

north dennington structure plan

prepared for warnambool city council

prepared by **hansen partnership pty ltd**

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contents

1. introduction	1	10. implementation	27
1.1 purpose	1	10.1 zoning and overlays	27
1.2 land to which this structure plan applies	1	10.2 development plans	27
2. role and context	2	10.3 development contributions plans	27
2.1 regional context	2	10.4 open space	27
2.2 municipal context	2	10.5 subdivision works	27
2.3 study area	2		
3. local context	3		
3.1 land use and ownership	3		
3.2 landscape and natural environment	4		
3.3 access and movement	5		
3.4 cultural heritage	5		
3.5 community infrastructure and open space	6		
3.6 commercial and industrial activities	6		
3.7 housing	6		
3.8 character and built form	6		
3.9 considerations	6		
4. policy context	7		
4.1 regional	7		
4.2 state planning policies	7		
4.3 municipal strategic statement	7		
4.4 local planning policies	8		
4.5 zoning and overlays	8		
4.6 adopted policies, plans and strategies	9		
5. stakeholder engagement	10		
6. demographic trends	11		
6.1 development yields	11		
6.2 population forecasts	11		
7. community infrastructure	11		
7.1 community facilities	11		
7.2 open space	11		
8. the structure plan	12		
8.1 vision	12		
8.2 key principles	12		
8.3 structure plan description	12		
9. key structure plan themes	13		
9.1 land use and density	15		
9.2 access and movement	17		
9.3 open space and natural environment	20		
9.4 built environment and heritage	22		
9.5 services and utilities	24		
9.6 staging	25		

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1. introduction

North Dennington is a major growth area for the City of Warrnambool. It occupies a unique position in the city, being located on the banks of the Merri River, with existing and future community, commercial and recreation facilities nearby.

North Dennington is one of four planned major greenfield growth areas in Warrnambool. The growth area is located approximately 4kms west of the Warrnambool City Centre and lies on the south side of the Merri River.

1.1 purpose

The purpose of the North Dennington Structure Plan is to set out the land use planning and development framework that will be used by Council, the community, landowners and developers to guide the future growth of North Dennington.

The Structure Plan establishes a vision and overall layout for the growth area, as well as objectives and guidelines required to guide changes in land use, open space, built form and the road network to achieve that vision.

The NDSP is an Incorporated Document in the Warrnambool Planning Scheme. It will be used to guide the detailed preparation of Development Plans and Planning Permit applications that affect the North Dennington Growth Area.

The North Dennington Structure Plan forms the strategic basis for the associated North Dennington Development Contributions Plan (also an Incorporated Document in the Warrnambool Planning Scheme), which will enable equitable and efficient delivery of infrastructure to service planned growth.

1.2 land to which this structure plan applies

The land to which the NDSP applies is shown in the figure opposite. The Structure Plan boundary generally includes farming land east of Harrington Road, south and east of the Merri River and north of former railway line, and existing developed residential areas.



2. role and context

2.1 regional context

Warrnambool is a Regional City located within the Great South Coast Region, approximately 225 kms (as the crow flies) south-west of Melbourne. The City is located on the Princess Highway, which provides direct road access to Geelong, Melbourne and Adelaide. Rail access to Melbourne is provided by the Warrnambool to Melbourne V/line service.

The City of Warrnambool is designated as a 'major regional centre' within the Great South Coast Region and is considered to be the 'hub' of the Western District. According to the ABS, the estimated resident population of Warrnambool, including Dennington (state suburb geographic areas) was 32,878 people as at June 2012. By 2031 it is projected that the population of Warrnambool will be approximately 44,836 people (.id, 2012). The City is projected to accommodate approximately 50% of the Great South Coast Region's resident population growth over the next 10-15 years. This growth reflects the city's high level of service provision, employment opportunities, good access by road and rail to Melbourne and its coastal location, which is often favoured by people moving from intra-State areas. The type of population growth will also change a little, with trends to an ageing population and smaller household sizes, as is occurring throughout most of the State.

2.2 municipal context

The North Dennington Growth Area is identified in the Warrnambool Land Use Strategy (2004) as one of four residential expansion areas suitable to provide sufficient residential land supply for the City. The growth area was originally identified as appropriate for 'environmental residential' development in the Warrnambool Land Use Strategy. However, in recognition of land supply shortages within Warrnambool and State policy directions that seek to make efficient use of serviceable land and to accommodate population growth over at least 15 years, the growth area is now considered more appropriate for standard residential development. Such development typically consists of a range of lot sizes including some larger lots and small lot housing. Within the context of a regional city such as Warrnambool, densities of around 12 dwellings per hectare are considered appropriate.

