

AERIAL IMAGE



WINCHELSEA GROWTH AREA OUTLINE DEVELOPMENT PLAN



August 2011



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of Council held on Wednesday 24 August 2011**

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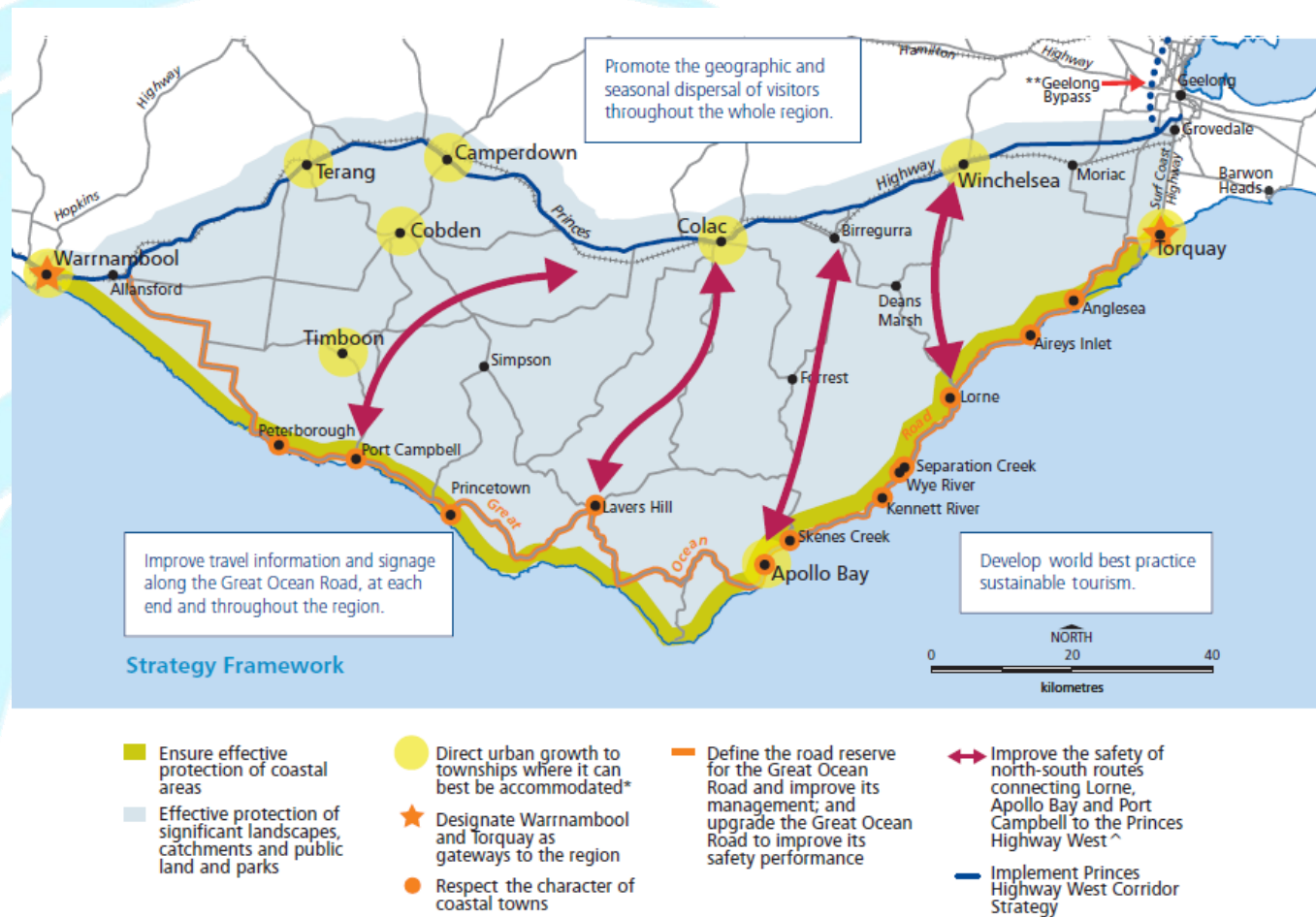
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1.0 INTRODUCTION

1.1 Regional context

Winchelsea (population: 1,336 persons (ABS 2006)) is located about 40 km west of Geelong and is nominated as one of the townships in the G21 Geelong Regional Plan and the Great Ocean Road Region Strategy, where urban growth can occur.

Plan 1 illustrates the regional context in the Great Ocean Road Region Strategy, 2004. Winchelsea is designated as one of the townships in the region where urban growth should be directed.



PLAN 1: Strategy Framework— Great Ocean Road Region Strategy

1.2 Local context

The Winchelsea Structure Plan 2021 (WSP 2021) sets the strategic framework to guide the future growth of the township (Refer Plan 2).

Key components in the plan include:

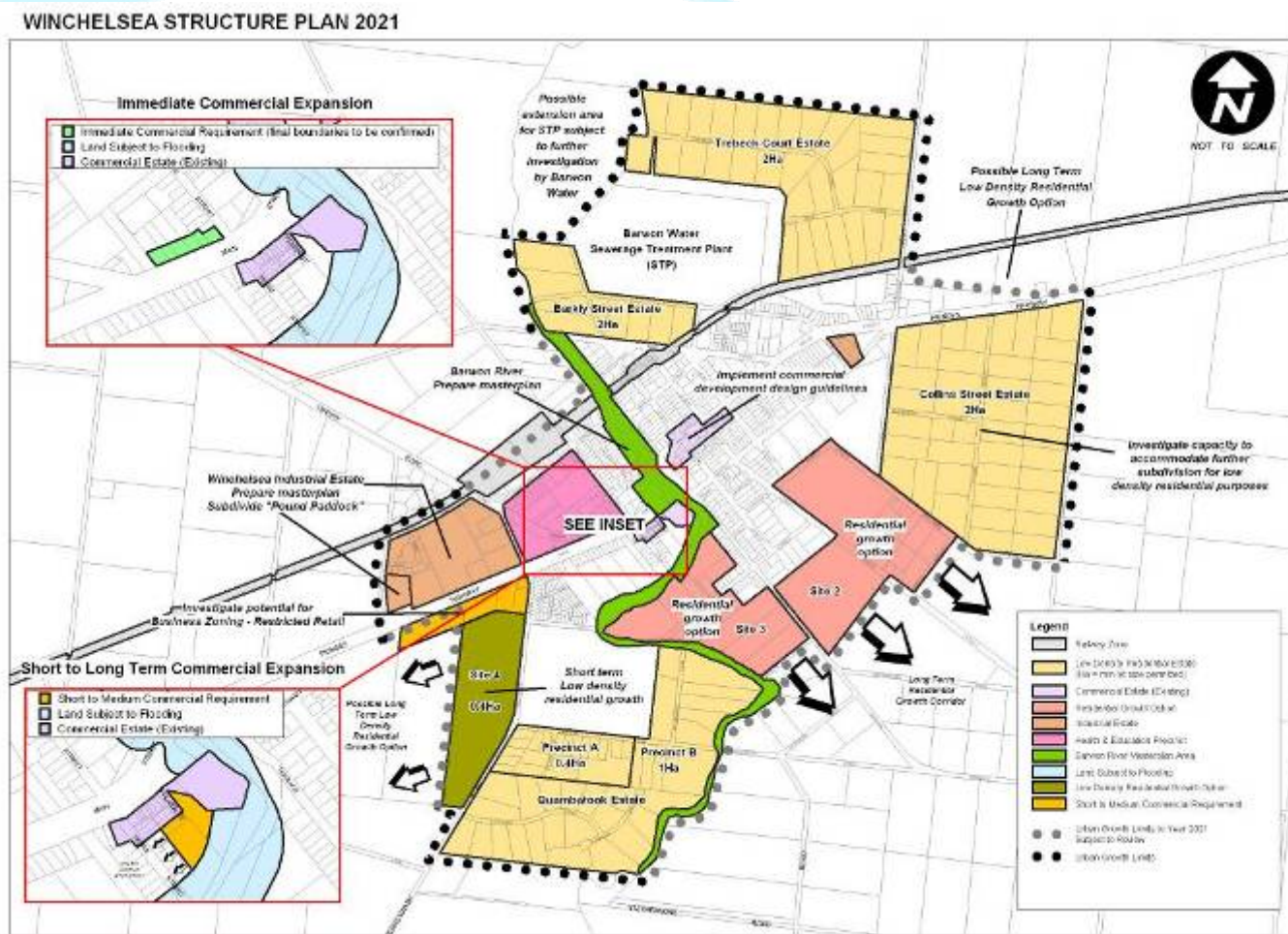
Residential growth — Directs future residential growth to the south-east of Winchelsea to cater for population growth to the year 2021.

Local economy – defines the primary Activity Centre for Winchelsea along Main Street (Princess Highway) and provides for future commercial and industrial development.

Environmental Assets and Landscape Values – identifies, protects and enhances existing environmental and scenic landscape assets.

Community Facilities & Services – reviews the adequacy of existing facilities and services and identifies future requirements. For example, investigating the provision of, and most appropriate location for, a Children's Services Facility' and investigating the potential opportunity to reserve land adjacent to Eastern Reserve for the purpose of a future second sporting reserve.

Infrastructure & Transport – provides an appropriate physical infrastructure and transport modes to service future development and population growth in the township. For example upgrading Batson Street between Barwon Terrace and Austin Street and Gladman Street to Connector Road status.



1.3 Role of the Outline Development Plan

The Winchelsea Growth Area Outline Development Plan (ODP) is a long-term plan for urban development. It describes how the land is expected to be developed, and how and where services are planned to support development.

The ODP:

- Is a strategic plan which guides the delivery of quality urban environments.
- Enables the transition of non-urban land to urban land.
- Sets the vision and principles for how land should be developed and achieved.
- Provides developers, investors and local communities with certainty about future development.

The need to prepare an outline development plan for the Winchelsea urban growth area arose from the combination of a number of issues:

- A recommendation in the adopted Winchelsea Structure Plan 2021 (WSP 2021).
- The need to integrate and coordinate development within a fragmented ownership precinct.
- The need to provide more detailed direction for land development prior to the rezoning for residential purposes.

