should be planned for commuter friendly / convenient locations within the activity centre. 		
SERVICE AREAS (E.G. LOADING AND WASTE STORAGE)		
<ul style="list-style-type: none"> A UDF should demonstrate that the provision of service areas are internalised wherever possible. Where internalised service areas cannot be provided, they should be secured and screened at the rear of buildings. Where service areas are accessible from car parks, they should present a well designed and secure façade to public areas. 		
SUSTAINABLE DESIGN		
<ul style="list-style-type: none"> Where required, an Urban Design Framework UDF should be accompanied by a sustainability management plan which demonstrates how the following considerations have been incorporated into the design of the NAC: <ul style="list-style-type: none"> Use of energy efficient design and construction methods is encouraged for the development of all buildings. Water Sensitive Urban Design such as integrated stormwater retention and reuse (e.g. toilet flushing and landscape irrigation) is encouraged. Access and mobility, safe pedestrian movement should be demonstrated within and to and from the centre. Shade and shelter through a combination of landscape treatment and built form features. Natural ventilation of all buildings to reduce the reliance on plant equipment for heating and cooling. Passive solar orientation in the configuration and distribution of built form (e.g. north south orientation of the 'main street' to maximise natural daylight to shop fronts) is encouraged. Waste collection points should be grouped to maximise opportunities for recycling and reuse. Solar energy for water and space heating, electricity generation and internal and external lighting is encouraged. How in ways other than those listed above, the design of built form reduces greenhouse gas emissions associated with the occupation and the ongoing use of buildings 		

Figure 1: Indicative Selandra Rise Local Town Centre Plan

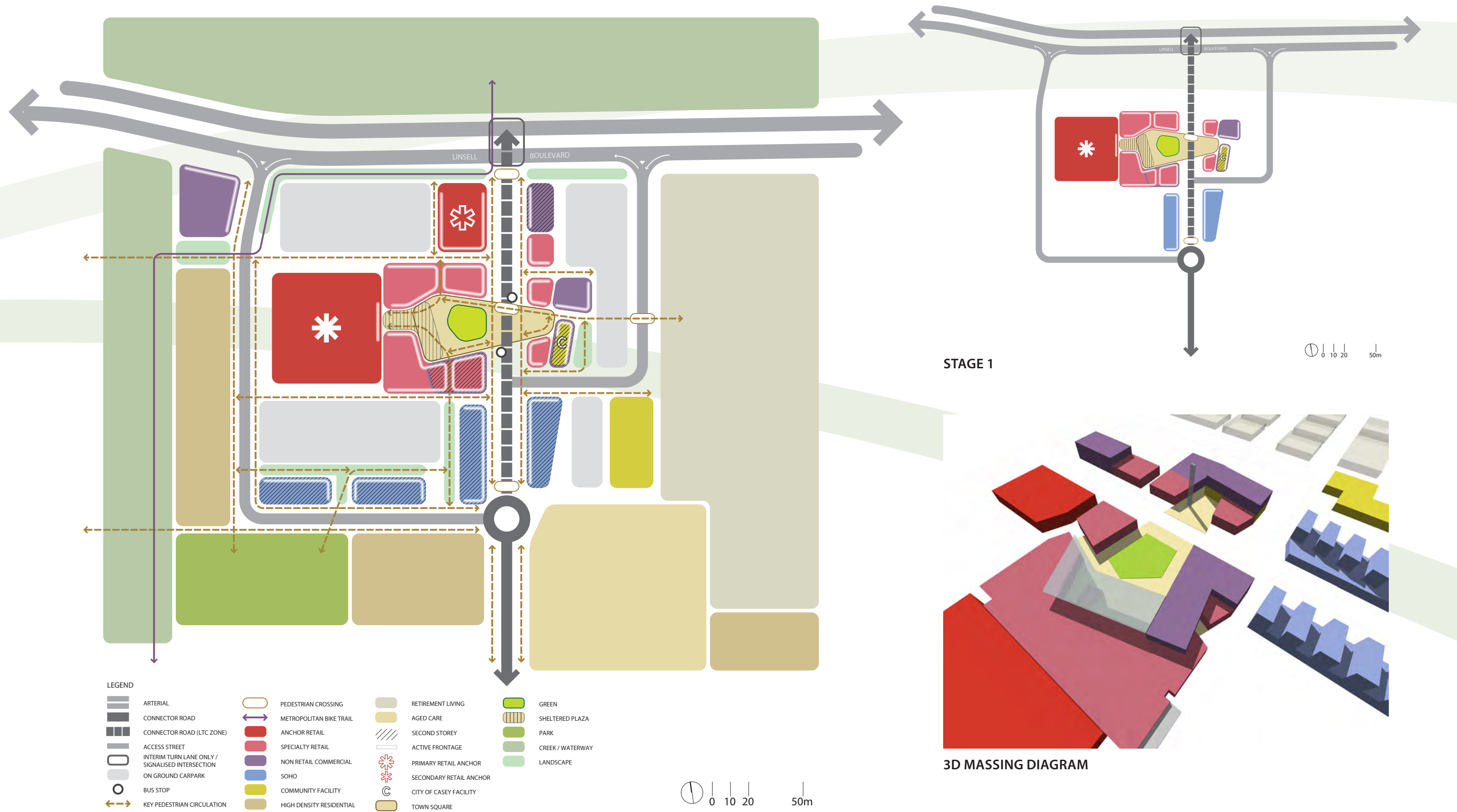


Figure 2: Indicative Adrian Street Neighbourhood Activity Centre Plan

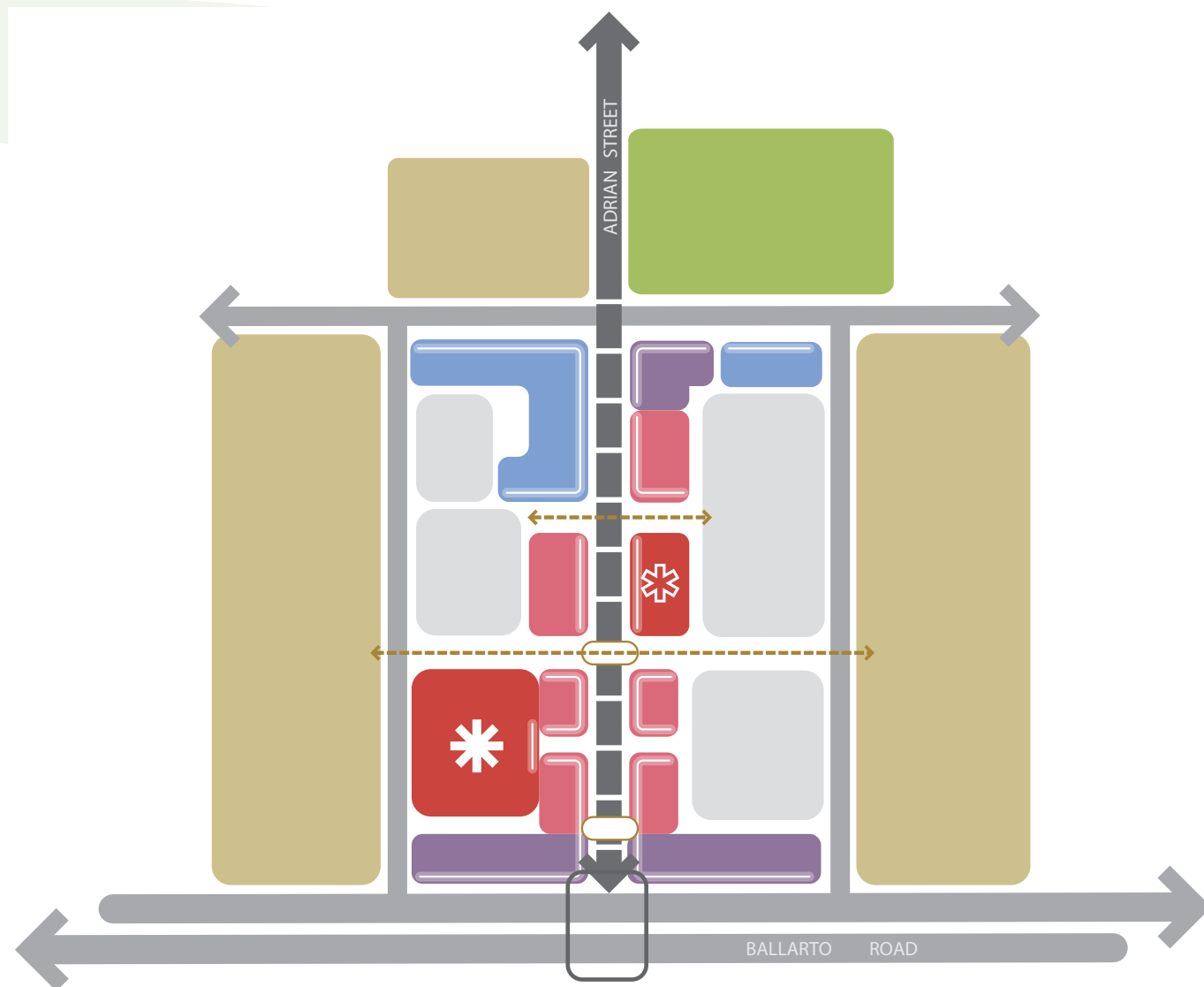
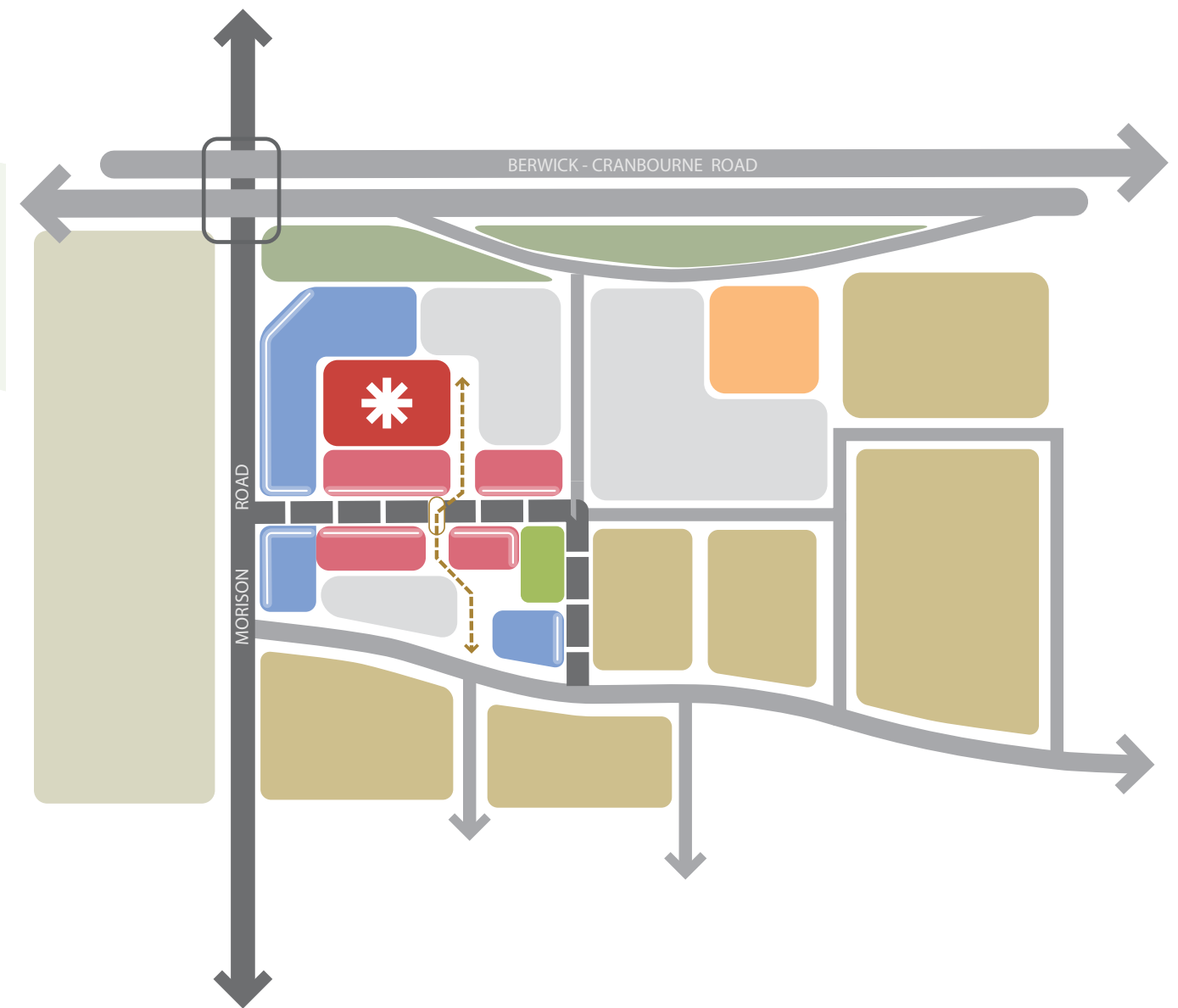