2.3 study area

The North Dennington Structure Plan Area is shown opposite. The NDSP area is located approximately 4 kms west of the Warrnambool City Centre. The study area is bounded generally by the Merri River to the north and west, Harrington Road to the east and existing residential development to the south. The Fonterra Milk Processing Plant lies to the south-west of the study area. The Warrnambool Saleyards exists to the west of the study area.



3. local context

This section of the Structure Plan documents the relevant existing conditions within the study area in regard to land use and ownership, landscape, natural environment, movement and access cultural heritage, community infrastructure and open space, commercial activities and housing, which need to be considered in the formulation of the Structure Plan.

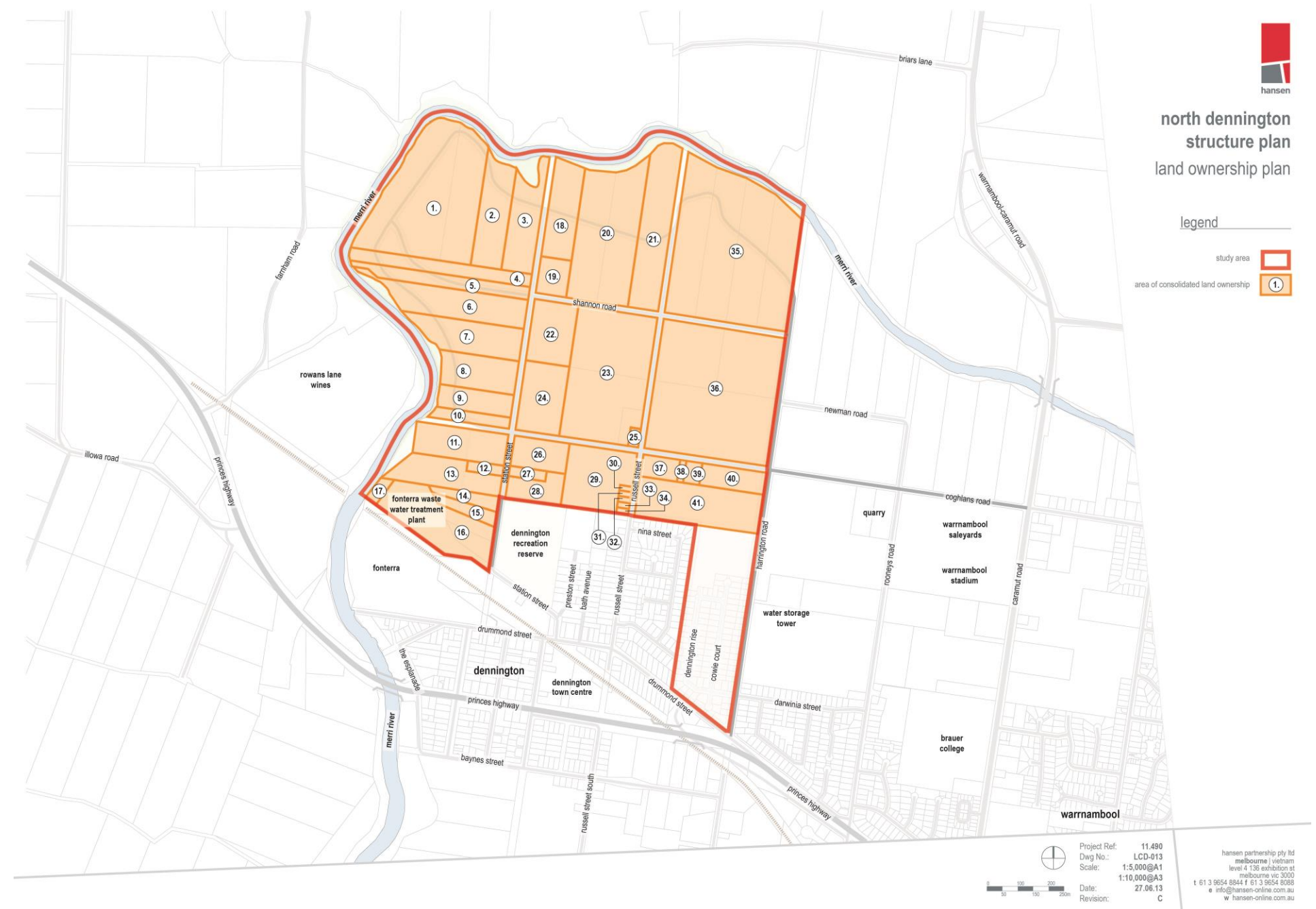
3.1 land use and ownership

Whilst the study area includes the Dennington Rise Estate, which is mostly developed, the undeveloped sections of the NDSP area consist of 52 parcels of land under the ownership of 41 landowners. Parcels sizes range from 0.11ha to 13ha. Land ownership within the NDSP is highly fragmented and will require an innovative approach and practical approach to ensuring timely delivery of key infrastructure.

