



Cranbourne North Development Plan

Adopted by Council 25 August 2009

This Development Plan was adopted by Casey City Council as the approved Development Plan for the affected land under Clause 43.04 of the Casey Planning Scheme

Document Authorisation



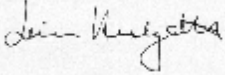
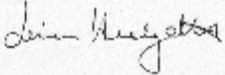
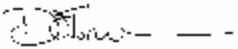
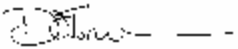
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A	21/12/2004	Development Plan for Council consideration	Manager City Development	
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Table of Contents

1.0 INTRODUCTION	3	5.0 THE STRUCTURE PLAN	18
1.1 Planning for Cranbourne North	3	5.1 Land Use Budget	19
1.2 The Development Plan	4	5.2 Site Yield	19
1.3 The Locality	5	5.3 Structure Plan Precincts	22
2.0 DEVELOPMENT PLAN IMPLEMENTATION	6	5.4 Non-residential Uses	24
2.1 Amendment C77 to the Casey Planning Scheme	6	5.5 Planning Principles	24
2.2 Cranbourne North Development Contributions Plan	7	6.0 PRE-PERMIT SUBDIVISION MASTERPLAN REQUIREMENTS	47
3.0 DEVELOPMENT PLAN STRUCTURE	8	6.1 Subdivision Masterplan	49
4.0 VISION & OUTCOMES	9	7.0 PERMIT AND POST PERMIT REQUIREMENTS	57
4.1 Vision	9	7.1 Subdivision Application Requirements	57
4.2 Outcomes: A Suburb Superstructure to Deliver Strategic Design Outcomes	12	7.2 Use / Development Application Requirements	67
4.3 Melbourne 2030 Neighbourhood Principles	16	8.0 FUTURE DIRECTIONS	71

8.1 Service Business Precinct	71
8.2 Residential Precinct	72

Table of Figures

Plan 1 Area Plan	4
Plan 2 Local Context	5
Plan 3 Structure Plan	20
Plan 4 Structure Plan Matrix	21
Plan 5 Road Network	27
Plan 6 Road Detail	32
Plan 7 Indicative Public Transport Routes	34
Plan 8 Walkability & Trails	35
Plan 9 Open Space Network	37
Plan 10 Community Facilities & Centres	38
Plan 11 Vegetation Retention	39
Plan 12 Landscape Design	43
Plan 13 Buffer Plan	44
Plan 14 Staging Plan	45
Plan 15 Site Masterplan Example	58
Plan 16 Building Envelope (Indicative Plan)	70
Plan 17 Future Development	73

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1.0 Introduction

The Cranbourne North Development Plan (the 'Development Plan') provides a detailed, strategically driven development framework to achieve World Class residential development in this part of Casey, it also:

- Addresses strategic planning, design and infrastructure provision principles set out in key strategic documents like:
 - Melbourne 2030: Planning for Sustainable Growth (Department of Infrastructure, October 2002).
 - Casey C21 Strategy - A vision for our future (City of Casey, September 2002).
 - Casey Image Strategy (City of Casey, November 2004).
 - Casey Neighbourhood Character Policy (City of Casey, November 2004).
 - Casey Open Space Strategy (City of Casey, 2001).
 - Casey Activity Centres Strategy (City of Casey, October 2006).
- Addresses fundamental issues raised by new Casey residents in community values research, new resident forums and other research undertaken by the City.

1.1 Planning for Cranbourne North

This broader study area is bounded by:

- The Casey Central Shopping Centre and Glasscocks Road/Pound Road to the north;
- Narre Warren - Cranbourne Road to the west which is identified in M2030 as a PPTN (Principal Public Transport Network);
- Thompsons Road to the south; and,
- Berwick - Cranbourne Road to the east.

Previously an interim Urban Growth Boundary (UGB) traversed through this 'broader' study area, placing part of this area within the Green Wedge.

In November 2005 the interim UGB was moved to include the whole study area however only that land previously within was rezoned under Amendment C77. Further planning scheme amendments will be prepared over time to address this balance land. The Development Plan provides strategic direction with regards to the balance land.

Plan 1 Area Plan

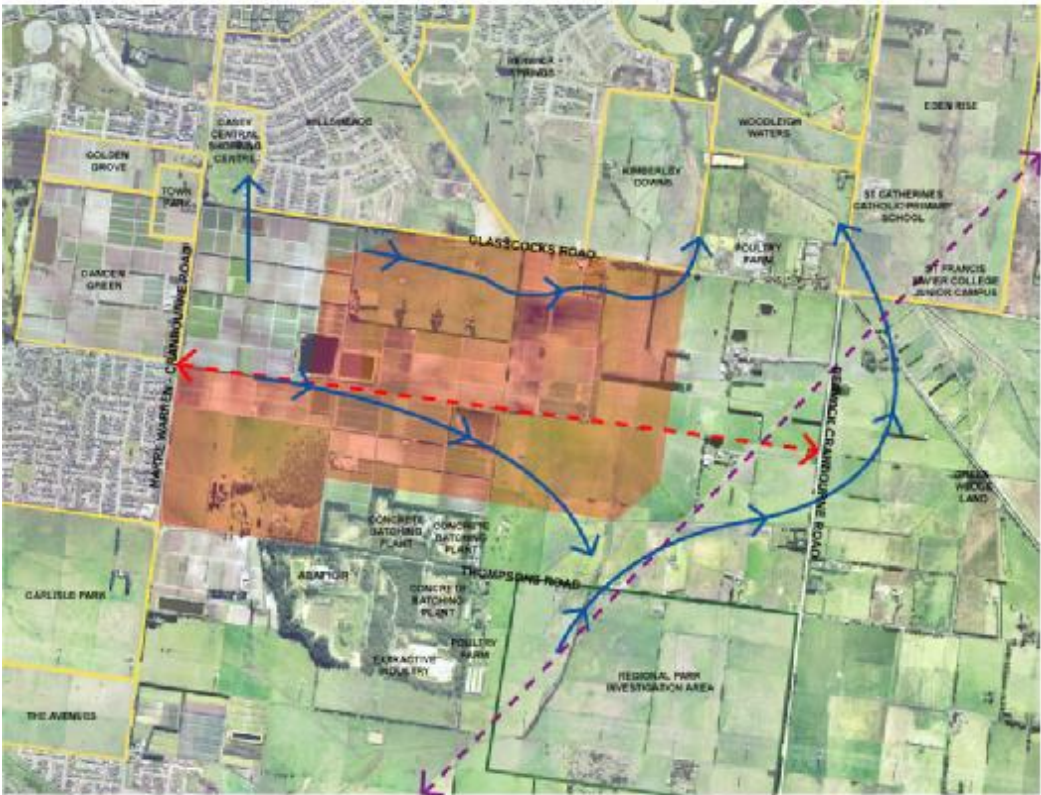


1.2 The Development Plan

The Development Plan applies to all land affected by the Development Plan Overlay (Schedule 14) under the Casey Planning Scheme (refer to Plan 1). More broadly it provides strategic direction to all land within the UGB that is bounded by:

- the proposed Casey Central Town Centre area and Glasscocks Road to the north,
- Narre Warren - Cranbourne Road (Casey Boulevard) to the west,
- Berwick - Cranbourne Road to the east; and
- Thompsons Road to the south.

Plan 2 Local Context



LEGEND	
	WATER PIPELINE
	ON SITE WATER FLOW
	GAS TRANSMISSION PIPELINE EASEMENT
	RESIDENTIAL ESTATES
	REGIONAL PARK INVESTIGATIONS AREA

1.3 The Locality

Plan 2: Local Context, indicates where the study area lies in relation to adjoining residential estates and other land uses. This plan also identifies some of the constraints placed on the site including on site water flow, easements, offensive land uses and pipelines

2.0 Development Plan Implementation

2.1 Amendment C77 to the Casey Planning Scheme

Amendment C77 to the Casey Planning Scheme rezoned the land for urban purposes, applied the Development Plan Overlay (DPO) and a Development Plan Contribution Overlay (DPCO).

2.1.1 Application of the Development Plan

In accordance with the provisions of the Development Plan Overlay a permit granted must:

- Be generally in accordance with the development plan.
- Include any conditions or requirements specified in a schedule to this overlay.

It is important to note that other planning requirements may also apply to land use, subdivision and development proposals within the Development Plan area. These policies must be satisfied separately to the requirements of this Development Plan. Where this Development Plan specifies a more

onerous requirement, it will be required by Council that this more onerous requirement must be met.

This Development Plan is complementary to the requirements of *ResCode*, which are set out in Clause 54, 55 and 56 of the *Casey Planning Scheme*. The requirements of *ResCode* must be addressed and met separately as part of a land use or development proposal. In some instances, this Development Plan requires a higher standard / alternative design or infrastructure provision (for example road widths, landscaping requirements, etc). In these cases, the requirements of this Development Plan must be met in addition to *ResCode* requirements.

2.1.2 Schedule to the Development Plan Overlay

This Development Plan must be read in conjunction with Schedule 14 in Clause 43.04 of the Casey Planning Scheme. The requirements of the Schedule are written into this Development Plan so that it forms an integrated package.

The Schedule to the Development Plan sets out matters relating to:

- Requirements before a permit is granted.
- Conditions and requirements for permits.

- Requirements for Development Plan.

2.1.3 Future Planning Scheme Amendments

Future Planning Scheme Amendments are anticipated to be progressively required overtime to:

- Delete the Public Acquisition Overlay from land once it has been acquired for public purposes.
- Apply an appropriate Road Zone to sections of Glasscocks/Pound Road, Thompsons Road and Narre Warren-Cranbourne Road once this land has been acquired for road purposes.
- Delete the Environmental Audit Overlay from land where the requirements of the Overlay have been met.
- Delete the Development Plan and Development Contributions Plan Overlay from land once the development phase is complete.
- Apply a Public Acquisition Overlay to the State Government Secondary and Primary School sites at a time when the Government determines to proceed with acquisition.
- Apply an appropriate Public Purposes Zone over land when it

is acquired for that purpose for Education (State Government schools), Local Government (community centre site) and other public purposes (such as for drainage purposes).

- Apply a Public Park and Recreation Zone to land as it is transferred to Council for parkland purposes.
- Implement a final road corridor upgrade for Berwick - Clyde Road based on the results of the current investigation being carried out by the State Government (VicRoads).
- Further rezoning of land previously outside the UGB for urban development purposes.
- Implement changes flowing from any Amendment to link the further design work that is progressing to the planning for the area (for example the Designing Casey: Residential Design Code).

2.2 Cranbourne North Development Contributions Plan

This document has been prepared concurrent with the Development Contributions Plan to provide developer funding towards the infrastructure needs of the area. The Cranbourne North Development Contributions Plan is an incorporated document within the Casey Planning Scheme under Clause 45.06.

3.0 Development Plan Structure

The Development Plan structure is:

- Vision & Outcomes
- Structure Plan
- Pre Permit Subdivision Masterplan requirements
- Permit and post permit requirements
- Future directions

The Table provides a brief outline of the purpose of each section.

Vision & Outcomes (Discussed in Section 4.0)	Sets out the vision and outcomes as they apply to land within the Development Plan area.
Structure Plan (Discussed in Section 5.0)	Sets out what is in the Development Plan and briefly explains why it has been included. It illustrates the key land use, development and subdivision requirements of the Development Plan.
Pre Permit Subdivision Masterplan requirements (Discussed in Section 6.0)	Introduces the concept of a Subdivision Masterplan and outlines the detail required in a Subdivision Masterplan. A Subdivision Masterplan is to be prepared and submitted to Council for approval prior to (or concurrent to) a Planning Permit application being considered. This ensures that all details included in this Development Plan forms part of the overall development of the site. This section also includes property specific considerations that must be addressed in the Subdivision Masterplans.
Permit and post Permit requirements (Discussed in Section 7.0)	Sets out requirements for Planning Permits both in terms of information to be submitted with an application and matters that the Permit must address when being considered. This section also includes some standard Planning Permit conditions and introduces a suite of conditions to be placed on Planning Permits to provide for post Permit outcomes, for example the requirement of a Building Envelope as a restriction on Title to achieve certain neighbourhood character outcomes.
Future Directions (Discussed in Section 8.0)	Provides strategic direction with regard to the balance land within the study area, that was not rezoned for urban purposes as part of the C77 Planning Scheme Amendment. This strategic direction will form the basis for any future rezoning.

4.0 Vision & Outcomes

4.1 Vision

The Development Plan provides a detailed, strategically driven development framework to achieve World Class Development in Casey. A central aspect of the vision is making this part of Cranbourne North a Great Place to Live!

The site is the largest undeveloped parcel that is located centrally within Casey's designated future suburban area. As a significant greenfield site, the Plan showcases implementation of the planning principles embedded within both the State Government's *Melbourne 2030* (October 2002) and the *Casey C21 Strategy* (September 2002). It is intended that the model of development will provide a benchmark for other planned developments in the Casey-Cardinia Growth Corridor.

The vision charts a new development direction away from conventional development and infrastructure provision of the past towards a new model. Experience has shown that the outcomes from past models do not fully reflect the values of the Casey community and do not adequately address infrastructure provision expectations of our people.

Melbourne 2030 (State Government, October 2002) provides the following vision for greenfield development:

"Melbourne 2030 intends that neighbourhoods should be created as integrated and interconnected communities, not just as subdivisions. It adopts a set of Neighbourhood Principles that apply to the development of new areas and to major redevelopment in existing areas. Not only will new developments meet basic needs, they will also build a strong sense of place and community. Because the population is made up of people of different ages, genders, family types, cultural backgrounds, interests and abilities, neighbourhoods must respond to different needs, opportunities and aspirations."

The Casey greenfield development vision set out in the *Casey Image Strategy* (City of Casey, November 2004) is to:

"Support World's best practice integrated design and development of master planned communities. The physical design is to be prepared by integrated design teams rather than small piecemeal 'subdivision based' development. The physical design is to respond to the Casey garden suburb vision and values, while still achieving appropriate housing densities."

The design is to be based on an understanding of community development needs and the links between good design, sustainability and longer term community health and wellbeing. Opportunity for every street and every place to contribute, even in a small way, towards the wider design objective is to be grasped."

The overall outcome being sought for the Cranbourne North Development Plan, which permeates all design aspects, is one of achieving "World Class Development in Casey". World class benchmarks are sought from approaches to water sensitive design, residential development outcomes through public art and landscape design and community development approaches. Innovative and site responsive approaches are one of the key drivers of achieving this objective.

Throughout the planning process, a strong attempt has been made to ground the design and development proposals to reflect requirements that are economically feasible and deliverable by the development industry. It is recognised that the approach of changing the direction of development towards more sustainable solutions is a gradual one and one that will take time to evolve.

The vision for land within the Cranbourne North Development Plan is:

"For an innovative World Class Development that shifts Casey's development pattern towards one that embraces the sustainability principles of environmental restoration, economic vibrancy and social cohesion. Above all else, the vision is for Cranbourne North to be a great place to live!"

The Plan seeks to create a new model suburb in which to live, work and play in response to the needs of a rapidly expanding population and based upon the principles of exceptional design, innovation, liveability, sustainability and a sense of community as outlined in Melbourne 2030. A core principle of this model is the importance of creating a compact, safe and walkable living environment."

The Development Plan embraces sustainability principles at a level not yet seen in Casey with regard to:

- Innovation
- Liveability & Connectivity
- Liveability & Amenity
- Liveability & Environment
- Sustainability
- Accessibility Network
- Housing Diversity

These sustainability principles are summarised in the table on the following page.

