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C**ARMSTRONG CREEK URBAN GROWTH AREA****Importance and Key Issues**

The Armstrong Creek Urban Growth Plan provides the development framework for Geelong's primary future growth area. It aims to concentrate the majority of the urban growth of Geelong into a comprehensive community in an area south of the Melbourne to Warrnambool railway line and includes parts of the suburbs and localities of Grovedale, Marshall, Connewarre and Mount Duneed. For the purpose of this policy, this growth area is known as 'Armstrong Creek'.

The vision is for Armstrong Creek to be developed into a sustainable community that sets new benchmarks in best practice urban development. Natural and cultural features will be protected and enhanced to create a distinct urban character. Armstrong Creek will become a highly sought-after location for living, working and recreation, forming an attractive addition to Geelong.

The Armstrong Creek Urban Growth Plan - Structure Plan summarises the proposed development framework for the area and defines an urban growth boundary. Areas of visual sensitivity along the Mount Duneed ridgeline and flood prone areas east of Barwon Heads Road are excluded from urban development. The remaining area within the urban growth boundary is the Armstrong Creek Urban Growth Area consisting of approximately 2,350 hectares of land with an estimated capacity of 22,000 dwellings, and a potential population of 54,000 persons.

The following objectives and strategies are derived from the Armstrong Creek Urban Growth Plan:

**Objective 1**

To provide a wide range of housing types and densities in an urban structure based on walkable neighbourhoods, public transport and mixed use activity centres.

**Strategies**

- Ensure residential development is organised into a series of 'walkable neighbourhoods', approximately 1.6 kilometres in diameter, with a mixed use activity centre at the heart and with each neighbourhood having a distinct identity.
- Provide a comprehensive mix of lot sizes, housing types and affordability within each neighbourhood and promote housing that is adaptable so that people can 'age in place'.
- Provide a greater concentration of medium and high density housing and aged care housing towards the centre of the neighbourhoods and avoid 'gated communities'.
- Achieve a minimum average residential density of 15.5 dwellings per hectare in residential areas across the growth area, including:
  - a minimum of 30 dwellings per hectare in 'higher density housing' areas - being those areas within 400 metres of existing and planned public transport interchanges.
  - a minimum of 20 dwellings per hectares in 'medium density housing' areas being those areas beyond the 'higher density' areas within 800 metres of existing and planned public transport interchanges, and within 400 metres of the edge of sub regional and neighbourhood centres
  - a minimum of 14 dwellings per hectare in the remaining 'conventional density housing' areas.

- Ensure residential lots within 400 metres of the sub regional, neighbourhood and local activity centres have a layout that is designed to enable future intensification of development.
- Require medium and high density housing areas to have additional street trees and public parks to compensate for the loss of planting opportunities in private gardens.

### **Objective 2**

To establish a network of mixed use activity centres providing retail, community and educational facilities for the incoming Armstrong Creek community.

### **Strategies**

- Develop a sub-regional activity centre as designated on the north east corner of Torquay Road and Burvilles Road that includes a full range of retail, community, entertainment, business and residential uses.
- Provide two neighbourhood activity centres, each providing a supermarket, a government primary school and a ‘family hub’ of health, community and medical services, and limit retail leasable floor area in the north eastern neighbourhood activity centre on Horshoebend Road to 7,000m<sup>2</sup>.
- Develop a series of local centres each containing local shops, a government primary school, local sporting facilities, and a ‘family hub’ including a kindergarten, child care, maternal and child health services.
- Ensure additional multi-purpose ‘corner’ stores, co-located with local parks, are provided within 400 metres of all dwellings which are not within 400 metres of activity centres.
- Provide three specialised activity centres at the edges of the proposed industrial areas containing services such as cafes and restaurants to serve the needs of the workforce along with floor area for higher job density activities such as research and development.
- Ensure the provision of two government secondary schools, one towards the west of the growth area and one towards the northeast co-located with a neighbourhood or local activity centre.
- Locate all centres and schools on the proposed local transit system, the ‘greenway’ network and at least one connector road, and ensure schools have a street frontage on at least three sides.
- Ensure all activity centres within the growth area are orientated and designed to support active street frontages, street based community interaction and pedestrian safety.
- Ensure the minimum community services required at the local and neighbourhood level, such as a multi-purpose facility, are available at the outset of the development.
- Provide a mixed-use corridor along Torquay Road containing bulky goods retailers, offices and high-density residential accommodation.

### **Objective 3**

To create an economic and employment structure that complements the broader Geelong region while providing employment areas, business opportunities and local jobs.

### **Strategies**

- Ensure the Armstrong Creek area complements the existing activity centre structure of Geelong by supporting Central Geelong as the primary centre.