The NDSP area is predominantly rural, having been used for cropping associated with the productive river soils of the Merri River and grazing over a number of years. Some allotments contain dwellings, however the area is largely undeveloped. The NDSP area also includes the Fonterra Milk Australia Processing Plant and waste water facility on Station Street, St John's Primary School on Coghlan Road and some existing residential development at Dennington Rise and Cowie Court.

potentially contaminated land

There is no known history of industry, mining or the storage of chemicals, gas, wastes or liquid fuel within the study area. However, under Minister's Direction No. 1 Council must satisfy itself that the environmental conditions of the land within the study area are, or will be, suitable for sensitive uses (e.g. residential, open space). As it is known that some land within the study area has been used for market gardens, an environmental site assessment has been prepared by a suitably qualified professional. The assessment reviews the site history and potential for soil and groundwater contamination as part of preparation of future Development Plans. The assessment concludes that a statutory environmental audit is not required at the site. The site, under its current condition is suitable for rezoning for the purpose of future residential development.



3.2 landscape and natural environment

native flora and fauna

The majority of the North Dennington Growth Area has been cleared of native vegetation. It is understood that this occurred in the mid-19th century for the establishment of farms in the area. There are some remnant patches of riparian vegetation along the Merri River Corridor.

topography

The topography within the Structure Plan area includes the river flats along the Merri River floodplain and a prominent ridgeline that runs generally east-west through the NDSP area. Some parts of the study area, through the middle sections, incorporate relatively steep slopes.

landscape

The North Dennington Growth Area has a unique rural landscape quality. The use of the area for farming has created a pastoral landscape that softly undulates down towards the rich river flats of the Merri River. Evidence of historic farming activities is scattered across the area, including traditional cypress windrows, drystone walls (on Coghlans Road), a number of farm houses and structures and cultivated paddocks.

The Merri River is a dominant feature of the area. The importance of views across the river to the rural landscape beyond is a key landscape character element of the NDSP area.