Cranbourne North Development Plan Sustainability Principles

Innovation	Implement innovative concepts in design, lifestyle, environmental sustainability and technology.
Liveability & Connectivity	A central Community Spine links all precincts. A secondary network of Community Corridors provides universal permeability between precincts, open space and public facilities for cars, pedestrians and cyclists. Image connectors that help build and shape a local sense of place form part of the community super-structure.
Liveability & Amenity	Offer a broad range of community and recreational facilities within a walkable neighbourhood including: <ul style="list-style-type: none"> • Shops and cafes • Schools (primary and secondary) • Public and private community facilities and services • Neighbourhood based convenience centres • A full range of parkland experiences
Liveability & Environment	Active and passive parks are distributed throughout the development area including: <ul style="list-style-type: none"> • A treed hilltop park where nature is protected and restored • Sports ovals shared with schools • A green community spine • One hectare neighbourhood parks • Bike paths and walking trails
Sustainability	Demonstrate “best-practice” sustainability on a broad range of issues: <ul style="list-style-type: none"> • Reduced car dependence • Maintaining and restoring habitats • Reduced energy use • Future proofing through good design • Prosperity and local economic development • Community development and social capital building
Accessibility Network	Identification of the key road network and hierarchy of the roads that are designed to: <ul style="list-style-type: none"> • Safely disperse vehicular traffic throughout the Development Plan area • Allow for innovate concepts to incorporate tall tree planting • Accommodate dedicated bike lanes in the arterial road network • Accommodate median tree planting along the Boulevard Collector Roads • Adapt and accommodate the future needs of public transport • Identify strategically designed connections to adjoining roads and neighbourhoods
Housing Diversity	Provide for a higher density of housing than offered in surrounding neighbourhoods in accordance with <i>Melbourne 2030</i> principles. Provide for increased housing density where new residents will have higher amenity, services and facilities at their door step or within easy walking distance. Increase housing diversity, through the provision of a range of dwelling types, forms and densities, to offer a greater choice of housing to meet different housing needs across a wide variety of ages and throughout the site. Encourage high quality architecture that is integrated with the lot and setting to create a positive image for the development and where trees dominate the landscape and community character. Ensure that housing is designed in accordance with environmentally sustainable design principles.

4.2 Outcomes: A Suburb Superstructure to Deliver Strategic Design Outcomes

Ten (10) strategic design outcomes have been formulated and form the basis of the 'Suburb Superstructure'. These are the fundamental components that each small development will collectively deliver in time. Development proposals must not lose sight of the part they play in the strategic picture. Short sighted decisions that work today, but do not deliver the same longer term benefits will not be supported.

The strategic design outcomes are:

- Cranbourne North, a great place to live!
- A treed suburb with a parkland image to key transit corridors
- Formal Boulevard Structure
- Community Spine
- Country feel and suburban breaks
- Community corridors
- Neighbourhood structure
- Site icon features linked with image connectors
- Support for the staged transition to suburban use and reflecting the history of the place in its future
- Sustainable suburb

The following section provides more detail about the 10 Strategic Design Outcomes, with reference to the collection of plans within this Development Plan. It is important to note that all plans in the Development Plan must be viewed as the collective integration of these Strategic Design Outcomes and principles to be fully understood and appreciated.

4.2.1 Cranbourne North, a great place to live!

A suburb that offers a quality living experience for everyone throughout their life by offering a range of housing product and settings (as identified in Plan 3: Structure Plan and Plan 4: Structure Plan Matrix).

Compact walkable neighbourhoods and streets with higher housing densities located where higher amenity and service provision will be achieved.

A design process that delivers significantly improved outcomes at both the suburb level right through to the house/allotment level.

Liveability will also arise from:

- The amenity and service provision associated with the Town Centre, local shops, safe legible streets, community hubs located on the spine, sports and recreation

facilities all linked by a series of looping trails.

- Quality, busy public spaces. Public space that is safe, accessible and attractive to the user. Develop busy meeting places and a focus for community life that reflect the character of local communities. Public art to be created in high activity locations in activity centres, learning places, community places and other busy locations and transit junctions. Public space design that facilitates truly socially inclusive use, partnership and outcomes.
- Housing that is adaptable for all ages and abilities. Build medium density housing models from the outset that are suitable for all people in terms of access and equity through internal layout considerations.
- A transit structure where bus services can be easily extended in an efficient manner to the site, include development requirements to build safe, accessible and weather shielded bus stops that can be funded and constructed in the development phase.

- Shared infrastructure. Innovative park masterplanning to maximise sharing of buildings and associated infrastructure such as car parking.
- Hierarchy of playspaces and playgrounds. Safe, natural designed playspaces and playgrounds linked to shade, pathways and other activity areas.
- Urban Design to ensure new streets are walkable and connect people to where they want to go. Dead-end streets that reduce permeability and legibility will not be permitted. Laneways are generally minimised, and where included, have windows facing into them from more compact abutting building arrangements.
- More people will walk to shops, work, and friend's houses or simply for recreation than in any other part of Casey.

4.2.2 A treed suburb with a parkland image to key transit corridors

Despite achieving higher housing densities, the overall outcome is one where large canopy trees are planted throughout the public and private spaces. This outcome is a key driver of the structural and detailed design

of the Development Plan. The Cranbourne North landscape theme comprises large, tall, clean trunk trees, with a high crown to allow surveillance, low ground covers underneath with limited shrubs.

The outcomes include:

- Large street trees. New streets designed to allow planting of large street trees that form a touching canopy on all streets.
- Trees in private lots. Establish sustainable tree creation envelopes in new subdivisions and development sites.
- An informal indigenous and native base of trees, with 20% of trees in public space providing introduced colour with landmark qualities.
- Landmark trees in important locations. Roundabouts, junctions, vistas, axis, and parkland planted with landmark trees to maximise both canopy, height, and a sense of structure and to inspire the local people.
- Consistent street tree themes. Implement street tree masterplans with consistency throughout so the themes make sense between estates after the development process is complete.
- Parkland where an open green landmark treed character

dominates even active reserves. Active parks to be multiuse, flexible and evolving.

- Multi-use design of active parkland. Design of active spaces to maximise opportunity for flexible multi-use activities throughout the year.
- Waterway parklands. Embrace opportunities for waterway parklands - consistent with the Casey Green-Blue parkland concept in the Casey Image Strategy (City of Casey, November 2004). Water features that look great, have good community visual exposure, are safely designed, minimise maintenance costs and do not use potable water will be considered positively.
- Existing trees, like those located near older homesteads will be retained in parks and windrows will be managed into the structure of the new development.

4.2.3 Formal Boulevard Structure

Consistent, formal, densely planted boulevards cut through the heart of the community to service transit desire lines (including proposed bus routes) and create a strong image, sense of place and a legible suburb character (refer to Plan 5: Road Network and Section 5).

This form of street with a consistency of large tree planting and a central median has not been delivered before in developments such as this and on this scale.

Turn key roads into boulevards using large trees, underground powerlines, shared paths, lighting, bus shelters, street furniture and active frontages to assist image, use and safety. Manage advertising to maintain clutter free arterial roads.

A strong sense of street legibility is missing from many more recent developments in Casey and the fringe as a whole.

4.2.4 Community spine

The principal community corridor that runs east-west through the site is called the 'Community Spine' (refer Plan 8: Walkability and Trails). The Community Spine is a linear open space corridor that links up all public facilities like the Town Centre, multi-purpose community centres, schools

and active sports reserves. A walking and cycling path forms the spine and is lined with towering informally planted trees that provide structure to the community, create character and a sense of place.

Public art and interpretative displays along the trail tell the history of the place in terms of the past, present and future. Quality and consistency of public space treatment and public art is found throughout.

Pockets of higher density housing benefit from the outlook over these spaces.

4.2.5 Country feel and suburban breaks

Fundamental to the Casey's people is a strong country feel-city living value. The layout supports and strengthens this value in the design by the creation of the large hilltop park in the south-west of the site. A spiralling path will lead you to a hidden lookout structure from which you will experience both the most urban parts of Casey like the Cranbourne Town Centre and the Casey Central Town Centre while also experiencing close and distant views to land in the Green Wedge Zone. This experience typifies the Casey City-Country values. The vegetation in this zone will also contribute towards the restoration of nature and

the consolidation of a bio-link between the Hilltop Park and the vegetated area to the south in the Green Wedge.

4.2.6 Community corridors

A network of linear open space connects each neighbourhood to the suburb superstructure and the Community Spine as well as the wider City-wide corridors.

The community corridors will be informally planted with tall trees to provide a wonderful cycling or walking journey through the heart of the community. The community corridors will strongly contribute to community character.

These community corridors also link the Casey Valley Parklands through the site from the Berwick Springs Waterway Parkland to the Parks Victoria Regional Park Investigation Area immediately to the south.

Provision of public art will be required at key junctions of the corridors. Pockets of higher density housing benefit from the outlook over these spaces.

4.2.7 Neighbourhood structure

The suburb is based around a compact, walkable neighbourhood structure (refer to Plan 8: Walkability and Trails). A community corridor traverses through each neighbourhood, connecting it to the wider community. The Boulevard Collector Roads and the Arterial Roads define neighbourhood edges, minimising traffic through each neighbourhood space.

Each neighbourhood is within easy 400 metre walking distance of facilities such as local shops, schools, sports facilities or one of the larger passive parklands.

4.2.8 Site icon features linked with image connectors

Some defining image design elements are fundamental to the preferred future character of the area and the future sense of place and community. These elements are termed 'image connectors' and provide the suburb urban design framework (refer to Plan 9: Open Space Network), including:

- The hilltop park to proposed Town Centre park visual axis.
- Streets designed to relate to the hilltop park.
- The hilltop park to school axis.
- Casey Central Town Park.

- Spaces, buildings and other landscape elements in the Town Centre that relate strongly to Narre Warren-Cranbourne Road and Glasscocks Road.
- Boulevard entry roads based on retention of the existing Cypress trees.
- Extension of the hilltop park to provide a Thompsons Road frontage to assist in creation of a positive image for the wider area.
- Retention of other clumps of large existing trees in parks.
- The formal boulevard structure.
- The community corridors.

4.2.9 Support for the staged transition to suburban use and reflecting the history of the place in its future

The design detail of public space will fundamentally reflect the site history and the story will be told along the community spine and corridors and in key public spaces. Also, historic remnants such as windrows and trees associated with the older homesteads will be protected in medians and hilltop parks.

Aboriginal heritage will be nurtured within the site and in especially set aside spaces in partnership with the Aboriginal community located within the hilltop park area.

Buffers to existing uses in the Thompsons Road area have been supported by the design. The buffers to uses such as the abattoir, treatment works, concrete batching plants and poultry farm have all been incorporated and housing development remains outside of these areas (refer to Plan 13: Buffer Plan).

4.2.10 Sustainable suburb

A range of measures have been both mandated and encouraged through the development controls to move away from conventional development models towards more sustainable models. These have been applied across a whole community and not piecemeal. It is recognised that this is a journey within a framework of what is practical at any point in time. Key measures include mandating dual plumbing for all buildings, use of recycled water for toilets and garden/park watering to reduce water use by 50%, water sensitive design to clean and reduce water runoff, mandating provision of broadband cable throughout to link to digital networks, drought proof landscape design and providing for all household types throughout the site.

Further work is continuing to create an approach to the economic and community development of the area to compliment these approaches and to broaden the definition of

sustainable community development in Casey.

The Plan will implement an innovative model of how to apply advanced environmental engineering solutions across an entire new suburb, including the creation of a drought-proof suburb.

4.3 Melbourne 2030 Neighbourhood Principles

The table on the following page is an overview assessment of how the *Melbourne 2030* Neighbourhood Principles are implemented through the Development Plan.

Overview assessment of how the Cranbourne North Development Plan meets M2030 Neighbourhood Principles

M2030 Neighbourhood Principle	The Development Plan
An urban structure where networks of neighbourhoods are clustered to support larger activity centres on the Principal Public Transport Network.	The housing densities set out in the Structure Plan Matrix (Plan 4) show how higher housing density will support the Principal Public Transport Network and the Town Centre. The Walkability & Trails Plan (Plan 8) demonstrates the principles of neighbourhood planning to support bus network planning.
Compact neighbourhoods that are oriented around 'walkable' distances between activities and where neighbourhood centres provide access to services and facilities to meet day-to-day needs.	Neighbourhoods have been planned where they are not split by Boulevard Collector Roads or Arterial Roads. Each neighbourhood has been planned with easy walking access to a range of open space and the community corridors as well as local services and facilities wherever feasible.
Reduced dependence on car use because public transport is easy to use, there are safe and attractive spaces for walking and cycling, and subdivision layouts allow easy movement through and between neighbourhoods.	The very structure of the public transport network has been set up around an 800 metre grid as well as a lower order legible grid system of Boulevard and Collector Roads and Streets that support easy extension of bus services to the development as shown on the Public Transport Plan (Plan 7).
A range of lot sizes and of housing types to satisfy the needs and aspirations of different groups of people.	The Structure Plan Matrix (Plan 4) and the Subdivision Masterplan requirements ensure this aspect will be implemented.
Integration of housing, workplaces, shopping, recreation and community services, to provide a mix and level of activity that attracts people, creates a safe environment, stimulates interaction and provides a lively community focus.	The large Town Centre with higher density housing and the smaller neighbourhood convenience centres facilitate this outcome. A mixed use zone in proximity to the Town Centre provides further opportunity.
A range of open spaces to meet a variety of needs, with links to open space networks and regional parks where possible.	The Open Space Network Plan (Plan 9) and The Landscape Design Plan (Plan 12) both fundamentally implement this principle.
A strong sense of place created because neighbourhood development emphasises existing cultural heritage values, attractive built form and landscape character.	The history of the place will be reflected in the landscape design, retention of existing vegetation, reflection of the history in public art and parkland design. The strong emphasis on a legible, treed structure focused on the community corridors will create a strong sense of place.
Environmentally friendly development that includes improved energy efficiency, water conservation, local management of stormwater and waste water treatment, less waste and reduced air pollution.	The permit requirements section (Section 7) details a range of measures that will help move the sustainability objective forward in a positive manner. A non-planning based project (community and economic development planning) will commence to further non infrastructure and non physical solutions.
Protection and enhancement of native habitat and discouragement of the spread and planting of noxious weeds.	A primary planning and design principal has been not just protection, but restoration of the environmental values. The area with the greatest potential is the Hilltop Park which will in fact form a bio-link to the vegetated areas in the Green Wedge land to the south.

5.0 The Structure Plan

The Structure Plan illustrates the features within the Development Plan and outlines why these components have been included. It illustrates and outlines the key land use, development and subdivision requirements of the Development Plan. All applications for Subdivision Masterplans and/or Planning Permit approvals must be consistent with the Structure Plan.

The components of the Structure Plan are illustrated in Plan 3 and the Structure Plan Matrix forms Plan 4. Proposals within each precinct must be generally in accordance with the Structure Plan and the Structure Plan Matrix. The following precincts are identified in the Structure Plan and Structure Plan Matrix:

- Mixed Use
- High Density Residential
- Medium Density Residential
- Conventional Residential (Suburban Housing)
- Education
- Neighbourhood Convenience Centres
- Community Places
- Open Space - Parkland
- Open Space - Recreation
- Open Space - Linear Link
- Green Wedge
- Rural Land

The Structure Plan Matrix provides important information about each precinct in relation to the following:

- Land use.
- Residential density (maximum and minimum).
- Non-residential density (maximum and minimum).
- Maximum height.
- Landscape category.
- Design principles.