- Ensure the Armstrong Creek area complements the existing industrial structure of Geelong by providing for niche industrial development opportunities including locally oriented service industry in the northeast, and export oriented hi tech manufacturing in a business park setting in the west.
- Provide opportunities for advanced business services to establish as home based businesses and grow into activity centre based businesses.
- Provide a mix of activity centre office spaces and business park spaces that showcase the latest and most advanced forms of commercial and industrial development.
- Generate synergies with Deakin University and regional research and commercial businesses.
- Seek to provide 22,000 jobs within the Armstrong Creek area including provision of 'higher order' professional, managerial and advanced technical jobs.

#### **Objective 4**

To protect and enhance the natural environmental features and cultural heritage values of the Armstrong Creek area and provide a distinct urban character and a green setting.

#### **Strategies**

- Ensure the natural channels and floodplains along the Barwon River, Armstrong Creek and its tributaries are maintained.
- Protect the habitat values and water quality of Armstrong Creek and its tributaries by providing public open space within the 1-in-100 year flood extent, and avoiding development and clearing of vegetation within 70 metres of streams and wetlands.
- Create and strengthen vegetation linkages along creeks, rivers and roadsides through strategic revegetation using the key iconic local native tree species.
- Protect and enhance areas of remnant native vegetation in the growth area including significant roadside vegetation and areas of Bellarine Yellow Gum and River Red Gum woodland located on private land.
- Protect places of Aboriginal cultural heritage significance in consultation with the Wathaurong community.
- Ensure Aboriginal archaeological assessments and flora and fauna surveys are undertaken to inform the preparation of Development Plans and prior to subdivision within the growth area.
- Provide protection for the thirty seven post contact (European) cultural heritage places listed in the Urban Growth Plan which do not already have statutory protection.
- Protect significant view lines associated with indigenous and post contact heritage places and establish cultural heritage interpretation trails throughout the growth area.

#### **Objective 5**

To ensure the provision of a comprehensive and well connected network of open space and recreation facilities.

#### **Strategies**

- Achieve a minimum public open space contribution of 10% of unencumbered, subdividable land within the growth area.

- Ensure the establishment of major indoor recreation facilities at the sub-regional centre and the two proposed government secondary schools.
- Provide a comprehensive range of playing fields and local parks including two regional sporting facilities and sports grounds within each government primary and secondary school site, co-located with an additional oval on adjoining Council reserves.
- Distribute local parks of at least 0.5 hectares in area, within 400 metres of all dwellings across the residential areas.
- Establish at least one major, high value, conservation park at a regional scale in the vicinity of Stewarts Reserve.
- Develop a network of linear open space focussed on Armstrong Creek and its tributaries, the Barwon River and by converting the existing rural roads to 'greenways'.
- Ensure recreational walking and cycling trails provide direct links to activity centres, schools and major parks, are well lit and are overlooked by development.

### **Objective 6**

To provide a sustainable movement and access network within the Armstrong Creek area.

#### **Strategies**

- Provide for three main public transport interchanges including the existing Marshall Railway Station and new interchanges at Rossack Drive and the sub-regional centre.
- Provide for a high quality sub-regional public transport link between the existing railway line and the sub-regional centre, with provision for it to be extended beyond towards Torquay.
- Provide for a comprehensive local public transport system on dedicated routes that link all activity nodes and pass within 600 metres of all dwellings and ensure public transport services are provided at the outset of development.
- Provide for new pedestrian bridges across the existing railway line and proposed east-west link road at Rossack Drive, Bieske Road and Bickford Road.
- Provide improved local vehicle access in the western section of the growth area by extending Rossack Drive across the railway line.
- Provide for a network of connector streets across the growth area.
- Provide for a new east - west link road to connect the Geelong Bypass with the Surf Coast Highway, Barwon Heads Road and ultimately, Portarlington Road.
- Provide primary and improved connection between Torquay and the Geelong Bypass by upgrading Mt Duneed Road and Anglesea Road.
- Provide for potential widening of Barwon Heads Road to two lanes in each direction.
- Provide for grade-separated crossings of the existing rail line at Barwon Heads Road, Torquay Road, Rossack Drive and the east-west link road.
- Develop existing and proposed arterial roads as urban boulevards.

### **Objective 7**

To provide utility services that meet current best practice standards and are environmentally sustainable.