flooding and drainage

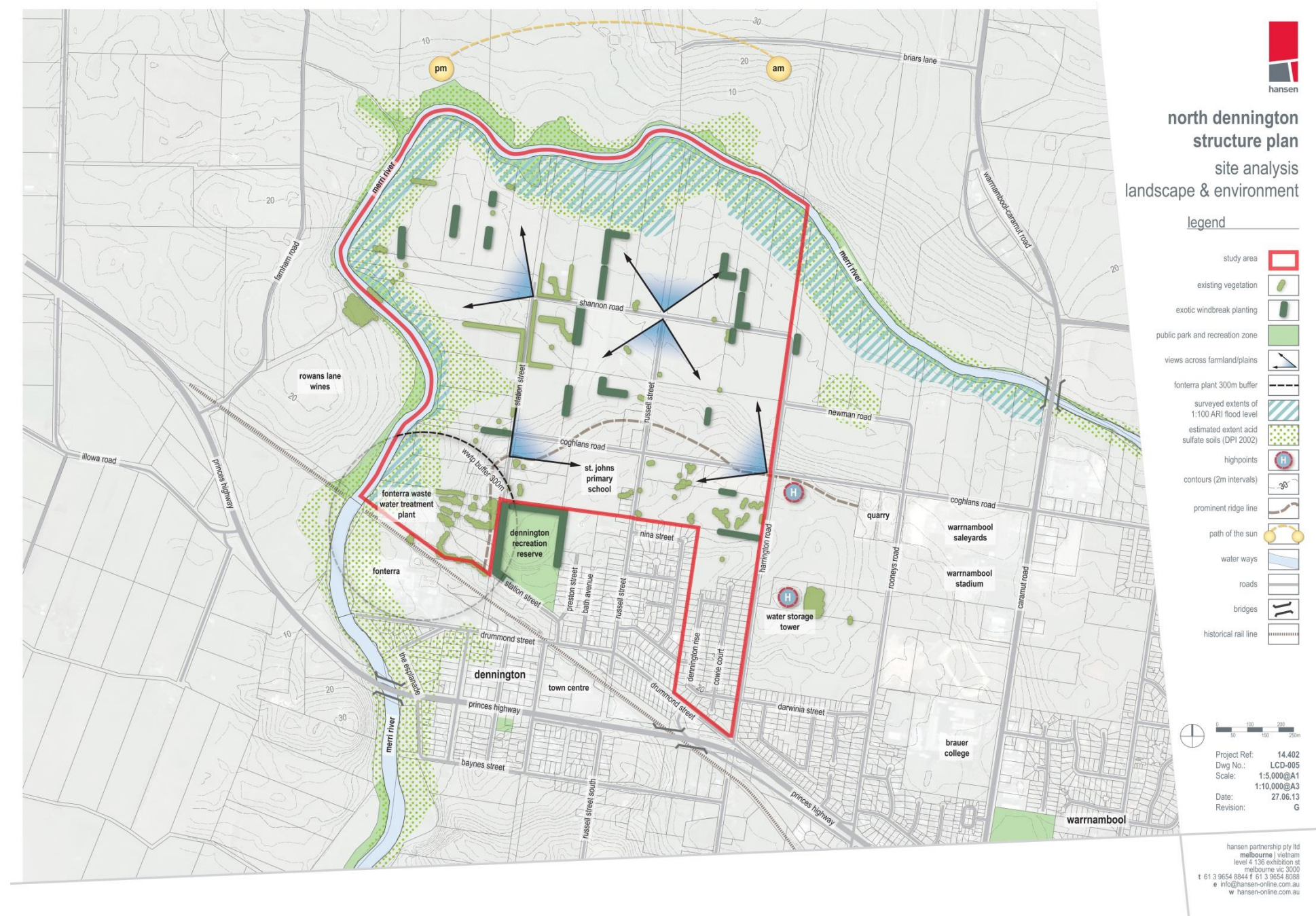
A flood study has been undertaken by Glenelg Hopkins Catchment Management Authority, which identifies land subject to flooding in a 1 in 100 year storm event (refer to map opposite).

Further investigation is required at more detailed planning stages (i.e. as part of a Development Plan or subdivision planning permit application as specified by Council). Affected areas may require adoption of specific design responses and treatment measures to enable development to occur.

Land that is subject to flooding is considered encumbered land and is not suitable for urban development. The encumbered land can however be used for drainage purposes, or other uses such as passive open space purposes. The protection of riparian vegetation and water quality of the Merri River is an important function of the drainage corridor.

acid sulfate soils

Acid sulfate soils contain a high amount of iron sulfate that, once oxidised, can produce large amounts of acid which can affect plants, aquatic life and infrastructure (DPI, 2003: 3). The Department of Primary Industries has produced Acid Sulfate Soil Hazard Maps showing where acid sulfate soils are located. The area immediately surrounding the Merri River in North Dennington is identified as potentially containing acid sulfate soils, which means there could be a low to high probability of these soils occurring within the designated area. Further investigation is required at more detailed planning stages (i.e. as part of a Development Plan or subdivision planning permit application as specified by Council). Affected areas may require adoption of specific design responses and treatment measures to enable development to occur.



3.3 access and movement

Dennington North occupies a unique location, being at the western most extent of Warrnambool, and contained by the Merri River. This contained location will likely result in the future Dennington North community being characterised by limited through traffic and low vehicle speeds and volumes.

roads

Based on the model of early surveyors who created and delineated towns throughout Victoria, the existing road network in North Dennington is based on a regular street grid that is aligned with the Merri River (Warrnambool Heritage Gap Study, 2005).

Russell Street and Station Road currently provide the main north-south access routes through North Dennington with Harrington Road currently being unsealed. Coghlan's and Shannon Roads provide east-west connections, with the latter also being unsealed.

There is not currently a clearly defined road hierarchy, as all existing road reserves are 20 metres wide and service a limited number of properties using the existing road network of sealed and unsealed road with no particular preference. It is assumed that Coghlan's Road and Russell Street present the most likely connections beyond the North Dennington area.

Dennington has the benefit of access to central Warrnambool and the surrounding rural townships due to its location adjacent to the Princes Highway. However, its existing entry / exit points currently suffer from poor visibility and access.

public transport

Bus services are provided to Dennington through the 'Warrnambool Bus Lines' network operated by Transit South West. Route 1 connects the Dennington area with the city centre, and runs along Morris Road, Coghlan's Road, Caramut Road and Raglan Parade. This service operates on weekdays and weekends.

