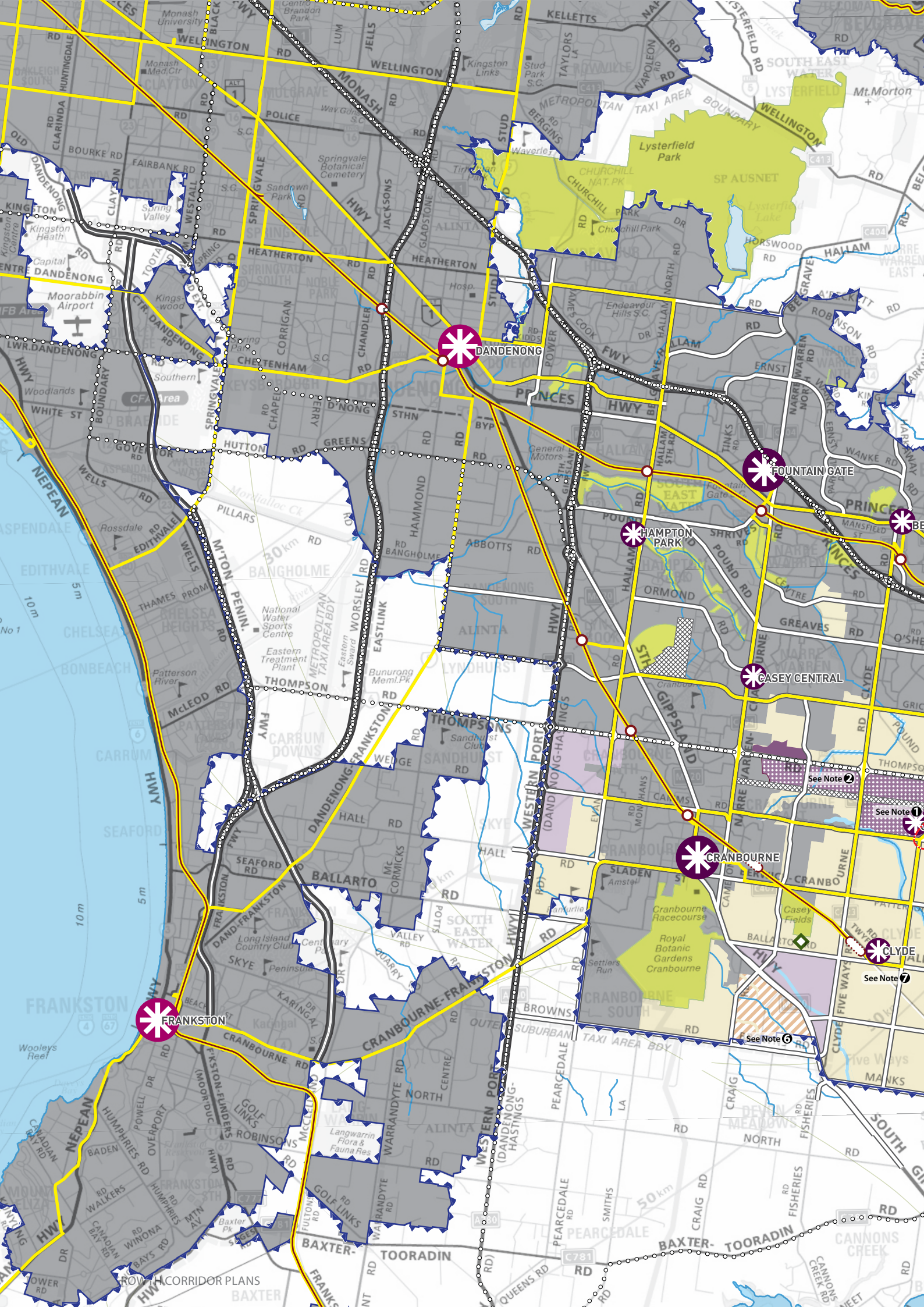
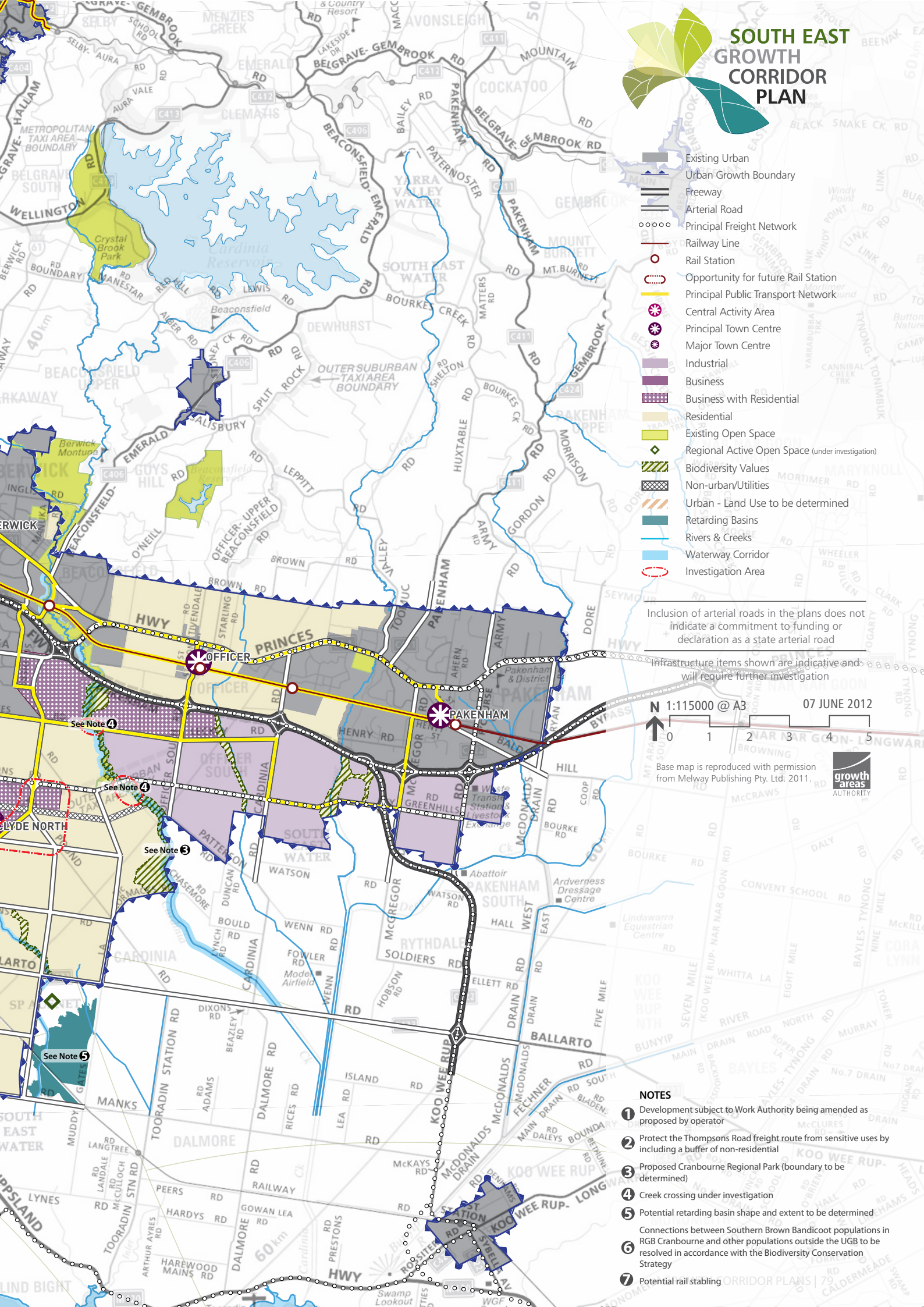