1.4 Land to which the ODP applies

The ODP focuses on the primary study area comprising the residential growth areas in the WSP 2021 located at the south eastern quadrant of Winchelsea (Refer Plan 3).

A secondary study area, located to the south – east of the primary study area (designated as 'Long Term Residential Corridor' in WSP 2021), is identified, in less detail, to acknowledge the influences of this outlying long term growth corridor.

It should be noted that the ODP applies only to land within the primary study area.

1.5 Relationship to Winchelsea township

The primary study area is some distance (at least 500m) from the major services and facilities located on the western side of the Barwon River.

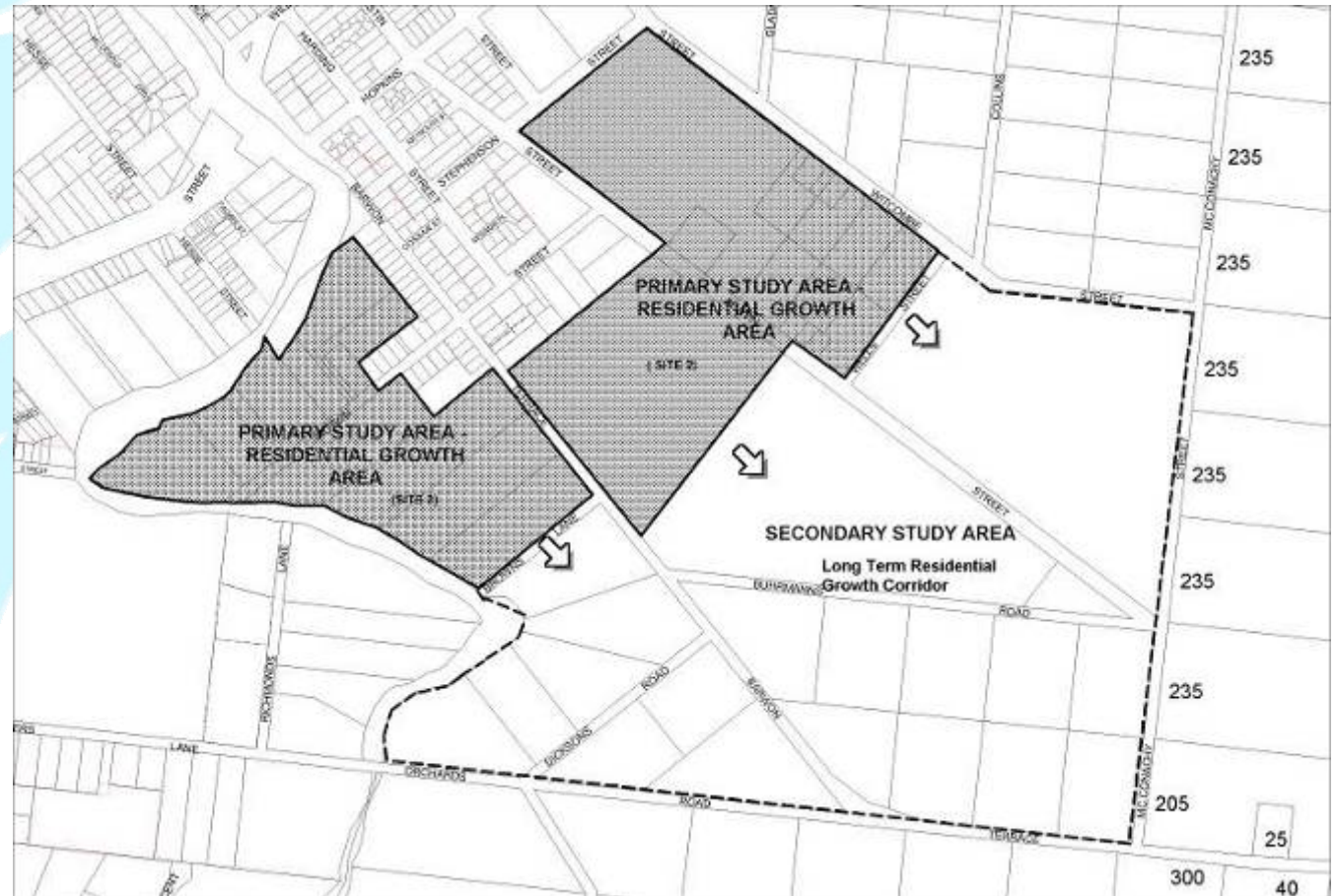
The northern section of the study area is in proximity to the existing sporting facilities at Eastern Reserve and the open space at Winchelsea Common.

Pedestrian access across the Barwon River to Hesse Street is recommended in Council's Pathway Strategy. This access will be critical for pedestrian connectivity from the residential growth area to the commercial, health and education services on the western side of the Barwon River.

1.6 Population Characteristics

The population of Winchelsea township grew at a steady rate of around 3.5% per annum from 1,102 persons in 2001 to 1,336 persons in 2006 (ABS). Features of this growth include:

- A consistent trend towards an ageing population, with 21.4% of persons aged 64 years or over in 2006.
- A decline in age groups associated with young families during this period, however, there is recent evidence to suggest that this trend may be reversing.
- A relatively permanent and stable population with predominantly one and two person households.



PLAN 3: Location of Study Area

2.0 PRECINCT FEATURES

2.1 Aerial image

The aerial image of the primary and secondary study areas is illustrated in Plan 4.

The primary study area is largely undeveloped, however there are existing buildings dispersed through it especially the eastern section.

The secondary study area comprises mostly of farm land and larger residential lots.



PLAN 4: Aerial Image

2.2 Topography & landform

The primary study ODP area is mostly undulating (Refer Plan 5) but with a marked gully along the Barwon River at the western edge of the study area.

The relatively undulating topography in the residential growth areas may provide some innovative design opportunities.



PLAN 5: Topography



Fig 1: Undulating landform at the northern section of land bounded by Witcombe St, Stephenson St and Austin St



Fig 2: Gently undulating land form from Batson Street overlooking to the Barwon River

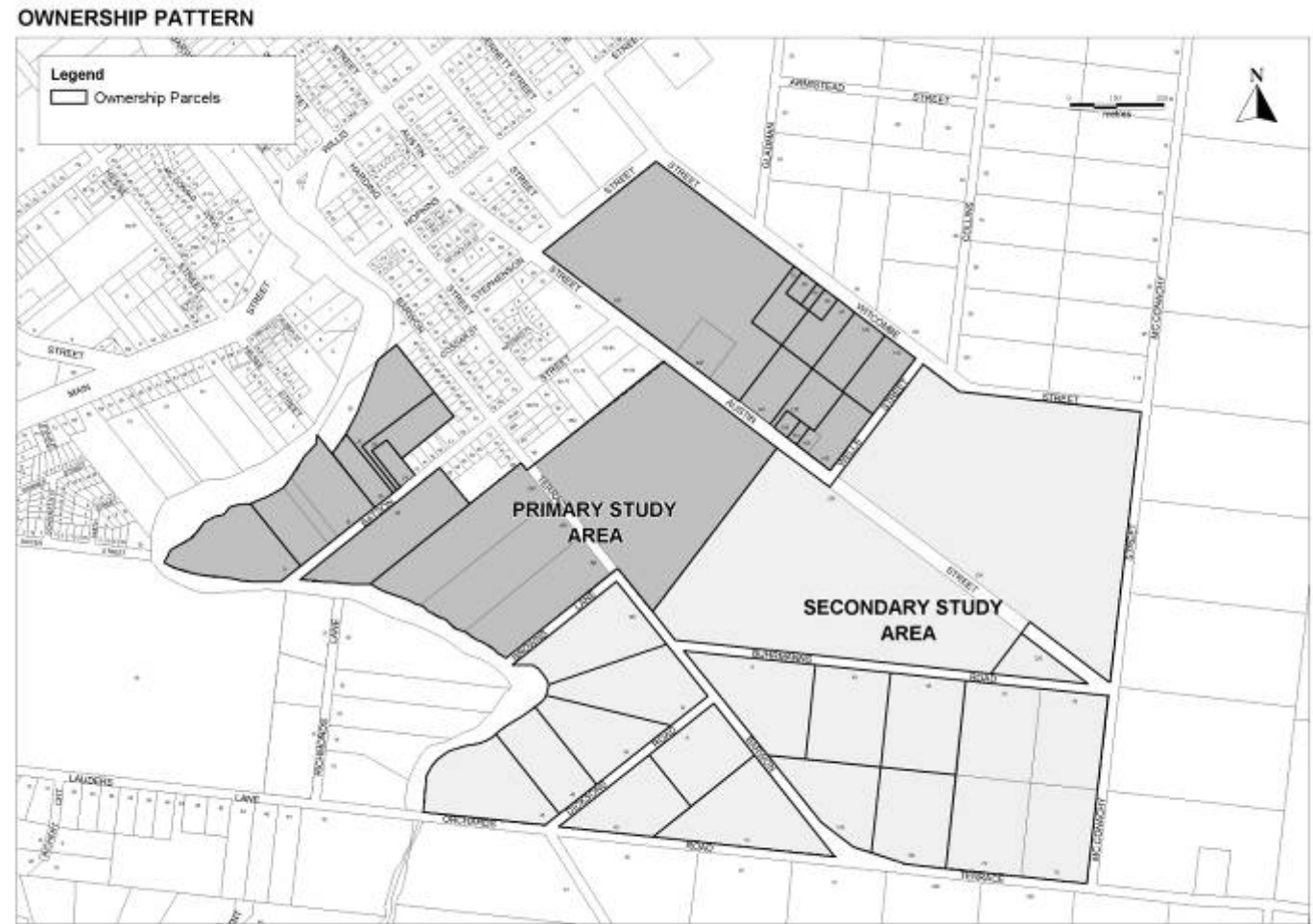


Fig 3: Marked gully along the Barwon River at Batson Street.

2.3 Ownership pattern

The land parcels in the primary study area are fragmented into 21 land ownership parcels (Refer Plan 10). Eight of these land parcels are less than 1 hectare in area.

The large number of individually owed allotments is a challenge for coordinated subdivision and development of the land.