3.4 cultural heritage

aboriginal cultural heritage

Land within 200m of the Merri River is identified as an 'Area of Cultural Heritage Sensitivity' by the Department of Planning and Community Development under the provisions of the *Aboriginal Heritage Act 2006*.

Any potential sites outside of the open space precinct will need to be considered in the preparation of future Development Plans as part of a Cultural Heritage Management Plan (CHMP). CHMPs will be required to be approved prior to the issue of a planning permit, in accordance with the *Aboriginal Heritage Act 2006*.

european cultural heritage

The following places possibly have local heritage significance:

- Cottage, 79 Station Street, Dennington
- Farmhouse 18 Shannon Road Dennington
- Archaeological site, 48 Shannon Road Dennington
- Farmhouse, 87 Russell Street Dennington

Further investigation of these places is required to determine significance.



4. policy context

This section of the NDSP sets out the relevant regional, State and local planning policy context.

4.1 regional

great south coast regional strategic plan

The Great South Coast Regional Strategic Plan is a strategy for long term sustainable growth within the municipalities of Glenelg, Southern Grampians, Warrnambool, Moyne, Corangamite and Colac Otway.

The strategy recognises the importance of having an agreed regional plan for potential challenges in the near future such as population growth, changing and emerging industries, environmental impacts and population health status.

The strategy identifies the emerging challenges of the region to be: economic development; connectivity; environment; health and wellbeing, land use and liveability. Strategic goals, immediate actions and “to do lists” are established for each emerging challenge.

The strategic plan presents an agreed direction for the future of the region. Priorities are identified to assist in the allocation of resources and the attraction of Local, State and Federal Government resources and funding for their implementation.

4.2 state planning policies

clause 11: settlement

Relevant clauses:

- 11.02- Urban growth
- 11.02-1- Supply of urban land
- 11.02-2- Planning for growth areas
- 11.02-3- Structure planning
- 11.03 Open space
- 11.05 Regional development

It is stipulated in Clause 11 that “planning is to anticipate and respond to the needs of existing and future communities through provision of zoned and serviced land for housing, employment, recreation and open space, commercial and community facilities and infrastructure”. The importance of planning for growth areas is highlighted, to ensure sufficient supply of urban land for a range of uses. The completion of structure planning will ensure orderly development within growth areas.

clause 12: environmental and landscape values

Relevant clauses:

- 12.01- Biodiversity
- 12.01-1 Protection of habitat
- 12.01-2 Native vegetation management

- 12.04- Significant environments and landscapes
- 12.04-1 Environmentally sensitive areas
- 12.04-2 Landscapes

The above clauses emphasise the importance of the protection and maintenance of sensitive environments. Biodiversity values, native vegetation and significant landscape values are aspects which are to be retained and enhanced through effective land use planning.

clause 15: built environment and heritage

Relevant clauses:

- 15.01 Urban environment
- 15.01-1 Urban design
- 15.01-2 Urban design principles
- 15.01-3 Neighbourhood and subdivision design
- 15.01-4 Design for safety
- 15.01-5 Cultural identity and neighbourhood character
- 15.02 Sustainable development
- 15.02-1 Energy and resource efficiency

In summary, the above clauses emphasise the requirement for new urban environments to be safe and functional with a sense of place and cultural identity. Neighbourhoods created should protect the cultural identity of the wider area. Sustainably principles and innovative design should be evident in a neighbourhood structure, which reduces greenhouse gas emissions.

clause 16: housing

Relevant clauses:

- 16.01 Residential development
- 16.01-2 Location of residential development
- 16.01-4 Housing diversity
- 16.02-1 Rural residential development

New urban environments should be planned to provide for housing diversity, affordability and long term sustainability, including walkability to activity centres, public transport, schools and open space. Essential services should be able to be readily accessed.

4.3 municipal strategic statement

Clause 21.02: Key issues:

- Dennington and North East Warrnambool will continue to expand.
- Dennington will continue to be strongly associated with the operational requirements of the milk processing plant.

Clause 21.05: Housing

This clause provides a brief overview of the Warrnambool Land Use Strategy, which is summarised in the section below. The clause reiterates the importance of the maintenance of existing character and effectively integrating new development with existing architectural, historic and landscape character of Warrnambool. The clause details land release timeframes for growth areas as well as housing objectives in relation to neighbourhood character, redevelopment areas and Greenfield development.