6

The South East Growth Corridor Plan



SOUTH EAST GROWTH CORRIDOR PLAN



- Existing Urban
- Urban Growth Boundary
- Freeway
- Arterial Road
- Principal Freight Network
- Railway Line
- Rail Station
- Opportunity for future Rail Station
- Principal Public Transport Network
- Central Activity Area
- Principal Town Centre
- Major Town Centre
- Industrial
- Business
- Business with Residential
- Residential
- Existing Open Space
- Regional Active Open Space (under investigation)
- Biodiversity Values
- Non-urban/Utilities
- Urban - Land Use to be determined
- Retarding Basins
- Rivers & Creeks
- Waterway Corridor
- Investigation Area

Inclusion of arterial roads in the plans does not indicate a commitment to funding or declaration as a state arterial road

Infrastructure items shown are indicative and will require further investigation

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NOTES

- Development subject to Work Authority being amended as proposed by operator
- Protect the Thompsons Road freight route from sensitive uses by including a buffer of non-residential
- Proposed Cranbourne Regional Park (boundary to be determined)
- Creek crossing under investigation
- Potential retarding basin shape and extent to be determined
- Connections between Southern Brown Bandicoot populations in RGB Cranbourne and other populations outside the UGB to be resolved in accordance with the Biodiversity Conservation Strategy
- Potential rail stabling



THE SOUTH EAST Growth Corridor Plan

6.1 CONTEXT

The South East Growth Corridor is located on the outer edge of this broader economic region, and is heavily reliant on the established urban areas for jobs and services. As a result, many residents in this Corridor travel considerable distances to access jobs and services offered in places like Dandenong, Frankston, Knox, Kingston and Mulgrave. The area covered by the Growth Corridor Plans will eventually accommodate a population of 230,000 or more people and has the capacity to provide for at least 86,000 jobs.

Improving the local self containment of jobs in the South-East Growth Corridor is a key objective of the Corridor Plan.

The wider south-east economic region is substantial in its own right. Its economy is closely linked to the wider metropolitan area with a distinctive focus on manufacturing and technology and it features a high degree of employment self-containment at the sub-metropolitan scale.

Central Dandenong is the CBD of the south east, and it is well connected to the rest of Melbourne by rail and road. It

is also connected to a series of Principal Town Centres and specialised employment precincts across the south east region.

Residents in the South East Growth Corridor will continue to rely upon the broader metropolitan south eastern suburbs for employment and services however over the longer term, the potential exists for the South East Growth Corridor to be re-positioned as central to an emerging sub-regional economic triangle comprising Dandenong, the Casey/Cardinia employment area and the Port of Hastings.

The proposed land use and transport framework will facilitate this outcome, by providing opportunities for greater business investment and better sub-regional transport connectivity.

Facilitating jobs and investment within the region, together with a transport network that links people to those jobs, has been the primary influence shaping this plan.



Development of the South-East Growth Corridor will continue to enhance the region's self-sufficiency, sustainability and distinctiveness by providing a good range of new employment opportunities which are well-connected by appropriate transport links between homes and new and existing jobs. New job opportunities will be provided at Pakenham, Thompsons Road and South Gippsland Highway, as well as in the existing and identified town centres and within new residential communities. Dandenong and the south eastern metropolitan suburbs will also continue to be a major focus for employment, services and facilities provision in the region.

The existing sense of place will be enhanced through the design of precincts enabling residents to enjoy access to a network of waterways, biodiversity corridors and open spaces, as well as providing ready access to vibrant town centres, local services and job opportunities. Opportunities to integrate the waterways, the Royal Botanic Gardens Cranbourne, local hills and views to more distant hills including the Dandenong Ranges, will be maximised.





6.3 LANDSCAPE, ENVIRONMENT AND OPEN SPACE

Melbourne's South East Growth Corridor comprises areas of important biodiversity, drainage, flood mitigation, landscape and cultural heritage values. Significant opportunities exist to create new active and passive recreation areas to address the open space needs of the broader region.

The Corridor Plan recognises the wide range of ecological, cultural, recreational and social values across the South East Growth Corridor.

Combined, these values make up an integrated open space network. This network provides an important natural setting for the entire Growth Corridor. It will make a major contribution to the future amenity and sense of place for future communities.

Residents and visitors will be able to access the open space via a comprehensive trail network that will extend throughout this Growth Corridor.

6.3.1 Landscape

Key landscape elements that require particular attention include:

- > Retention of distant views to the Dandenong Ranges to the north;

- > Utilisation of the natural drainage system that flows into the Western Port to create a network of open spaces which connect different parts of the Corridor in both visual and landscape terms. Cardinia Creek, Clyde Creek, Gum Scrub Creek and Toomuc Creek are particularly important in this regard; and

- > Retention of the rural character of the areas adjoining the UGB. The areas adjoining the UGB support a range of agricultural, hobby farms and equestrian industries, which add considerably to the character and amenity of Melbourne's south east. The planning and design of activities along this interface need to ensure that urban activities within the UGB do not adversely impact on the functions or amenity of these rural edges.