Figure 3: Indicative Morison Roads Neighbourhood Activity Centre Plan



LEGEND

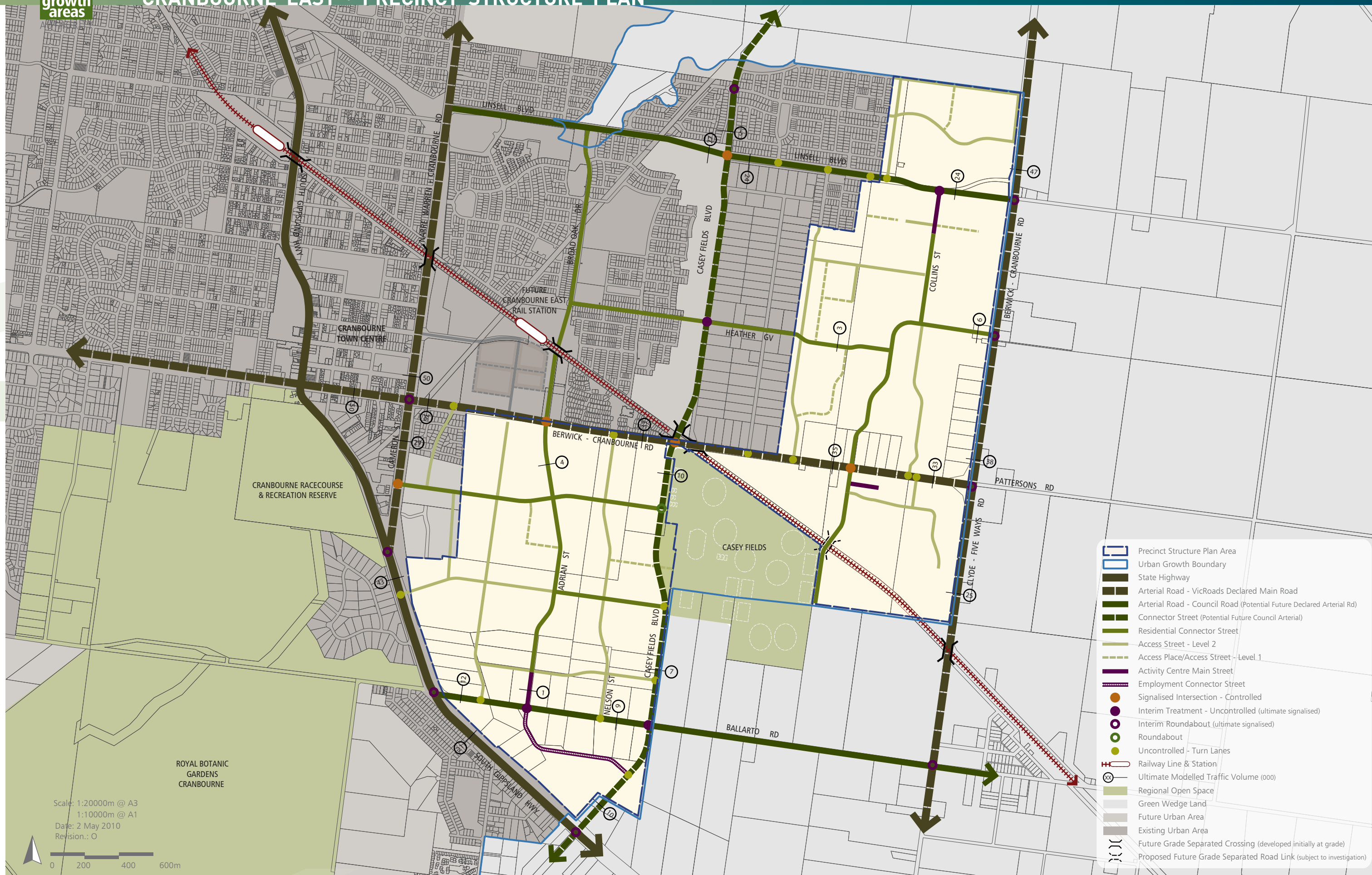
ARTERIAL	PEDESTRIAN CROSSING	RETIREMENT LIVING	GREEN
CONNECTOR ROAD	METROPOLITAN BIKE TRAIL	AGED CARE	SHELTERED PLAZA
CONNECTOR ROAD (LTC ZONE)	ANCHOR RETAIL	SECOND STOREY	PARK
ACCESS STREET	SPECIALTY RETAIL	ACTIVE FRONTAGE	CREEK / WATERWAY
INTERIM TURN LANE ONLY / SIGNALISED INTERSECTION ON GROUND CARPARK	NON RETAIL COMMERCIAL	PRIMARY RETAIL ANCHOR	LANDSCAPE
BUS STOP	SOHO	SECONDARY RETAIL ANCHOR	
KEY PEDESTRIAN CIRCULATION	COMMUNITY FACILITY	CITY OF CASEY FACILITY	
	HIGH DENSITY RESIDENTIAL	TOWN SQUARE	

Note: Figure 2 provides an indicative illustration of the main organising elements of the centre. Where there is a question of interpretation it is intended that the requirements of table 15 prevail.

LEGEND

ARTERIAL	PEDESTRIAN CROSSING	RETIREMENT LIVING	GREEN
CONNECTOR ROAD	METROPOLITAN BIKE TRAIL	AGED CARE	SHELTERED PLAZA
CONNECTOR ROAD (LTC ZONE)	ANCHOR RETAIL	SECOND STOREY	PARK
ACCESS STREET	SPECIALTY RETAIL	ACTIVE FRONTAGE	CREEK / WATERWAY
INTERIM TURN LANE ONLY / SIGNALISED INTERSECTION ON GROUND CARPARK	NON RETAIL COMMERCIAL	PRIMARY RETAIL ANCHOR	LANDSCAPE
BUS STOP	SOHO	SECONDARY RETAIL ANCHOR	
KEY PEDESTRIAN CIRCULATION	COMMUNITY FACILITY	CITY OF CASEY FACILITY	
	HIGH DENSITY RESIDENTIAL	TOWN SQUARE	

Note: Figure 3 provides an indicative illustration of the main organising elements of the centre. Where there is a question of interpretation it is intended that the requirements of table 15 prevail.



- Precinct Structure Plan Area
- Urban Growth Boundary
- State Highway
- Arterial Road - VicRoads Declared Main Road
- Arterial Road - Council Road (Potential Future Declared Arterial Rd)
- Connector Street (Potential Future Council Arterial)
- Residential Connector Street
- Access Street - Level 2
- Access Place/Access Street - Level 1
- Activity Centre Main Street
- Employment Connector Street
- Signalised Intersection - Controlled
- Interim Treatment - Uncontrolled (ultimate signalised)
- Interim Roundabout (ultimate signalised)
- Roundabout
- Uncontrolled - Turn Lanes
- Railway Line & Station
- Ultimate Modelled Traffic Volume (000)
- Regional Open Space
- Green Wedge Land
- Future Urban Area
- Existing Urban Area
- Future Grade Separated Crossing (developed initially at grade)
- Proposed Future Grade Separated Road Link (subject to investigation)

4.6 TRANSPORT AND MOVEMENT

4.6.1 TRANSPORT AND MOVEMENT OBJECTIVES

The objectives for transport and movement are:

- To establish an integrated and sustainable transport network that reduces dependency on the use of private vehicles, maximises access to public transport and encourages walking and cycling within and between neighbourhoods,
- To establish a bus network that connects the future Cranbourne East rail station and the existing Cranbourne railway station with key destinations such as:
 - Residential neighbourhoods,
 - Local Town Centres,
 - Schools, and
 - Parks and ovals.
- To establish a local street network that provides for the safe and efficient operation of bus movements,
- To support the early provision of local bus services and walking and cycling links through the sequential staging of the development of the area,
- To establish an 800 metre spaced grid of arterial roads and connector streets so that more than 95% of all households can be located within 400 metres of a potential public transport service,
- To support the early provision of safe and efficient pedestrian and bicycle paths and links which are connected to the key features of the precinct and which link to regional networks outside the precinct,
- To provide for the landscaping of roads, transport and movement corridors to help create safe and attractive urban environments,
- To plan for the future grade separation of all proposed access and service crossings of the Leongatha Rail Reserve and protect options for future use of the reserve,
- To ensure that the transport network provides for the safe and efficient operation of the existing and future arterial road network both in the short and long term,
- To limit access to arterial roads to protect their function and safety, and
- To ensure that the transport network is planned to provide for the safety of all road users.

4.6.2 IMPLEMENTATION

The objectives for Transport and Movements are met by implementation of all the following:

- » *Plan 5: Future Urban Structure Plan,*
- » *Plan 12: Road Network Plan,*
- » *Plan 13: Public Transport Plan,*
- » *Plan 14: Walking and Trails Plan,*
- » *Table 13: Road Hierarchy, and*
- » *Planning and design guidelines set out in 4.6.3 including the road and street cross sections.*

4.6.3 PLANNING AND DESIGN GUIDELINES

ROAD AND RAIL GRADE SEPARATION

The following planning and design guideline **must** be met:

- Development must plan for the future grade separation of the Leongatha rail line by ensuring that sufficient is land aside to accommodate grade separated road and rail intersections. Land areas to be set aside are to be to the satisfaction of the Responsible Authority (determined in consultation with the Department of Transport (including VicTrack) and VicRoads).

CONNECTOR STREET CONSTRUCTION

The following planning and design guidelines **must** be met:

- Connector streets (including any culverts) must be constructed by development proponents as part of the subdivision works (prior to the issue of a statement of compliance for the relevant stage).

CASEY FIELDS BOULEVARD (BETWEEN BERWICK-CRANBOURNE ROAD AND BALLARTO ROAD)

Development with an abuttal to Casey Fields Boulevard should meet the following planning and design guidelines to the satisfaction of the Responsible Authority:

- Residential lots fronting Casey Fields Boulevard should be accessed via internal loop roads or in a manner that allows vehicles to enter and exit in a forward manner, and
- Where sideage or no internal loop road is provided 4.5m tree reserve must be provided to the satisfaction of the responsible authority.

CONSTRUCTION OF INTERSECTIONS WITH ARTERIAL ROADS

The following planning and design guidelines **must** be met:

- All intersections with existing or proposed arterial roads as shown on Plan 5 and 13 must be designed, constructed and controlled to the satisfaction of the Roads Corporation and the municipal council, with the main design objective being to allow for a minimum 10-year design life having regard to the anticipated traffic growth on the affected roads from both the ultimate development of the PSP area and the external traffic.
- Staging of subdivisions must provide for the timely connection of road links between properties and to the arterial road network to support timely transport connections (i.e. bus, cycle and walking), to the satisfaction of the responsible authority.
- Land must be provided for right of way flaring at all arterial road connections to existing and proposed arterial roads for the ultimate design of the intersection in accordance with VicRoads' standards.

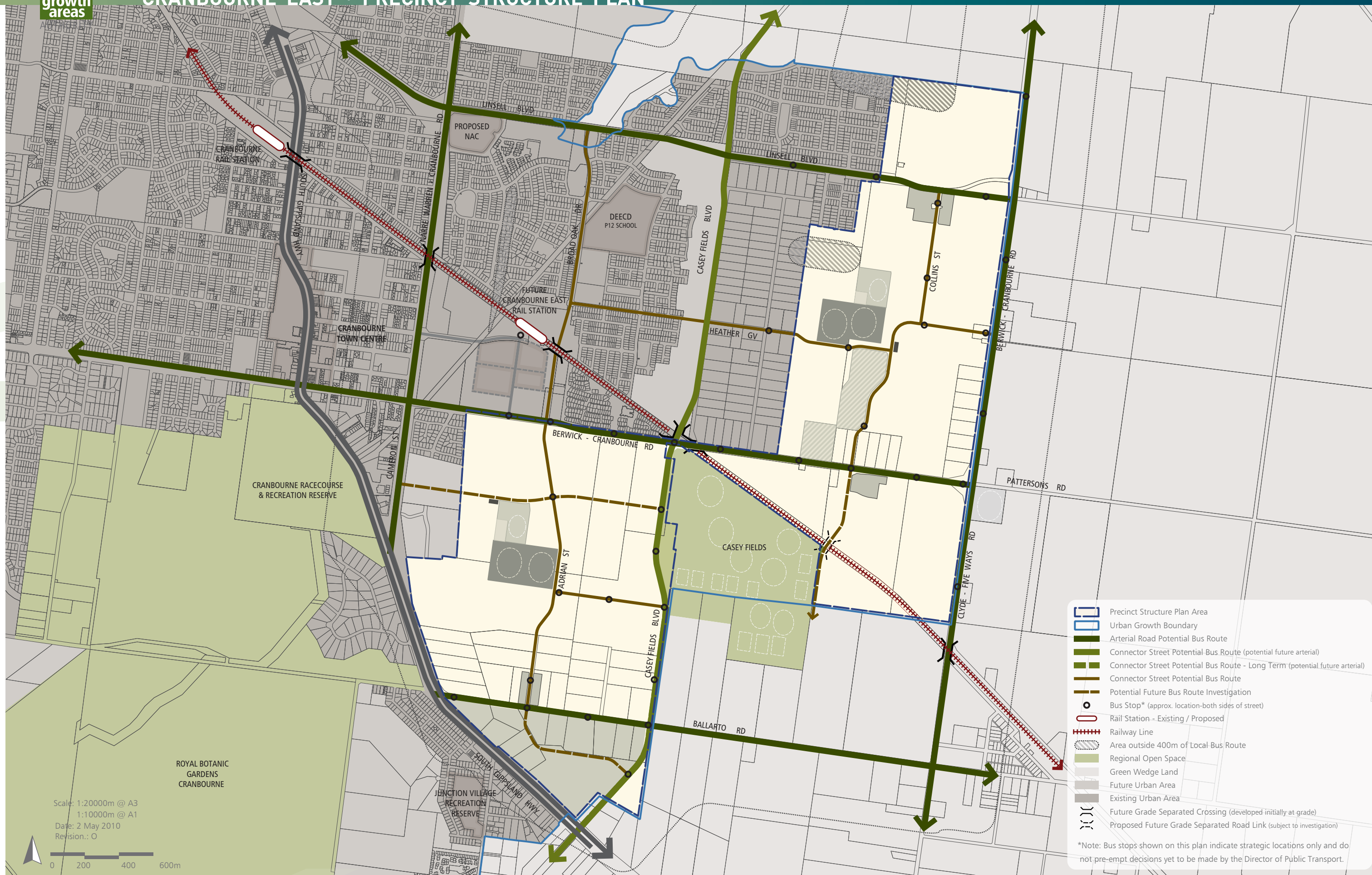
The following planning and design guideline **should** be met:

- Prior to the preparation of planning permit applications which require access to an arterial road as shown on Plan 5 and 13, permit applicants, should consult with VicRoads to determine the appropriate extent of Right of Way flaring required for the intersection.