In regard to the urban expansion of North Dennington Clause 21.05 establishes the following:

....provides an opportunity for highly sustainable and liveable urban design outcomes. Detached housing will be the dominant housing stock, however at higher densities than current residential development, estimated to yield approximately 400 lots.

These areas will be enhanced by a rehabilitated Merri River Corridor with open space areas for passive recreation, riparian habitat preservation and management of stormwater runoff. This expansion area will be supported by the existing Dennington community which may justify the introduction of additional commercial and community services.

The area can be readily serviced through extensions to existing water and sewage systems, however, the lower level land would require the installation of a new sewerage pump station.

Key strategies include:

- Maintain and reinforce the existing community structure at Dennington.
- Ensure that land use and development enhance the river environment at North Dennington.
- Establish a 500 m buffer zone between the saleyards / industrial area and nominated residential areas of North Dennington, possibly incorporating pedestrian/bicycle link and low impact light industrial uses and uses associated with the business park.

Clause 21.06: Environment

Significant environmental issues important to the region of Warrnambool, namely biodiversity, native vegetation and sustainability etc are identified at this Clause. Environmental objectives for each key environmental issue are detailed at this clause.

Clause 21.07: Economic Development

This clause sets out the activity centre hierarchy in Warrnambool. The Dennington Town Centre is identified as a Neighbourhood Activity Centre, providing weekly good and services. Clause 21.07 also sets out the economic significance of the Saleyards.

Clause 21.08: Infrastructure

Urban development, through the introduction of exotic plant species and urban runoff, use of septic tank systems and industrial waste can have adverse impacts on river health. There is a need for sensitive urban design and utilising open spaces to act as flood ways.

4.4 local planning policies

clause 22.02 environment

This clause details local policies which relate to land subject to flooding, landslip, steep topography and along hilltops or ridgelines. The policies aim to guide or restrict development within these sensitive environments.

Clause 22.02-1 Urban Floodway Local Policy

The objective of this policy is to identify potential flood hazards adjacent to the Merri River and provide a sound basis for the future development and use of land considered liable to be at risk of flooding.

Clause 22.02-3 Susceptibility to Mass Movement

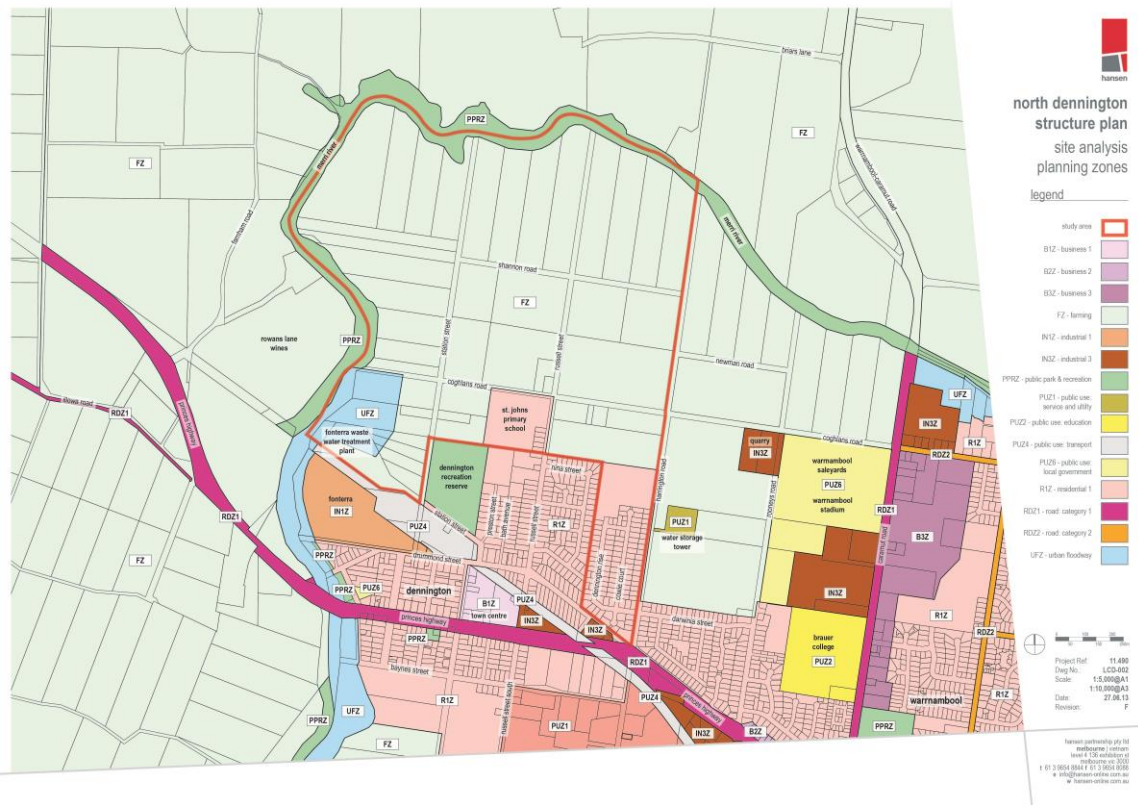
Some areas of Warrnambool have been identified as being susceptible to mass movement and this policy aims to ensure that development does not occur on land with such constraints.