6.3.2 Biodiversity

This Growth Corridor has significant biodiversity values associated with its major creek lines. Habitat exists for fauna species including Growling Grass Frog, and Southern Brown Bandicoot. These species are not reliant on extant native vegetation and utilise a generally highly degraded rural landscape.

The existing landscape provides habitat and permeability for the Southern Brown Bandicoot through scattered patches of habitat throughout the Growth Corridor. The most significant of these areas is the Royal Botanic Gardens Cranbourne which supports high quality habitat and an important population of Southern Brown Bandicoot.

Scattered threatened flora species exist throughout the Growth

Corridor and in particular along the southern end of the railway line and along Manks Road.

The following biodiversity values are recognised by the South East Growth Corridor Plan:

- > Cardinia Creek Corridor. Areas for Growling Grass Frog protection have been identified along Cardinia Creek. Some of these areas are likely to be included in the area identified for the Cranbourne Regional Park;
- > Clyde Creek Corridor. Areas for Growling Grass Frog protection have been identified along Clyde Creek Corridor generally downstream of Tucker Road and extend east to the Muddy Gates Drain West Branch;
- > Habitat for the southern brown bandicoot at the Royal Botanic Gardens, Cranbourne and nearby areas. Options

for the connection between bandicoot populations in RGB Cranbourne and other populations outside the UGB will be resolved in accordance with the Biodiversity Conservation Strategy); and

- > Clyde-Tooradin Grasslands on the Railway Line – Public Use Zone Transport. The southern end of the South East (Cranbourne) railway line is to be established as a conservation area in order to protect and manage Maroon Leek Orchid and Swamp Everlasting. In determining the boundary of the conservation area consideration has been given to the need to provide rail services in future. A Conservation Management Plan will be developed for the management of the conservation area.





6.3.3 Drainage

The South East Growth Corridor includes parts of four major catchments:

- > the Mornington Peninsula catchment;
- > the Dandenong catchment;
- > the Cardinia Creek catchment; and
- > the Dalmore catchment.

Major local waterways include Cardinia Creek, Clyde Creek and the Western Contour Drain. These waterways, numerous smaller tributaries and wetland areas include areas of cultural heritage, and provide habitat for significant native flora, native frog and fish species, and other fauna.

Waterways in this Growth Corridor ultimately discharge to Western Port, an internationally recognised Ramsar⁴ wetland. Ramsar wetlands require a high level of control over the quality and quantity of surface water discharge.

Significant areas of Southern Casey are prone to shallow sheet flooding.

To address local flooding, and protect the downstream Koo Wee Rup Flood Protection District and the Western Port Bay Ramsar site, more flood storage areas will be required to service development in this corridor than in other Growth Corridors. A regional retarding basin of approximately 250ha is proposed by Melbourne Water beyond the south east corner of the Urban Growth Boundary to provide some of the flood storage capacity required.

The retarding basin is proposed to be located north of Manks Road, between the Western Contour Drain and Muddy Gates Lane. This will control the quantity and quality of stormwater flows into the Western Port Bay, and its delivery is vital to enable the development of the recently expanded Growth Corridor.

The retarding basin is required to help manage the increase in stormwater flows resulting from the new urban development. It will be designed to temporarily store then gradually release the increased flows to protect downstream properties from flooding. The retarding basin also has the potential to be used for other beneficial purposes such as improving water quality and the provision of active and passive open space.

This regional asset may also be able to provide additional environmental or recreational benefits. Opportunities will exist for the facility to contribute to the broader biodiversity value of the region. For instance, the wetlands within the basin might contribute to the habitat for a variety of migratory birds associated with the Ramsar wetlands to the south, as well as provide habitat for the Growling Grass Frog.

6.3.4 Regional Parks and Open Space

A network of waterways, biodiversity corridors and open spaces will extend across the South East Growth Corridor.

This network will comprise land which has been set aside for a range of purposes, including biodiversity protection, drainage, flood mitigation, active and passive recreation, landscape and cultural heritage protection. The major open space nodes within this network include:

- > The Royal Botanic Gardens Cranbourne;
- > The Casey Fields sporting precinct;
- > The Cranbourne regional parkland identified along Cardinia Creek; and
- > The proposed regional flood retarding basin and wetlands along the south-east edge of the UGB.

Key open space linkages within



⁴ Ramsar wetlands are wetlands of international importance listed under the Convention on Wetlands also known as the Ramsar Convention. The Convention was signed in 1971 at a meeting in the town of Ramsar, in Iran. The aim of the convention is to halt the worldwide loss of wetlands and to conserve those that remain.

this network include Clyde and Cardinia Creeks and the associated Growling Grass Frog corridors, and modified local drainage networks within local neighbourhoods.

This open space network will ensure that the specific environmental functions are protected and enhanced, whilst also ensuring that the features provide value to the community by providing a recreation function, and linking nodes with linear trails.

Open space nodes will be connected by a series of trails focused particularly along the creeks. Some of these will form

part of the MTN (and shown on the Growth Corridor Plan), and others will form local trails to be provided through PSPs.