ARTERIAL ROAD CONNECTIONS – GENERAL REQUIREMENTS

The following planning and design guidelines **should** be met:

- Residential lots fronting the arterial road network should be accessed via internal loop roads rather than by a service road,
- Access to streets connecting to an arterial road should be considered within the context of the requirements of traffic management, safety, urban design and its urban environment,
- Intersection design should provide for the safe and efficient operation of the arterial road and the side road to the satisfaction of VicRoads, with consideration to vehicle speeds, vehicle queues and conflicting movements on approach to and departure from the intersection, and
- Access points (temporary and permanent) to the existing or proposed arterial road network beyond those shown on Plan 13, will be considered on a case by case basis in accordance with VicRoads access management policies.



Scale: 1:20000m @ A3
1:10000m @ A1
Date: 2 May 2010
Revision: 0

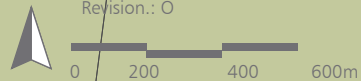


Table 13: Road Hierarchy

ROAD/STREET	EXISTING RESERVE	ULTIMATE RESERVE	ACCESS MANAGEMENT POLICY	INDICATIVE VEHICLES PER DAY (VPD)	TRAFFIC LANES	MEDIAN	SPEED LIMIT	BUS COMPATIBLE	PROPERTY ACCESS AND PARKING	TREE RESERVE	ON ROAD CYCLE LANE	SHARED PATH	RESPONSIBILITY
South Gippsland Highway	60m	60m	AMP 2 limited access (Urban)	45,000	4	Yes	80 km/h	V-line/local	No	No	Yes	Yes*	VicRoads
Berwick-Cranbourne Road (Clyde Road)	20m	50m	AMP 2 limited access (Urban) - Under investigation by VicRoads	32,000	4	Yes	80 km/h	Local	No	No, unless sideage or no internal loop road	Yes	Yes*	VicRoads
Berwick –Cranbourne Road (East – West)	20m-41m	41mm	AMP 2 Limited Access (Urban)	32,000	4	Yes	80 km/h	Local	No	No, unless sideage or no internal loop road	Yes	Yes*	VicRoads
Linsell Boulevard	17m-61m	34m	AMP 2 limited access (Urban)	20,000	4	Yes	80km/h	Local	No	No, unless sideage or no internal loop road	Yes	Yes*	Council (Potential VicRoads in future)
Casey Fields Boulevard	0m	34m	Mixed Function Not applicable – Potential future AMP 2 limited access (urban)	10,000	2 (potential 4)	Yes	70-80 km/h	Local	No - managed property access only	No, unless sideage or no internal loop road	Yes	No	Council
Narre Warren-Cranbourne Road/ Cameron Street	70m	70m**	AMP 2 limited access (urban)	50,000	6	Yes	80 km/h	PPTN/Local	No	No	Yes	Yes	VicRoads
Heather Grove (through Collison Estate)	20m	22m	Not applicable	Up to 3,000	2	No	50km/h	Local	Yes	No	Yes	No	Council
Ballarto Road	20m	34m	AMP 2 limited access (urban)	5000, greater if UGB is extended	4	Yes	80km/h	Local	No	No, unless sideage or no internal loop road	Yes	Yes*	Council (Potential VicRoads in future)
Residential Boulevard Connector Street	0m	32m	Not applicable	Up to 7,000	2	Yes	50 km/h	Local	Yes	No	Yes	No	Council
Residential Connector Street	0m	25m	Not applicable	Up to 7,000	2	No	50 km/h	Local	Yes	No	Yes	No	Council
Residential Connector Street with shared landscaped trail	0m	31m	Not applicable	Up to 7,000	2	No	50 km/h	Local	Yes	No	Yes	Yes	Council
Access Street Level 2	0m	23m	Not applicable	Up to 3,000	2	No	50 km/h	No	Yes	No	Yes**	No	Council
Access Street Level 2 with shared landscaped trail	0m	29m	Not applicable	Up to 3,000	2	No	50 km/h	No	Yes	No	Yes**	Yes	Council
Access Place/Access Street level 1	0m	16m	Not applicable	Up to 1,000	2	No	50 km/h	No	Yes	No	No	No	Council
Access Place with shared landscaped trail	0m	22m	Not applicable	Up to 1,000	2	No	50 km/h	No	Yes	No	No	Yes	Council
Activity Centre Main Street (connector street)	0m	22m	Not applicable	Up to 7,000	2	No	50 km/h	Local	Yes	No	No	No	Council
Employment Connector Street	0m	25m	Not applicable	Up to 5,000	2	No	50 km/h	Local	Yes	No	Yes	No	Council
Employment Access Street	0m	23m	Not applicable	Up to 2,000	2	No	50 km/h	Local	Yes	No	No	No	Council

* if no frontage roads

** for 23m reserve width only



BUS NETWORK

The following planning and design guidelines **must** be met:

Where a requirement for a bus route or bus stop has been nominated by the Director of Public Transport:

- Bus stop facilities must be constructed by development proponents as part of the subdivision works (prior to the issue of a statement of compliance for the relevant stage) in accordance with the requirements of the Public Transport Guidelines for Land Use and Development to the satisfaction of the Director of Public Transport,
- The facilities must be provided with DDA compliant direct and safe pedestrian access connected to an existing pedestrian/shared path, and
- The facilities must be designed as an integral part of activity centres and activity generating land uses, such as schools, sports fields and employment areas.

SHARED PATHWAYS

The following planning and design guidelines **must** be met:

- Walking and cycling networks must be constructed by development proponents as part of subdivision works (prior to the issue of a statement of compliance for the relevant stage),
- Footpaths and cycle paths must be provided with increased width in areas expecting high foot traffic such as near schools, community centres, activity centres, rail station and public transport interchanges and bus stops,
- Pedestrian and cycle crossings must be provided at all relevant street intersections and along key desire lines, particularly along the interface between the residential and employment areas and in the vicinity of bus stops,
- Bicycle lane connections must be designed to allow for the smooth transition between on-road and off-road facilities,
- Pedestrian and cycle paths must be designed and located to maximise passive surveillance and provided in wide road verges with safe crossing points at key locations, and
- The local street network must be designed to provide permeable and safe routes for walking and cycling to activity centres, community facilities, parks and open space, major trail networks and public transport.

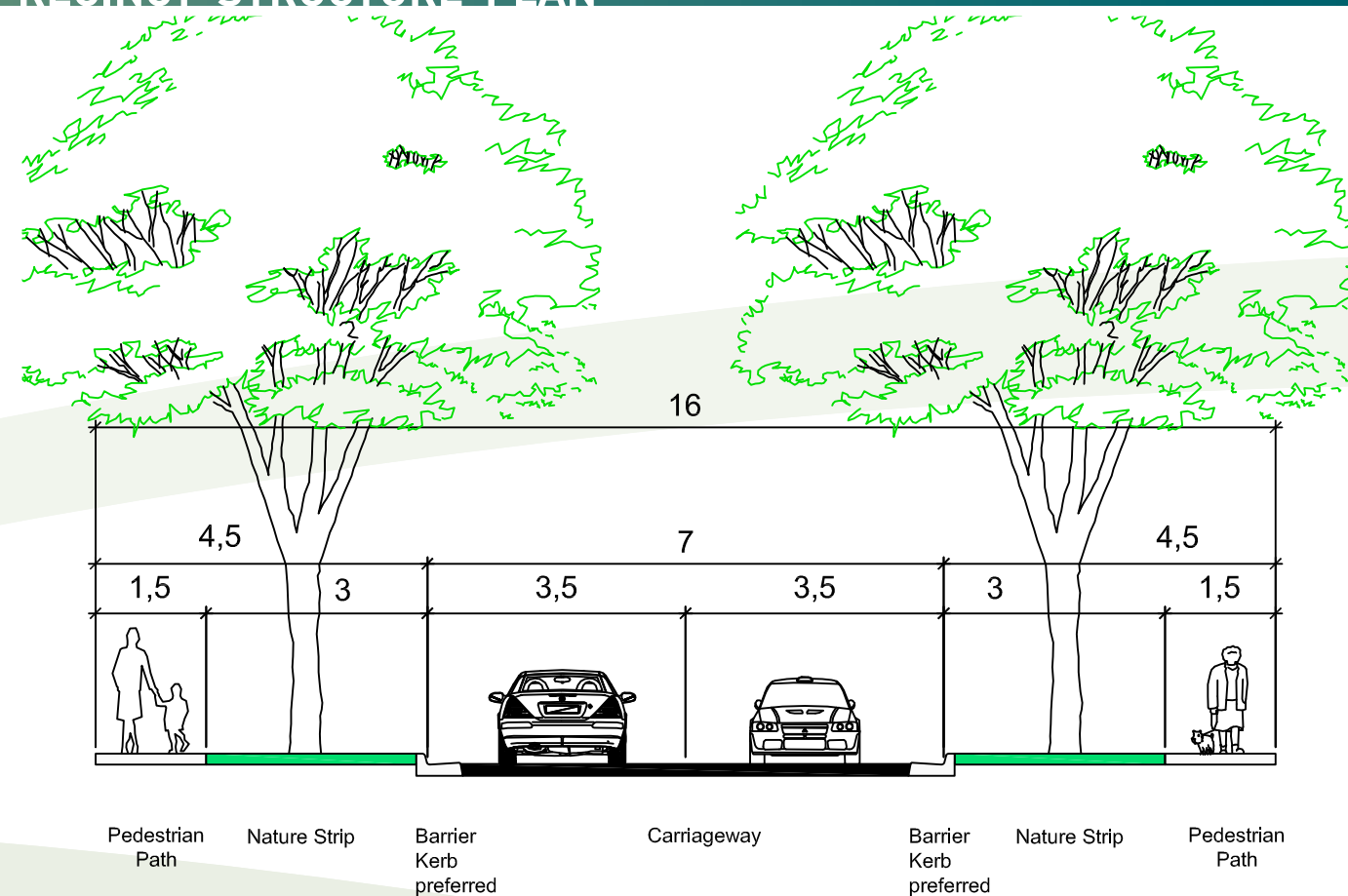
ROAD AND STREET CROSS SECTIONS

The following planning and design guidelines **must** be met to the satisfaction of the responsible authority.

- Lots must be designed to address the road network to the satisfaction of the Responsible Authority, and
- In accordance with the Casey Arterial Road Tree Strategy (or as amended), a tree reserve must be provided to any arterial road where an internal loop road (or service road) is not provided.

The following planning and design guidelines **should** be met to the satisfaction of the responsible authority.

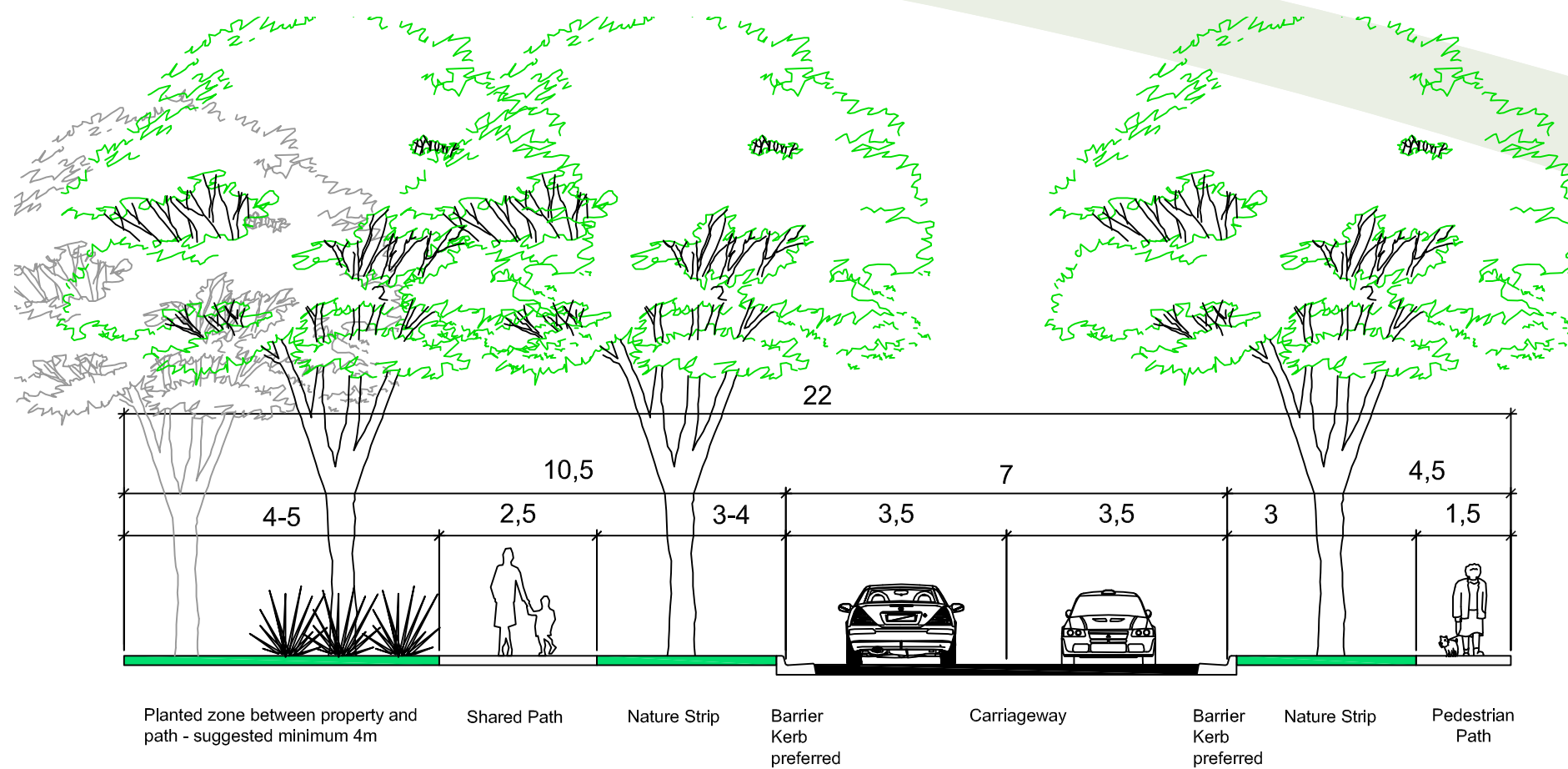
- Road and street cross sections should be generally consistent with the cross sections included in this Element,
- Where possible common trenching should be used to accommodate underground utilities and services, and
- Where additional land is required for utilities and services, in connector streets, additional trenching may be provided within the 2.3m parking lane.