PLAN 6: Ownership pattern

3.0 PLANNING CONTEXT

3.1 Existing land use

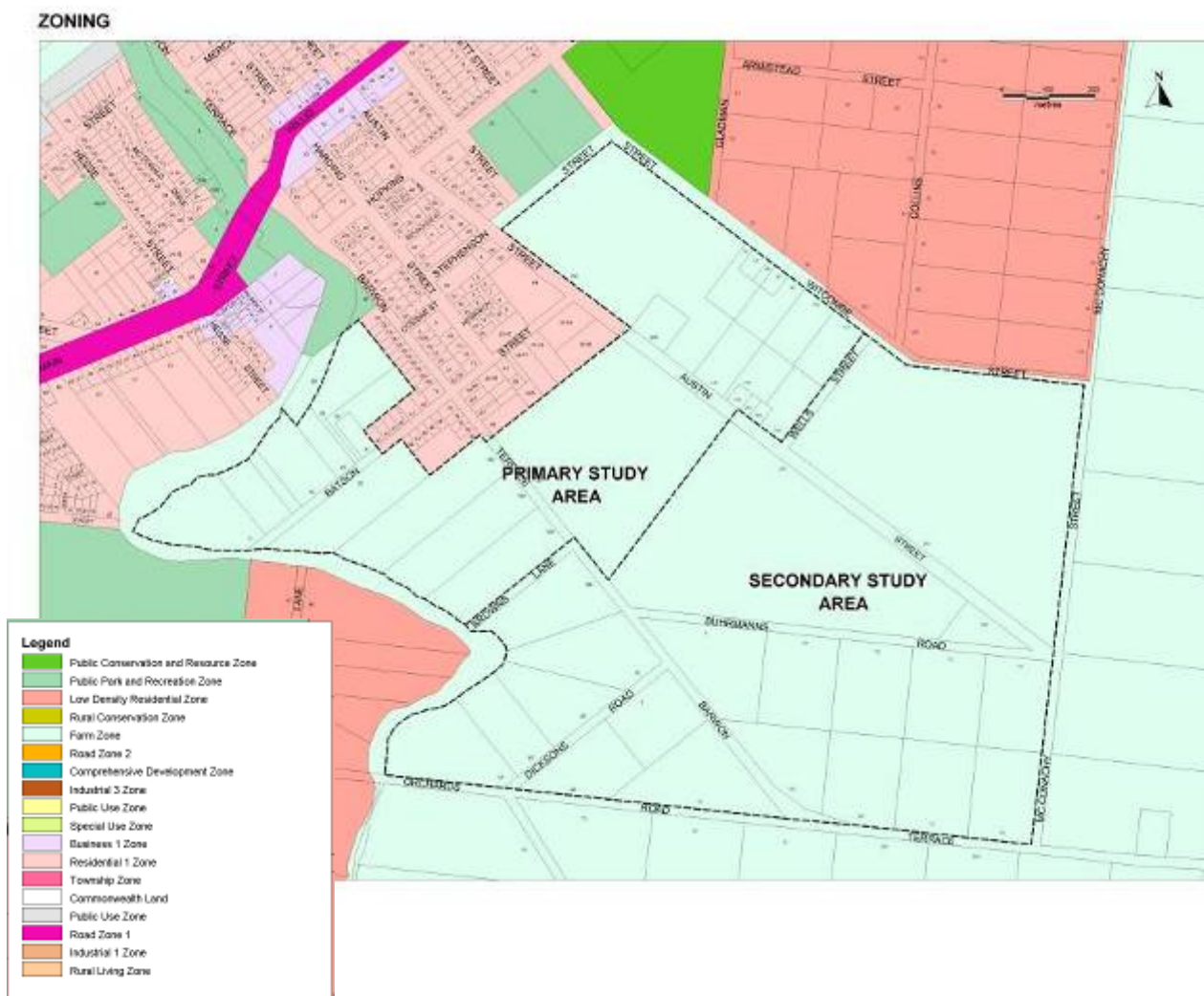
The ODP primary study area comprises a mix of semi rural and residential land uses. The average lot size is about 2.3 ha. A number of smaller allotments are developed with residential dwellings.

3.2 Zone controls

The primary study area is currently zoned Farm Zone (FZ), and abuts Residential 1 Zone (R1Z) to the north and a Low Density Residential Zone to the east (Refer Plan 7).

The primary purpose of the Farming Zone is to provide for the use of land for agriculture purposes.

The primary study area would have to be rezoned for residential purposes to facilitate its use as a residential growth area as envisaged in the Winchelsea Structure Plan.



PLAN 7: Zone controls

3.3 Overlay controls

The following planning scheme overlay controls affect land within the ODP area. The location and description of these controls are provided in more detail in Section 6.0 Constraints.

i) Environmental Significance Overlay (ESO) -

The purposes of this overlay are to protect the biodiversity of the area associated with wetlands and waterways of local, regional or state significance and to prevent water pollution in watercourses.

ii) Significant Landscape Overlay (SLO)—

The purpose of this overlay is to ensure that the development of land adjoining the Barwon River maintains and enhances the scenic landscape values of the Barwon River.

iii) Salinity Management Overlay (SMO)

The purpose of this overlay is to identify areas subject to saline ground water discharge or high ground water recharge.

iv) Environmental Audit Overlay (EAO)

The purpose of the Environmental Audit Overlay is to ensure that potentially contaminated land is suitable for a sensitive purpose (for example, residential use).

v) Land subject to Inundation Overlay (LSIO)

This overlay identifies land in a flood storage or flood fringe area affected by the 1 in 100 year flood.

vi) Floodway Overlay (FO)

This overlay identifies waterways, major flood-paths, drainage depressions and high hazard areas which have the greatest risk and frequency of being affected by flooding.

4.0 INFRASTRUCTURE CONTEXT

The Winchelsea Structure Plan 2021 Infrastructure and Transport review makes particular recommendations in relation to roads, traffic and transport, drainage, sewerage, water supply, power supply and telecommunications within the primary study area as follows:

4.1 Roads

1. Provide an alternative Collector roadway to enable the majority of the traffic generated by the potential development site(s) to access the Princes Highway without increasing traffic loadings on existing residential streets.
2. Upgrade the existing major link(s) to the Central Activities Area (CAA)
3. Upgrade Batson Street between Barwon Terrace and Austin Street to Connector Street status.
4. Upgrade Gladman Street to Connector Street status.
5. Provide a new future Connector Street to link Batson Street with Gladman Street. (proposed eastern traffic link).

In addition, VicRoads advises that:

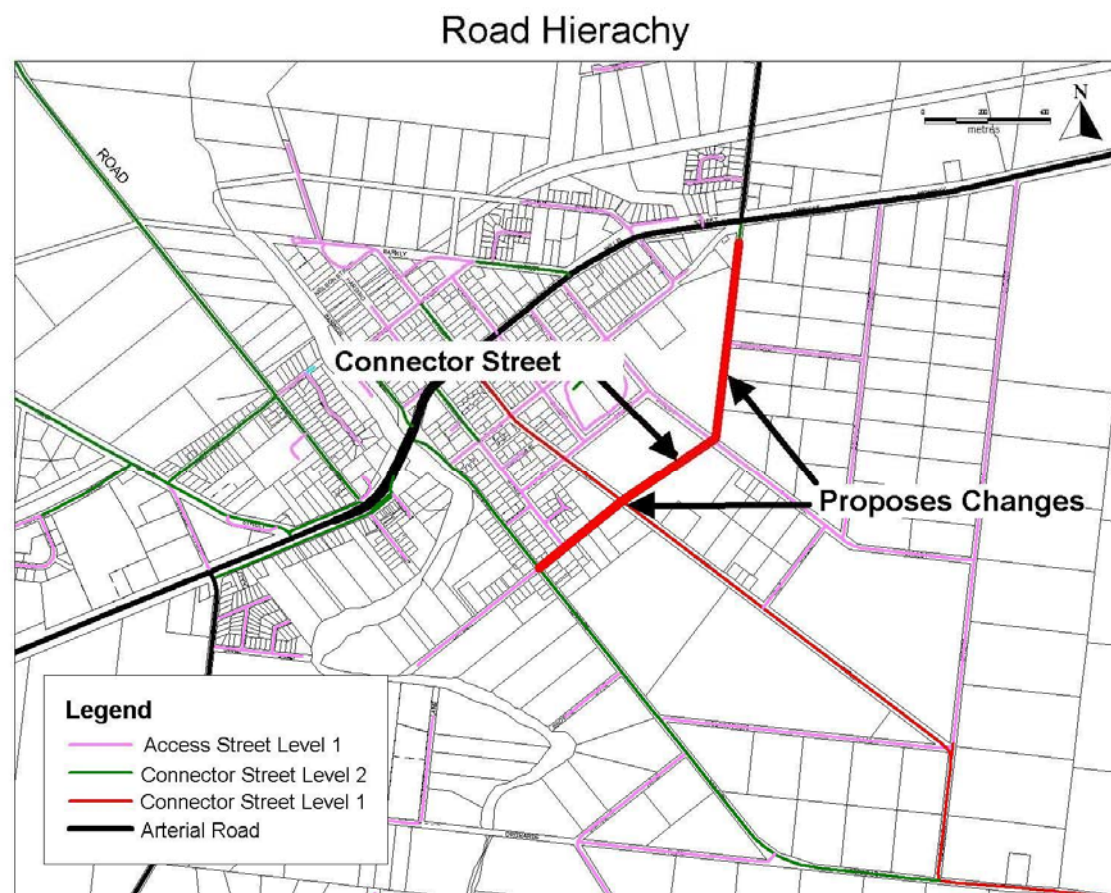
- a right turn lane will be required at the Princes Highway/Austin Street intersection to cater for vehicles from the west turning south into Austin Street.
- further intersection upgrades eg traffic signals, may be necessary at the Princess Highway/Gladman Street intersection in the longer term to cater for development beyond the ODP area in the secondary study area.

The road hierarchy network in Winchelsea (Refer Plan 8) consists of the following:

Access Street Level 1— These are local residential streets

Connector Street Level 1 & 2—The Connector Streets collect traffic from the lower order roads and carry a higher volume of traffic.