Specific initiatives within this network include the following:









Cardinia Creek Regional Park

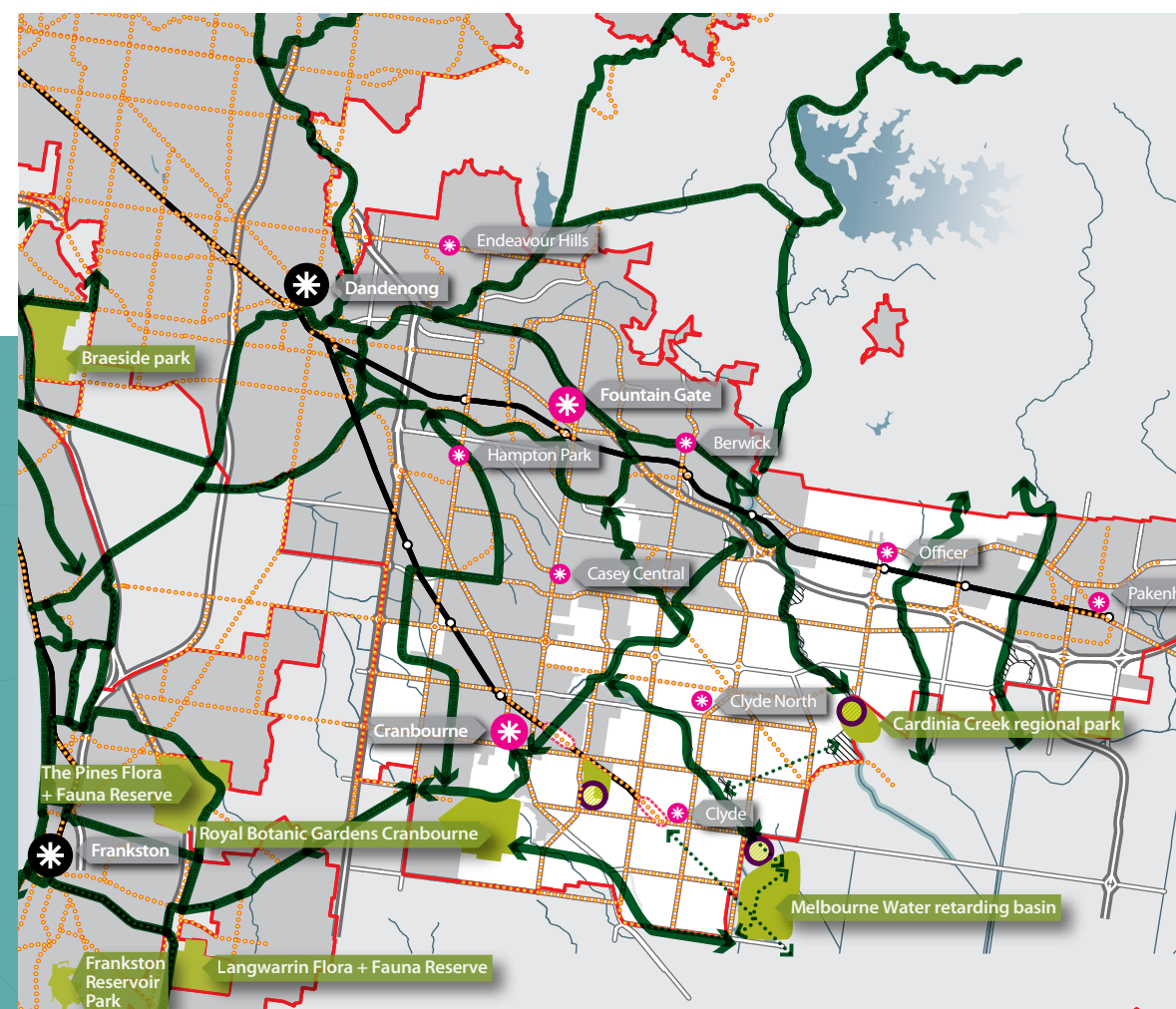
A new regional park is identified along Cardinia Creek, generally south of Thompsons Road. The location of this regional park is subject to investigation. The location of the Thompsons Road crossing of Cardinia Creek (under investigation by VicRoads) may form the northern boundary of the park.

6.3.5 Regional active open space

There is likely to be a need for additional regional active open space within the South East Growth Corridor. Short term opportunities exist to extend the existing Casey Fields facility, which the City of Casey is currently exploring. Additional opportunities might exist to provide new regional active open space outside the Urban Growth Boundary to the north west of the proposed Melbourne Water retarding basin.

South East Integrated Open Space Concept Plan

-  Central Activity Area
-  Principal Town Centre
-  Major Town Centre
-  Train Station
-  Future Station
-  Opportunity for future Rail Station
-  Urban Growth Boundary
-  Existing Urban Area
-  Area Outside UGB
-  Regional Open Space (not all publicly accessible)
-  Potential Regional Active Open Space
-  Potential Bicycle Network
-  Principal Bicycle Network Links
-  Metropolitan Trail Network
-  Metropolitan Trail Network Links
-  Landscape Values





6.4 CREATING COMMUNITIES

6.4.1 Regional self-containment

Central to creating liveable communities in the south east is the need to create a more self-contained region which offers more jobs and facilities and better, high quality, public transport and road connections.

The regional focus for higher order services and facilities, and a significant number of jobs, will be

central Dandenong. Over time, a substantial number of jobs will also be provided in the Pakenham employment corridor, as well as the planned employment precincts at Minta Farm, along Thompsons Road, the South Gippsland Highway and within both existing and planned town centres.

The South East Growth Corridor Plan creates opportunities for investment across a wide range of precincts to maximize the region's potential for the creation and diversification of local job opportunities.

6.4.2 Residential Districts within the Growth Corridor

Two new residential districts are identified in the new Growth Corridor, focused on new Major Town Centres at Clyde and Clyde North.