Cross Section 1

Access Place/Access Street Level 1

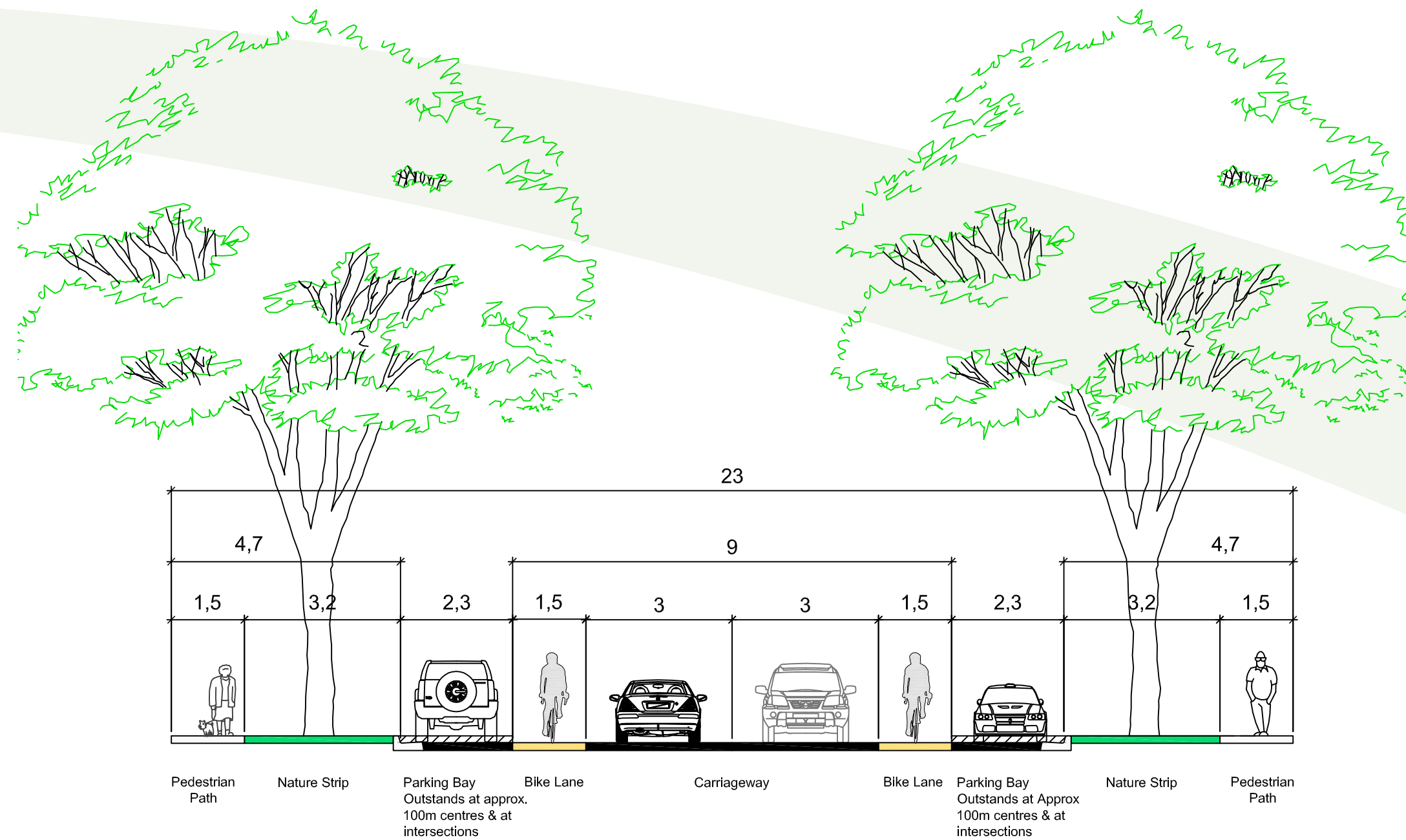
16m <1000VPD



Cross Section 2

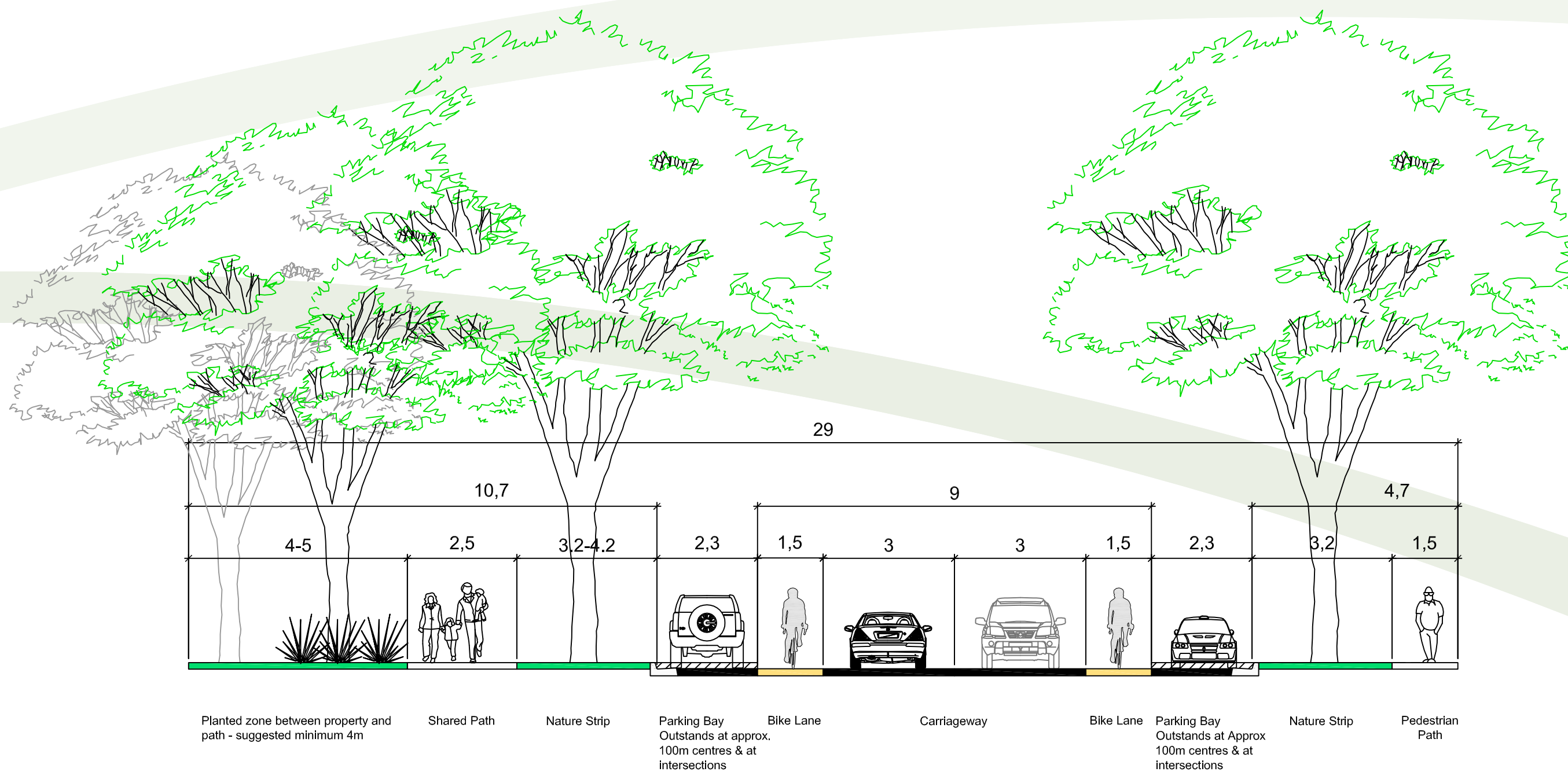
Access Place/Access Street Level 1 with Shared Landscape Trail

22m <2000VPD



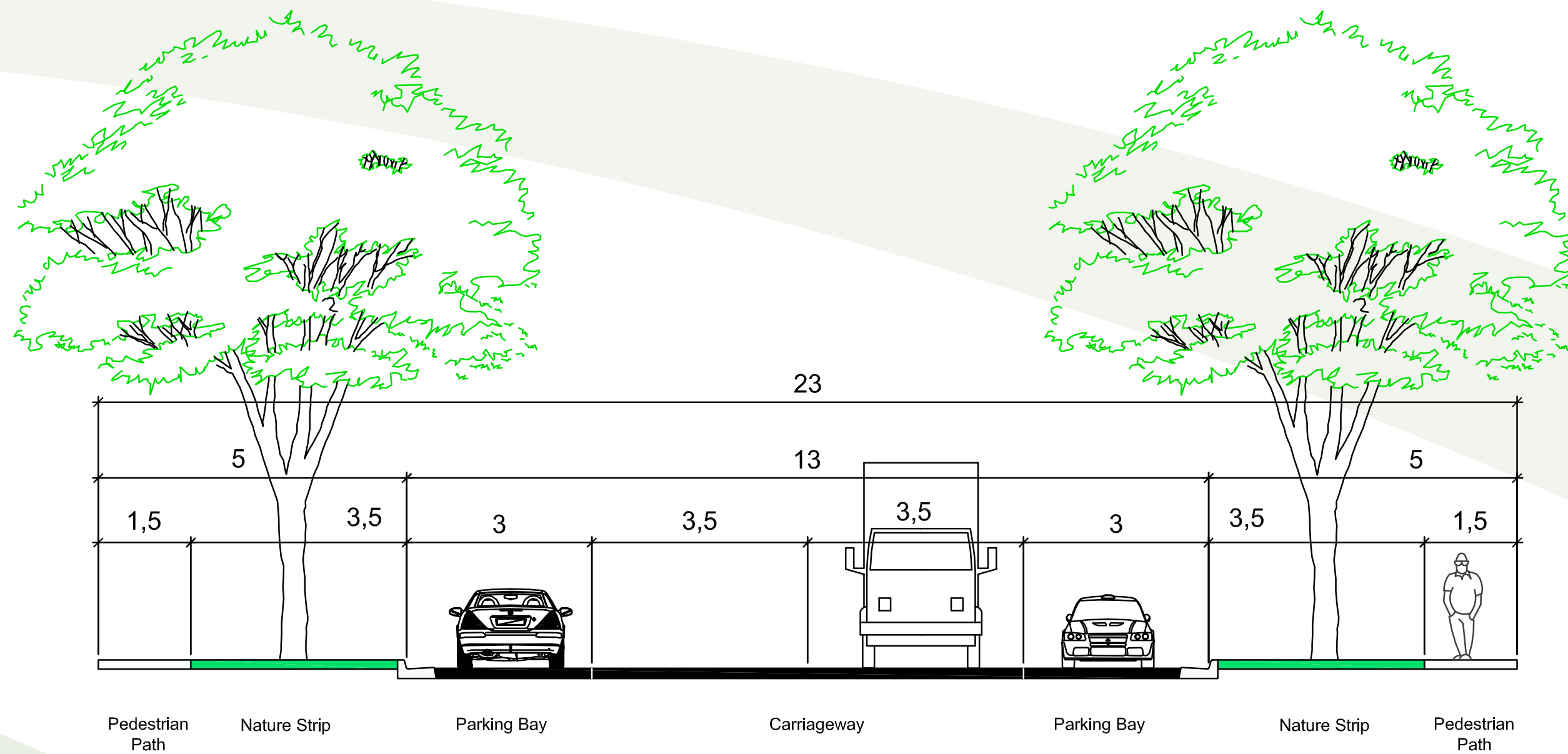
Cross Section 3

Access Street Level 2 2000-3000VPD
23m Standard Version - Without Dedicated Bike Lane