A proper understanding of the Structure Plan and the Structure Plan Matrix can only be achieved by reading in conjunction with the planning principles and the following related plans:

- Road Network and Cross Sections
- Public Transport
- Walkability & Trails
- Open Space Network
- Community Facilities
- Vegetation Retention
- Landscape Design
- Staging
- Buffers
- Surface Water Management
- Future Masterplans

Site Yield Calculation	Area ha	Minimum dwellings	Average dwellings	Maximum dwellings
High density (25-50 dw/ha) min 8%	18.8	470	705	940
Medium Density (15-25 dw/ha) min 30%	70.4	1,056	1,408	1,760
Conventional density (10-15 dw/ha) max 62%	145.4	1,454	1,818	2,181
Total Dwellings	234.6	2,980	3,931	4,881

Minimum Yield Calculation	High Density	Medium Density	Conventional Density
Dwellings	470	1,056	1,454
Occupied dwellings	447	1,003	1,381
People per occupied dwelling	2	3	3
Development Plan population estimate	894	3,009	4,143
Minimum Population estimate	8,046		
Maximum Yield Calculation	High Density	Medium Density	Conventional Density
Dwellings	940	1,760	2,181
Occupied dwellings	893	1,672	2,072
People per occupied dwelling	2	3	3
Development Plan population estimate	1,786	5,016	6,216
Maximum Population estimate	13,018		
Average Population	10,532		

Notes:
 Occupied dwellings is 95% of total dwellings consistent with outcomes of the Australian Bureau of Statistics Census data.

5.1 Land Use Budget

The following table provides an overall land use budget for the site.

Site Area Calculation	Area ha
Site (excludes Town Centre)	299.0
Arterial Roads	-6.4
Boulevard Collector Roads	-19
Community Places	-1.1
Mixed Use	-1.8
Education Facilities	-15.4
Hilltop Park (encumbered portion)	-6.6
Neighbourhood Convenience Centres	-3.1
Rural Land	-11.0
Total Developable Area	234.6

5.2 Site Yield

The expected yield from the development of the site is indicated in the table opposite. For the purposes of planning, a mid-point between the maximum and minimum is the anticipated yield for the development.

Plan 3 Structure Plan



Plan 4 Structure Plan Matrix

Precinct	Land Uses	Residential Density	Non Residential Density	Maximum Height	Landscape Category	Design Principles
Mixed Use	Retail space at ground level Land uses same as High Density	25 - 50 dw/ha	Mixed use retail 1000sqm	4 Storeys	Urban	<ul style="list-style-type: none"> Non-residential use at street level Same Design Principles as High Density Residential
Residential	High Density	25-50 dw/ha Minimum 8% 470-940 dwellings	N/A	4 Storeys	Fringe Urban	<ul style="list-style-type: none"> Higher density located close to higher amenity of town centre and public transport Incorporate on-site recreation facilities Incorporate retirement and / or aged care accommodation.
	Medium Density	15-25 dw/ha Minimum 30% 1056 - 1760 dwellings	N/A	2 Storeys	Neighbourhood	<ul style="list-style-type: none"> Principally medium-density housing forms and smaller lots with some conventional lots Create diversity of housing choice Incorporate one hectare neighbourhood parks within 400m distance of each dwelling Reinforce Casey garden suburb character
	Conventional Density	10-15 dw/ha Maximum 62% 1454-2181 dwellings	N/A	2 Storeys	Neighbourhood	<ul style="list-style-type: none"> Principally conventional lots with some pockets of higher density Reinforce Casey garden suburb character
Education	Primary schools Secondary school	N/A	N/A	N/A	Neighbourhood	<ul style="list-style-type: none"> Locate school buildings with integrated parking and shared facilities Provide adequate safe setdown areas Created on community spine.
Neighbourhood Convenience	Shops Local businesses Service stations	N/A	N/A	2 Storeys	Neighbourhood	<ul style="list-style-type: none"> Uses to be appropriate to service neighbourhood Provide legible off street parking Create suitable buffer to residential land uses Supermarkets not permitted
Community Place	Pre-school Child Health Centre Multi-Purpose Community Building	N/A	N/A	2 Storeys	Fringe Urban	<ul style="list-style-type: none"> Located on community spine Neighbourhood scale Active street frontages
Rural Land	Rural	N/A	N/A	2 Storeys	Rural	<ul style="list-style-type: none"> Land affected by buffer zone Land for future zoning outside buffers
Open Space - Park	Public Open Space	N/A	N/A	N/A	Park	<ul style="list-style-type: none"> For passive recreation
Open Space - Hilltop Park	Public Open Space	N/A	N/A	N/A	Park	<ul style="list-style-type: none"> For passive recreation Conservation Visual relief
Open Space - Recreation	Sporting Fields Public Open Space	N/A	N/A	N/A	Park	<ul style="list-style-type: none"> Include range of active and passive uses Incorporate community facilities appropriate to uses Ovals / Buildings / Carparking Sporting facilities to be shared between schools and community Incorporate community facilities as appropriate to users Located on community spine
Open Space - Linear Park	Linear Link	N/A	N/A	N/A	Park	<ul style="list-style-type: none"> Adjunct to major road Landscaped road corridor Incorporate community trail May incorporate stormwater path

5.3 Structure Plan Precincts

The Structure Plan identifies 10 different precincts. The precincts are as follows:

- Mixed Use
- Residential
- Education
- Neighbourhood Convenience Centres
- Community Places
- Open Space - Park
- Open Space - Recreation
- Open Space - Linear Link
- Open Space - Hilltop Park
- Rural Land

5.3.1 Residential Precincts – Housing Density and Mix

The residential precincts within the Structure Plan include mixed use, high density, medium density and conventional (suburban) density. The Structure Plan promotes housing taking various forms within each housing precinct.

Higher residential densities should be provided in proximity to activity centres, areas of high residential amenity such as local open space and public transport. High density, in

particular, will need to be provided within 400m of Casey Central Town Centre.

Residential development densities must be proportioned across the development plan area are as follows:

- High density (25-50 dw/ha) a minimum of 8%
- Medium density (15-25 dw/ha) a minimum of 30%
- Conventional density (10-15 dw/ha) a maximum of 62%

The residential dwelling density is measured as a net figure after excluding land for activity centre sites, community facility sites, schools, non-residential uses, open space, road widening, rural land, tree reserves and Boulevard Collector Roads.

Sections of higher density development in one part of the land in the Subdivision Masterplan may be used to offset lower density development in another part of the land in the Subdivision Masterplan to the satisfaction of the responsible authority.

5.3.2 Education Precincts

Three public learning precincts (schools) are proposed within the Development Plan area:

- One Secondary School located towards the centre of the western boundary of the Development Plan to the north of the community spine.
- One Primary School located towards the centre of the western boundary of the Development Plan is to the south of the community spine.
- One Primary School along the eastern boundary of the Development Plan area.

Opportunities exist for private schools to locate within the area provided they are located on an Arterial Road or a Boulevard Collector Road and a community corridor.

5.3.3 Neighbourhood Convenience Centres

Three Neighbourhood Convenience Centres are proposed and strategically located throughout the structure plan area to serve the day to day requirements of people that live in the new community.

These centres will perform a supportive role to the larger activity centres such as Eden Rise and eventually Casey Central Town Centre that will provide for the weekly shopping needs and higher order retail shopping.

The vision for the convenience centres are a facility that contain multiple outlets and are anchored by a major store of up to 800 square metres leasable floor area being a 'mini' supermarket or other convenience food outlet. This will be accompanied by three to four additional stores to compliment and provide a good tenancy mix that services the community needs.

The clustering of other facilities and services within the precincts is also strongly supported and encouraged. Such facilities to include:

- a village green that will provide a focal point for the centre and encourage walkability.
- community meeting space to act as a community focal point and provide for such services as medical centre, child care facility and other complementary services.
- service station.

The leaseable floor area of the convenience centres are capped and the maximum combined leasable floor area for a shop within these Neighbourhood Convenience Centres, without a further permit, is 1,000 square metres. Typical uses that are likely to develop in a Neighbourhood Convenience Centre are: shops, restaurants, local businesses and a service station.

A supermarket, or other anchor store with an area greater than 800 square metres, is not permitted in the Development Plan area, such facilities will be located in the Casey Central Town Centre or at other Neighbourhood Centres sites as set out in the *Casey C21 Strategy* (City of Casey, September 2002) or in the *Casey Activity Centres Strategy* (City of Casey, October 2006).

5.3.4 Community places

A community place generally consists of a number of community buildings designed to accommodate a range of community-based activities. The site area acquisition forms part of the Development Contributions Plan for the area. The site area includes allowances for parking, landscaped areas, outdoor activity spaces, buffers to surrounding land uses and long term expansion.

Community places are proposed at the following locations:

- Adjacent to the proposed Secondary College site of 0.72 hectares.
- Adjacent to the proposed primary school in the east of 0.4 hectares.

The community facilities proposed on the sites are set out in the Cranbourne North Development Contributions Plan.

5.3.5 Open Space

The Structure Plan identifies the following open space precincts: Parkland, Recreation and Linear Link.

The predominant use of the parkland precincts is for passive recreation, which includes the hilltop park and parks distributed throughout the Development Plan area.

The recreation open space precincts include a range of passive and active pursuits, which may also include the incorporation of community facilities and centres over time.

The linear open space link has been strategically integrated alongside major roads within the Development Plan area to provide a landscaped corridor to further enhance the streetscape character. This area may also serve for stormwater purposes.

The Structure Plan also identifies the rural land which is located outside the Development Plan Overlay area (formerly outside the Urban Growth Boundary).

5.3.6 Rural Land

A portion of the land within the broader study area did not form part of the rezoning proposed by Amendment C77 to the Casey Planning Scheme. That land is identified as Rural in the Structure

Plan (Plan 3) and Structure Plan Matrix (Plan 4).

Part of this section of land is affected by buffers generated from the number of offensive uses located along Thompsons Road. The buffers are identified in Section 5.5.8.

Although this land did not form part of the rezoning under amendment C77 to the Casey Planning Scheme, the land will be rezoned at a later date. Please refer to Section 8 with respect to the future direction of the land.

5.4 Non-residential Uses

The Structure Plan provides the overall strategic land use structure. Site specific applications for non-residential uses such as a child care centres or a medical centre are discretionary. However, these uses must be planned as part of the Subdivision Masterplan process to maximise synergies and opportunities for better urban design outcomes. Through the Subdivision Masterplan process, it is expected that proposals will integrate non-residential uses with parkland, Boulevard Collector Roads, the community corridors or some other structural feature of the new community that makes integrated urban design sense.

Proposals that are not planned into the development up front in an integrated manner will generally not

be supported unless exceptional design responses are provided to the satisfaction of the responsible authority regarding:

- Sound traffic planning principles and parking provisions.
- Provision for suitable landscaping including canopy tree planting.
- Amenity protection, acoustic treatment to surrounds.
- Appropriate bulk and scale.

Relevant policy documents that should be considered in relation to these activities include the principles set out in the Casey C21 Strategy, the State and Local Planning Policy Framework, including:

- Clause 22 of City of Casey Retail Policy, Casey Planning Scheme.
- Clause 22.08 Non-Residential Uses in Residential Areas Policy, Casey Planning Scheme.

5.5 Planning Principles

As identified earlier in this section of the Development Plan, a proper understanding of the Structure Plan and the Structure Plan Matrix can only be achieved by reading it in conjunction with the planning principles and related plans of the following subject matter:

- Road Network and Cross Sections

- Public Transport
- Walkability and Trails
- Open Space Network
- Community Facilities
- Vegetation Retention
- Landscape Design
- Staging
- Buffers
- Surface Water Management
- Future Masterplans

5.5.1 Road Network and Cross-sections

The objectives for the road and transport network within the Development Plan are to:

- Cater for primary transit desire lines.
- Provide a legible structure for the new community that also provides for a memorable experience and landscape image.
- Co-locate the key road network with urban design considerations such as the community spine, community corridors, and image features and connectors.
- Incorporate the concept of landscaped roads and the image of Casey as a garden suburb.
- Optimise connectivity and permeability to encourage social

- interaction and enhance public safety.
- Create a legible road network for visitors entering and leaving neighbourhood precincts.
 - Create safe streets.
 - Reduce car dependence and minimise greenhouse gas generation.
 - Create an urban form that encourages walking, cycling and public transport use.
 - Manage private car travel in a manner that does not detract from other transport modes and residential amenity.
 - Create highly connective and accessible street network, with dead ends and cul de sacs avoided.
 - Provide for a series of direct bus routes through the development that connect with schools and the town centre and other services and facilities.
 - Ensure that 95% of all residents are within 400 metres walking distance of a proposed bus route as shown on Plan 7, Public Transport Plan.

- Provide a road network that is safe, un-congested and easy to move throughout.
- Provide attractive bicycle and walking routes.
- Promote the use of public transport.
- Integrate all modes of transport.
- Create travel mode share outcomes in line with State Government strategies such as Melbourne 2030 and the 20/2020 Implementation Plan.
- Provide an efficient road network to reduce delays for essential road based travel.

The road network promotes:

- Highly legible, integrated streets and strong hierarchy.
- Maximum opportunity for solar access for dwellings and lots.
- Maximum choice of routes through the neighbourhood.

The Development Plan incorporates:

- A road network including 6 and 4 lane arterial roads, boulevard collector roads, collector roads, streets and lanes to manage access through and around the site. These roads also define the

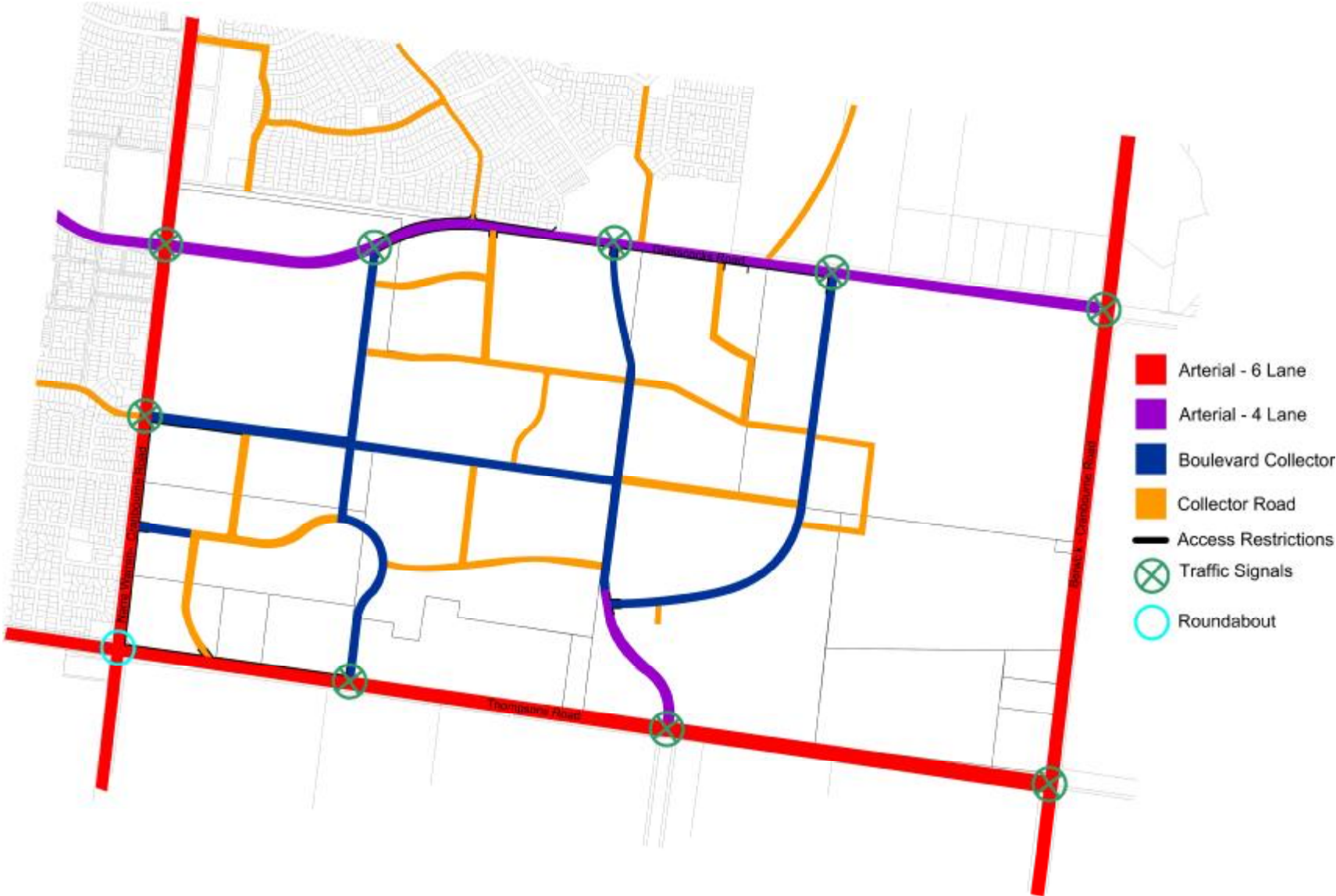
future neighbourhood structure edges.