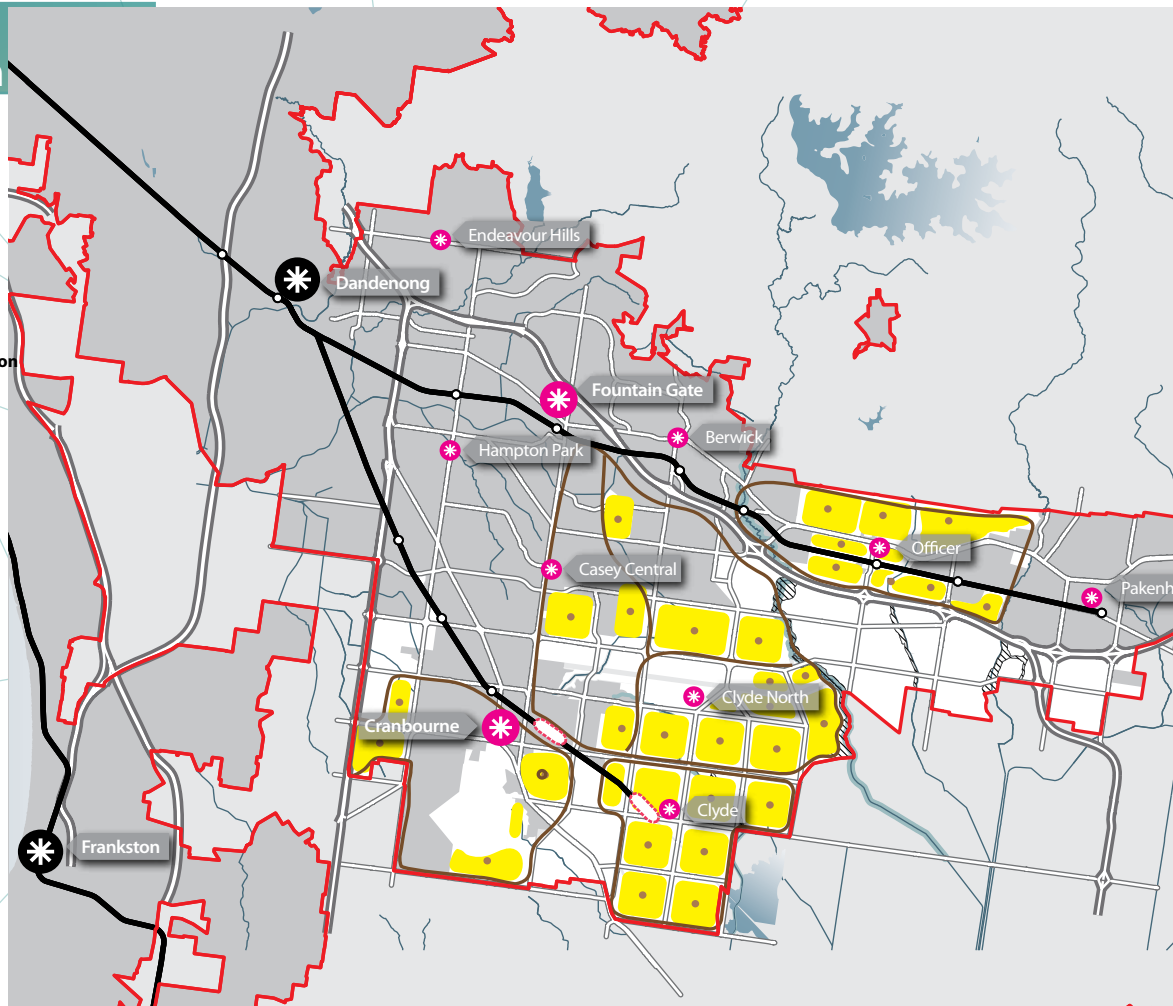
Each of these districts is of a sufficient size to support a Major Town Centre within it, and each can provide a mix of jobs and housing types/densities.

Connections between districts will be provided by a grid of arterial roads and extended public transport networks.

South East

Community Concept Plan

-  Central Activity Area
-  Principal Town Centre
-  Major Town Centre
-  Train Station
-  Future Station
-  Opportunity for future Rail Station
-  Urban Growth Boundary
-  Existing Urban Area
-  Area Outside UGB
-  Constrained Land
-  Local Neighbourhood
-  New Residential Districts



6.4.3 Character and Identity

The sense of place for each of these communities will be created from natural features, particularly the creeks, ridgelines, and views to highpoints such as the Dandenong Ranges and Royal Botanic Gardens Cranbourne.

The town centre at Clyde North is near Clyde Creek, and can be designed to integrate this waterway into the character of the town.

Creeks and waterways will also provide alternative connections between communities via the MTN.

Opportunities exist to ensure that



some of the arterial road routes are designed to have a strong boulevard character. This will potentially require such routes to have a wider cross section to allow for tree planting and wider medians. Thompsons Road is a key route for consideration of such treatment.

6.4.4 Regional Community, Health and Education Services and Facilities

The major campus based post compulsory education providers in the South East are Monash University's Berwick and Peninsula (Frankston) campuses, and Chisholm Institute at Berwick, Dandenong, Cranbourne and Frankston.

It is anticipated that the expected growth in demand for campus based Higher Education and Vocational Education and Training (VET) can largely be met from existing campuses. However, additional TAFE services, with a focus on VET qualifications and Higher Education feeder courses, could be considered in Cardinia to help ensure locally relevant provision of post compulsory education services.

Primary, secondary and tertiary health services, both hospital and community based, are provided by a combination of state and commonwealth government and private providers. Primary care services are generally provided by general practitioners. Tertiary mental health services are provided at a range of locations by Southern Health and a range of non government organisations. Southern Health is the major provider of services in Melbourne's south-east and operates six hospital campuses and a range of community based services delivering a range of primary health care services. Monash Medical Centre at

Clayton and Moorabbin provides specialist services. The Kingston Centre provides specialist aged care, mental health and sub acute services. People living in the South East Growth Corridor also access the Alfred Hospital and other inner metropolitan specialist hospitals for tertiary and state-wide health services.

Dandenong Hospital provides a range of acute services including mental health and primary care. Casey Hospital, at Berwick, provides a range of acute health services. Cranbourne Integrated Care Centre provides a range of day, outreach and aged care assessment services.

A number of services and sites in the South East Growth Corridor are currently being expanded. Master planning is underway at Casey Hospital for the growth and development of acute health services to meet future demand. A major expansion of children's services is planned at the Clayton site. A GP Super Clinic which is intended to integrate a range of primary care services is being established in Berwick. Planning for the upgrade and expansion of ambulance services is occurring within the context of the state-wide service network.

Additional residential aged care capacity will be required to provide for an expanding and ageing population in Melbourne's south-east.

Strategic planning will take account of interface communities on the metro rural fringe, consider the need for health and medical precincts in major centres and include a focus on the potential for co-location of services.

More comprehensive and specialist education, health and community facilities would normally be located in the higher order town centres, which include Pakenham, Officer, Cranbourne/ Cranbourne East and Clyde.



6.5 EMPLOYMENT

The South East Growth Corridor will continue to have a strong relationship to the Dandenong Central Activities Area (CAA) and other major employment destinations in the broader south east metropolitan area. This will continue to drive the need for improved transport connections between the Growth Corridor and major job locations.

However, over time, the South East Growth Corridor will aim

to achieve greater local job self containment. In total, the South East Growth Corridor Plan area is expected to accommodate between 86,000 and 110,000 new jobs, across a range of employment sectors and locations.