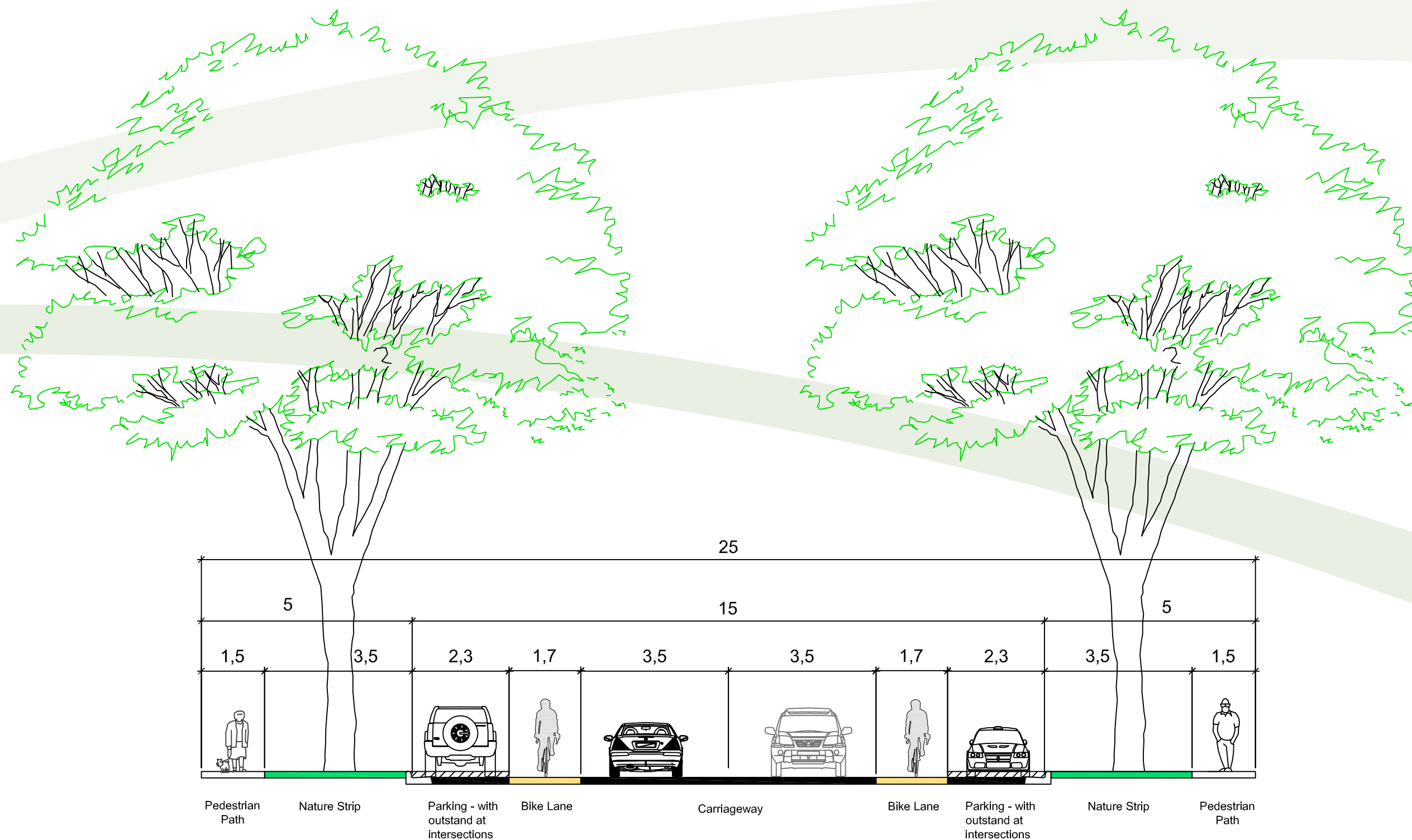
Cross Section 4

Access Street Level 2 2000-3000VPD
23m Standard Version - with Shared Landscape Trail



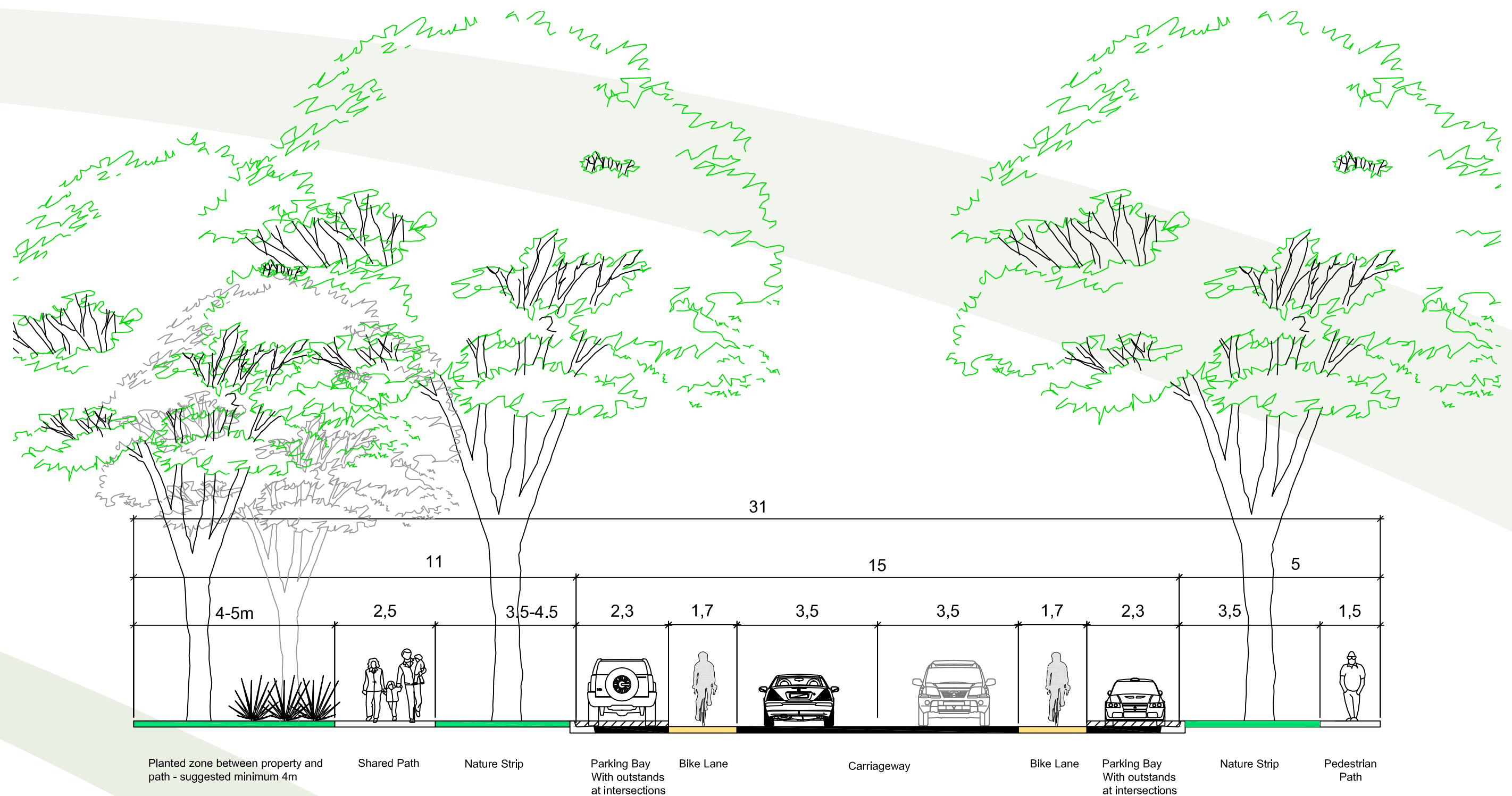
Cross Section 5

Industrial Access Street - Employment 23m <2000VPD



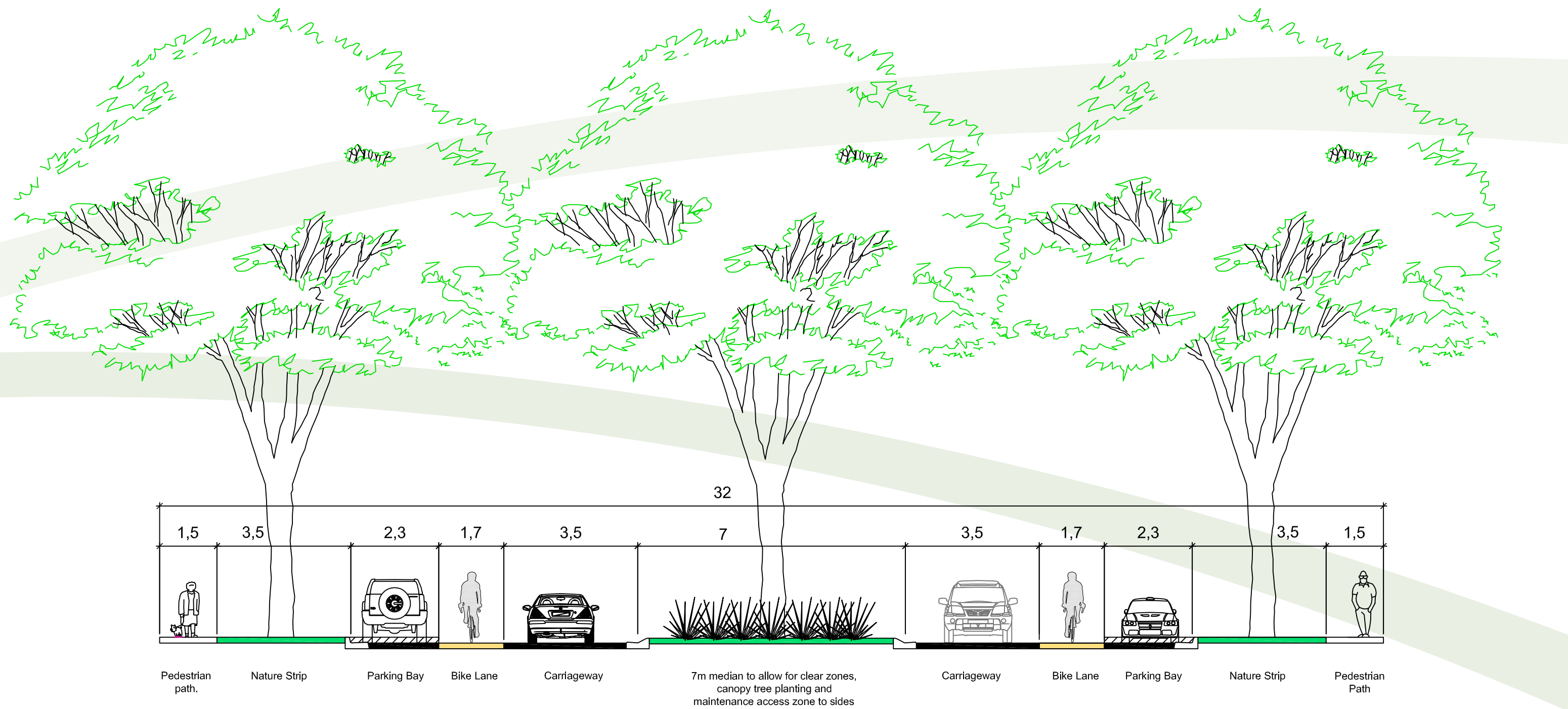
Cross Section 6

Connector Street Level 1 & 2 - Residential 25m 3000-7000VPD



Cross Section 7

Connector Street Level 1 & 2 - Residential
with Shared Landscape Trail 31m 3000-7000VPD



Note:

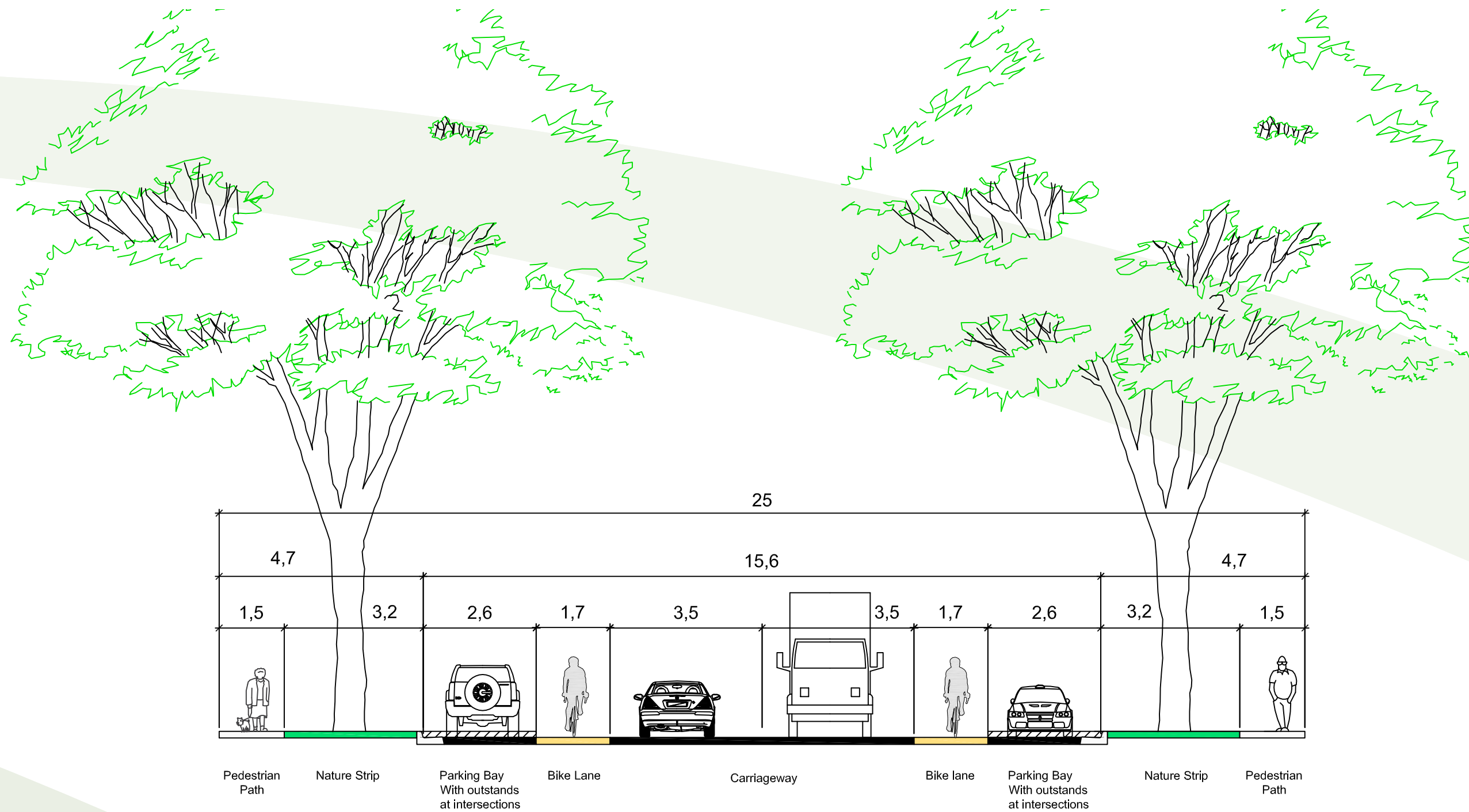
Targeted to key intersections with arterials, with the extent generally limited to the 1st 100-200m of road

Cross Section 8

Boulevard Connector Street

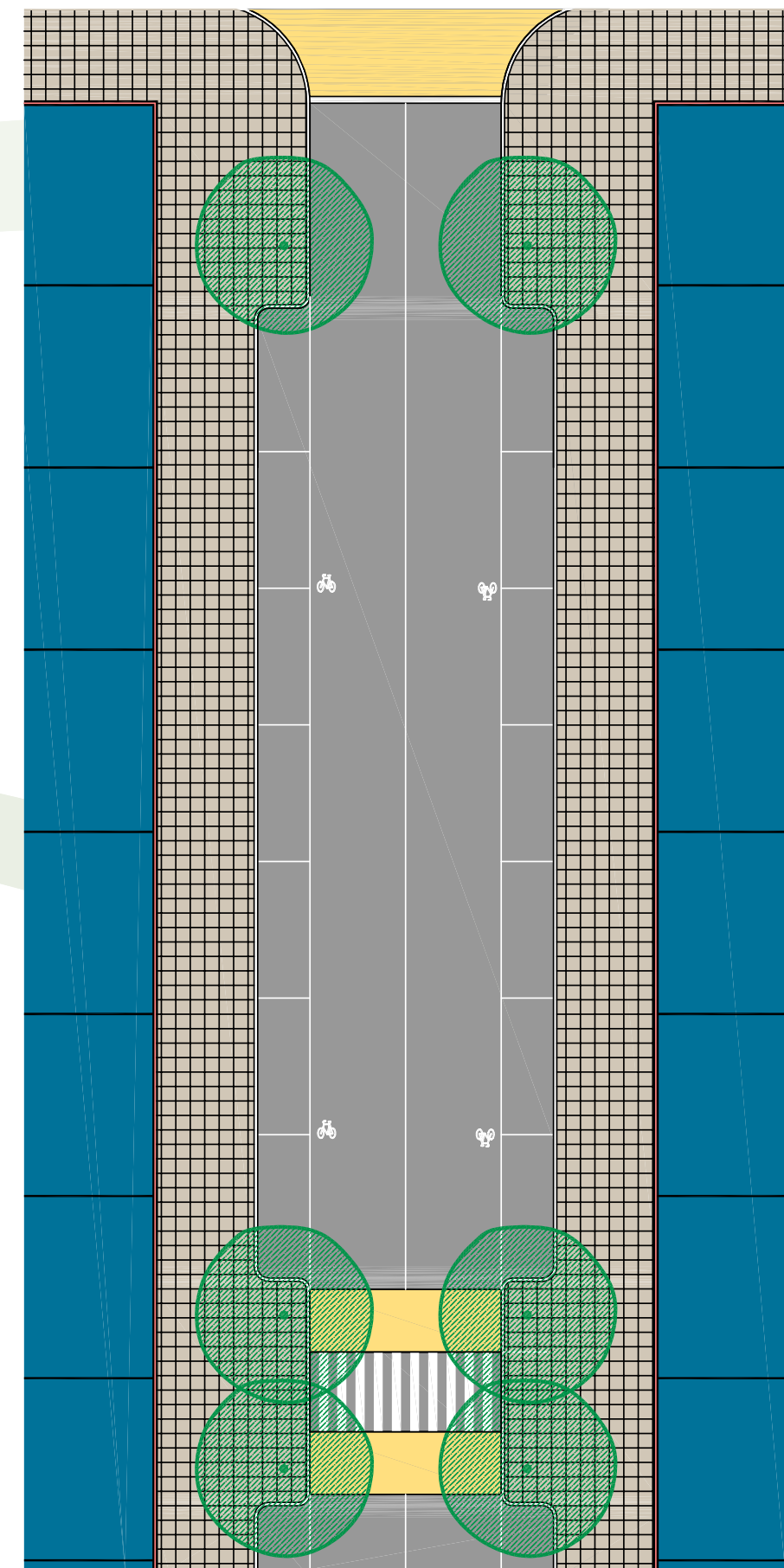
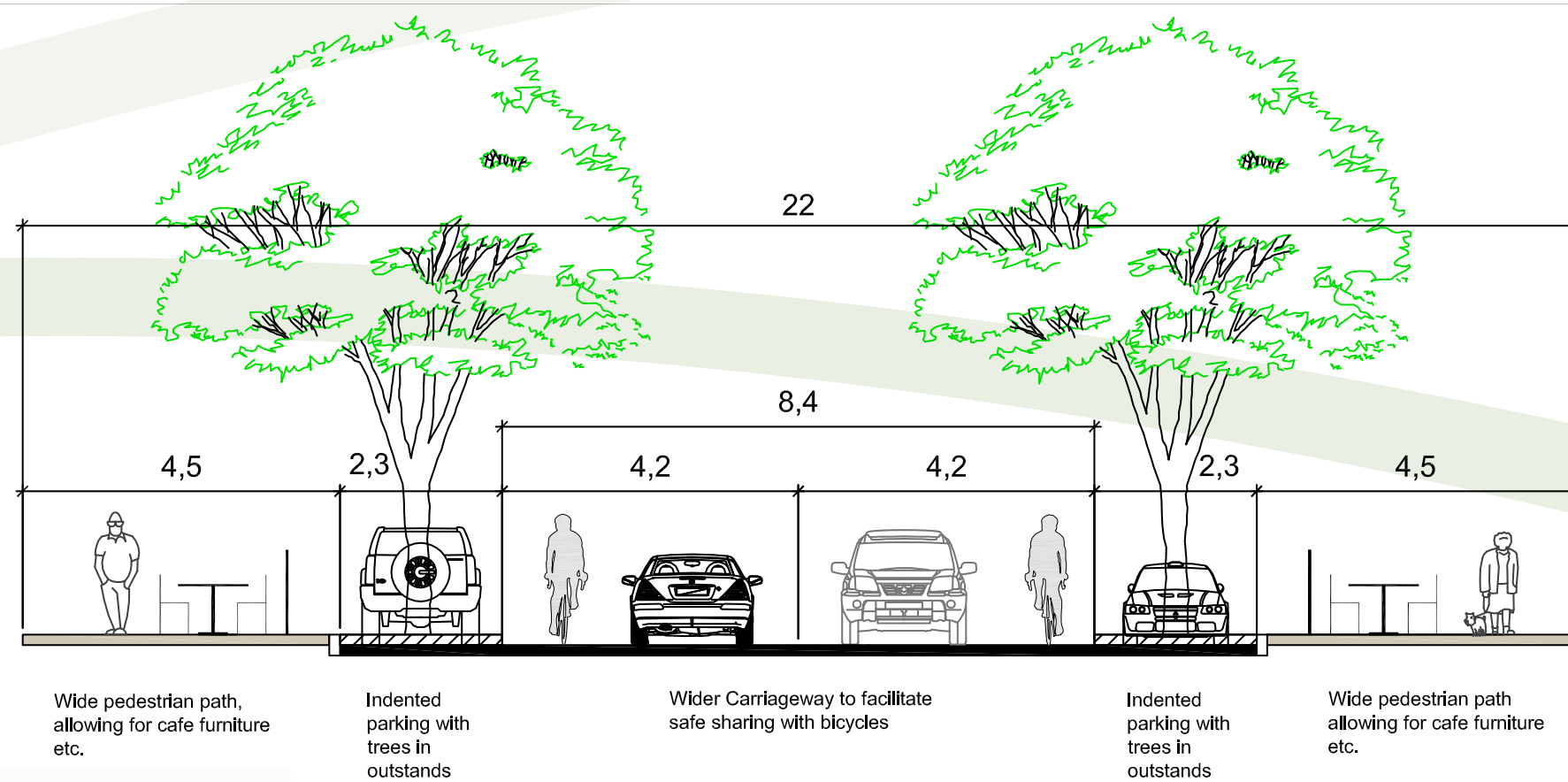
32m

3000-7000VPD



Cross Section 9

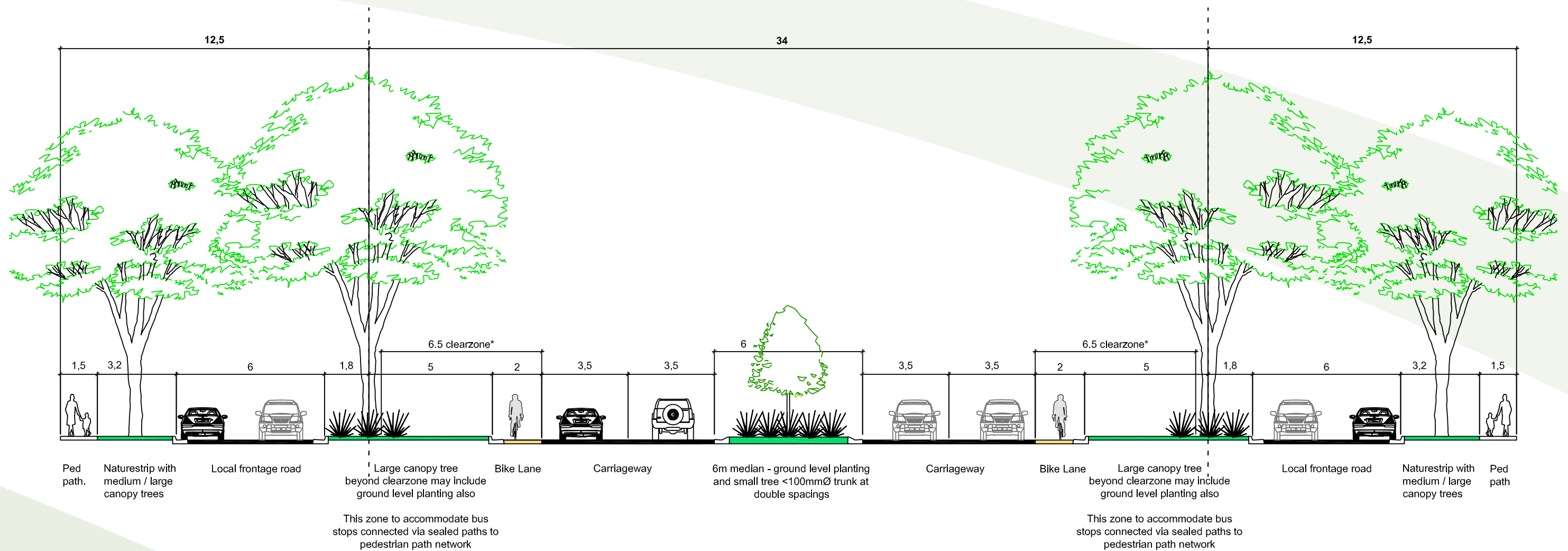
Connector Street - Industrial 25m >2000VPD