#### **Strategies**

- Seek to employ gravity systems for the sewer network and align trunk sewer lines with public open space where possible.
- Require water sensitive urban design including minimising direct connections between impervious areas and the underground stormwater system.
- Provide a series of flood storages including retarding basins and household rainfall collection tanks to limit 1.5 year and 100 year peak flow to pre-development conditions.
- Require rainwater tanks and encourage low water use gardens as standard water conservation measures for all new buildings in the growth area.
- Explore the potential for leading edge water supply strategies and alternative water supplies, such as recycled water (including a '3rd Pipe' system) and the use of stormwater.
- Require solar hot water systems as standard measures for all new buildings and encourage solar electricity generation.
- Explore the potential for leading edge sustainable energy supply strategies and alternative energy sources, such as, combined heat and power, and energy from waste.
- Provide for the latest telecommunications technology in the growth area.
- Provide an Integrated Resource Recovery Centre (IRRC) within the proposed industrial area at Marshall.

### **Objective 8**

To ensure orderly, controlled and staged development of Armstrong Creek.

### **Strategies**

- Limit urban expansion to the Urban Growth Area as defined by the Urban Growth Boundary.
- Commence development at the designated growth nodes at Marshall and Torquay Road.
- Ensure staging and sequencing of development follows the staging principles outlined in the Armstrong Creek Urban Growth Plan.
- Ensure no more than 10 to 15 years supply of vacant residential land is zoned for residential development at any one time to avoid an oversupply of lots and, if supply drops below 10 years, consider rezoning more land for urban purposes.
- Require subdivision permit applications to cover an area of at least 40 hectares.
- Ensure a fair, transparent and accountable system of development contributions is put in place to fund and deliver infrastructure in a consistent and timely manner.
- Require the preparation of detailed Development Plans, covering an area of at least the scale of the 'walkable neighbourhoods' of 1.6 kilometres in diameter detailed in the Armstrong Creek Urban Growth Plan, prior to rezoning of land for urban development.
- Ensure Development Plans are consistent with the vision and principles of the Armstrong Creek Urban Growth Plan and the location of land uses and infrastructure are generally in accordance with the Armstrong Creek Urban Growth Plan - Structure Plan.

### **Implementation**

These strategies will be implemented by:

### **Using policy and the exercise of discretion**

- Ensure use and development is in accordance with the vision and principles of the Armstrong Creek Urban Growth Plan Volume 1, October 2006.

### **Applying zones and overlays**

- Applying the Incorporated Plan Overlay across the Urban Growth Area.
- Applying Schedule 1 to the Environmental Significance Overlay to areas along the Armstrong Creek and stands of significant remnant vegetation.
- Applying Schedule 2 to the Environmental Significance Overlay to the Barwon River floodplain as a buffer to the wetlands of Reedy Lake and Lake Connewarre.
- Applying Schedule 1 to the Vegetation Protection Overlay to areas of significant roadside vegetation.
- Applying the Floodway Overlay to locations that are high hazard and active floodways.
- Applying the Land Subject to Inundation Overlay to areas which are subject to periodic inundation.
- Applying the Special Building Overlay to land in existing urban areas that are subject to inundation by surcharge flows from urban drainage systems.
- Applying the Heritage Overlay to significant heritage sites.
- Applying the Significant Landscape Overlay to the Mt Duneed hill top.
- Applying the Development Contributions Plan Overlay.
- Applying the Development Plan Overlay.

### **Undertaking further strategic work**

- Prepare a detailed Implementation Plan including a rezoning strategy.
- Prepare a Development Contributions Plan for the Urban Growth Area.
- Coordinate the preparation of more detailed Development Plans for development areas within the Urban Growth Area.
- Develop sustainable water and energy policies prior to commencement of development.

### **Other Actions**

- Explore the feasibility of undergrounding the Anglesea – Point Henry electricity transmission line.
- Explore the feasibility of making sprinkler systems a standard requirement for all new dwellings in the growth area.
- Investigate the possibility of establishing one or more ‘eco-villages’ within the growth area, in which all homes are self-reliant in terms of energy and water.
- Prepare cultural heritage management plans for significant European and Aboriginal heritage places including the Mount Duneed Recreation Reserve.
- Investigate the establishment of a Cultural Heritage Interpretation Trail.

### **References**

Armstrong Creek Urban Growth Plan - Volume 1, October 2006

Armstrong Creek  
Urban Growth Plan

Structure Plan

- Urban Growth Boundary
- Rail Line
- Sub-Regional Transit Route
- Possible Future Public Transport Interchange
- Dedicated Local Transit Route
- Greenway
- Recreational Trail
- Geelong Bypass
- East-West Link Road
- Arterial Road
- Connector Street
- Watercourse
- Sub-Regional Centre
- Neighbourhood Centre
- Local Centre A
- Local Centre B
- Local Shops
- Specialist Centre
- Secondary School
- Employment Land
- Mixed Use Corridor
- Medium-High Density Housing
- Conventional Density Housing
- Local/Active Parkland
- Biodiversity corridor/Passive Parkland
- Indigenous Heritage Area
- Rural Land
- Detention Basin/Wetland



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