- A road hierarchy that is focussed on the concept of landscaped roads in which large trees and green access ways go hand-in-hand with vehicle paths. By this means the road network also provides the main structure for a permeable and connective pedestrian and cycle network.
- A mile-grid arterial road network which is a goal and planning principal in the Casey C21 Strategy (City of Casey, September 2002). This network exists to the south (Thompsons Road) and west (Narre Warren - Cranbourne Road). A Public Acquisition Overlay exists on both these roads to accommodate future road widening.
- The realignment of Glasscocks/Pound Road. In line with C21, Glasscocks/ Pound Road is realigned to connect with the western side of Narre Warren - Cranbourne Road south of Casey Central Town Park.
- A North-South Boulevard Collector Road that connects south of Thomspsons Road. This road has been deliberately split to provide for better distribution of traffic to avoid the need for an arterial road through the site that would

split neighbourhoods and become a barrier to community interaction. This road can accommodate a Principal Public Transport Network (PPTN) set out in the *Casey C21 Strategy* (City of Casey, September 2002).

The Road Network is identified in Plan 5 and illustrates the proposed road hierarchy and intersection treatments onto the Arterial Road network.

Plan 5 Road Network



Arterial Road Network

Road	Required Road Reserve Widening	Ultimate Road Reservation Width (approx)
Narre Warren - Cranbourne Road [PPTN]	20 m Public Acquisition Overlay exists (part west side / majority on east side)	40 m Allows for a 6 lane divided road Dedicated bike lanes Service road or 12 metre wide tree reserve
Thompsons Road	20 m Public Acquisition Overlay exists (south side)	40 m Allows for a 6 lane divided road Dedicated bike lanes Service road or 12 metre wide tree reserve
Glasscocks / Pound Road	43 m reserve required through the Town Centre to provide for a 15 metre wide landscaped boulevard median. This is to be obtained partially through compulsory acquisition and partially through vesting of land in the first stage of the Town Centre development as a proposed requirement of the Town Centre Structure Plan.	43 m Allows for a 4 lane divided road with 15 metre wide median through Town Centre Dedicated bike lanes
	34 metre reserve required outside the Town Centre including the existing road reserve that exists in part which varies in width	34 m Allows for a 4 lane divided road Dedicated bike lanes Service road or 12 metre wide tree reserve

Arterial Road Network

The arterial road network is to be provided and designed in accordance with this table.

Housing must front the arterial and other road network, there are a range of options to achieve this:

- A road (for example a service road) can be provided for all abutting development, except at locations where it is not physically achievable or desirable (eg in proximity to major intersections) in these cases a 12 metre wide tree reserve must be provided.
- Where a road is not provided lots must still include restrictions on title to ensure they front the road and a 12 metre tree reserve is required to be vested in Council.
- Where sideages are proposed they must meet the corner allotment fencing controls set out later in this Development Plan and provide for a 12 metre wide tree reserve.

Land shall be set aside by the developer to accommodate appropriate treatments for arterial/arterial road intersections. Land required for road widening is to be to the satisfaction of Council and VicRoads and would reflect Figure 12 in the *Cranbourne Traffic Study, (VicRoads, 1991)* to the satisfaction of VicRoads for Declared Main Roads and the responsible authority.

Intersection Treatments

Signalised intersections are required at the following locations (refer Plan 5: Road Network):

- Narre Warren - Cranbourne Road, and:
 - Glasscocks Road realignment.
 - New east-west Boulevard Collector Road in proximity to the gas easement.
- Thompsons Road, and:
 - New north-south Boulevard Collector Road adjacent to Hilltop park.
 - New north-south Arterial connecting onto the north - south arterial route in Cranbourne East.
- Glasscocks/Pound Road, and:
 - New north-south Boulevard Collector Road adjacent to Town Centre.
 - New north-south Boulevard Collector Road located in the centre of the Development Plan site.
 - New north-south Boulevard Collector Road located to the east of the Development Plan site.

Uncontrolled intersections within the arterial road network will be subject to the approval of VicRoads. Full turning movements (median breaks) are expected to be required at a number of locations within the arterial road network, subject to the approval of VicRoads.

Access to the arterial roads surrounding the study area have been planned to ensure the function and safety of the road network is appropriately managed. Where possible, access to the arterial road network has been planned to be consistent with the "Initial Draft Victorian Code for the Management of Vehicular Access to Arterial Road" (VicRoads 1 April 2003). In proximity to activity centres, it may be necessary to provide access intersections at spacings less than set out in this Code to improve overall accessibility and accommodate expected traffic movements.

The arterial road access management principles which were considered as part of the Development Plan are listed in the following table.

Arterial Road Access Management Design Principles	
Arterial Road	Design Principles
Narre Warren - Cranbourne Road	<p>Signalised intersections at minimum spacing 700m (approx).</p> <p>Absolute minimum signalised intersection spacing of 400m (approx) adjacent to an activity centre (ie Town Centre).</p> <p>Maximum of one unsignalised intersection between adjacent signals.</p> <p>Minimum intersection spacing of 200m (approx). Desirable spacing of halfway between adjacent signalised intersections.</p>
Thompsons Road & Glasscocks/Pound Road	<p>Signalised intersections at minimum spacing 700m (approx).</p> <p>Absolute minimum signalised intersection spacing of 400m (approx) adjacent to an activity centre (ie Town Centre).</p> <p>Maximum of three unsignalised intersections between adjacent signals, desirable spacings of equal distances between adjacent intersections where possible. Absolute minimum spacing of 120m (approx).</p>

Local Road Network

Local road networks should be designed with reference to *Safer Urban Environments Road Safety in Land Use Planning Guide* (VicRoads, May 2004). This document sets out guidelines for the provision of a road network which include road spacings, street lengths, intersection control, cross sections, safety treatments and bicycle and pedestrian considerations in road design, etc.

Broadly speaking, the following aspects should be considered:

- All road network intersections should be designed to ensure safe and efficient use by all road users.
- Where intersections are not controlled by signals, intersection control should be a roundabout or a "T" intersection. "T" intersections should be staggered as not to overlap right turning movements.
- Development proposals must include a clearly defined road hierarchy based on the north - south grid network, and in accordance with the Road Network Plan.
- Arterials, Boulevard Collector Roads and Collector Roads must be provided in accordance with the Road Network Plan.

- All collector and higher order roads must be designed to accommodate bus movement by a 12.5m low floor bus or other agreed design vehicle (as a minimum).

The following local roads are designated on the Development Plan:

Boulevard Collector Roads	31 m reservation 2 lanes + parking 6 m median tree planting
Collector Roads	22 m reservation with shared path 2 lanes + parking 20 metre where no shared path is required Collector streets abutting the Community Spine or school sites will need to provide for a shared path
Streets	16 m reservation 2 lanes + parking

All local roads must be designed and constructed in accordance with the *City of Casey's Standard Drawings* forming an incorporated part of this Development Plan.

Additional requirements for local road design standard associated with this Development Plan are as follows:

- Access places and lanes will be permitted in limited circumstances only. These must make adequate provision for emergency vehicle and waste collection vehicle access. A footpath must be provided along all lanes and dwellings must orient windows towards the laneway to improve safety.
- Roads abutting public open space areas may be entitled to reduce road reserve width to an area equivalent to one nature strip width, subject to negotiation with the City of Casey.

A grid network can lead to some local streets which, without proper planning, becoming attractive traffic routes for through (non local) traffic. To ensure local streets do not become through routes, new development should ensure that the local road network does not provide a more convenient route than the designated arterial / collector road network. This can be achieved through the following measures:

- Developing a clear hierarchy of roads.
- Providing a good level of service on the arterial road network as shown on the Structure Plan.
- Implementation of 50kph (or lower) speed limits in local streets.
- Installing slow points on the local road network (which can be intersection

treatments, deflections points, speed humps or other treatments).

- Restricting the capacity provided for access from local street networks onto arterial road networks.
- Access controls on arterial routes to limit side traffic friction (shown on Plan 5: The Road Network Plan).

A grid network which is defined by long straight roads can increase the opportunity for motorists to travel at excessive speeds. Through proper planning and control, vehicle speeds can be managed in a safe manner. These measures include:

- Intersection treatments which slow vehicles such as roundabouts.
- Slow points at regular intervals.
- Visual elements to indicate to motorists that they are in a low speed environment.
- Appropriate speed limit signs.
- Enforcement of speed limits.

Plan 6 Road Detail

Arterial Six Lane 40.0m Reservation	Allows for tall planting along roads Six lanes, no parking Access restriction applies Low planting in median for visibility Shared cycle / walk path
Arterial Four Lane 34.0m Reservation	Allows for tall planting along roads Four lanes, no parking Access restriction applies Low planting in median for visibility Shared cycle / walk path
Boulevard Collector 31.0m Reservation	Allows for tall planting along roads Allows for trees in median Two lanes, two parking Access restriction applies Low planting in median for visibility Shared cycle / walk path
Collector Road 22.0m Reservation	Allows for tall planting along roads No median Two lanes, two parking Footpath use only
Access Road 16m Reservation	Allows for tall planting along roads No median Two lanes, two parking Footpath use only



BOULEVARD COLLECTOR



ARTERIAL



ACCESS STREET



COLLECTOR

5.5.2 Public Transport

The Public Transport Plan (Plan 7) is based on the *Cranbourne North Integrated Transport Plan* prepared by Booz Allen Hamilton in conjunction with the City of Casey and GTA Consultants.

The Development Plan provides for a bus based public transport system as follows:

- Bus routes are available to service the development once funding from the State Government is allocated in the State Budget process.
- The Design Standards for all Arterial, Boulevard Collector and Collector Roads and intersection treatments will allow for bus services to be extended.
- Unless the site is constrained by topography or other site conditions, lot distribution should provide for 95% of dwellings to be located no more than 400m street walking distance from the nearest existing or proposed bus stop.
- Bus stop infrastructure will be put in place during the development phase as set out in the conditions and requirements for permits set out later in this Development Plan.
- A PPTN transport interchange is proposed as a core component in

the Casey Central Town Centre, planning and design work on the Town Centre is progressing in a separate project.

5.5.3 Walkability & Trails

The amenity of local residents within Cranbourne North can be greatly improved through the development of a suburb with high levels of walkability. The report *“Encouraging Walking: Advice to Local Authorities”* (Department of Environment, Transport and Regions, 2000) recommends the following checklist when assessing walkability:

- Are there walking networks to provide good access to key destinations?
- Do local facilities meet design standards for footway width, walking surfaces and planning for disabled people?
- Can streets be crossed easily, safely and without delay?
- Are routes interesting, clean and free from threat?
- Are walking routes clearly signposted and are they published in local maps?

All of these guidelines have been considered as part of the Development Plan design process and should be considered for new development proposals. Examples of the how the Development Plan addresses the above criteria are listed below as follows:

- Provision of paths along the main desire lines between key destinations.
- Open space and parklands providing walking links throughout the suburb.
- Clustering of key destinations such as schools, the town centre and public transport nodes.
- Planning for a pedestrian friendly Town Centre.
- Consideration of pedestrian movements in development of road cross sections and intersection designs.
- The Casey Standard Drawings provide for pedestrian paths for all streets and roads throughout the area.
- The Development Plan also requires provision of paths through open space areas.

Plan 7 Indicative Public Transport Routes



Plan 8 Walkability & Trails



5.5.4 Open Space Network

The Casey Planning Scheme (through Amendment C77) requires a 12.5% public open space contribution for land affected by the Residential 1 Zone in Cranbourne North. All required public open space is shown on Plan 9: the Open Space Network Plan, and the provision of public open space must be generally in accordance with this Plan.

The location of active (i.e. sports grounds) and passive parkland is indicated on the Open Space Network (Plan 9), Community Facilities & Centres Plan (Plan 10) and the Landscape Plan (Plan 12). These areas of open space should be site responsive to an integrated open space network that maintains ecological integrity and environmental character as well as offering a wide range of passive and active recreation opportunity for all user groups.

The Open Space Calculation Table sets out the public open space components identified in the Open Space Network Plan (Plan 9), including a reference to their indicative location and incorporates the minimum of 29.3ha of unencumbered public open space as required under the Development Plan.

Management

Of the proposed recreational reserves, two facilities are proposed to be located adjacent to the primary and/or secondary schools, providing for the possibility of joint use between community and education. The facilities have been identified by state agencies and the City of Casey as required to serve the needs of Cranbourne North. As such, the construction, management and ongoing maintenance of the facilities will require joint agreements between the stakeholders to address these matters upfront. Consideration needs to be given to the following:

- § Joint approval of the Masterplan and school layout;
- § Joint capital funding for construction;
- § Hours of use for all user groups;
- § Ongoing maintenance costs based on level of use;
- § Insurance matters.

With respect to the junior ovals co-located adjacent the school sites, should a joint use agreement be anticipated a total land area of 173m x 143m will need to be set aside to ensure safety for users and adequate land for run off.

Access and Integration

The recreation reserve adjacent to the proposed secondary school is

intended to include a full sized oval that will be the base for the development of a new senior football club. As such, the more detailed design of this reserve must be considerate of the necessary buffer between the reserve and any adjoining/neighbouring residential areas.

Open Space Calculation	
Public Open Space Component	Credit Area (ha)
Sport and Recreation Reserve (southern end)	5.3
Sport and Recreation Reserve (adjacent to CCTC)	6.2
Sport and Recreation Reserve (eastern end, adjacent to Primary School)	1.3
East - West Community Spine (30m wide)	3.4
North - South Community Spine (12m wide)	1.2
Hilltop Park (unencumbered portion only)	6.4
Local Park (south of CCTC)	0.4
3 x Local parks (north of community spine)	2.8
3 x Local parks (south of community spine)	2.3
Total amount of Public Open Space	29.3

Plan 9 Open Space Network



Plan 10 Community Facilities & Centres



5.5.5 Community Facilities

The community spine (Refer Plan 9) is a central link for the community facilities and community places. This offers a broad range of facilities / places within the walkable proximity of each of the neighbourhoods.