Cross Section 10

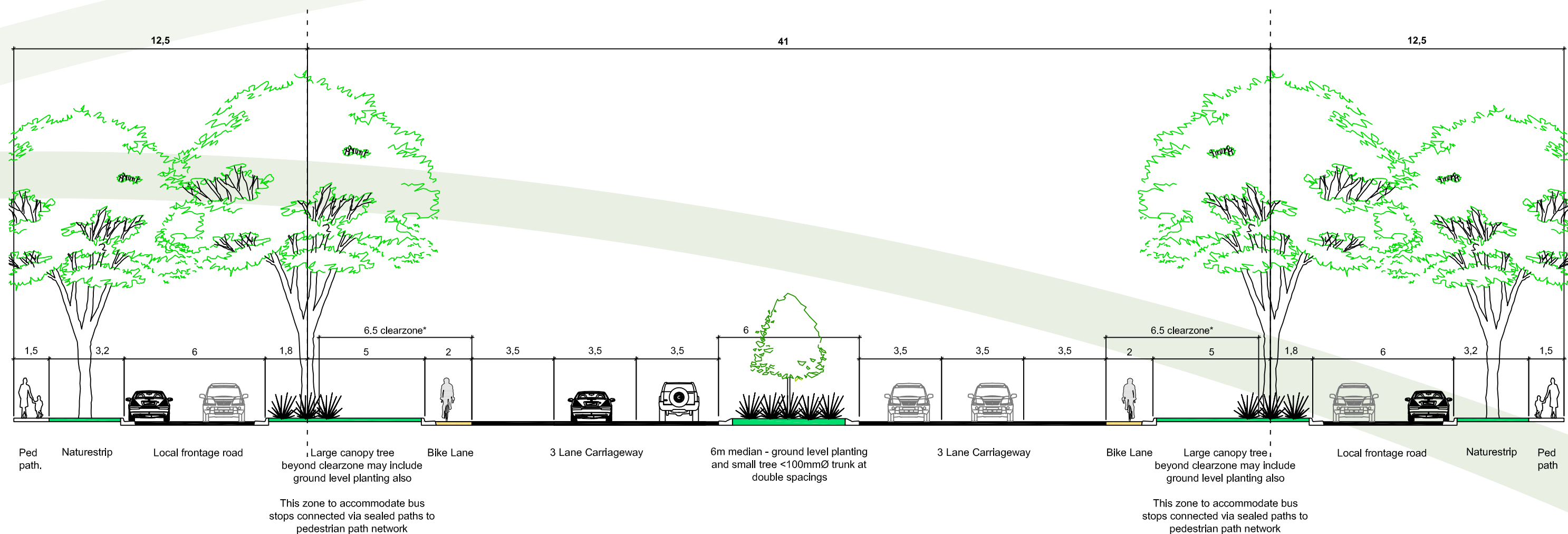
Main Street/Connector for Local Town Centres 22m

2000-7000VPD

**Note**

- Includes typical residential frontage roads each side
- investigation and use of physical barriers such as wire rope fencing is encouraged to enable more extensive canopy tree planting.
- *Clearzone assumes 80km/h speed limit >5,000 VPD

Cross Section 12**4 Lane Arterial 34m 10,000-25,000VPD**



Note

- Includes typical residential frontage roads each side
- investigation and use of physical barriers such as wire rope fencing is encouraged to enable more extensive canopy tree planting.
- *Clearzone assumes 80km/h speed limit >5,000 VPD

Cross Section 13

6 Lane Arterial 41m >40,000VPD

4.7 UTILITIES AND DEVELOPMENT STAGING

4.7.1 UTILITIES OBJECTIVES

The utilities objective is:

To provide all developed lots, to the satisfaction of the relevant authority, with:

- a potable water service,
- electricity,
- a reticulated sewerage service,
- drainage,
- gas, and
- telecommunications.
- Implementation

The objectives for utilities are met by implementation of all the following:

- » *Meeting requirements of the relevant service authority/provider, and*
- » *Planning and design guidelines.*

ELECTRICITY

The following planning and design guidelines **must** be met:

- All new electricity supply infrastructure (excluding infrastructure to support cables with a voltage greater than 66kv) must be provided underground (excluding substations),
- New substations must be identified at the subdivision design response stage to ensure effective integration with the surrounding neighbourhood and to minimise amenity impacts, and
- The design of subdivision electricity infrastructure must consider the practicality of removing existing above ground electricity lines in the local and arterial road network both within and abutting the subdivision and re-routing lines underground through the subdivision.

DEVELOPMENT STAGING

Generally, staging will be determined by the development program of developers within the precinct and the availability of infrastructure services. Within this context, the following planning and design guidelines **must** be met:

- Development staging must not create circumstances in which residents will be unreasonably isolated from commercial and community facilities or public transport,
- Development staging must, to the extent practicable, be integrated with adjoining developments, including the timely provision of connecting roads and walking / cycling paths, and
- Access to each new lot must be provided via a sealed road.

Coordination of utilities and services

- Where appropriate the installation of underground utilities and services should be coordinated to maximise the use of common trenching.

5.0 PRECINCT INFRASTRUCTURE PLAN

5.1 INTRODUCTION

This Precinct Infrastructure Plan sets out infrastructure and services required to meet the needs of development of the precinct. The infrastructure and services are to be provided through a number of mechanisms including:

- subdivision construction works by developers,
- development contributions (community infrastructure levy and development infrastructure levy),
- utility service provider requirements, and
- capital works projects by Council, State government agencies and non-Government organisations.

5.1.1 SUBDIVISION CONSTRUCTION WORKS BY DEVELOPERS

As part of subdivision construction works, new development must meet the cost of delivering the following infrastructure:

- Connector and collector streets and local streets, including culverts,
- Local bus stop infrastructure,
- Landscaping of all existing and future roads and local streets,
- Intersection works and traffic management measures along arterial roads, collector streets and local streets,
- Council approved fencing and landscaping (where required) along arterial roads,
- Local pedestrian and bicycle paths along arterial roads, collector and local streets and within local parks,
- Basic improvements to local parks and passive open space including earthwork, grassing, tree planting, local playgrounds and shared paths and footpaths, basic furniture and structures (i.e. park shelter),
- Local drainage systems, and
- Infrastructure as required by utility services providers including water, sewerage, drainage (except where the item is funded through a Drainage Scheme), electricity, gas, and telecommunications.

DEVELOPMENT CONTRIBUTIONS PLAN

A development contribution plan has been prepared for the Cranbourne East Precinct in conjunction with this PSP. The Development Contribution Plan is an incorporated document of the Casey Planning Scheme.

5.2 INFRASTRUCTURE AND SERVICES REQUIRED TO SUPPORT DEVELOPMENT OF THE PRECINCT

Table 14 sets out the list of infrastructure and services required within the precinct to support its development, including details of:

- Infrastructure Group and Category,
- Project Title and Description,
- Lead Agency. (The agency responsible for the coordination and approval of the project. Other agencies and / or developers may have an involvement in the project),
- Timing and Indicative Capital Cost (\$2010).

Table 15 sets out the list of infrastructure and services required outside the precinct to support its development, including details of:

- Infrastructure Group and Category,
- Project Title and Description, and
- Lead Agency. (The agency responsible for the coordination and approval of the project. Other agencies and / or developers may have an involvement in the project)

5.3 PROJECT CO-ORDINATION

Where practical and compatible, infrastructure projects should be grouped and delivered in a coordinated manner.

Examples of the projects that could be grouped for coordinated delivery include:

- The western State primary school, community hub, playing fields, pavilion and car parking,
- The eastern State primary school, community hub, playing fields, pavilion and car parking,
- The Selandra Rise Local Town Centre and the community hub located within, together with the passive park adjacent to the site,
- Construction of the intersection of Ballarto Road and the South Gippsland Highway when Ballarto Road is constructed as Connector Street, and
- Construction of Linsell Boulevard between Casey Fields Boulevard and Broad Oak Drive and Heather Grove early to coincide with the planned opening of the P-12 Secondary College in the Hunt Club Estate.

5.4 DELIVERY AND MONITORING

The Growth Areas Authority and Casey City Council will jointly monitor the implementation of the Precinct Infrastructure Plan.

The Growth Areas Authority has established a Casey Infrastructure Working Group to manage the monitoring, review, implementation and prioritisation of identified projects.

Table 14: Infrastructure and Services required within the precinct

PROJECT GROUP	PROJECT CATEGORY	TITLE	PROJECT DESCRIPTION	LEAD AGENCY	TIMING: S=2010-13 M=2015-18 L=2020+	INDICATIVE COSTS (\$M 2010)
ROADS						
Transport	Road	Casey Fields Boulevard, initial construction	Construction of Casey Fields Boulevard as a Connector Street between Berwick-Cranbourne Road and the South Gippsland Highway.	Relevant development proponent	S - M	Undetermined
Transport	Road	Casey Fields Boulevard, land for ultimate	Land for Casey Fields Boulevard to preserve option for potential future arterial function between Thompsons Road and South Gippsland Highway.	Casey City Council	S - M	3
Transport	Road	Linsell Boulevard, initial construction	Land and construction between Casey Fields Boulevard and Berwick-Cranbourne Road.	Casey City Council, agreed in-kind provision by Development Proponent	S	Undetermined
Transport	Road	Linsell Boulevard, duplication	Duplication between Casey Fields Boulevard and Berwick-Cranbourne Road.	VicRoads	L	20
Transport	Road	Berwick-Cranbourne Road	Duplication between Thompsons Road and Pattersons Road.	VicRoads	L	40
Transport	Road	Berwick-Cranbourne Road	Duplication between Narre Warren-Cranbourne Road and Berwick-Cranbourne/Clyde-Fiveways Road.	VicRoads	L	40
Transport	Road	Clyde-Fiveways Road	Duplication between Pattersons Road and Leongatha Railway.	VicRoads	L	70
Transport	Road	North-South Connector Street	North-south Connector Street - Land required for 26 metre road reservation and construction of 201 metres of connector street.	Casey City Council	S - M	1.5
Transport	Road	Linsell Boulevard Re-alignment	Linsell Boulevard - construction of realigned section of road 340 metres east of Clyde Road.	Casey City Council	S - M	3.6
Transport	Road	Ballarto Road, land requirements	Ballarto Road - Land for widening of Ballarto Road to the south to achieve a 34 metre road reservation.	Casey City Council	S - M	1.5
Transport	Road	Ballarto Road, first carriageway construction	Ballarto Road - Upgrade of northern 22 metre carriageway to urban standard.	Casey City Council	S - M	3.6
Transport	Road	Berwick-Cranbourne Road, intersection	Berwick-Cranbourne Road and Casey Fields Boulevard - Interim signalised intersection construction.	Casey City Council	S - M	3.8
Transport	Road	Ballarto Road, intersection	Ballarto Road and Casey Fields Boulevard - Interim signalised intersection construction.	Casey City Council	S - M	2
Transport	Road	South Gippsland Highway, intersection	South Gippsland Highway and Casey Fields Boulevard - Roundabout construction.	Casey City Council	M - L	1.9
Transport	Road	South Gippsland Highway, intersection	South Gippsland Highway and Ballarto Road - Roundabout construction.	Casey City Council	S - M	2.5
Transport	Road	Berwick-Cranbourne Road Pedestrian Signals	Berwick-Cranbourne Road and Cranbourne Complex - Pedestrian signal construction.	Casey City Council	S	0.2
Transport	Road	Berwick-Cranbourne Road, intersection	Berwick-Cranbourne Road and Broad Oak Drive - Interim signalised intersection construction.	Casey City Council	S - M	3
Transport	Road	Berwick-Cranbourne Road, intersection	Berwick Cranbourne Road and Morison Road - Interim signalised intersection construction.	Casey City Council	S	3.3
PUBLIC TRANSPORT						
Public Transport	Bus	Cranbourne East Bus Services	Progressive extension of local bus services to service the precinct.	Department of Transport	S-L	Undetermined
Public Transport	Bus	Bus stops	Provision of bus stops to be delivered with local street system as part of subdivision construction approvals.	Relevant development proponent	S-L	Undetermined
COMMUNITY						
Education	School	Primary School	Provision of new primary school for western area.	DEECD	S - M	11.5
Education	School	Primary School	Provision of new primary school for eastern area.	DEECD	S - M	11.5
Community services	Community centre	Interim provision	Sustainability Centre in Stockland Display Village (for 2 to 3 years).	Stockland and Casey City Council	S	Undetermined
Community services	Community centre	Land	Western Community Centre. Land acquisition.	Casey City Council	S - M	2.2
Community services	Community centre	Construction	Western Community Centre Construction. Construction of dual kinder, Maternal & Child Health, 2 consulting rooms and multi-purpose room.	Casey City Council	S - M	2
Community services	Community centre	Land	Eastern Community Centre (co-located with school). Land.	Casey City Council	S - M	1.4
Community services	Community centre	Construction	Eastern Community Centre (co-located with school). Construction of centre to include dual kinder, consulting room and multi-purpose room. Casey Council may also develop maternal and child health facility in-lieu of potential site at Selandra Rise Local Town Centre.	Casey City Council	S - M	1.8
Community services	Community centre	Land	Eastern Community Centre (located in Selandra Rise Local Town Centre). Land acquisition.	Casey City Council	S - M	0.9
Community services	Community centre	Construction	Selandra Rise Community Centre. Construction of centre including 5 consulting rooms, staff hub and 3 consulting rooms.	Casey City Council	S - M	1.5
OPEN SPACE						
Open space	Passive parks	Passive park construction	Basic improvements to open space including earthworks, grading, seeding, garden beds, paths and trails, local playground construction.	Relevant development proponent	M - L	Determined through future approval of landscape construction plans
Open space	Active Open Space	Sports Fields	Eastern Active Playing Fields. Construction of 3 soccer pitches and 2 football/cricket ovals and cricket nets.	Casey City Council	M - L	3.1
Open space	Active Open Space	Pavilion	Eastern Pavilion. Construction of Pavilion to serve active playing fields (soccer/cricket).	Casey City Council	M - L	1.8
Open space	Active Open Space	Sports Fields	Western Active Playing Fields. Construction of 2 football/cricket ovals, cricket nets and 2 netball courts.	Casey City Council	M - L	3.3
Open space	Active Open Space	Pavilion	Western Pavilion. Construction of Pavilion to serve active playing fields (footy/cricket).	Casey City Council	M - L	2.1
Open space	Active Open Space	Sports Fields	Western Active Playing Fields. Construction of 2 football/cricket ovals, cricket nets & 2 netball courts.	Casey City Council	M - L	3.4
Open space	Active Open Space	Pavilion	Western Pavilion. Construction of Pavilion to serve active playing fields 4 (footy/cricket).	Casey City Council	M - L	2.1