Arterial Road— VicRoads managed road which includes such roads as Freeways, Highways and Main Roads



PLAN 8: Road hierarchy

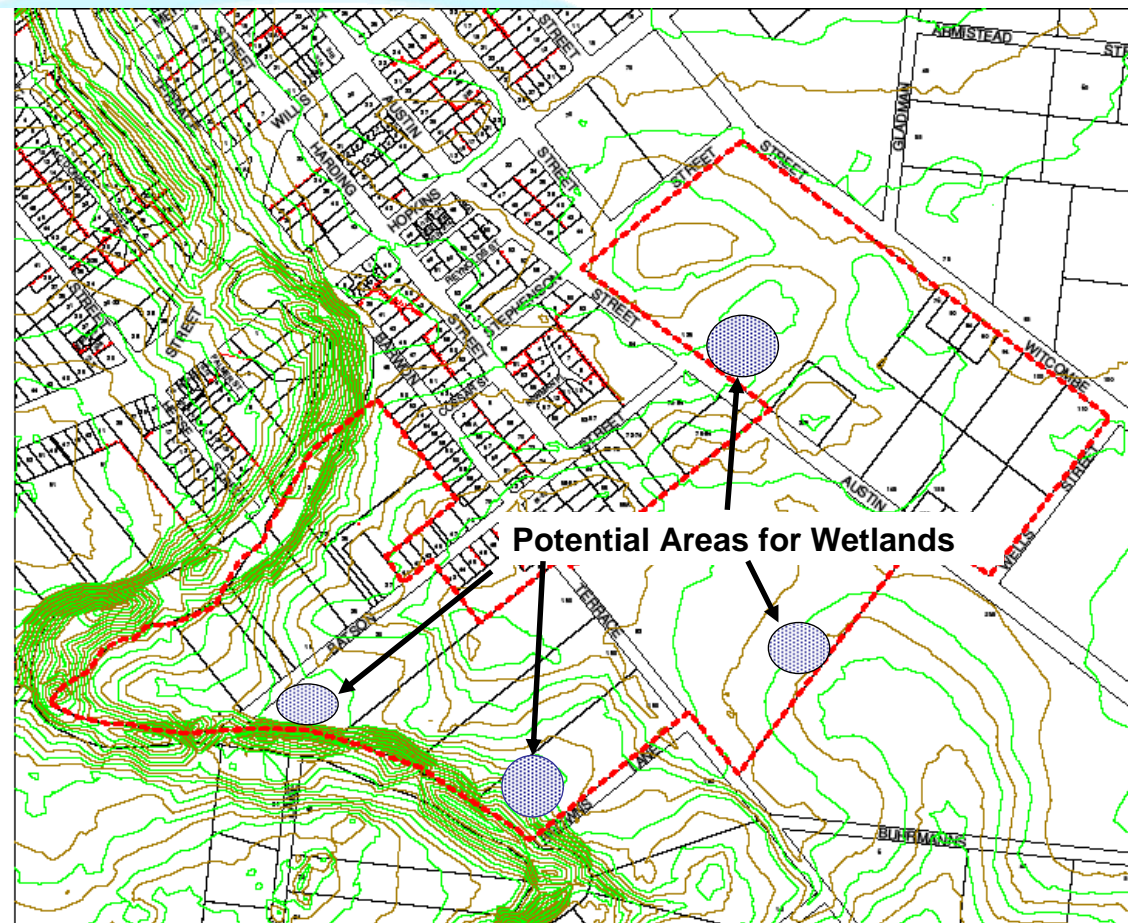
4.2 Drainage

The study area encompasses several minor drainage catchments. Drainage of all the possible sites appears achievable with gradient available for traditional underground drainage. Each site will ultimately discharge into the Barwon River.

To control proposed new drainage outfalls, as well as both the quality and quantity of discharged storm water, it is expected that drainage controls will include:

- On-site detention (Refer Plan 9—Potential Areas for Wetlands) to limit peak outflows from the developed land. The potential areas for wetlands were chosen because these occur at the lowest levels.
- On-site treatment to ensure the quality of the storm water discharged meets current best practice.
- Velocity reduction measures at the point of outlet into any receiving waters.
- Site Stormwater Management Plans (SSMP) and possibly Environmental Storm water Management Plans (ESMP).
- Water sensitive urban design features to be used wherever possible.
- Detention systems to be used to reduce outflows to the Barwon River.

It is recommended to prepare a stormwater master plan for the ODP area to consider these drainage issues.



PLAN 9: Potential wetland areas

4.3 Sewerage

The majority of Winchelsea, to the north of the study area currently has underground sewer (Refer Plan 10) service but with limited spare capacity. The northern portion of the study area adjacent to the existing dwellings can be serviced by the existing gravity system. For the remaining areas of the development, the construction of a new pump station is required that will pump sewage via a rising main directly into Winchelsea Pump Station.

Further examination would be required to determine exactly the number of sites/properties that can be serviced by the existing gravity system and what may need to be pumped into the system via the new pumping station.

4.4 Water supply

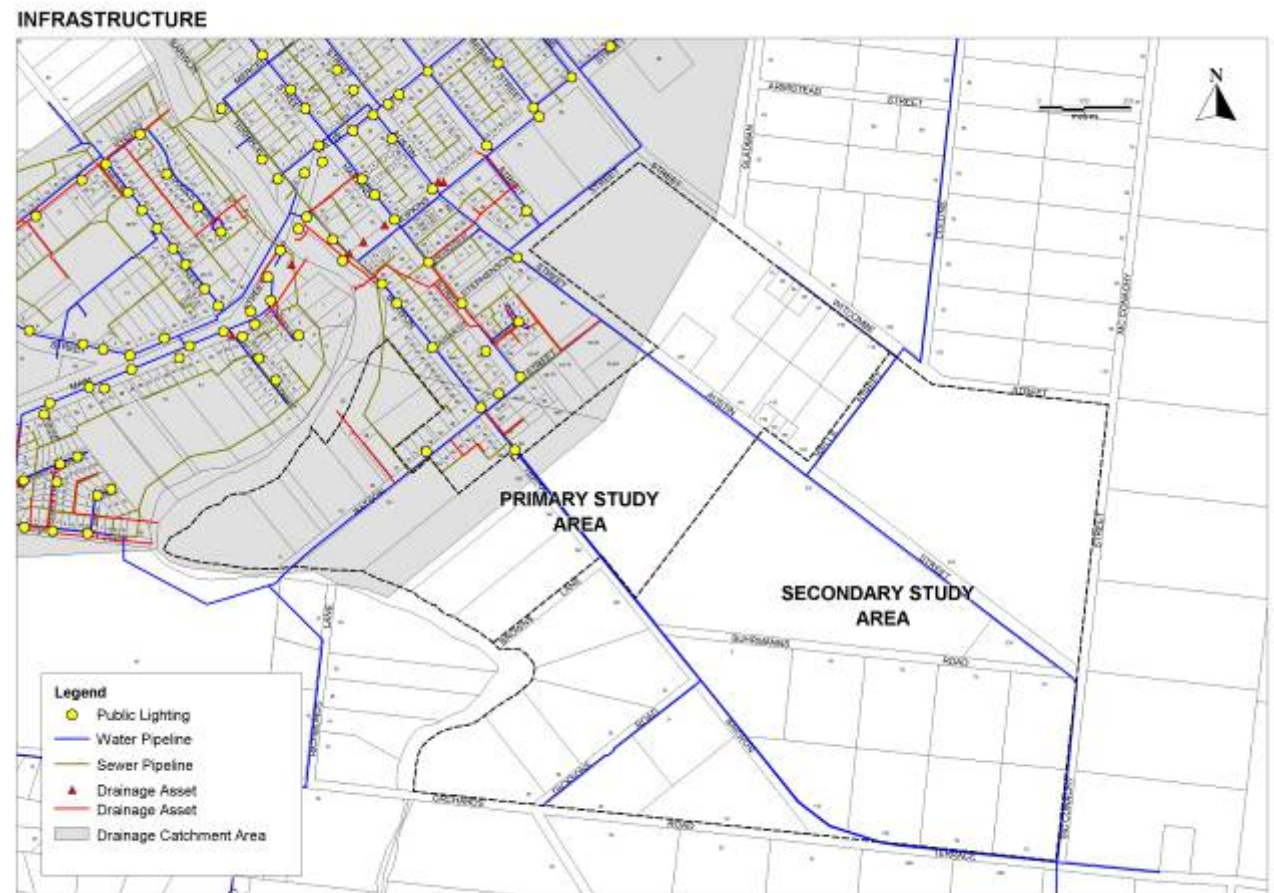
The existing 3 ML water supply tank has capacity to expand to cater for an increase in the township population.

Augmentation of the feeder main from Wurdiboluc water supply reservoir may be required at some future stage.

4.5 Power supply

All the proposed development sites can be supplied with power. Powercor recommends that the development of the northern part of the study area first, particularly in the region adjacent to Witcombe Street.

Existing sub-stations can supply both Low and High Voltage to all areas, although the installation of a new kiosk and high voltage supply cable from one existing sub-station will become necessary as development proceeds past a certain point.



PLAN 10: Existing infrastructure

4.6 Telecommunications

The existing exchange located at the corner of the Princes Highway and Hesse Street has capacity to facilitate upgrade works to service the entire maximum predicted Winchelsea population.

Some limited subdivision may be achievable whilst still utilising the existing local service cables in the immediate vicinity of the existing developed areas.

As development occurs in the study area, a connection must be made to the existing underground conduit at the intersection of Austin Street and Hopkins Street. The conduit will require extension along Austin Street to the south eastern extents of the site.

Common trenching of underground infrastructure cabling is recommended.

4.7 Gas supply

Gas supply is not currently available in Winchelsea.

In the lead-up to the November 2010 State election, the Coalition Government promised to investigate the connection of natural gas to 23 regional towns including Winchelsea.

It is proposed to investigate means to have reticulated gas provision in new subdivision in anticipation of connection of natural gas to Winchelsea.

5.0 RECREATIONAL CONTEXT

The Eastern Reserve recreation ground is a major active open space facility that adjoins the northern section of the ODP study area.