Sporting facilities are distributed throughout the Development Plan area which provides choice and convenience to the residents within this area. Good design solutions have been used promoting the shared use of a number of facilities in these precincts.

Plan 9 Open Space Network and Plan 10 Community Facilities & Centres details the sporting facilities within the Development Plan area. In addition, the following table provides a summary of the proposed active recreation sporting facilities supported by the Amendment C77 Panel and reflected in the Development Plan.

Sporting Facilities

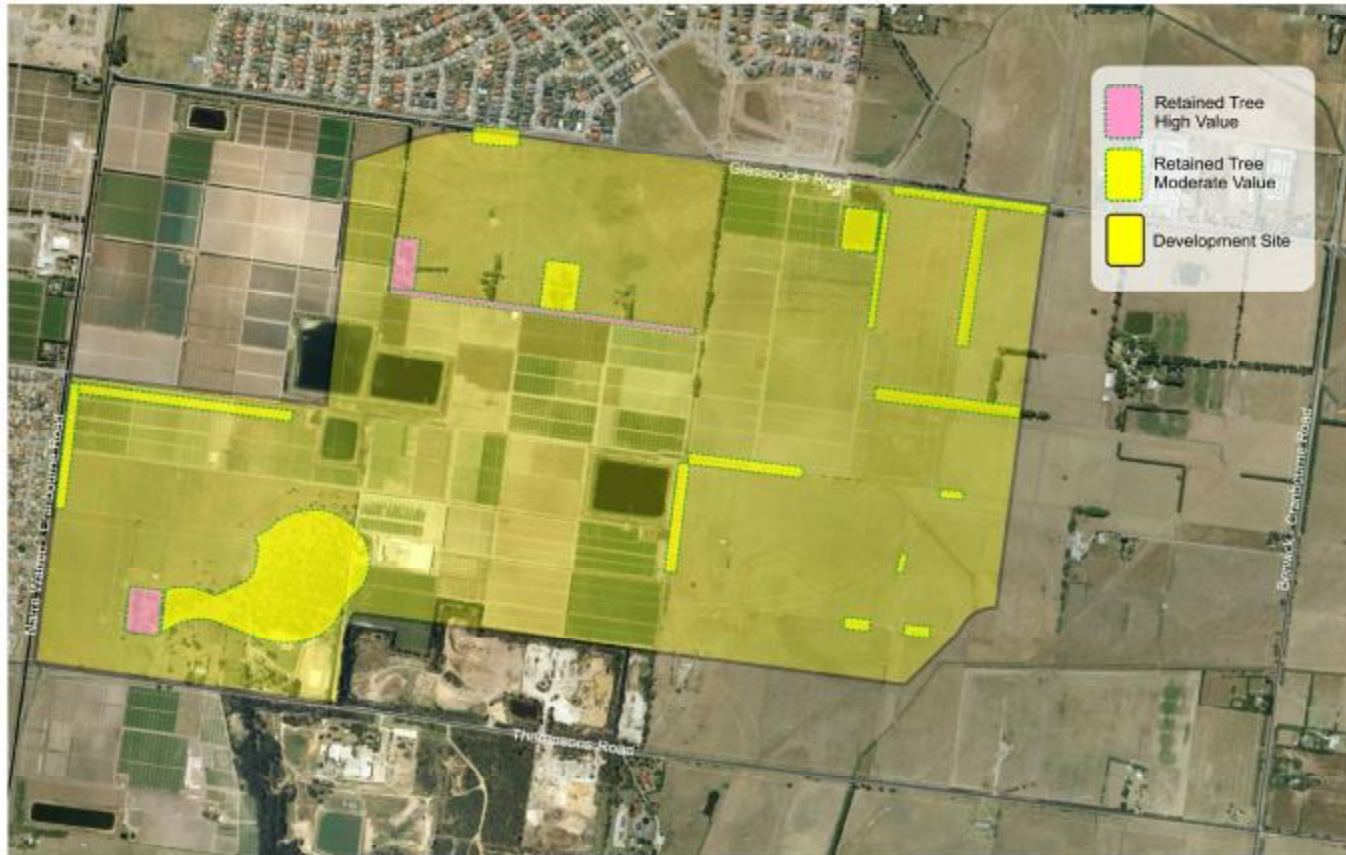
Location	Facilities
District Park adjoining Secondary College	1 Junior Oval 1 Senior Oval Netball Courts 1 Base Pavilion 1 Major Pavilion 1 Playground

	4 Tennis Courts Tennis Pavilion
District Park adjacent to the Primary School	1 Junior Oval 1 Base Pavilion 1 Playground
Active Open Space Reserve to the South	3 Soccer Pitches Major Pavilion 1 Playground

A regional community facility is located within the Town Centre area which forms part of the Cranbourne North Development Contributions Plan.

Plan 10 identifies the Community Facilities and Centre sites within the Development Plan area.

Plan 11 Vegetation Retention



5.5.6 Vegetation Retention

The Vegetation Retention Plan (Plan 11) identifies areas that contain significant vegetation that is to be retained and incorporated into the design of the area. Existing significant trees, as well as small features of cultural, natural or heritage value are to be retained in a manner acceptable to Council, which may include one of the following means:

- Within a park (not to be credited as part of the required public open space contribution unless otherwise specified).
- Within a suitably designed road reservation or plantation reserve.

5.5.7 Landscape Design

The landscape design objectives for Cranbourne North are to:

- Provide an attractive treed landscape setting for future residents and visitors, including:
 - Densely planted formal boulevards to provide structure and character.
 - Informally planted community corridors with towering trees.
 - Co-ordinated street tree planting between estates.
 - Landmark tree planting in roundabouts and key junctions.
 - A base of native planting, with up to 20% highlight planting for colour and character.
- Public art at key junctions and busy meeting/gathering spaces.
- Seek to increase habitat values by landscaping with indigenous species.
- Retain significant native and exotic trees to maintain treed character of site.
- To reinforce the image of Casey as a garden suburb.
- Street planting including species and spacing will be in accordance with standards set in the *Casey Image Strategy* (City of Casey,

November 2004) and any future Landscape Design Concept Plan approved for the Development Plan area.

- Each precinct will have a specified landscape character in accordance with the landscape category listed in the Development Plan.

The Landscape Design Plan (Plan 12) provides an outline of the overall approach to landscape design principles.

5.5.8 Buffers

There is a number of 'offensive uses' surrounding the Development Plan area that generate a buffer. Such uses generate emissions that are deemed to be incompatible with sensitive uses, such a dwelling. Some of the buffers are specified in the Casey Planning Scheme, while some form part of the guidelines of the Environment Protection Authority (EPA).

The following table provides a summary of the buffer distances supported by the Amendment C77 Panel which are reflected in the Development Plan.

Buffer Distances

Location	Buffer
Concrete Batching Plant - north side of Thompsons Road	300 m from existing approved plants
Poultry Farm for eggs - north side Glasscocks/Pound Road	200 m from existing sheds.
Poultry Farm for meat - south side Thompsons Road	550 m from existing sheds.
Extractive Industry Site - south side of Thompsons Road	180 m from the site boundary (excluding battleaxe).
Concrete Batching Plant - south side of Thompsons Road	300 m from existing approved plant
Abattoir - south side of Thompsons Road	500 m from original 1.428ha site.
Abattoir waste water treatment facility - south side of Thompsons Road	As per abattoir default of 500m if connected to sewerage system otherwise 700m.

The buffers in the south-western part of the Development Plan area are indicated in the Buffer Plan (Plan 13).

A 700 metre line from the Wagstaff wastewater treatment ponds (measured from the centre point between the two smaller ponds located north of the larger pond) must be maintained until the abattoir has been connected to reticulated sewerage, to the satisfaction of South East Water and the pre-treatment system has been designed and operating in a manner to satisfy the EPA 500m buffer requirements. Upon these requirements being met to the satisfaction of the responsible authority, the responsible authority will advise the affected landowners in writing of the reduced buffer requirement.

5.5.9 Surface Water (Drainage)

Management

Surface Water (drainage) management must be in accordance with the Casey Central, Surface Water Management Strategy, (Pat Condina and Neil Craigie, 2 September 2004) and be to the satisfaction of Melbourne Water and the City of Casey. Development will need to implement the latest design criteria for water sensitive urban design as updated by Melbourne Water from time to time.

5.5.10 Future Masterplans

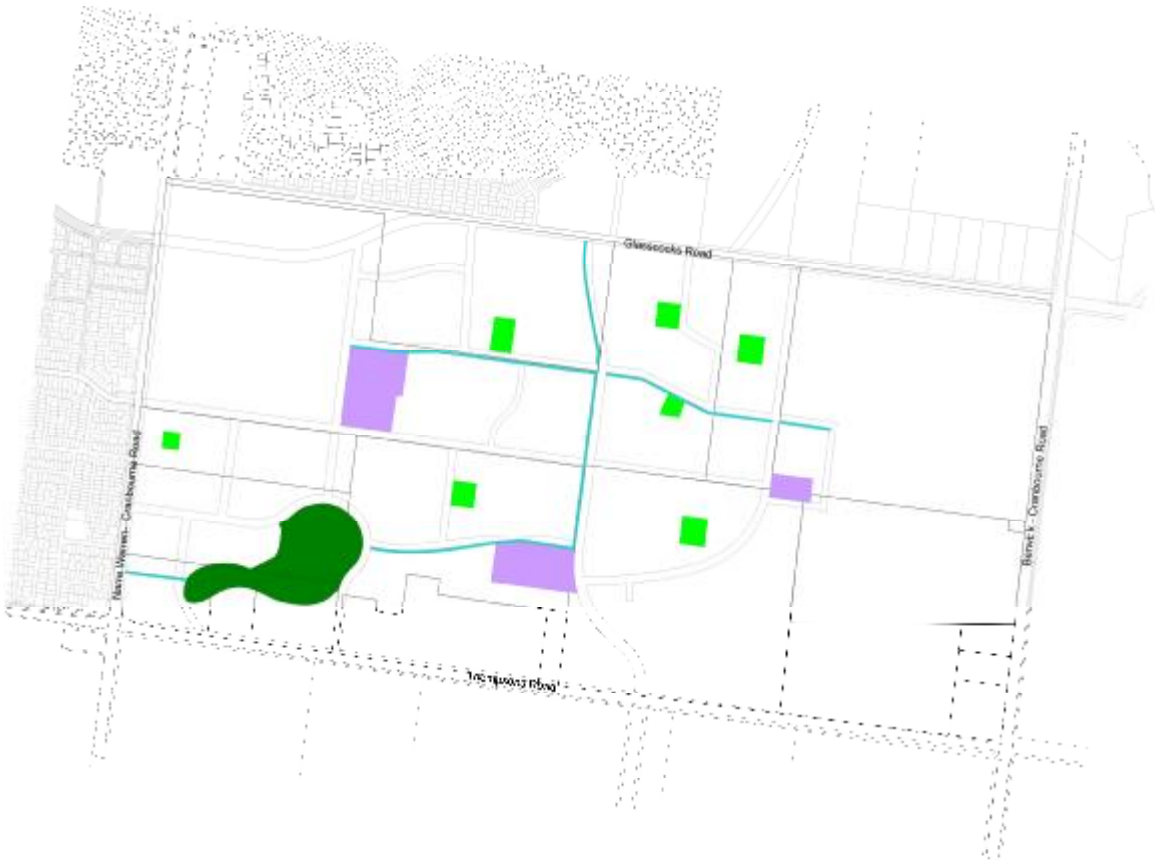
Council is in the process of developing the following Masterplans:

- A detailed plan for the school, community facility and parkland precincts so that an integrated outcome can be achieved.
- A detailed plan and design principles for the Neighbourhood Convenience Centres.
- A detailed plan for the community places.
- A detailed Landscape Concept Plan for the entire Development Plan area. The adopted Landscape Concept plan will include Masterplans for each of the open space areas.

Any change to the Development Plan to incorporate this work will be part of a future public exhibition/submission process to provide all affected parties with opportunity for input and discussion.

Plan 12 Landscape Design

	Landscape Category	Purpose	Characteristics
	Park	<ul style="list-style-type: none"> Major open recreation space for broader community Passive and active recreation Reinforce tall tree canopy Water quality treatment Landscape image connectors 	<ul style="list-style-type: none"> In public ownership Predominantly informal / natural character Contains landmark tall tree planting Contains landscape image connectors Includes amenity facilities (structures) for total community Includes public art
	Neighbourhood Park	<ul style="list-style-type: none"> Local park for immediate neighbourhood Passive recreation Community focus The 'big backyard' for medium density living 	<ul style="list-style-type: none"> In public ownership Predominantly cultivated / formal character Is within walking distance Includes facilities for local neighbourhood use Includes public art
	Sporting Facilities	<ul style="list-style-type: none"> For active recreation Shared school / public use 	<ul style="list-style-type: none"> In public ownership Incorporates ancillary buildings Predominantly sporting facilities Includes public art
	Linear Park	<ul style="list-style-type: none"> Bike / Walking network Storm water flow path Enhances road character. 	<ul style="list-style-type: none"> Incorporates safe cycleway / walkway Natural tree planting Includes public art



Plan 13 Buffer Plan



Plan 14 Staging Plan



5.5.11 Development Staging

The staging of development is anticipated to occur generally as indicated on the Staging Plan (Plan 14). Staging may be varied. In all cases the developer will be required to provide the funding for necessary up front or earlier infrastructure provisions costs as required by the Schedule to the Development Plan Overlay. Staging of individual developments must:

- Not create circumstances by which its future residents might be unreasonably isolated from employment, social and community needs.
- Ensure sealed road access from a sealed arterial road network.
- Ensure road connections to adjoining development are completed, and in a logical and early/timely sequence and not held up to maintain a market advantage.
- Only allow for temporary road access in exceptional circumstances and:
 - If the associated traffic volumes will not exceed that of local street levels.
 - Where the road and access points are constructed to a

permanent standard in accordance with City of Casey Standard Drawings.

- Not overload the traffic carrying capacity of any collector road or access street within or adjoining the Development Plan area.

The development staging will also provide for a gradual transition between the present land uses being predominately rural farmland to an increasingly urbanised environment. It is acknowledged that rural operations have in many cases made long-term investments in their agricultural enterprises and intend to continue with such into the future. Throughout the development process, there is potential for land use conflict to occur. These conflicts can be minimised through placement of roadways or other buffers to reduce potential for such.

6.0 Pre-Permit Subdivision Masterplan Requirements

As required under Schedule 14 to the Development Plan Overlay:

Before the grant of a planning permit, a Subdivision Masterplan (The Masterplan) must be prepared for the land the subject of the permit application and for contiguous land holdings within the control, ownership or effective control (including through a related corporation) of the owner of that particular land. The Subdivision Masterplan must be approved by the responsible authority.

The Subdivision Masterplan must be consistent with the Cranbourne North Structure Plan diagrams in the Schedule (Schedule 14) and is not to be prepared in stages.