Table 15: Infrastructure and Services located outside the precinct

PROJECT GROUP	PROJECT CATEGORY	TITLE	PROJECT DESCRIPTION	LEAD AGENCY
TRANSPORT				
Transport	Road	Linsell Boulevard, land	Linsell Boulevard - Land required for 34 metre road reservation between the Pipe Track and Casey Fields Boulevard.	Casey City Council
Transport	Road	Linsell Boulevard, construction	Linsell Boulevard - Construction of single carriageway between Broad Oak Drive and Casey Fields Boulevard.	Casey City Council
Transport	Road	Thompsons Road, intersection	Thompsons Road and Casey Fields Boulevard - Signalised intersection Construction.	VicRoads
Transport	Road	Linsell Boulevard, intersection	Linsell Boulevard and Casey Fields Boulevard - Signalised intersection Construction.	Casey City Council
Transport	Road	Casey Fields Boulevard, intersection	Heather Grove and Casey Fields Boulevard - Signalised intersection Construction.	Casey City Council
Transport	Road	Thompsons Road, duplication	Duplication of Thompsons Road between Berwick-Cranbourne Rd and Casey Fields Blvd.	VicRoads
Transport	Road	Thompsons Road, duplication	Duplication of Thompsons Road between Casey Fields Blvd and Narre Warren-Cranbourne Rd.	VicRoads
Transport	Road	Narre Warren-Cranbourne Road, duplication	Duplication of Narre Warren Cranbourne Rd between Thompsons Rd and Linsell Blvd.	VicRoads
Transport	Road	Narre Warren-Cranbourne Road, duplication	Duplication of Narre Warren Cranbourne Rd between Linsell Blvd and Berwick-Cranbourne Rd.	VicRoads
Transport	Road	Narre Warren-Cranbourne Road, duplication	Duplication of Cameron Street between Berwick-Cranbourne Road and Sth Gippsland Hwy.	VicRoads
Transport	Road	Clyde-Fiveways Road, duplication	Duplication of Clyde-Fiveways Rd between Leongatha Rail and Sth Gippsland Hwy.	VicRoads
Transport	Road	Heather Grove (through Collison Estate)	Heather Grove upgrade to be consistent with 22m Connector Street.	Casey City Council
Transport	Road/Rail	Broad Oak Drv Grade separation	Grade separation of Broad Oak Drive and Leongatha Railway line.	Department of Transport
Transport	Road/Rail	Casey Fields Blvd Grade Separation	Grade separation of Casey Fields Boulevard and Leongatha Railway line.	Department of Transport
PUBLIC TRANSPORT				
Public Transport	Rail	Rail Extension	Extension of rail services to Cranbourne East.	Department of Transport
EDUCATION				
Schools	Secondary College	New Cranbourne East P-12 School	Provide new Secondary School Campus to service Cranbourne East.	Department of Education, Training and Early Childhood Development

6.0 OTHER INFORMATION

6.1 ACRONYMS

AHD	Australian Height Datum
AFL	Australian Football League
CAD	Central Activities District
CALC	Cranbourne Aquatic & Leisure Centre
CBD	Central Business District
CHMP	Cultural Heritage Management Plan
CIL	Community Infrastructure Levy
CPTED	Crime Prevention Through Environmental Design
DEECD	Department of Education & Early Childhood Development
DIL	Development Infrastructure Levy
DPCD	Department of Planning & Community Development
DoT	Department of Transport
DSE	Department of Sustainability & Environment
ECV	Environmental Conservation Value
GAA	Growth Areas Authority
GDA	Gross Developable Area
Ha	Hectare
HO	Heritage Overlay
LTC	Local Town Centre
MCH	Maternal & Child Health
MSS	Municipal Strategic Statement
NAC	Neighbourhood Activity Centre
NDA	Net Developable Area
NDHa	Net Developable Hectare
NRHa	Net Residential Hectare
NGO	Non Government Organisation
NVPP	Native Vegetation Precinct Plan
PAC	Principle Activity Centre
PIP	Precinct Infrastructure Plan
PPTN	Principle Public Transport Network
PSP	Precinct Structure Plan
P-6	State School Prep to Year 6
P-12	State School Prep to Year 12
RBGC	Royal Botanic Gardens Cranbourne
Sq m	Square Metres
UGB	Urban Growth Boundary
UGZ	Urban Growth Zone
VIF	Victoria in Future
VPD	Vehicles Per Day
WSUD	Water Sensitive Urban Design

6.2 GLOSSARY

Active Open Space

Land set aside for the specific purpose of formal organised/club based sports.

Activity Centre

Provide the focus for services, commercial and retail based employment and social interaction. They are where people shop, work, meet, relax and live. They are well-served by public transport, they range in size and intensity of use. In the growth areas, these are referred to as principal activity centres, major activity centres, neighbourhood activity centres and local centres. For further information refer to Melbourne 2030.

Affordable Housing

Well-located housing, appropriate to the needs of a given household, where the cost (whether mortgage repayment or rent) is no more than 30 per cent of that household's income.

Arterial Road

A higher order road providing for moderate to high volumes at relatively high speeds typically used for inter-suburban journeys and linking to freeways, and identified under the Road Management Act 2004. All arterials are managed by the State Government.

Co-location

Adjoining land uses to enable complementary programs, activities and services and shared use of resources and facilities. For example, the co-location of schools and active open space.

Community Facilities

Infrastructure provided by government or non-government organisations for accommodating a range of community support services, programs and activities. This includes facilities for education and learning (e.g. government and non-government schools, universities, adult learning centres); early years (e.g. preschool, maternal and child health, childcare); health and community services (e.g. hospitals, aged care, doctors, dentists, family and youth services, specialist health services); community (e.g. civic centres, libraries, neighbourhood houses); arts and culture (e.g. galleries, museums, performance space); sport, recreation and leisure (e.g. swimming pools); justice (e.g. law courts); voluntary and faith (e.g. places of worship) and emergency services (e.g. police, fire and ambulance stations).

Connector Street

A lower order street providing for low to moderate volumes and moderate speeds linking local streets to the arterial network. Managed by the relevant local council. (See Table C1 in clause 56)

Conventional Density Housing

Housing with an average density of 10 to 15 dwellings per net developable hectare.

Development Contributions Plan

Document that sets out the contributions expected from each individual landowner to fund infrastructure and services. Refer to Part 3B of the Planning and Environment Act 1987.

Encumbered Land

Land that is constrained for development purposes. Includes easements for power/transmission lines, sewers, gas, waterways/drainage; retarding basins/wetlands; landfill; conservation and heritage areas. This land may be used for a range of activities (e.g. walking trails, sports fields).

Freeway

A high speed and high volume road with the highest level of access control and typically used for longer distance journeys across the metropolitan area and country Victoria. All freeways are managed by VicRoads.

Frontage

The road alignment at the front of a lot. If a lot abuts two or more roads, the one to which the building, or proposed building faces.

Growth Area

Areas on the fringe of metropolitan Melbourne around major regional transport corridors that are designated for large-scale change, over many years from rural to urban use. Melbourne has five growth areas called Casey-Cardinia; Hume; Melton-Caroline Springs; Whittlesea and Wyndham.

Growth Area Framework Plan

Government document that sets long-term strategic planning direction to guide the creation of a more sustainable community in the growth areas.

High Density Housing

Housing with an average density of more than 30 dwellings per net developable hectare.

Housing Density (Net)

The number of houses divided by net developable area

Linear Open Space Network

Corridors of open space, mainly along waterways that link together forming a network.

Land Budget Table

A table setting out the total precinct area, net developable area and constituent land uses proposed within the precinct.

Local Centre

An activity centre smaller than a local town centre (neighbourhood activity centre) with a catchment radius of about 400 metres and may include a small supermarket or convenience store of 500 square metres to 1,500 square metres.

Lot

A part (consisting of one or more pieces) of any land (except a road, a reserve, or common property) shown on a plan, which can be disposed of separately and includes a unit or accessory unit on a registered plan of strata subdivision and a lot or accessory lot on a registered cluster plan.

Lower Density Housing

Housing with an average density of less than 10 dwellings per hectare.

Local Town Centre

An alternative term developed by the GAA to describe a 'neighbourhood activity centre' as defined in Melbourne 2030. The term 'local town centre' is favoured by the GAA as it encapsulates expresses the Victorian Government's vision for these important sites.

Major Activity Centre

Activity centres that have similar characteristics to Principal Activity Centres but serve smaller catchment areas. For further information refer to Melbourne 2030.

Major Employment Area

Areas identified on the Growth Area Framework Plan for economic and employment growth.

Medium Density Housing

Housing with an average density of 16 to 30 dwellings per net developable hectare.

Native Vegetation

Plants that are indigenous to Victoria, including trees, shrubs, herbs, and grasses.

Native Vegetation Precinct Plan

A plan relating to native vegetation within a defined area that forms part of the precinct structure plan. Native vegetation precinct plans are incorporated into local planning schemes and listed in the schedule to Clause 52.16.

Neighbourhood Activity Centre

Activity centres that are an important community focal point and have a mix of uses to meet local needs. Accessible to a viable user population by walking, cycling and by local bus services and public transport links to one or more principal or major activity centres. For further information refer to Melbourne 2030.

Net Developable Area

Total amount of land within the precinct that is made available for development of housing and employment buildings, including lots, local and connector streets. Total precinct area minus community facilities, schools and educational facilities and open space, arterial roads and encumbered land. Small local parks defined at subdivision stage are included in net developable area. Net Developable Area may be expressed in terms of hectare units (i.e. Net Developable Hectare ("NDHa")).

Net Residential Area

As per Net Developable Area but excludes neighbourhood activity centres, non-government schools and other existing or permitted non-residential land uses (e.g. golf course sites). Net Residential Area may be expressed in terms of hectare units (i.e. Net Residential Hectare ("NRHa")).

Passive Open Space

Open space that is set aside for parks, gardens, linear corridors, conservation bushlands, nature reserves, public squares and community gardens that are made available for passive recreation, play and unstructured physical activity including walking, cycling, hiking, revitalisation, contemplation and enjoying nature.

Precinct Infrastructure Plan

Section within the precinct structure plan that defines the priority regional and local infrastructure requirements for future planning and investment by council and government agencies.

Precinct Structure Plan

A statutory document that describes how a precinct or series of sites within a growth area will be developed over time. A precinct structure plan sets out the broad environmental, social and economic parameters for the use and development of land within the precinct.

Principal Activity Centre

Activity centres that accommodate a mix of activities that generate higher numbers of trips, including business, retail, services and entertainment.

Generally well served by multiple public transport routes and on the Principal Public Transport Network or capable of being linked to that network. Has a very large catchment covering several suburbs and attract activities that meet metropolitan needs. For further information refer to Melbourne 2030.

Principal Public Transport Network

A high-quality public transport network that connects Principal and Major Activity Centres, and comprises the existing radial fixed-rail network, extensions to this radial network and new cross-town bus routes.

Public Open Space

Land that is set aside in the precinct structure plan for public recreation or public resort; or as parklands; or for similar purposes. Incorporates active and passive open space.

Public Transport Interchange

Places where people can access or change between multiple public transport routes. For example, between train and bus or a multi-route bus station at a major activity centre

Ramsar

The Convention on Wetlands is a global intergovernmental treaty that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. It was adopted in the Iranian city of Ramsar in 1971 and came into force in 1975.

Shared or Joint Use

When councils, schools and community service organisations come together to plan, build and in some cases jointly manage a single facility to be used by multiple service providers. E.g. Using a school as a facility for wider community utilisation.

Social Housing

Non-profit housing owned and managed for the primary purpose of meeting social objectives such as affordable rents, responsible management, security of tenure and good location in relation to employment services. The term encompasses public housing and includes housing owned or managed by the community.

Social Infrastructure

Community facilities plus public open space.

Urban Growth Boundary

A statutory planning management tool used to set clear limits to metropolitan Melbourne's urban development.

Urban Growth Zone

Statutory zone that applies to land that has been identified for future urban development. The UGZ has four purposes: (1) to manage transition of non-urban land into urban land; (2) to encourage development of well-planned and well-serviced new urban communities in accordance with an overall plan; (3) to reduce the number of development approvals needed in areas where an agreed plan is in place; and (4) to safeguard non-urban land from use and development that could prejudice its future urban development.

Water Sensitive Urban Design

A sustainable water management approach that aims to provide water-quality treatment, flood management to reduce the pollution carried to our waterways and more sustainable urban landscapes. Key principles include minimising water resistant areas; recharging natural groundwater aquifers (where appropriate) by increasing the amount of rain absorbed into the ground; encouraging onsite reuse of rain; encouraging onsite treatment to improve water quality and remove pollution, and using temporary rainfall storage (retarding basins/wetlands) to reduce the load on drains and improve landscape viability.

6.3 SUPPORTING INFORMATION

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Design for Trucks, Buses and Emergency Vehicles on Local Roads, VicRoads, 1998

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