This will be achieved in a variety of ways, ranging from home based businesses and jobs in Local Town Centres through to employment in large town centres and industrial precincts.


















6.5.1 Town Centres

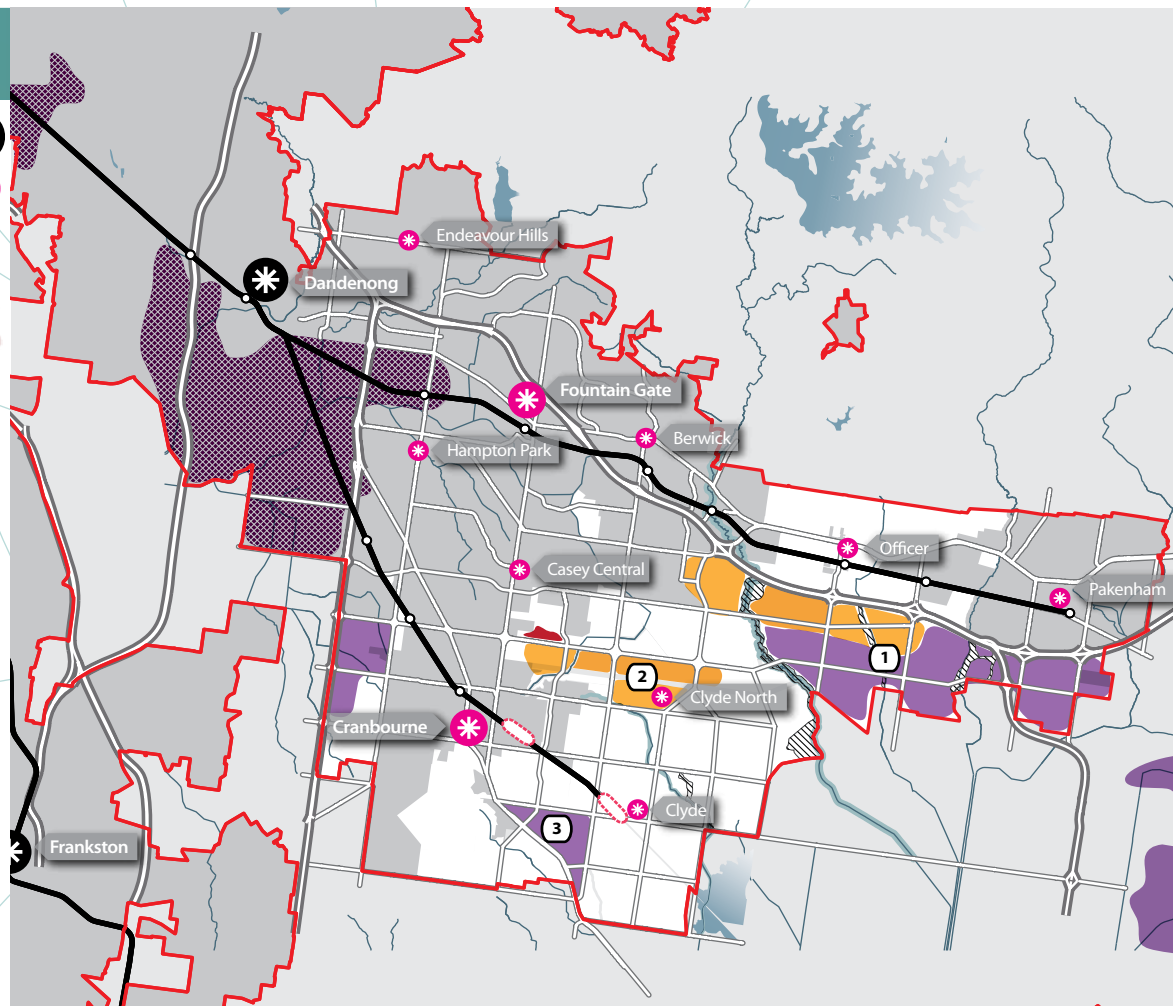
A wider range of businesses and job opportunities will emerge over time in Dandenong CAA along with the Principal Town Centres identified at Cranbourne and Fountain Gate and the Major Town Centres identified at Pakenham, Officer, Berwick and Casey Central.

Two new Major Town Centres are identified in the Growth Corridor Plan at Clyde, adjacent to a new rail station along the extended Cranbourne rail line, and at Clyde North, on the PPTN which links Cranbourne to Officer and beyond.

South East

Employment Concept Plan

- Central Activity Area 
- Principal Town Centre 
- Major Town Centre 
- Train Station 
- Future Station 
- Opportunity for future Rail Station 
- Urban Growth Boundary 
- Existing Urban Area 
- Area Outside UGB 
- Constrained Land 
- Industrial 
- Existing industrial 
- Business 
- Business with Residential 
- Officer-Pakenham Employment Corridor 
- Thompsons Road Employment Corridor 
- South Gippsland Highway Industrial Node 



6.5.2 Employment Precincts

The South East Growth Corridor Plan makes provision for:

- > 2,370 (gross) hectares of industrial land;
- > 1,290 (gross) hectares of business land; and
- > Around 60 (gross) hectares of additional land could also be provided, for a range of local industrial and commercial activities across residential PSPs. These will be identified as required through the PSP process.

Officer-Pakenham Industrial/Business Corridor

This corridor has good freight and public transport connections, and will be an attractive location for a wide range of advanced manufacturing and commercial enterprises, as well as the more traditional manufacturing, warehouse and logistics, commercial and some high density residential uses.

It has direct freight access to the metropolitan area and the Port of Hastings via the South Gippsland Highway, Western Port Highway.

It will be anchored by high amenity business parks planned at Cardinia Road to the east and Minta Farm to the west, and will be well serviced by the PPTN identified to connect to the Officer Town Centre and rail line, and the broader south-eastern metropolitan area.

Thompsons Road Business Corridor

This corridor will have excellent freight access to the metropolitan area and the Port of Hastings. It will be serviced by a high amenity business precinct and Major Town Centre identified at Clyde North, and will be readily accessible to the PPTN by a series of north-south public transport connections.