The Subdivision Masterplan must contain or be accompanied by, to the satisfaction of the responsible authority:

- § *A strategic land use plan illustrating the general layout of the proposed subdivision.*
- § *An indicative staging layout plan.*
- § *The movement network showing the overall road hierarchy, local street network and proposed cross-sections for each street type.*
- § *Indicative bus stop locations on the Principal Public Transport Network (PPTN).*
- § *Areas of proposed public open space.*
- § *A table setting out the diversity of lot sizes in the proportions generally as required by the Schedule (Schedule 14).*
- § *A preliminary environmental audit that investigates the suitability of the land for residential or other sensitive uses and makes recommendations regarding the need for further investigations.*
- § *Areas proposed for non-residential uses, including schools, activity centres and community facilities.*
- § *Area of existing vegetation proposed to be retained and removed.*
- § *A report describing how the Subdivision Masterplan responds to the Cranbourne North Structure Plan diagrams in the Schedule (Schedule 14) and which addresses:*
 - *Staging and provision of infrastructure.*
 - *An environmental management plan.*
- § *Details of the subdivision development and design, including:*
 - *Residential development densities proportioned across the development plan area as follows:*
 - *High density (25-50 dw/ha) min 8%*
 - *Medium density (15-25 dw/ha) min 30%*
 - *Conventional density (10-15 dw/ha) max 62%.*

A permit must be generally in accordance with the approved Subdivision Masterplan.

The Subdivision Masterplan may be amended with the approval of the responsible authority.

The table on the following page provides a summary of the detail required followed by a more detailed description of the requirements.

Subdivision Masterplan Requirements	
Strategic Land Use Plan	<p>The Subdivision Masterplan must illustrate the general layout of the proposed subdivision, including how it responds to:</p> <ul style="list-style-type: none"> ● Strategic land use and movement network requirements in the Structure Plan and Structure Plan Matrix ● Strategic planning issues, the vision and outcomes, including environmental constraints, such as buffers between sensitive land uses and those with ● Areas of proposed public open space ● Areas proposed for non-residential uses, including schools, activity centres and community facilities ● The need for well considered transitional interfaces ● Corner allotment treatments ● Provision for safe communities through design for passive surveillance ● The need for contour responsive design ● The longer-term needs of the community
Indicative Staging Layout Plan	<p>The Masterplan must include:</p> <ul style="list-style-type: none"> ● Infrastructure staging and provision plan ● Development staging plan
Movement Network	<p>The Masterplan must include or address:</p> <ul style="list-style-type: none"> ● The overall road hierarchy, local street network and proposed cross-sections for each street type ● Details of a walkable neighbourhood ● The Casey trails network ● A Traffic Plan (A preliminary traffic report and traffic safety audit) ● Public Transport - bus network ● Indicative bus stop locations on the Principal Public Transport Network (PPTN)
Environmental Audit	<p>The Masterplan must respond to:</p> <ul style="list-style-type: none"> ● A preliminary environmental audit that investigates the suitability of the land for residential or other sensitive uses and makes recommendations ● A preliminary surface water management plan and detailed stormwater management plan
Ecological Responsive Design	<p>The Masterplan must address / ensure:</p> <ul style="list-style-type: none"> ● Areas of existing vegetation, with identification of vegetation proposed to be retained and removed based on an ecological and arborist report ● Retention of rows of existing trees where possible ● How it will rehabilitate remnant vegetation (a management plan) ● How it will recreate / enhance habitat links ● Treed community design response (integration of large healthy trees, tree plant zones, tree planting masterplan)
General Requirements	<p>The Masterplan submission must include:</p> <ul style="list-style-type: none"> ● A report describing how the subdivision Masterplan responds to the Cranbourne North Structure Plan diagrams in the Development Plan Overlay ● Details of subdivision development and design including residential development densities proportioned across the development plan in accordance with ● A table setting out the diversity of lot sizes in the proportions required ● An overall Neighbourhood Character Siting & Design Commitment (NCSDC) ● A Landscape Framework Plan (concept level)

6.1 Subdivision Masterplan

6.1.1 Strategic Land Use Structure

The Masterplan must demonstrate how it responds to:

- Strategic land use and movement network requirements in the Structure Plan (Plan 3). The analysis provided should demonstrate an understanding of the strategic planning issues, the vision and outcomes and not present a superficial response.
- Environmental constraints flowing from items like noise and buffers must be considered at this stage.
- Non-residential uses and precincts of local services and facilities such as activity centres, private schools, places of worship, child care centres and medical centres must be planned from the outset in highly accessible locations as part of the urban design framework. These are essential for the longer-term needs of the community once it is fully established. Sites for such uses should be set aside in the Masterplan even if they are not viable until the wider community is fully established.

6.1.2 Neighbourhood Character Siting and Design Commitment

The applicant must provide an overall Neighbourhood Character Siting and Design Commitment (NCSDC) statement with the Masterplan for Council approval. This statement will drive subsequent building envelopes for the new lots and link with the integrated approvals process described below.

The NCSDC must contain provisions dealing with the following matters:

- Solar orientation of houses and value space (private open space).
- Garaging.
- Building height.
- Setbacks to front, side and rear boundaries and site coverage.
- Fencing.
- Tree planting zones.

The NCSDC, drawings and standards are to ensure compliance with the following overall objectives:

- To achieve the neighbourhood principles of Melbourne 2030.
- Precinct layouts will provide housing choice in terms of lot sizes and accommodation types to suit diversities of lifestyles, ages and family formations.
- To optimise controlled solar access to houses.

- To provide connectivity to open space, walking and cycle paths, neighbourhood nodes and future public transport.
- To create a sense of place and neighbourhood character and identity.
- To retain and integrate existing natural land features and significant trees.
- To reinforce the dominant character of Casey as a garden suburb.
- To create streetscapes and public spaces which use landscaping as a major feature including planting of large and medium trees.
- To create active urban streetscapes.

6.1.3 Infrastructure Staging and Provision Plan

- Infrastructure Staging and Provision Plan

The Masterplan must include an Infrastructure Staging and Provision Plan. The Plan would, for example, show expected staging of major drainage, parkland, road and intersection works or other projects identified in a Development Contributions Plan as well as non- Development Contribution Plan requirements. Details of works for example those required to major

intersections are to be addressed in the Planning Permit process.

- **Development Staging Plan**

The Infrastructure Staging and Provision Plan must include an anticipated Development Staging Plan. Key movement links are critical to set in place at the earliest practical time and these should be identified in the Staging Plan.

6.1.4 Movement Network

The Masterplan must demonstrate how it responds to each of the following requirements.

- **Neighbourhood Road Network**

Within the overall road structure it is proposed that each precinct will have a Subdivision Masterplan which will illustrate the neighbourhood road network in accordance with the following principles:

- Road hierarchy, road layout and cross sections will incorporate the concept of landscaped streetscapes (ie the combination of the road reserve and the front setback space) and the image of Casey as a garden suburb in accordance with the Development Plan.

- Street design and precinct layouts will be designed to optimise connectivity and permeability to encourage social interaction and enhance public safety.
- Road design will demonstrate a legible road network for visitors entering and leaving neighbourhood precincts as well as to create a sense of place for residents.
- Road design will promote the concept of safe streets in accordance with the Development Plan.

- **Public Transport**

The Masterplan must include requirements to provide pedestrian connectivity and footpaths to planned bus stop locations and shelter structures.

- **A Walkable Neighbourhood**

A walkable neighbourhood is to be primarily achieved through provision of a street network based on a legible grid that is adapted to site contours (ie organic) as well as links through the public open space network.

The Masterplan must demonstrate how a pedestrian-friendly, walkable neighbourhood design can be generated by providing a design that focuses links between streets as well as court heads/reserves to enhance

pedestrian accessibility to key destinations such as:

- Bus stops on the Principal Public Transport Network (refer Melbourne 2030: Planning for Sustainable Growth (Department of Infrastructure, 2002) or Casey C21 Public Transport Network Plan.
- Parkland (all types).
- Activity centres.
- Community places.
- Learning centres.
- Environmental or heritage features of the area.

The Masterplan should indicate where future pedestrian crossing points on arterial roads and Boulevard Collector Roads are likely to be warranted and to plan/provide them into the suburb fabric from the outset.

- **Casey Trails Network**

The Masterplan must demonstrate the future shared use trail network, including location of trails through:

- Linked linear open space systems.
- Along arterial and Boulevard Collector and key Collector Road corridors.

Combined with street based shared pathway systems to link attractors/destinations (refer to key destinations listed above under 'A Walkable Neighbourhood').

- **Traffic Plan**

A traffic report and traffic safety audit must accompany the Masterplan.

The traffic report should address:

- Road hierarchy and width to cater for potential bus routes.
- Traffic generated by the ultimate development and any key staging of development.
- Traffic generated once surrounding levels of development that will eventually impact on the masterplan area.
- Traffic modelling at collector street level and above.
- Recommended functional layouts for intersections to sub-arterial and arterial roads taking account of development and other ultimate traffic generation.
- Recommended street design principles to restrict traffic speed, while still maintaining a simple and legible traffic network.

Where the site strongly relies on access (even indirectly) to a main road, the report must be endorsed by, and meet requirements of, VicRoads. Referral of the Masterplan and

Permits will be required in these cases to VicRoads.

Bus stop infrastructure should also be addressed within the traffic plan to address recommended street design principles to restrict traffic speed whilst still maintaining a simple and legible traffic network that will not impede the operation of public transport services.

6.1.5 Housing and lot size diversity

- **Lot Size Distribution Concept Plan**

A Lot Size Distribution Concept Plan indicating residential lot size and typology mix (with a typical density that meets the requirements set out in the Structure Plan Matrix) for example:

- Serviced aged care / nursing homes sites.
- Retirement communities.
- Integrated housing precincts (more than 20 multi-dwellings).
- Multi-unit precincts between 0 and 300 square metres (less than 20 dwellings).
- Small lot precincts between 301 and 450 square metres.

- Small/medium lot precincts between 451 and 550 square metres.
- Medium lot precincts between 551 and 650 square metres.
- Medium/large lot precincts between 651 and 1,200 square metres.
- Large lot suburban areas between 1,200 and 2,000 square metres.

The final diversity mix will respond to market conditions and local demands for product types. In larger developments it may be necessary to alter the mix a number of times through the development process as the design progresses, the market changes or as more detailed information about the market is obtained.

An approach of integration of small lots 'sprinkled within streets' is supported and should be identified up front in the Masterplan 'in principle'. This creates certainty as to different forms of housing and helps demonstrate how the development Plan yield outcomes can be achieved.

The small lot precincts must be located in a strategic manner in areas serviced by public transport (PPTN), parkland, community

corridors/linear walking trails, schools, the Town Centre and activity centres as well as local community services and facilities.

6.1.8 Surface Water Management

Plan

- **Surface Water Management Plan**

A preliminary surface water management plan must form part of the Masterplan and indicate liaison with Melbourne Water. The Plan must be consistent with the *Casey Central, Surface Water Management Strategy*, (Pat Condina and Neil Craigie, 2 September 2004).

- **Environmental Management Plan**

A preliminary Environmental Management Plan (EMP) for the full development must form part of the Masterplan.

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

- the proposed strategy to manage sediment and litter discharge from the site, including likely location and approximate sizing of primary control measures;

- the staging/timing of construction of such measures in relation to development staging; and,
- proposed water quality monitoring strategy.

In addition to sediment removal facilities such as traps and/or grassed filter areas, the sediment control criteria will likely require the implementation of source control measures. The planning and implementation of such measures will have due regard to the provisions of Urban Stormwater Best Practice Environmental Management Guidelines (USBPEMG 1999), the EPA publication Construction Techniques for Sediment Pollution Control (1991), Environmental Guidelines for Major Construction Sites (1995) and Draft WSUD Engineering Procedures: Stormwater, Melbourne Water (8 June 2004).

Permanent litter, sediment and nutrient control measures must be constructed to limit long term pollutant concentrations to no more than existing rural levels. It is required that at least 80% reduction in suspended solids, and 45% reduction in both total nitrogen and total phosphorus loads, which is consistent with the

criteria set out in the USBPEMG (1999).

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

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

6.1.9 Ecological Responsive Design

A number of issues need to be addressed by all developments, and these are:

- **Retain all Remnant Vegetation**

The Masterplan should incorporate an ecological report (prepared by a qualified ecologist) including:

- A vegetation quality map that details areas of high, medium and low vegetation quality. This should accurately define the boundaries of the remnant vegetation.
- All development, including drainage options, should be then based on this plan to avoid any indigenous vegetation removal. Buffers of at least 5 to 10 metres of site indigenous planting or mown public open space should also be established adjacent to remnants, to protect the vegetation and to intercept any drainage.

There should typically also be some areas of public open space adjacent to the remnant vegetation to allow for passive recreation.

- Healthy large trees are to be incorporated in public land to the maximum practical extent regardless of whether they have ecological value.
- **Retention of Rows of Existing Trees**

The Development Plan requires the retention of certain rows of

existing trees including large trees around existing dwellings and windrows in existing market gardens or paddocks (refer Plan 11).

- **Rehabilitate Remnant Vegetation**

A management plan to rehabilitate remnant vegetation should be prepared in order to increase the overall ecological values of the remnants. This should provide advice based on the different qualities of remnant vegetation and should include, weed control, natural regeneration, revegetation, soil disturbance, monitoring etc. Managed natural regeneration is preferred within areas of highest quality.

- **Recreate/Enhance Habitat Links**

Where the habitat links are to be recreated within pasture areas, the following should occur:

- Revegetation with site indigenous species propagated from locally sourced material (preferably collected from the site) should be undertaken, site preparation is vitally important (i.e. soil weed bank removal).
- Some narrow areas of remnant vegetation may warrant immediately adjacent

revegetation works to increase the width of vegetation.

6.1.10 Comprehensive Landscape Framework

- **Landscape Framework Plan**

A landscape framework plan must be prepared for the Masterplan area. The framework must include a concept level Landscape Framework Plan that implements Council's adopted Landscape Concept and Masterplans for the following areas:

- Parkland.
- Community places.
- Learning centres.
- Other public space.
- Streetscapes, including all street tree and front garden planting, roundabouts and other key road junctions.
- Easements, after discussion with the easement authority.

The concept level Landscape Framework Plan must:

- Address each of the spaces described above.
- Address ecological issues.
- Indicate landscape planting structure such as tree size, effect (ie Autumn colour), density of planting and

consistency and relationship throughout the area.

- Provide sufficient details in more difficult areas such as easements, hilltops, ridgelines, abutting parkland, waterways and the like to assist in design resolution around these sites that may be affected by the subdivision layout.
- Indicate how provision of public art is to be addressed (at least conceptually) as well as how major landscape junctions can be treated (including roundabouts) in a way that provides space for landmark tree planting and meet traffic safety requirements.
- Be prepared by a qualified landscape architect.

The Landscape Framework Plan must demonstrate how the landscape will dominate (via large tree planting) the built form at maturity. Space is to be organised to adopt the key principle where landscape dominates the built form to achieve a dense treed environment.

- **Treed Community Design Response**

The Landscape Framework Plan must demonstrate integration of large healthy trees into the subdivision design, including:

- Large healthy trees are to be retained through the suburban development process. Design of new parks and streets to sustain healthy tree growth envelopes around the trees and also maintain water and nutrient requirements for the trees.
- Large healthy trees are to be designed into the heart of the urban design fabric of the new subdivision, especially clumps of trees.
- Large tree retention in private lots is to be avoided as a better design response is to incorporate the trees into the public areas of the new suburb.
- Clumps of large trees should be incorporated into public land as a design feature for the community.

- **Tree Planting Zones**

The Landscape Framework Plan must demonstrate how tree planting zones on private lots are to be achieved. Planting zones for medium and large trees (via tree creation envelopes) are to be

achieved through the following requirements:

- New residential subdivisions must incorporate planting zones for medium and large trees that meet Council's requirements.
- Landscape plans and subdivision design must provide for large tree planting zones in roundabouts, parks, at landscape junctions and on other public land.
- Tree planting zones in private allotments.