Clause 22.02-4 Steep Land

This policy is applicable to land with a slope exceeding 20%, and aims to ensure all development on this land takes into account environmental constraints.

Clause 22.02-5 Hilltop and Ridgeline Protection

This is applicable to buildings and works occurring on hilltops or ridgelines, with the aim to ensure such development does not compromise the visual or sight lines, and that it does not cause environmental degradation.



4.5 zoning and overlays

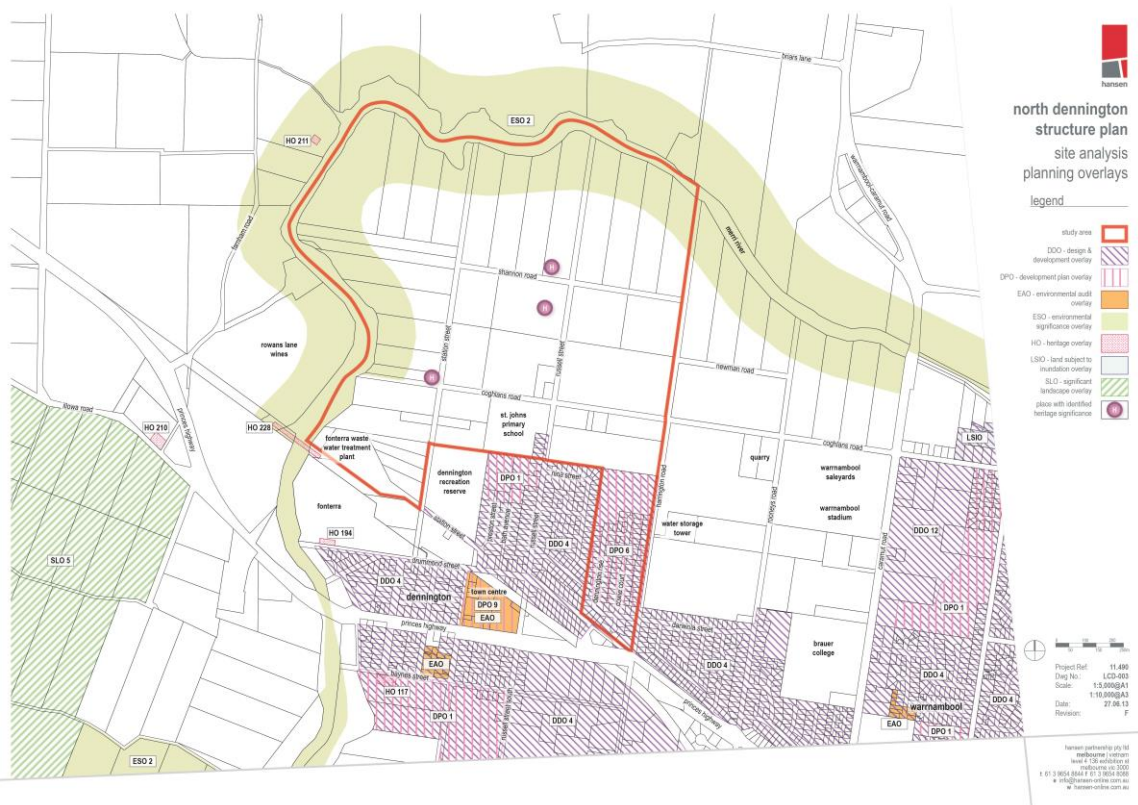
The existing zoning of the study area can be seen on the figure opposite. Of note is the following:

- Majority of the area is located within the Farming Zone (FZ).
- A small section, in the south-west section of the structure plan area, is covered by an Urban Floodway Zone (UFZ).
- Merri River is located within the Public Park and Recreation Zone (PPRZ).
- Land to the south of the structure plan area is within the General Residential Zone (GRZ).