An Eastern Reserve Master Plan (Refer Plan 11) was prepared in 2007 and documents the key issues that have shaped the development of the Master Plan. Using the issues as a starting point, it describes the intention, detail, priorities and cost implications of the plan.

One of the actions in the plan is to extend Eastern Reserve south-wards into part of land earmarked for future residential growth of Winchelsea.

The ultimate extension of Eastern Reserve southwards is proposed to occupy 3.25 hectare. The plan envisages an additional oval, community facilities and tennis courts to be located on the extended site.



PLAN 11: Eastern Reserve Master plan

aquatic fauna.

Development would appear to be a constraint within these areas. It is recommended that a more detailed environmental study be undertaken at the time of rezoning to determine the extent and ground truth the biodiversity areas within the primary study area.

6.0 CONSTRAINTS

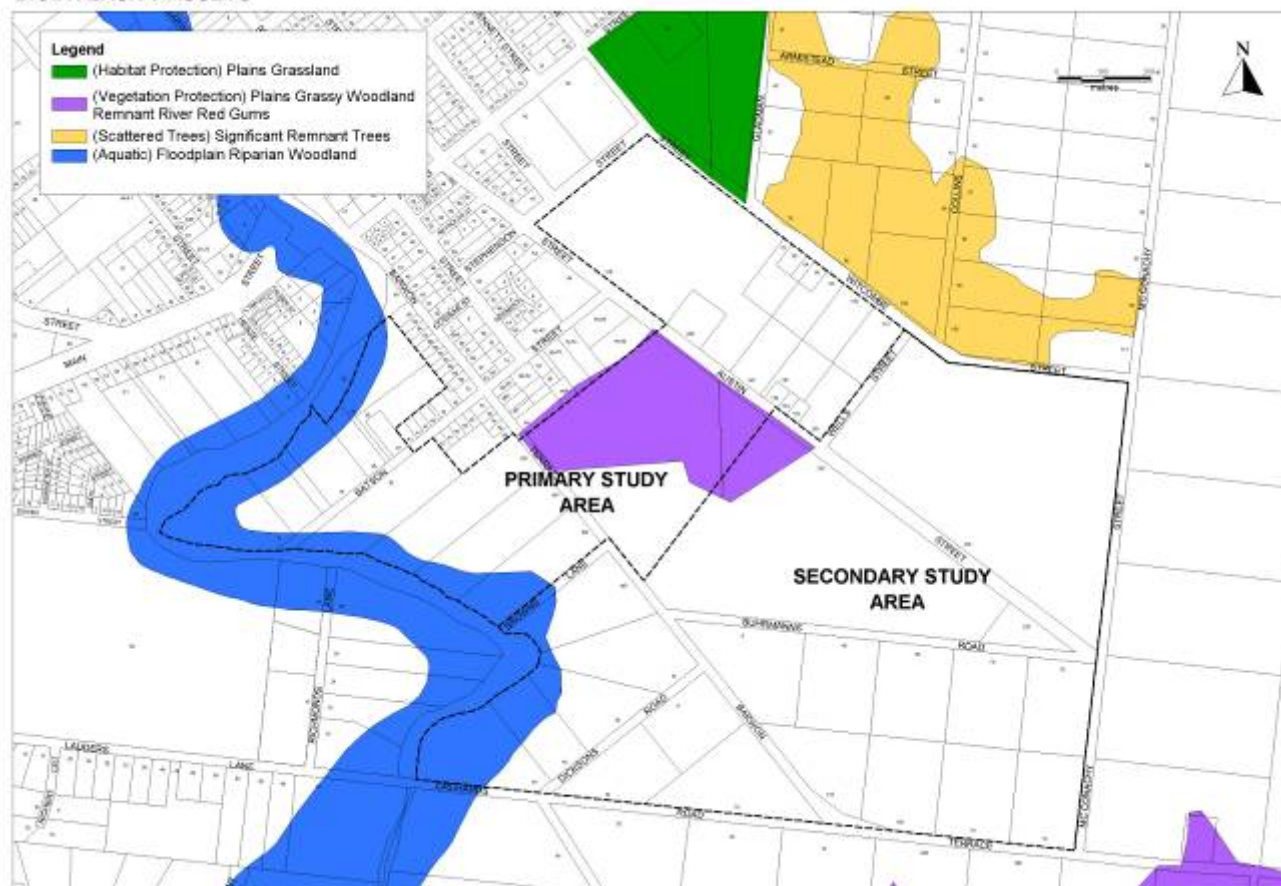
Constraints to development identified within the ODP primary study area include the following: (Refer Plan 15)

6.1 Biodiversity areas

The Department of Sustainability and Environment undertook a bio-diversity mapping for Winchelsea in 2007 (refer Plan 12). This mapping includes four classes of biodiversity significance within and adjacent to the study area as follows:

1. **Habitat protection class** — forms an important habitat for threatened flora and fauna. This site is adjacent to the study area and is located at the 'Winchelsea Common' (bounded by Willis Street, Gladman St, Witcombe St, Hopkins St and Lennox St.). This site contains Plains Grassland (endangered) and potential habitat for the Striped Legless Lizard (*Delma impar*).
2. **Vegetation protection class**, located south-west of Austin St and contains significant remnant vegetation, comprising of Plains Grassy Woodland and remnant River Red Gums.
3. **Scattered trees class**— located to the north east of Witcombes St comprising scattered mature trees with exotic understorey and hollow trees which provide habitat for fauna and flora..
4. **Aquatic systems class** — located along the Barwon River that support high biodiversity, provide habitat for threatened species, or form important habitat links in the landscape. (This area contains Riparian habitat, Floodplain Riparian Woodland (Endangered), Stream-bank Shrubland (Endangered) and Instream habitat for

BIODIVERSITY ASSETS



PLAN 12 : DSE Biodiversity areas

6.2 Overlay control areas

Planning scheme overlay controls within the primary study area will influence the ODP (refer Plan 13). These controls include :

i) An Environmental Significance Overlay (ESO) - exist along the Barwon River at the western section of the primary study area.

The purposes of this overlay are to protect the biodiversity of the area associated with wetlands and waterways of local, regional or state significance and to prevent water pollution in water-courses

ii) Significant Landscape Overlay (SLO)— applies to a large proportion of land at the western section of the primary study area towards the Barwon River.

The purpose of this SLO is to ensure that the development of land adjoining the Barwon River maintains and enhances the scenic landscape values of the Barwon River, in particular through the retention of native vegetation, by ensuring buildings are low scale and unobtrusive and by maintaining a sense of openness.

iii) Salinity Management Overlay (SMO) applies to land within the southern part of the secondary study area.

The purpose of this overlay is to identify areas subject to saline ground water discharge or high ground water recharge.

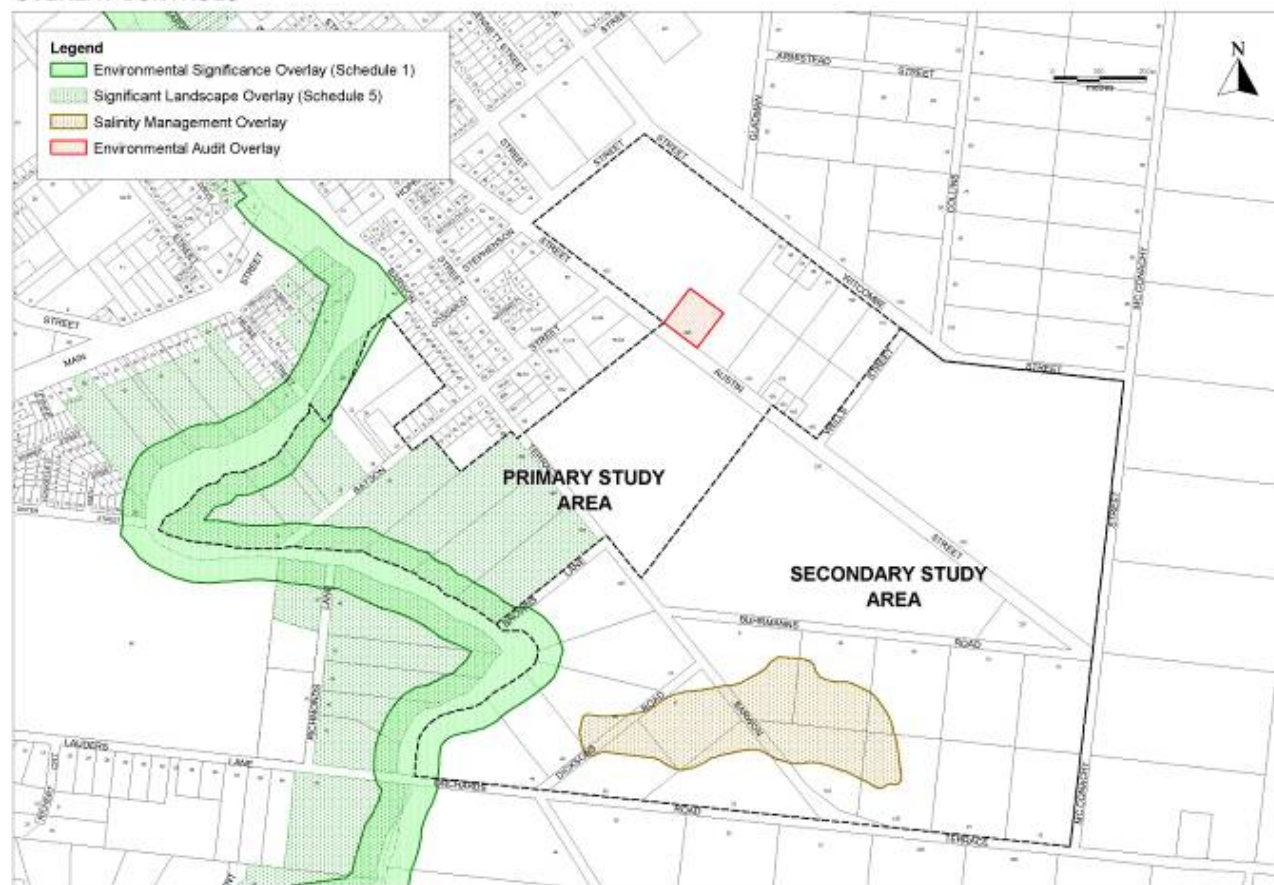
iv) An Environmental Audit Overlay (EAO) is designated on a small portion of the subject land at Austin Street, (8,400 sq m) that was formally used as a night soil depot.