The applicant will provide details of how they intend to:

- Carry out the landscaping of the tree planting zones to standards approved by Council prior to the issue of a statement of compliance in respect of the subject land.
 - Advise the future owner with details of the species of tree planting and how the trees should be maintained.
- **Tree Planting Masterplan**

The tree planting Masterplan must identify:

- The species of tree to be used.
- Typical tree planting patterns that would promote the long

term health and well being of the proposed trees.

- Setbacks of the tree planting zones from proposed buildings, works and services.

Other requirements set out by Council.

6.1.11 Comprehensive Urban Design Framework

The Urban Design Framework needs to be integrated with other aspects such as the landscape plan, land use structure etc.

The Framework must address the following:

- **Safe Communities Through Design for Passive Surveillance**

Subdivision layout and building envelopes are to be designed from the outset to ensure all housing fronts all useable public space, including the arterial road network.

No back fencing is to be supported in any case.

Side fencing is also to be minimised through designing it out through the subdivision and building envelope design process. Other requirements for side fencing are set out later on in the Development Plan.

- **Corner Allotments**

It is suitable for some corner allotments to be set aside for dual occupancy or small lot developments to take advantage of the 2 street frontages with a separate access point to each dwelling.

Each dwelling can relate to one of the street corners, which improves design outcomes and presentation as well as a more community orientated form and increases passive surveillance of the street. This approach also removes the negative of paling fences to one of the 2 street corners when this approach is not adopted. Other design options can also be considered to resolve this issue.

- **Environmentally Responsive Design**

The Masterplan should incorporate responsible environmental planning principles into the urban design response, including:

- **Ecological sites**

The response should indicate how sites of conservation value are to be preserved and suitably integrated with the surrounding area as key features of the design. Refer to separate guidelines set out

in 'Ecological Responsive Design'.

- **Energy rating and lot orientation addressed from the outset**

The subdivision/building layout is to optimise northerly aspect from principal living spaces to the private open space.

Therefore street orientation should be predominantly (having regard to contours and other strategic urban design considerations) as follows:

- Conventional subdivision with detached homes. Streets should run predominantly East-West to allow for principal living spaces to catch northerly sun either at the front or rear of the lot.
- Multi-unit or small lot developments. Streets should run predominantly North-South to allow for private north facing side courtyards (value space) linked to principal living areas.
- Variation may be sought where a comprehensive response is provided to clearly demonstrate how

solar orientation is to be addressed.

- **Other ESD measures**

The Masterplan must demonstrate how it provides for on-site solar energy capture and dual plumbing for recycled water reuse for the toilet and garden.

Water sensitive design is considered separately.

• **Well Considered Transitional Interfaces**

The Masterplan should ensure a visual density (landscape and built form) spectrum that is gradually increasing from a rural environment to that of a Town Centre setting to create a sense of place and optimise use of land.

These transitional landscapes underpin the fundamental character of Casey. Development in new suburban areas must consider and provide a design response appropriate to the interface between farming and rural, rural and suburban, suburban and town (neighbourhood) centre.

• **Contour Responsive Design**

Design is to address how the layout responds to areas with slope in a way that compliments

the contours of the land and take advantage of visually exposed areas with landmark tree planting sites or other features on public land.

Road alignments are to be designed with appropriate regard to the contours of the land and to highlight the topography of the area. View lines into, out of and within the site are to be considered during this process.

• **Heritage Responsive Design**

A plan indicating how sites of heritage value can be preserved and suitably integrated with the surrounding area is to be submitted. This plan must be to the satisfaction (where applicable) of the City of Casey and relevant heritage stakeholders.

7.0 Permit and Post Permit Requirements

This section of the Development Plan outlines requirements in terms of information to be submitted with a planning application for subdivision and use/development proposals. It specifies matters that the planning application should address. This section also includes some standard Planning Permit conditions. It introduces a range of conditions to be placed on Planning Permits to provide for post Permit outcomes, for example the requirement of a Building Envelope as a restriction on Title to achieve certain neighbourhood character outcomes. Prescriptive requirements as detailed in Section 2.2, Schedule 14 to Clause 43.04 of the Casey Planning Scheme are highlighted in italics.

7.1 Subdivision Application Requirements

7.1.1 Approved Subdivision Masterplan

The approved Subdivision Masterplan and accompanying reports for the land that have been approved by Council (unless the Subdivision Masterplan is being considered concurrently with the permit for Stage 1 of the proposed development) must be provided with any application for subdivision. Requirements for the

Subdivision Masterplan are outlined in Section 6.

7.1.2 Accompanying Reports and Plans

A number of the requirements listed in this section are also required as part of the Subdivision Masterplan process and may have already been approved by Council. If however, the planning application is a proposed stage within the Subdivision Masterplan there are likely to be a number of factors that may require more specific, site related investigation to be carried out (for example a more detailed traffic report).

This information is to be submitted in addition to the approved Subdivision Masterplan and accompanying reports to the satisfaction of the City of Casey.

In addition to the approved Subdivision Masterplan and accompanying reports, the table on the following page identifies information that is to be submitted with a permit application

Plan 15 Site Masterplan Example



Information to be submitted with a permit application (in addition to the approved subdivision Master Plan & accompanying reports)	
An Assessment Report (Cranbourne North Development Plan)	That demonstrates that: <ul style="list-style-type: none"> - The proposal is generally in accordance with the provisions of the Schedule to Clause 43.04 and approved Development Plan. - How the provisions of the Schedule to Clause 43.04 and the Development Plan will be implemented including matters relating to solar orientation of houses and private open space, garaging, building heights, setbacks, fencing and tree planting zones.
An environmental assessment	That identifies any areas of environmental significance on the subject land and methods to respond to such as part of the development process.
An Environmental Audit	That provides a detailed assessment of the suitability of the land for residential or other sensitive uses and includes any recommendations regarding site remediation, if required.
A Traffic Report	That provides a detailed assessment of the expected traffic generation and traffic impacts associated with the development on the internal and external road network and any recommended works or measures within and external to the site. The traffic report is to include an independent traffic safety audit.
A Development Staging Plan	That includes for the following for each stage: <ul style="list-style-type: none"> - Land use and public open space budget. - Dwelling density calculations. - An assessment of expected development contributions to be required as a result of the proposed development under any approved development contribution plan for the area.
A Neighbourhood Character Statement	That addresses the preferred future character of the area.
A Landscape Masterplan	Identifying areas of vegetation to be retained and removed based on an Arborists report. Including a landscape concept indicating design principles and species palette. Incorporating tree planting consistent with the <i>Casey Arterial Roads Tree Strategy, (City of Casey, September 2003)</i> . Demonstrating how tree planting zones are to be established and managed on new residential lots over 300 square metres.
Infrastructure Provision Report	A report that details infrastructure which is to be provided as part of the development including timing triggers, standards and funding.
An Aboriginal Cultural Heritage Assessment	Based on an archaeological survey that provides an assessment of cultural and heritage significance in accordance with the requirements of Aboriginal Affairs Victoria is required. Any heritage materials uncovered during the excavation and construction phases of development should be referred to the relevant Aboriginal communities for investigation.
A Crime Prevention Through Environmental Design (CPTED) Assessment	For applications within the activity centres and other applications as appropriate.

General

7.1.3 Subdivision Layout

The subdivision layout and building envelopes ensure that housing addresses/fronts public land. For the purpose of this requirement, public land includes all existing and proposed roads (including arterial roads), parkland (including drainage reserves) and any easement that is available for public use.

Access must be restricted from residential lots to roads consistent with the Road Network Plan contained in Schedule 14 to Clause 43.04 and the Road Network Plan (Plan 5) in this document.

Pedestrian and vehicular connectivity is to be legible and permeable throughout the site and links externally and the use of dead end streets or courts are to be avoided.

Roads are to be set out in a predominantly north south alignment in medium and higher density housing areas and in a predominantly east west street alignment in suburban housing density areas.

Areas of identified environmental and heritage significance are to be protected and managed (including during any construction phase) in accordance with a management plan

approved by the responsible authority.

Development within 100 metres of a proposed learning centre site is not to occur until a suitably detailed concept plan for the layout of the learning centre and any associated parkland or community place has been approved by the responsible authority after consultation with the State Government, Department of Education and Training.

The layout must respond to the treatment of buffer areas such that buffers are maintained between sensitive land uses and those with adverse amenity potential and if the plan of subdivision does not implement this requirement, a condition must be imposed on any permit to give effect to this requirement.

7.1.4 Housing Density and Mix

On sites greater than one hectare, a mix of lot sizes must be provided, as specified in the Development Plan.

Higher residential densities should be provided in proximity to activity centres, areas of high residential amenity such as local open space and public transport. High Density, in particular, will need to be provided within 400m of the Casey Central Town Centre.

7.1.5 Building Envelope Restriction

For all lots a restriction which sunsets after 25 years must be imposed on the lots by the plan of subdivision. The restriction must include a requirement that, except with the consent of the responsible authority, no dwelling is constructed outside a building envelope which achieves the following minimum standards. Any consent under this provision must ensure that the exceedance does not prejudice the achievement of the desired outcomes for the land and the surrounding land as envisaged by the development plan and the Subdivision Master Plan and must maintain the integrity of the minimum standards set out below.

The minimum standards are as follows:

- *A garage/carport opening must not exceed more than 40% of lot width and no more than a double garage may be visible from the street.*
- *A minimum rear setback of 3.0 metres. This does not apply to garages on a rear loaded lot.*
- *Walls of buildings should be set back from the principal street frontage the distance specified below:*

- 0 metres for shop top housing.
- 3 metres for lots of 300 square metres or below or 6 metres if the street is in a Road Zone Category 1, provided that access to a garage is from the rear of the land and the housing is provided as part of an integrated housing development;
- 4 metres for lots between 301 and 500 square metres or 6 metres if the street is in a Road Zone Category 1; and
- 5 metres for lots greater than 500 metres or 6 metres when the street is in a Road Zone Category 1.

Projecting building elements that are not enclosed on 3 sides (i.e. a porch) may encroach into these front setbacks.

- The garage/carport setback a minimum of 0.84 metres behind the front wall of the dwelling and must be a minimum of 5.5 metres from the street.
- The front wall of the dwelling must have a minimum width of 3 metres.
- Fencing must not be constructed forward of the front wall of the dwelling or 9 metres from the

principal frontage, whichever is lesser. A lot that fronts an arterial road on the Road Network Plan in the Cranbourne North Structure Plan diagrams contained in the Schedule may have a maximum 1.2 metre high fence.

- No dwelling may be constructed which does not front or address public land.
- A dwelling on a corner lot must:
 - Contain windows addressing both frontages; and
 - Have a minimum setback of 3 metres from the side/secondary street frontage for its secondary facade.
- On a corner lot, solid fencing (defined as fencing less than 30 percent translucent) greater than 1.2 metres high which exceeds 40 percent of the secondary street frontage must not be constructed.

Plan 16 provides an illustrative example of an indicative Building Envelope Plan.

7.1.6 Tree Planting Zones

Each residential lot which has an area greater than 300 square metres must include, and the relevant plan of subdivision must show, an area or

areas which will function as tree planting zone. The tree planting zone must be located in the front setback space (between the front wall of the dwelling and the road reserve).

A dwelling must not be occupied until a tree is planted in the tree planting zone in accordance with a Landscape Masterplan submitted by the applicant and approved by the responsible authority. The tree must have a minimum height of 2 metres at planting and be one that will grow to 10 to 12 metres or greater at maturity. To the extent possible, the tree must be maintained to the satisfaction of the municipal council.

The developer/owner must provide the subsequent owner with a written statement (species information sheet) approved by the municipal council describing the species of tree planted in the tree planting zone and how the tree should be maintained.

A species information sheet provided to residents should detail:

- Species name, origin, design qualities (including photographs).
- Description of tree characteristics and habits.
- Maintenance requirements.

- Any specific issues such as allergies known to be associated with the tree.
- Envelope requirements for long term healthy growth from buildings and works.

Infrastructure Provision

7.1.7 Infrastructure Agreement

Prior to the issue of a Statement of Compliance for the first stage of the development, the owner should enter into an agreement or agreements under section 173 of the Planning and Environment Act 1987 which specifies the infrastructure required to be provided as part of the development.

The agreement must require that unless the infrastructure item which is required to be provided is included in an approved Development Contribution Plan, the infrastructure item must be provided or funded by the owner referred to in the agreement in the manner set out in the agreement.

Where the infrastructure item forms part of an approved Development Contributions Plan and need for the infrastructure item is being brought forward by the proposal sooner than anticipated in the approved Development Contributions Plan or where there is a funding shortfall due to cost escalation above the costs

anticipated in the approved Development Contribution Plan, the agreement must provide for the costs of bringing forward the works or fully funding the works to be met by the developer/landowner. Council's costs associated with the drafting, checking, execution and enforcement of the agreement is to be met by the developer/landowner.

7.1.8 Stormwater Management (Drainage)

Prior to the commencement of any works, the applicant shall prepare a detailed Stormwater Management Plan (SMP) for the development and submit to Council and Melbourne Water for approval. Works should be designed and constructed to manage surface and groundwater in a manner that is consistent with the *Casey Central, Surface Water Management Strategy, (Pat Condina and Neil Craigie, 2 September 2004)* and to the satisfaction of Melbourne Water and the City of Casey.

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

- water balances for the site, peak flows, and seasonal flow volumes, all for before and after development conditions;
- details of all proposed water quantity and water quality control measures;
- details of water quality control measures and their maintenance needs for the subdivision phase, the building phase and the post development phase, and including predictions of water quality leaving the site;
- details of the expected performance, anticipated operating condition, and both short and long term annual maintenance requirements and costs, for all permanent waterbodies planned for the site;
- proposals for ongoing operation and maintenance responsibility for any constructed permanent drainage management assets, including duration of applicant maintenance period and trigger conditions for handover to Council and/or Melbourne Water.

It is anticipated that the applicant will be required to operate and maintain all permanent waterbodies constructed as part of the drainage management assets, for a period of at least 18 months after receiving a statement of compliance on the

relevant stage. Lesser periods would apply for conventional works such as pipelines, retarding basins and floodways.

Land required for drainage purposes must be transferred to the drainage authority or municipal council at no cost and will not be credited as public open space, unless otherwise determined in accordance with Section 2.3 of Schedule 14 to Clause 43.04.

All land transferred to or vested in the municipal council under this requirement must be developed and landscaped in accordance with any approved landscape plan to the satisfaction of the responsible authority.

Drainage infrastructure is to be designed having regard to the *Urban Stormwater Best Practice Environmental Management Guidelines (CSIRO, 1999)* and Draft WSUD Engineering Procedures: Stormwater (Melbourne Water, 8 June 2004).

Soil erosion control measures are to be employed throughout the construction stage of the subdivision and/or development.

The owner must procure an agreement from Melbourne Water in writing to undertake the ongoing management of any proposed wetland

or water body areas located on public land and in the event that it is unable to obtain such an agreement, it will itself undertake the ongoing management of the wetland or water body for a period of 10 years from the practical completion of the wetlands.

7.1.9 Water infrastructure, including Third Pipe

Subject to the relevant water authority agreeing to do so, the owner must enter into an agreement with the relevant water authority requiring the subdivision to be reticulated with a third pipe system to provide for the supply of recycled water from the Eastern Irrigation Scheme or any such similar scheme to all lots and open space reserves provided in the subdivision.

Irrespective of whether the relevant water authority has entered into an agreement as contemplated, any plan of subdivision must contain a restriction which provides that no dwelling or commercial building may be constructed on any lot unless the building incorporates dual plumbing for recycled water supply for toilet flushing and garden watering use if it is to become available.