Around 520 (gross) hectares of business land is identified along Thompsons Road including around the Clyde North Town Centre. Along with employment uses, this Precinct allows some residential development and a mix of business services, service industry and associated uses. Detailed planning will investigate the type of employment and industrial land uses that are appropriate, some of which will be influenced by the presence or proximity to physical and man-made constraints, such as the transmission easement. The Thompsons Road freight route will be protected from sensitive uses by including a buffer of non-residential land uses.

South Gippsland Highway Industrial Node

A new 250ha (gross) industrial precinct is identified along the South Gippsland Highway. This precinct will also enjoy excellent freight access to the metropolitan area and the Port of Hastings the South Gippsland Highway and Western Port Highway. It will be serviced by a new railway station, and Major Town Centre at Clyde.



6.6 TRANSPORT

6.6.1 Public Transport

Urban development in the South East Growth Corridor will be supported by the two metropolitan rail lines to Cranbourne and Pakenham. Planning will provide for rail services and station development, to include multi-modal integration, to support Principal and Major Town Centres as well as strategically located park and ride facilities.

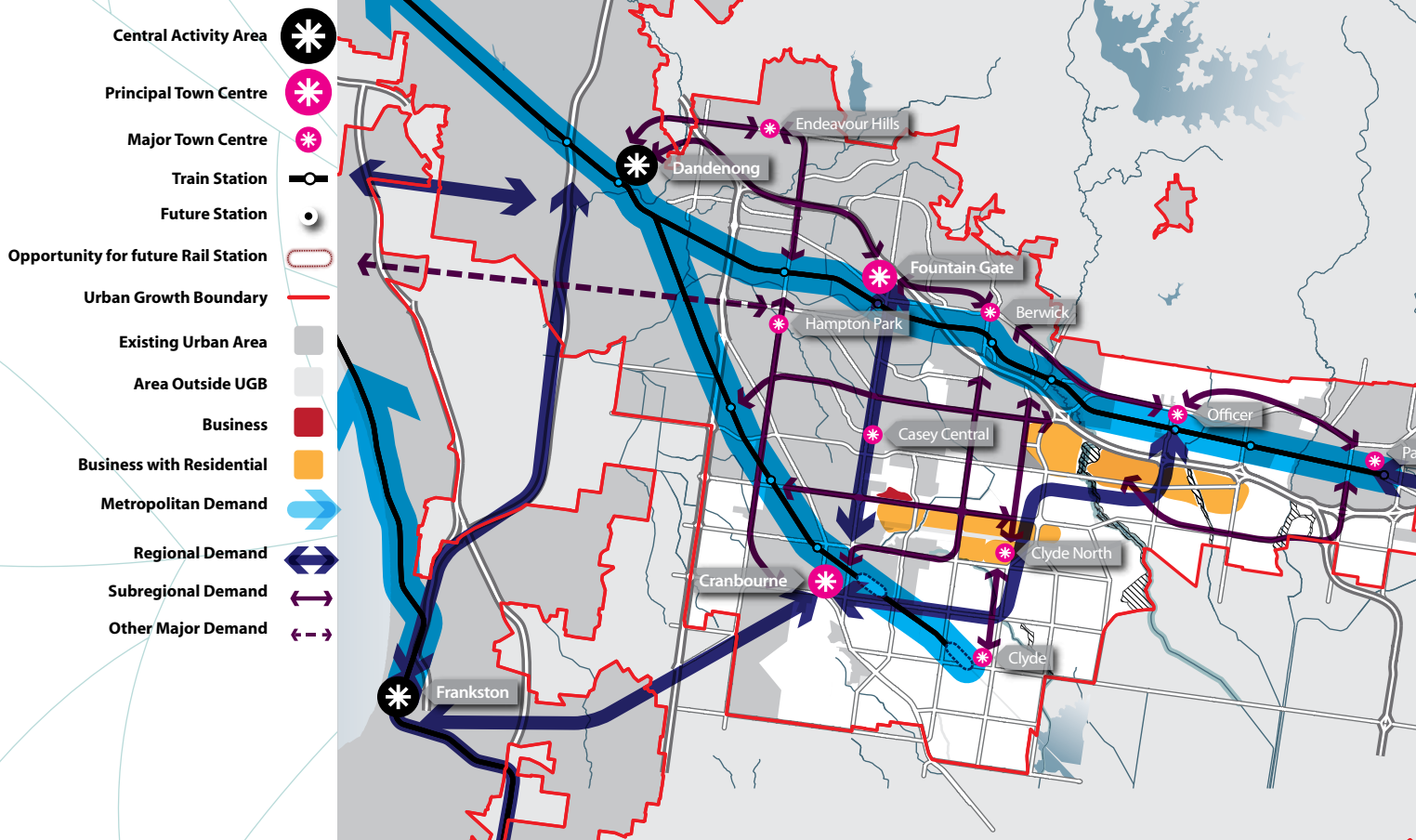
The identified PPTN will provide a basis for a potential future strategic bus network linking rail stations along and between the Cranbourne and Pakenham rail lines, as well as connecting the Major Town Centres and the large employment areas.

Parts of the arterial road network along the PPTN can be designed to accommodate potential higher capacity public transport network such as busways in the future. The connection from Cranbourne to Officer has potential for this higher capacity service for example.

The planning for the PPTN will extend beyond the Growth Corridor, linking to Dandenong South, Frankston and a range of jobs and services in the southern metropolitan region.

In addition, planning for a network of potential local bus routes will be provided across the area, and these routes will be planned as part of PSPs. For example, it is envisaged that major east – west routes such as Thompsons Road (which is a part of the PFN), may also provide for local bus services.

South East Public Transport Concept Plan



6.6.2 Arterial Road Networks

The Growth Corridor Plan proposes the development over time of additions to the grid of north-south and east-west roads, to provide critical linkages between communities, and to housing, jobs and services.

Planning for development of the grid will take into account the need for:

- > Links between Cranbourne and town centres at Officer and Pakenham;
- > North-south public transport routes;
- > Crossings of Cardinia Creek.





6.6.3 Planning for Freight

Planning for the freight network in the south east will aim to enable freight connections between the current freight facilities south of Dandenong, the Port of Hastings, and the Pakenham employment corridor.