The purpose of the Environmental Audit Overlay is to ensure that potentially contaminated land is suitable for a use which could be adversely affected by any contamination.

It is a requirement in the planning scheme that before a sensitive use (residential use, child care centre, pre-school centre or primary school) commences or before the construction of buildings and

works in association with a sensitive use commences, an environmental audit must be undertaken to determine the environmental conditions of the land are suitable for the sensitive use.

OVERLAY CONTROLS



PLAN 13 : Overlay controls

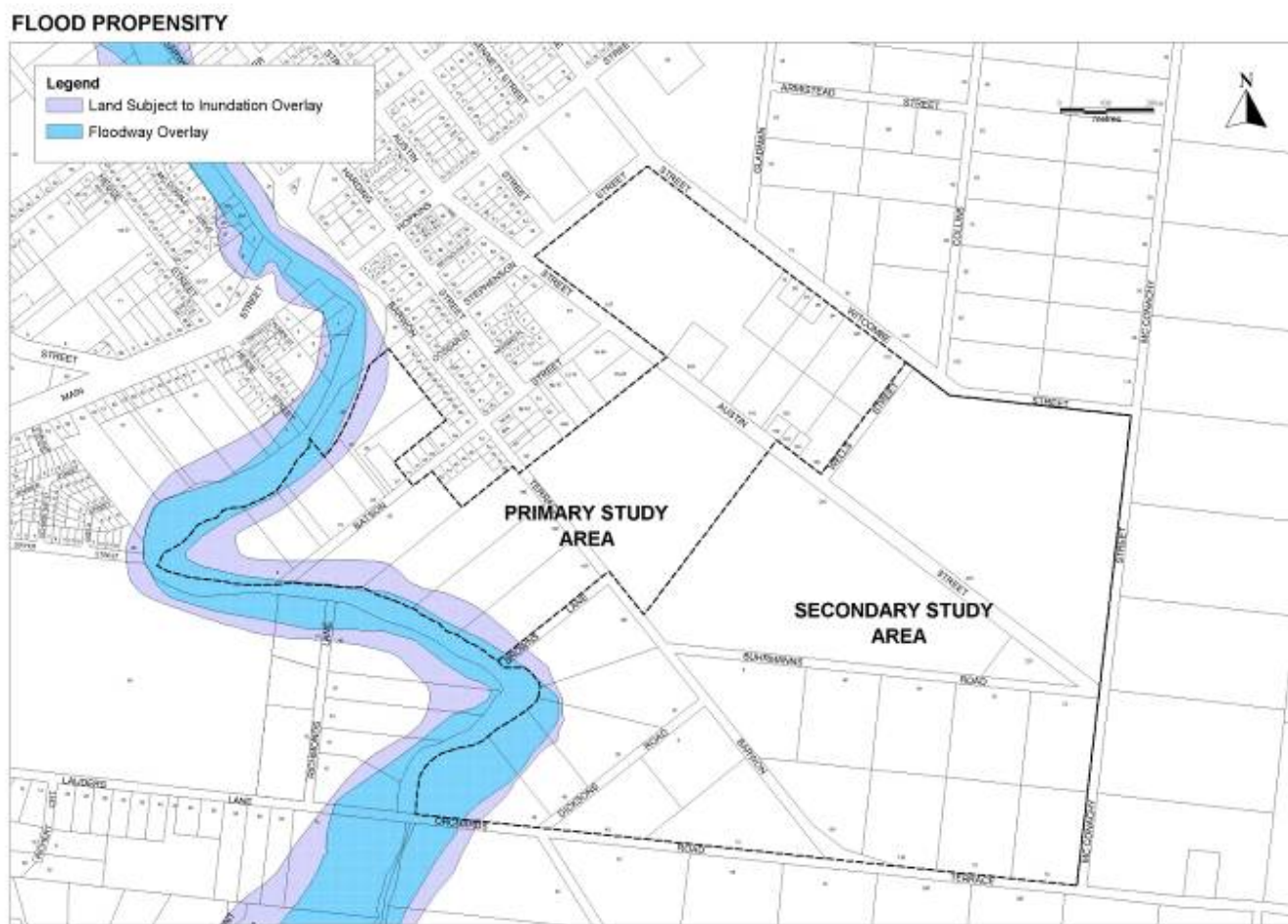
v) Land subject to Inundation Overlay (Refer Plan 14)— identifies land in a flood storage or flood fringe area affected by the 1 in 100 year flood. A planning permit is required for most building and works.

vi) Floodway Overlay (Refer Plan 14)— identifies waterways, major floodpaths, drainage depressions and high hazard areas which have the greatest risk and frequency of being affected by flooding. A planning permit is required for most building and works.

A potential area of flooding extension is identified in the secondary study area at the vicinity of Barwon Terrace. (refer Plan 15)

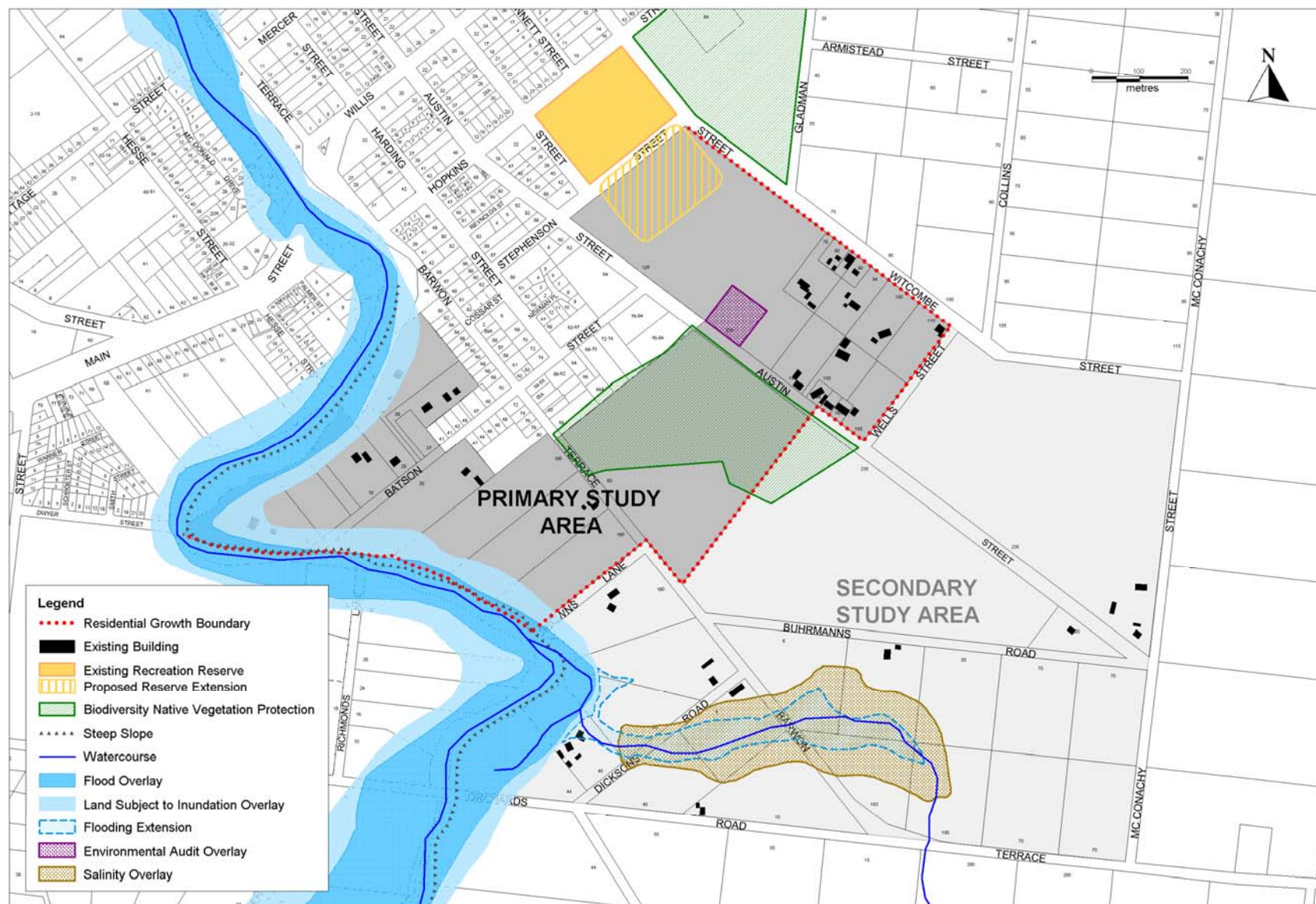
6.3 Existing buildings

Existing buildings are scattered mainly within the north-west and south-east sections of the primary study area. These buildings present a challenge to development within the ODP area.



PLAN 14: Flood propensity

CONSTRAINTS



PLAN 15: Constraints

7.0 OPPORTUNITIES

A range of opportunities within the ODP primary study area include (refer Plan 16):

7.1 Potential pathways

Council's Pathway Strategy recommends a network of potential pathways traversing the primary study area. A local bike path is proposed along Batson Street, Austin Street and Barwon Terrace. In addition, a shared bicycle/pedestrian path is proposed along the Barwon River.

There is an opportunity for a pedestrian bridge over the Barwon River to provide a link between the eastern half of the ODP primary study area to the commercial area and railway station along Hesse Street. This pedestrian bridge has been identified in Council's Pathway Strategy

7.2 Convenience store /Local activity centre

To meet the retail needs of the local population, there is the opportunity for a convenience shop located within a 400 m walkable catchment. In the longer term local activity centre may be warranted and located in the secondary study area.

7.3 Potential higher density housing

There is an opportunity for some higher density residential development to be provided within 400m walkable catchment of the activity centre (convenience store) and the western primary study area. This residential development should integrate with the open

space areas along the Barwon River and the Eastern Recreational Reserve,

Potential higher density housing may be provided in a variety of forms – ie, smaller 'town' lots or integrated development sites.