Irrespective of whether the relevant water authority has entered into an agreement as contemplated, connection points for the 3rd pipe are

to be provided by the developer/landowner to all public open space at no cost to the relevant water authority or Council to facilitate irrigation of public open space using recycled water if it is to become available.

7.1.10 Telecommunications Infrastructure, including Optical Fibre

All telecommunications infrastructure must be constructed underground to service the Development Plan area, excluding satellite dishes and telecommunications towers.

All subdivisions and commercial buildings must incorporate a conduit suitable for the provision of optical fibre services to the standards specified in the Planning Guidelines for Conduits for Optical Fibre Services to service all dwellings, commercial buildings and lots.

7.1.11 Electricity Infrastructure

All new electricity transmission infrastructure must be constructed underground (excluding sub-stations and service/maintenance component requirements).

All existing above ground electricity powerlines must be removed and placed underground before the issue of a Statement of Compliance.

The design of electricity and other related infrastructure for the development abutting or in proximity to Thompsons Road must provide for alternative electricity transmission through the new development so as to render the existing above ground assets along the roadway on the same side of the road as the development redundant and, subject to the relevant utility authority consenting, those assets must be removed as part of the development works for the relevant stage of the subdivision at no cost to the relevant utility authority or Council.

Provision of land and other infrastructure

7.1.12 Tree Reserves

If a residential lot would otherwise directly abut Glasscocks Road, Thompsons Road or Narre Warren-Cranbourne Road (i.e. no road such as a service road is provided), a tree reserve having a minimum width of 12 metres must be provided and must be shown as a tree reserve on the plan of subdivision.

Within 6 months of the issue of a Statement of Compliance, land required for tree reserves must be developed and landscaped in accordance with an approved landscaped plan to the satisfaction of the responsible authority and must

be transferred to the municipal council at no cost to Council.

7.1.13 Land for Community Facilities

Any plan of subdivision must ensure that the land required for community facilities as set out in the Cranbourne North Structure Plan diagrams in the schedule is transferred to or vested in Council prior to the issue of a Statement of Compliance for the stage showing that land or such other time to the satisfaction of Council.

The owner of the land is entitled to be reimbursed or credited (at the owner's option) the value of that land in the amount specified in the approved Cranbourne North Development Contributions Plan and if the plan of subdivision does not implement this requirement, a condition must be imposed on any permit to give effect to this requirement.

7.1.14 Bus Stop Infrastructure

Bus stop infrastructure must be provided at the following locations with a minimum spacing of every 400 metres along Narre Warren-Cranbourne Road, Glasscocks/Pound Road and all boulevard collector roads shown in Plan 5: The Road Network Plan.

The final location of bus stop facilities is to be to the satisfaction of

the municipal council having regard to the need for bus stops to be developed connected to a school, community facility, sports ground, activity centre or other facilities.

The term 'bus stop infrastructure' means a bus shelter, bus stop sign, concrete slab floor and any necessary drainage with a design consistent with similar modern facilities provided in the municipal area.

A concrete footpath or shared use path as appropriate must be constructed from the closest footpath or shared use path to connect to the concrete slab floor of the shelter structure.

7.1.15 Land for Road Widening

- *Land for road widening must provide for:*
 - *a 34 metre reservation for Glasscocks Road and one tree reserve 12 metres wide or a service road;*
 - *a 40 metre reservation for Narre Warren-Cranbourne Road and one tree reserve 12 metres wide or a service road; and*
 - *a 40 metre reservation for Thompsons Road and one tree reserve 12 metres wide or a service road.*

Any plan of subdivision must ensure that land required for road widening is transferred to or vested in the Roads Corporation (in the case of land for declared main roads under the Transport Act) or to the municipal council (in the case of other roads) at no cost prior to or in the course of the certification of a plan of subdivision in respect of the first stage of the development.

For land included within the Cranbourne North Development Contributions Plan, the owner of that land will be entitled to be reimbursed or credited (at the owner's option) the value of that land in the amount specified for land acquisition in the approved Cranbourne North Development Contributions Plan and if the plan of subdivision does not implement this requirement, a condition must be imposed on any permit to give effect to this requirement.

All land transferred to or vested in the municipal council under this requirement must be developed and landscaped in accordance with an approved landscape plan to the satisfaction of the responsible authority.

Construction Standards

7.1.16 Road Construction Standards

All roads (including upgrades of any existing roads) must be provided and designed in accordance with Casey Standard Drawings except a service road which must be 16 metres wide. Variation to the standards may be considered only to the extent that they can incorporate water sensitive urban design initiatives to the satisfaction of the municipal council.

Road reserve widths specified in the Standard Drawings for the local road network may be reduced by the width of nature strip if the local road abuts public open space, a drainage reserve or another road.

Slow points must be installed on the local road network, which can be intersection treatments, deflections points, other treatments or visual elements to indicate to motorists that they are in a low speed environment.

The treatments will be determined by the responsible authority after consideration of the recommendations of an independent road safety audit.

7.1.17 Arterial Road Intersection Construction Standards

If it is proposed to have a subdivisional road intersect with declared main roads or with

Glasscocks Road, the intersections 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 development plan area and external traffic.

7.1.18 Bicycle and Pedestrian Paths

Shared use paths (providing for bicycles and pedestrians and having a minimum 2.5 metres wide) must be provided prior to issue of a Statement of Compliance. All paths must be in accordance with the Casey Standard Drawings.

Shared use paths must:

- Traverse the length of all linear public open space and provide reasonable connections from the path to the surrounding streets and developments.
- Be provided along key desire lines through non-linear open space and ensure reasonable connections from the path to the surrounding streets and developments.
- Be along the length of external arterial roads along the frontage of the site.

- Provide for a concrete shared path to connect externally to other development in the area (leapfrog development that is isolated in terms of shared path and footpath links are not permitted).

Footpaths should be provided prior to issue of a statement of compliance:

- In accordance with the City of Casey Standard Drawings; and,
- Provision is to be made for a footpath in any laneway (which is not covered by the current Casey Standard Drawings) and is to be to the satisfaction of the municipal council.

Additional concrete and non-concrete paths may be approved in circumstances where a specific design objective warrants such provision.

All paths must be provided by the developer / landowners at no cost to the municipal council.

Public Land

7.1.19 Landscaping of Public Land

All public land (public open space and drainage reserves but not the Hilltop Park) is to be landscaped to a standard adopted by Council for other new estates in its municipality and must include.

- *Drinking water fountains along routes at key junctions and major destinations.*
- *Local playgrounds at appropriate locations.*
- *Shared use paths.*
- *Public art or other structures / features at key junctions of community corridors.*

Tree planting to arterial roads is to be provided in accordance with the Casey Arterial Roads Tree Strategy.

More generally, public land is to be landscaped to a suburban standard in accordance with the responsible authority's objectives for the area. Suburban standard includes:

- Earthworks to create the final form of the land, provide suitable site drainage and retaining walls.
- Seeding of grass on all exposed surfaces.
- Provision of tree planting in accordance with the responsible authorities adopted masterplan for the land.
- Planting of landmark trees at junctions, throughout parkland spaces and where practical in roundabouts.

Street trees on all road reserves must be planted consistent with the

approved Landscape Concept Masterplan.

7.1.20 Public Open Space Requirements

Any permit must provide a public open space contribution generally in accordance with the Structure Plan diagrams, Plan 9: The Open Space Network Plan and Section 2.3 of Clause 43.04 of the Casey Planning Scheme.

Public open space must be provided generally in accordance with the Cranbourne North Structure Plan diagrams in the schedule to the satisfaction of the responsible authority.

In determining whether credit for public open space is to be granted, the responsible authority must ensure that:

- *Land required by, or vested in, Melbourne Water for grainage related purposes is not credited as open space.*
- *If the public open space contribution is to be made by a transfer or vesting of land to or in the municipal council, only that part of the land which is unencumbered may be given credit towards the open space contribution.*

- *Land which acts as a linkage through courthoods, between lots and the like is not credited as open space.*
- *Not more than the minimum land required across the whole of the land in the development plan area to satisfy requirement at Clause 52.01 of the scheme is credited as open space.*
- *The cumulative total of the credit across the area of the schedule in respect of any category of open space in the open space budget contained in the development plan does not exceed any amount allowed in the development plan for that category of open space.*

7.2 Use / Development Application Requirements

7.2.1 Non Residential Developments

Non-residential developments must provide lockable bicycle storage facilities and shower facilities for use by staff and the general public as appropriate having regard to the size and intensity of the development.

7.2.2 Education Precincts

Private schools are encouraged to establish based on the same location

principles as non-residential uses. A key issue is the preparation of a traffic management plan, to the satisfaction of the City of Casey, in accordance with Clause 52.06-2 of the Casey Planning Scheme. The plan is to focus on identifying and resolving local traffic and parking problems likely to be generated by the learning centre.

7.2.3 Neighbourhood Convenience Centres

The Neighbourhood Convenience Centre design should also address *Melbourne 2030* and the following design principles:

- The structure / layout of the centre, as well as the design of the built form, are to be based on main street town centre concept.
- Pedestrian circulation routes are to be provided with constructed footpaths. The footpath is to be suitably distinguished and protected from conflict with vehicular circulation areas. This could be achieved through suitable road markings, landscaping, bollards, etc.

Applications for the Neighbourhood Convenience Centres will need to provide details of buildings and works in terms of:

- Details of the location, height, dimensions, elevations, floor area and setbacks of all buildings and works.
- Details of the external finishes and design of all buildings and works, including the colours and details of materials to be used for external walls.
- The proposed uses within all buildings.
- The layout and treatment of all vehicle and pedestrian routes and access points to and from the land.
- The location and layout of all car parking areas, including proposed disabled spaces and bicycle parking areas.
- The location of public transport facilities, access to them and passenger facilities.
- Details of site drainage, including the nature and location of litter retention systems and measures and trapping devices, and identification of the flows within the site estimated to occur as a result of a 1-in-100-year storm event.
- Provision for loading and unloading facilities of vehicles and means of access to them.

- Details of the location of waste collection, storage and removal facilities and areas.
- Details of the location of plant, equipment, services or architectural features.
- The stages in which the land is to be developed.
- Measures to facilitate accessibility to and within the site for the elderly and disabled.
- Measures for attenuating noise in neighbouring areas, in particular any abutting residential areas.

A traffic plan will also need to be submitted that shows:

- traffic management and control works in adjoining and nearby roads when the development or any stage of the development is completed;
- the means of vehicular ingress and egress to the site;
- the means of internal circulation, including details of internal access roads;
- the timing of the proposed traffic works relative to the staging of the development; and,
- public transport arrangements and access routes (including bus

stop infrastructure and connecting paths).

A landscape plan will be required that shows the following, in relation to the proposed development:

- the provision of appropriate landscape buffers, including fencing where the land directly abuts a residential area;
- where relevant, the landscape treatment of frontages of the land;
- the treatment of car parking areas, including rooftops and decked parking areas;
- the provision of outdoor areas for use by staff and customers;
- all other proposed landscaping on the land;
- any landscaping proposed for streets, road reserves and public areas;
- a staging strategy for the implementation of landscape works, including a detailed planting schedule and an ongoing management strategy.

The landscape plan should take into account the effects of shadowing on neighbouring areas.

All permits to construct a building or construct or carry out works must include the following condition.

“A management plan must be prepared to the satisfaction of the responsible authority that provides for:

- the proposed hours of construction of buildings and works;
- measures to minimise and control noise from construction works;
- measures to minimise the impact of construction vehicles arriving at and departing from the land;
- measures to minimise the off-site effect of external lighting;
- measures to minimise the creation of conditions liable to be a nuisance;
- measures to minimise the impact upon local amenity of operations such as waste collection, vehicle loading and unloading times, management and maintenance of car parking areas, and collection and control of shopping trolleys (where relevant);
- the management and maintenance of existing landscaped areas;
- the operation of waste collection;
- litter management;

- measures to meet the needs of youth and to minimise anti-social behaviour; and,
- any other matters the responsible authority may reasonably require."

Plan 16 Building Envelope (Indicative Plan)

The Building Envelope Plan

This drawing is the most important as it sets out the development controls applicable to each lot. It includes a plan with symbols or envelopes as well as text outlining the rules.

Indicative



Components of a Plan:

- Building Envelope
- Boundary layout
- Access points
- Setbacks
- Height code
- Site coverage
- Resident parking
- Visitor parking
- Fencing
- Residential Amenity
- Landscaping
- House design
- Energy Rating
- Garbage & Services

8.0 Future Directions

As stated in the Introduction (Section 1) an interim Urban Growth Boundary (UGB) traversed through the 'broader' study area, placing part of the area within the Green Wedge. The interim UGB was moved to include the broader study area, however the balance land was not formally included within the Development Plan and was excluded from the rezoning of land under Amendment C77.

Nonetheless, in anticipation of the possible relocation of the UGB, the structure planning process included preparation of a structure plan for the ultimate development of all land in Cranbourne North (refer to Plan 17).

This process has resulted in two distinct precincts being identified, namely a Service Business Precinct to the north of Thompsons Road and a Residential Precinct within the south and southeast portion of the site.

Accordingly, this section of the document details the future strategic direction with regards to the balance of land that is bounded by:

- The southern and eastern extent of the Development Plan Overlay Schedule 14;
- Berwick - Cranbourne Road to the East; and
- Thompsons Road to the south.

8.1 Service Business Precinct

Based on site constraints, locality and other policy considerations, the site is thought appropriate for commercial / light industrial uses that would provide an important employment precinct for local business.

The strategic direction for the site has been influenced by the following key strategic documents:

- Casey C21 Strategy - A vision for our future (City of Casey, September 2002)
- Casey Activity Centres strategy (City of Casey, October 2006)

The zoning of the site for service business will increase the area of land available for employment growth and expansion within the Cranbourne North and Casey more broadly.

Casey C21 Strategy

The Casey C21 Strategy provides an important municipality wide approach to city planning that was lead by the community.

In Volume 2 Part 2 of the strategy under Cranbourne North Goals (p164-165), the strategy encourages the development of a new service industrial precinct (with wide treed green mounded landscape strips to boundaries) on the north side of Thompsons Road as shown on the C21 Plan.

Casey Activity Centres Strategy

The Casey Activity Centres Strategy considers the importance and direction of the activity centres across the municipality. Although the strategy does not identify the specific site it does examine the need for employment and business growth within the immediate area and wider municipality and the appropriate planning measures of future activity centres and employment precincts.

The future use of the site for service business is consistent with the Strategy as it would increase the amount of employment land available in Casey and assist in providing the community with efficient access to such services as auto electricians, panel beaters, kitchen and cabinet makers and a number of service businesses that have been identified as required in the area.

8.1.1 Site Constraints

It is important to note and consider the constraints on the land in its potential future use.

The land is affected by amenity reducing buffers (refer to Plan 13). These buffers limit the use of the site from sensitive uses including residential, schools and health facilities.

While much of the land is cleared of vegetation there are some remnant pockets of vegetation that may require protection.

The planning of the site must take into consideration the surrounding land uses and to ensure minimal impact on the residential and parkland interface to the site.

8.2 Residential Precinct

The eastern and south eastern portion of the site is thought to provide a logical extension to the urban growth facilitated by Amendment C77. However, a significant portion of the land is affected by flooding and therefore has reduced potential for full suburban development.

Waterway engineering may facilitate development of portions of the site with balance to be used for flood mitigation and open space purposes. The alignment between residential and open space on Plan 17 is nominal only. Detailed analysis of this component would be required as part of any future rezoning proposal.

Plan 17 Future Development