Parts of the road network will be planned to carry freight as a key function, including:

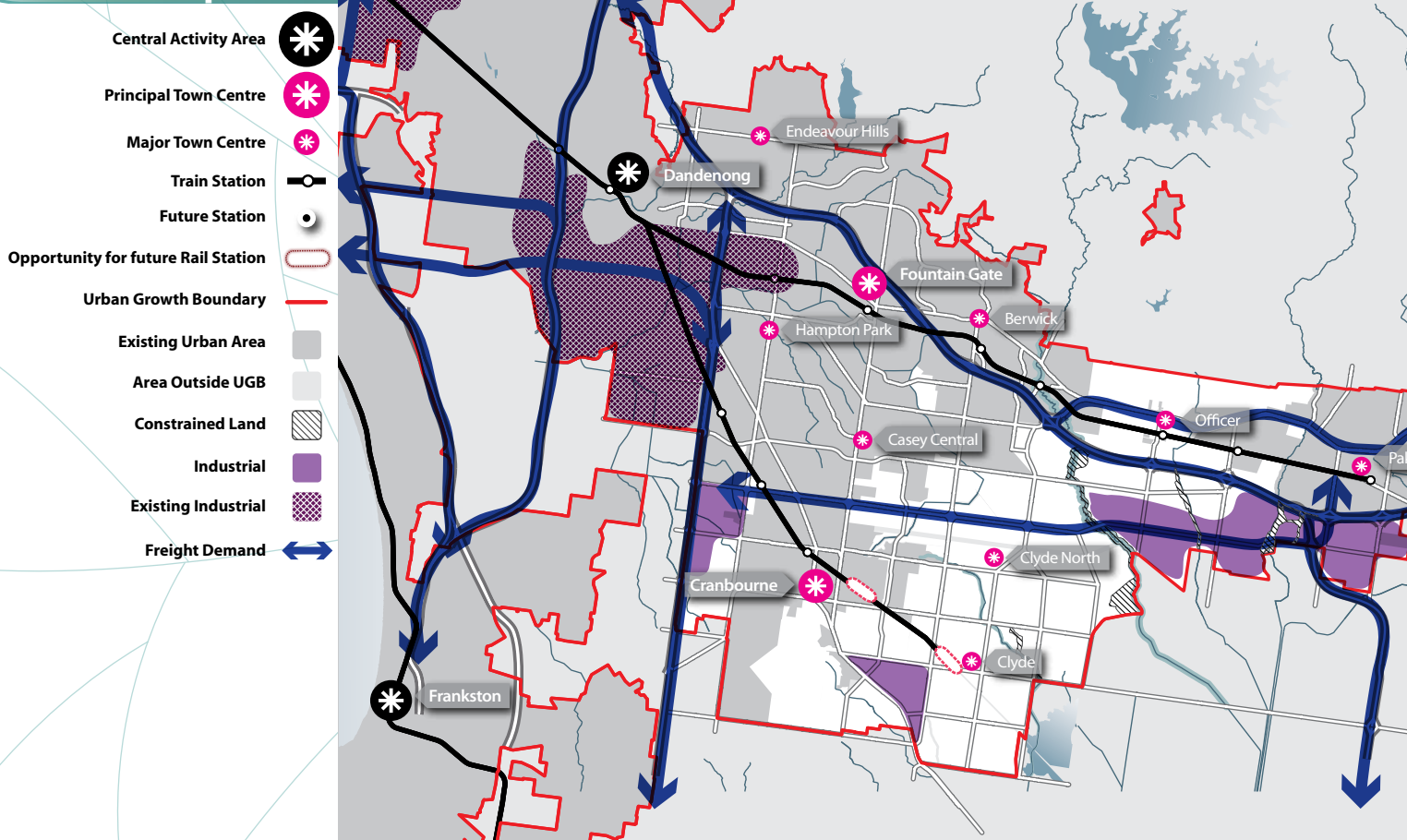
- > The Princes Freeway;
- > The Western Port Highway;
- > Eastlink;
- > The Mornington Peninsula Freeway; and
- > Thompsons Road.

The rail freight network in the south-east comprises rail corridors, including the

Dandenong-Pakenham corridor, Dandenong-Lyndhurst-Cranbourne corridor and the Frankston-Hastings Port rail line. The key future rail development is the proposed Lyndhurst-Hastings Port rail line.

A notable existing rail terminal is the Hanson's Westall quarry terminal. Important proposed rail terminals include the: Hastings Port intermodal terminal and the South-east Intermodal Freight Terminal at Lyndhurst and/or Greens Road Dandenong

South East Freight Concept Plan



6.7 OTHER INFRASTRUCTURE

South East Water (SEW) is currently preparing an Integrated Water Management Strategy for its service region. One of the key issues to be addressed by this Strategy is whether a new Sewage Treatment Plant (STP) will be constructed to service urban growth in the South East Growth Corridor. The decision regarding the need or otherwise for a new STP in this region will depend on whether there is sufficient use

for non-potable recycled water across the region.

In the event that there is insufficient demand for non-potable water in the region, then it is likely that the Eastern Treatment Plant, which already provides non-potable recycled water, will be relied upon to meet the sewage treatment requirements of this Growth Corridor.

Alternatively if sufficient future demand for non-potable recycled water can be confirmed, then a new STP will be considered as part of its Strategy. SEW has suggested that a new STP might be co-located with Melbourne Water's retarding basin, but investigations will continue. Consideration needs to be given to two areas with adverse amenity potential are included in the Growth Corridor, and need to be planned carefully:

The major quarry in the South East Growth Corridor lies to the south of Thompsons Road, and to the west of Berwick-Cranbourne Road. This quarry is currently zoned Special Use Zone, and land within a 500m buffer of the quarry is zoned Farming Zone. However, the operator of this quarry has indicated a willingness to close it down to enable urban development on the quarry site and on surrounding parcels. The Growth Corridor Plan identifies urban uses on the quarry site and on surrounding parcels, but it should be noted that this redevelopment is subject to the current works authority being extinguished.

An area further west along Thompson Road currently contains a poultry farm, a natural resource distribution centre and an abattoir. The owners of each of these facilities and associated land have indicated a willingness to close down operations. This needs to be coordinated to avoid uses that have ceased continuing to be constrained by neighbouring uses. The Growth Corridor Plan identifies business (with some broader uses) in this area, to enable this redevelopment to occur. This will be planned in more detail in a PSP.