7.4 Public open space network

To meet the active and passive recreation needs of the local community and protect and restore environmental values and features, there is the opportunity to establish a network of appropriately sized, connected and distributed open spaces (within 400m walkable distance from all households) at the following locations:

- South of the existing Eastern Recreational Reserve.
- South west of Austin Street at the vicinity of biodiversity area containing remnant river red gums.
- The central part of the primary study area
- Along the Barwon River that supports biodiversity habitats and linkages in the landscape.

7.5 Bio-Links

An opportunity exists to link the biodiversity areas identified in the study area through a network of bio-links. These are corridors linking open space areas of biodiversity significance.

7.6 Movement network

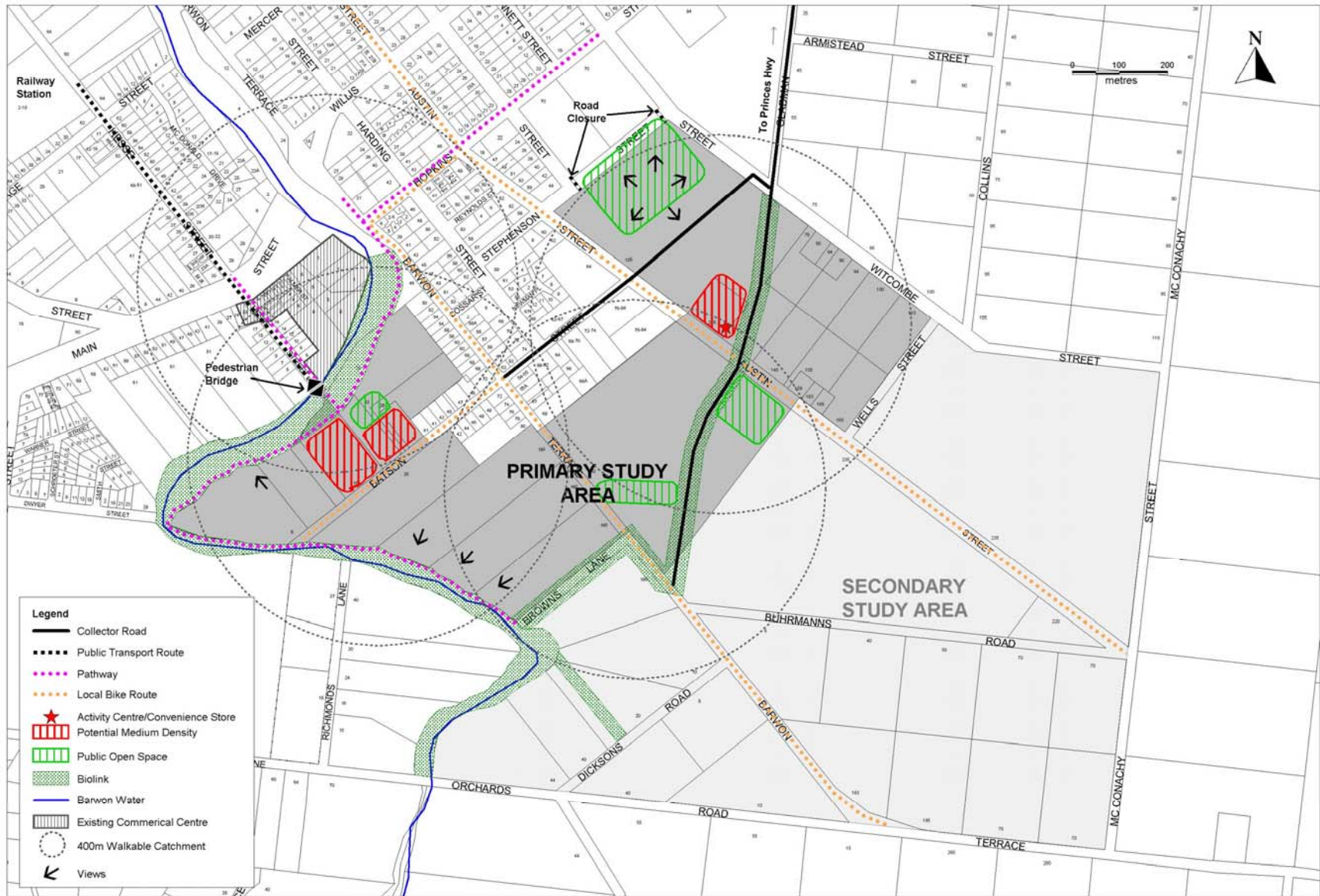
There is the opportunity to:

- Provide an upgraded connector street along Batson Street and from Gladman Street to Barwon Terrace through the ODP primary study area .
- Provide a right turn lane at the Princess Highway/ Austin Street intersection to cater for vehicles from the west turning south into Austin St as a result of increased development in the ODP primary study area.
- Support the early provision of walking and cycling links through the sequential staging of the development of the area.
- Provide for the landscaping of roads, transport and movement corridors to help create an attractive urban environment.

7.7 Views

Rural views exist throughout most of the study area, especially at the vicinity of the proposed open space south of Eastern Recreation Reserve and to the west of the study area towards the Barwon River.

OPPORTUNITIES



PLAN 16: Opportunities

Note : This map is indicative only.

8.0 FUTURE URBAN STRUCTURE

8.1 Neighbourhood planning

Council is seeking to implement a neighbourhood planning units concept in Winchelsea.

Plan 17 illustrates a theoretical neighbourhood planning concept, which involves locating activity centres or nodes within a 5 minute walking distance (ie. 400 metres) of most households.

The application of this is highly dependent on the density of population achieved and on physical constraints that influence movement and connectivity.

This neighborhood planning concept has not materialised in Winchelsea in the past for various reasons, not the least being its relatively low residential densities.

As sustainable living becomes more important, together with other influences including increased densities and cost of car ownership, the neighborhood planning concept will become increasingly more relevant.



PLAN 17: Theoretical neighbourhood units

9.0 OUTLINE DEVELOPMENT PLAN (ODP)

Following the analysis of the constraints and opportunities within the study area, the Outline Development Plan proposes a residential growth precinct comprising the following: (Refer Plan 18).

Road network

The proposed road network has been designed to maximize solar efficiency through a north-south / east-west grid. It includes a north-south connector street linking Burhman Road to Gladman Street and eventually the Princess Highway.

An upgraded connector road along Batson Street between Barwon Terrace and Austin Street links the eastern section of the primary study area to the western section.

Grid pattern access roads are aligned with the connector streets.

Possible intersection improvements are recommended at the intersections of Gladman / Witcombes Streets, Batson/Austin Streets, Austin/Gladman Streets and Gladman St/Burhmanns Rd. These include kerb and channel works.

A right turn lane is proposed at the Princes Highway/Austin Street intersection to cater for vehicles from the west turning south into Austin Street.

Local activity centre

A convenience store is proposed in the short term at the proposed intersection of Gladman Street and Austin Street within a 400m walkable catchment.

An opportunity may exist in the longer term for a local activity centre in the secondary study area depending on demand. This could accommodate employment based activities.

Potential higher density precincts

Two potential higher density precincts are proposed: in the vicinity of the Eastern Recreational Reserve and the proposed pedestrian bridge over the Barwon River at the western end of the primary study area. These areas are within 400 m walkable catchment to the activity centers near the Princess Highway and integrate with the open space areas. A residential density of 15 dwellings/ha is recommended for these areas.

Open Space areas

Three unencumbered Open Space areas are proposed. Firstly to the south of the existing Winchelsea Recreational Reserve. Secondly adjacent the proposed Barwon River pedestrian crossing and higher density precinct at the western section of the study area. Thirdly, within the central part of the primary study area.

In addition, two encumbered Open Space areas are proposed. One along the Barwon River Corridor and another at the vicinity of the biodiversity area south of Austin Street.

Bio-link corridors/footpaths connect the Barwon River reserve corridor to these three open space precincts.

Pathway

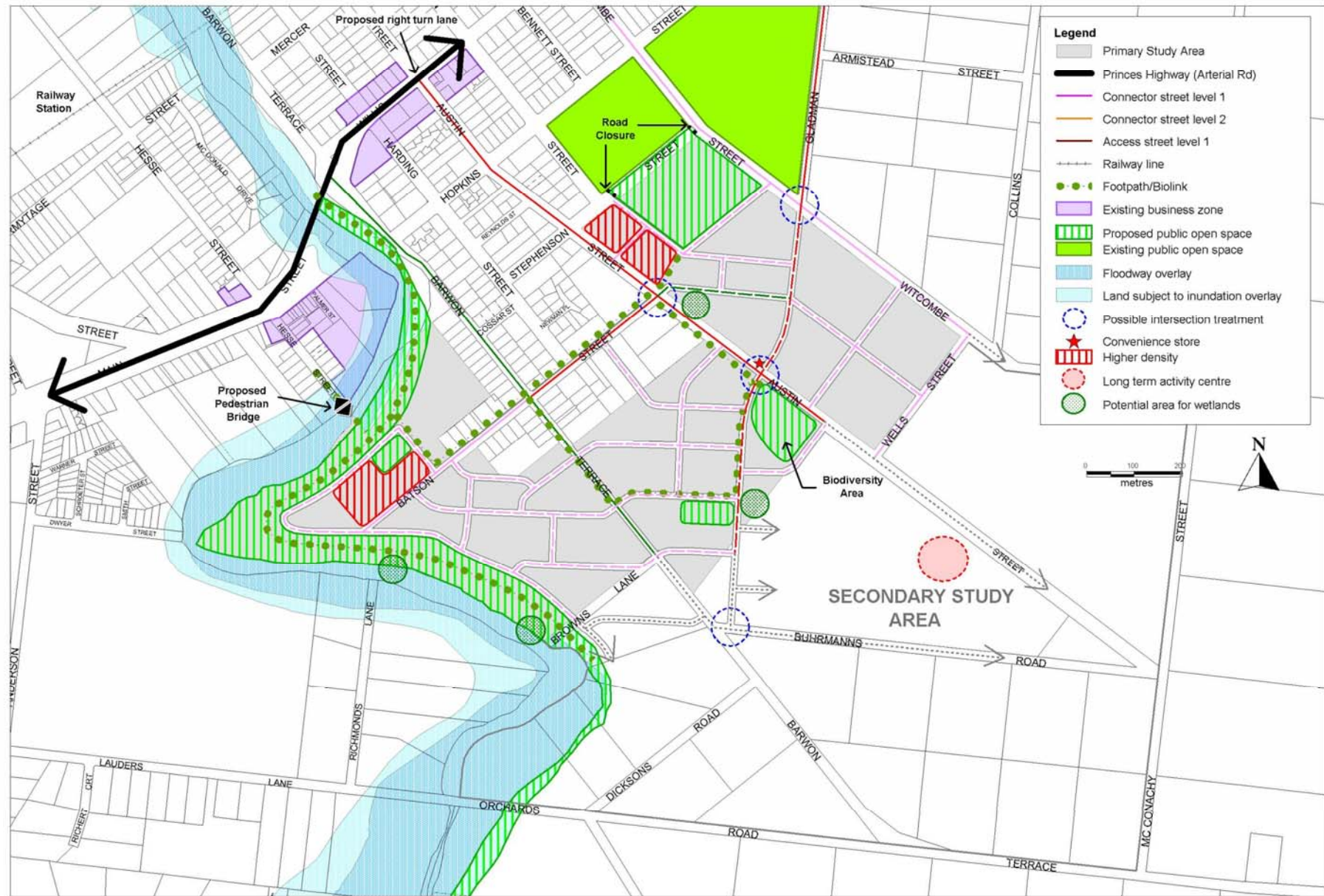
A pathway network is proposed along the Barwon River (proposed in Council's Pathway Strategy) and from Batson Street east over the proposed pedestrian bridge to Hesse Street. This latter link will provide a connection from the eastern half of the ODP primary study area to the commercial area at Main Street and the railway station.

Bicycle route

A local bike route network is proposed along Barwon Terrace and Austin Street. (Council's Pathway Strategy).

Potential Wetland areas

Potential wetland areas are proposed at the lowest topographical points within the primary study area to provide on-site detention and treatment of storm water (refer section 4.2).



PLAN 18: Outline Development Plan

Note: This map is indicative only

10.0 Land use allocation

The Land Use allocation table, provides an indication of the proportion of land uses and residential lot yield within the primary study area (Site 2 & 3) as identified in the Winchelsea Structure Plan 2021.

10.1 Land use allocation summary

Tables 1 & 2 highlight land use allocation within the study area.

Site 2 (Refer Fig 4)

Comprises the area bounded by Barwon Terrace in the south, Wells Street in the east, Witcombe Street in the north and Stephenson Street in the west. The site covers approximately 36.5 ha.

A typical allotment yield at 10 allotments per ha. will result in this site producing 316 allotments.

Site 3 (Refer Fig 4)

Comprises of the area bounded by Barwon Terrace in the east, the Barwon River in the south and west and the existing residential development in the north.

The site covers approximately 26.0 ha. A typical allotment yield at 10 allotments per ha. would result in this site producing 150 allotments.

The size of this yield takes into consideration the Land Subject to Inundation Overlay (LSIO) and Flood Overlay (FO) which encumbers approximately 32% of this site.

Development may not be suitable in the LSIO due to proximity to the river and susceptibility to flooding although sufficient control over the development of these allotments (eg minimum floor levels) may still allow for their development.

10.2 Demographic projections

The preparation of the ODP assumes an average household size of 2.3 persons per household (ABS 2006). Based on this household size, the future population of the ODP primary study area is estimated at 1,070 persons (2.3 X 466 dwellings) .

10.3 Staging

To ensure efficient infrastructure servicing, land adjacent to the existing residential areas (ie. 135 Austin Street) should be rezoned prior to land further removed from the township.

Sequencing of development stages have not been proposed in this ODP but will be guided by a series of development principles, including:

- Provision of service infrastructure.
- Ability to be accessed and connect to the key road network.
- Development must not unnecessarily disadvantage other stages from proceeding.
- Ability to deliver the ultimate solutions for drainage.
- Respect ultimate outcomes of walking and cycling networks.

11.0 Review

It is anticipated that that the Outline Development Plan will be monitored and reviewed in five years time or as appropriate.

Table 1 : Summary Land Use Allocation (Site 2)

Description:	Total area (ha)	% of total primary study area
TOTAL AREA AVAILABLE	36.5	100%
Encumbered Open Space (biodiversity area)	1.3	3.6%
Unencumbered Open Space (Active & Passive—10%)	3.6	10%
Residential	31.6	86.6%
Allotment Yield *	316 lots	

Table 2 : Summary Land Use Allocation (Site 3)

Description:	Total area (ha)	% of total primary study area
TOTAL AREA AVAILABLE	26.0	100%
Encumbered Open Space (biodiversity area FO, LSIO)	8.4	32.3%
Unencumbered Open Space (Active & Passive—10%)	2.6	10%
Residential	15	57.7%
Allotment Yield*	150 lots	

*Note :This yield is based on 10 lots/ha

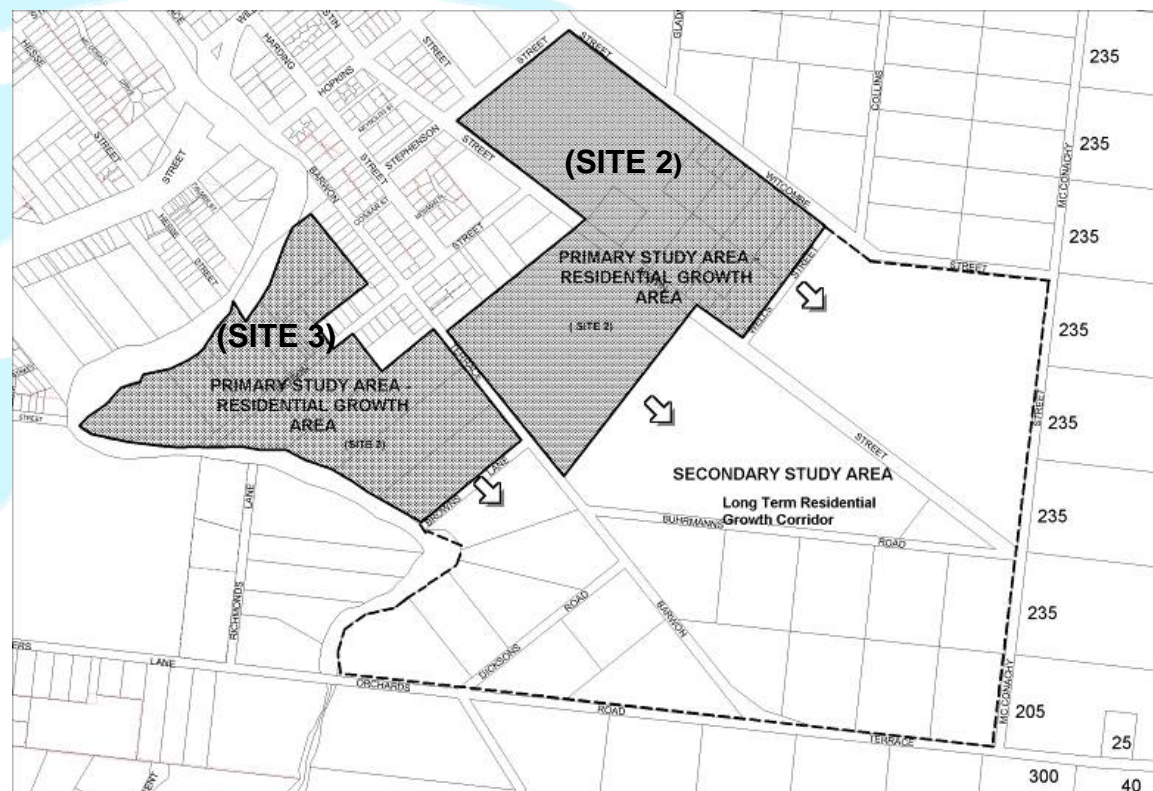


Fig 4: Location of Sites 2 & 3

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- The project steering group comprising

Mark Harwood	Strategic Planning Co-ordinator
Phil Rosevear	Co-ordinator Statutory Planning
David Mitchell	Project Engineer - Infrastructure
Peter Bromley	Recreation Development Officer
Nicky Angus	Community Recreation Officer
Gaye Seddon	Environment & Climate Change Coordinator
Leanne Rolfe	Environment Officer
Chris Lewis	Open Space Coordinator
Nicky Angus	Community Recreation Officer
Cletus Kweifio-Okai	Project Manager – Strategic Planning

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Glossary (partly adapted from “Preparing Precinct Plans—Growth Area Authority)

Local Activity Centre - Provides a small scale focus for services, employment and social interaction. They are where people shop, work, meet, relax and live. Usually served by public transport, they range in size and intensity of use.

Conventional Density Housing - Housing with an average density of 10-15 dwellings per net developable hectare.

Higher Density Housing - Housing with an average density of 15-20 dwellings per net developable hectare. .

Land Use Allocation Table - A table setting out the total precinct area, developable area and constituent land uses proposed within the precinct

Public Open Space—(Encumbered) - Land that is constrained for open space development purposes. Includes steep terrain, environmental significance, flood prone, waterways/drainage and retarding basins/wetlands areas. This land may be used for a range of activities (e.g. walking trails, passive recreation) but is not provided as a credit against public open space requirements. However, regard is taken of the availability of encumbered land when determining the open space requirement.

Public Open Space—(Unencumbered) - Land that is set aside for public recreation or as parklands; or for similar purposes. Incorporates active and passive open space areas.

Water Sensitive Urban Design - A sustainable water management approach that aims to provide water-quality treatment, flood management and green landscapes.

Key principles include:

- minimising water resistant areas;
- recharging natural groundwater aquifers (where appropriate) by increasing the amount of rain absorbed into the ground;
- encouraging onsite reuse of rain and incorporation of rain gardens;
- encouraging onsite treatment to improve water quality and remove pollution, and
- using temporary rainfall storage (retarding basins/wetlands) to reduce the load on drains.