The Environmental Significance Overlay - Schedule 2 applies to the Merri River and adjoining area. The overlay seeks to protect the Hopkins and Merri River environs by triggering a planning permit for buildings and works and certain vegetation removal.

The Design and Development Overlay - Schedule 4 covers the Dennington Rise Estate (within the NDSP area) and the Residential 1 Zoned land to the south of the structure plan boundary. This overlay triggers a planning permit for single dwellings or extensions above 7 metres in height above the existing floor level.

The Development Plan Overlay - Schedule 6 also applies to the Dennington Rise Estate. This Overlay seeks to provide for an integrated development outcome. As the estate is mostly developed the content of this overlay has generally been achieved.



4.6 adopted policies, plans and strategies

Warrnambool Council Plan 2013 - 2017

At a strategic level, Warrnambool City Council has outlined its vision for the City through its Council Plan, which is supported by a range of specific strategies and plans which aim to achieve these goals.

The focus of the 2009-2013 Council Plan (revised 2012) is to create a “thriving, culturally rich and inclusive leading regional city” by building:

- A leading regional city;
- A sustainable city;
- A liveable city; and
- A city of growth

The NDSP will assist Council in achieving the following specific objectives of the plan:

- | | |
|---------|--|
| 1.02 | Advocate for the city and the Great South Coast region |
| 1.04 | Deliver efficient and effective services |
| 2.02 | Protect, enhance and improve access to our coastal reserves and waterways |
| 2.03 | Promote sustainable transport systems |
| 2.04 | Create natural and open space environments in Warrnambool |
| 2.04.03 | Improve accessibility to Warrnambool’s parks and open spaces |
| 2.07 | Manage Council assets in a sustainable manner |
| 3.01 | Improve community health, wellbeing and safety |
| 3.02 | Develop and support sport and recreation activities to promote healthy lifestyles and community wellbeing |
| 3.06 | Deliver high quality community services that strengthen health and wellbeing |
| 3.07 | Promote an inclusive, connected and resilient community |
| 3.08 | Ensure community, recreation and cultural services and facilities are responsive to changing community needs and expectations. |
| 4.01 | Encourage creativity and innovation in urban design and development. |
| 4.02 | Invest in planning and infrastructure for growth areas. |

Warrnambool Health and Wellbeing Plan 2011-12 – currently under review

The City’s Health and Wellbeing Plan identifies a number of strategic objectives which will be furthered by the provision of a new well planned, designed and serviced community in North Dennington. These are:

- Strengthen social connections and relationships
- Strengthen and integrate health and human services
- Plan, advocate for and create healthy and safe places and spaces
- Promote opportunities for lifelong learning

Warrnambool Recreation Plan 2007-2017

The Warrnambool Recreation Plan which was adopted in 2007 specifically identifies improvements required at Dennington Recreation Reserve and within in the NDSP area to meet the community’s needs as this part of the City grows. Specific recommendations of the Plan which relate directly to NDSP are as follows:

- | | |
|-------|--|
| 1.1 | Link the Recreation Plan with other Council strategic documents |
| | Ensure the actions from the Plan are taken into consideration in future council strategic plans and processes. |
| 1.5.3 | Undertake various identified feasibility and other formal planning processes. |
| | Consider development of a community hub at Dennington Recreation Reserve. |
| 1.6 | Ensure that recreation planning is linked with Structure Planning. |
| | Work in partnership to ensure that Recreation Planning is linked into structure plans |
| 3.3 | Improve waterway infrastructure |
| 3.4 | Improve football/netball facilities (projects identified in list at Part 2 Appendix 4) |
| | Dennington FNC Netball change room amenities, scoreboard improvement, and football change room redevelopment. |
| 5.5 | Consider development of community hub at Dennington Recreation Reserve |
| 5.6 | Improved access to fishing |
| | Develop fishing jetties in growth areas on the Merri River. |
| 7.5 | Provide quality open space in Growth Development Areas |
| | All growth areas must have the following recreation infrastructure: |
| | - walking paths that meet the principles of the plan |
| | - Access to waterways |
| | - Fishing platforms where appropriate |
| | - Appropriate playground infrastructure commensurate with the size of the community |
| | - Seating within parks |

The actions of the adopted Recreation Plan 2007-17 must be supported by the inclusion of these projects and outcomes in the NDSP and the accompanying Development Contributions Plan.

Sustainable Transport Strategy 2010-2020

Council’s first Sustainable Transport Strategy identifies ways to develop a city which is less reliant on private motor vehicles and using more “active” transport modes more often. Access to and within the study area should be planned to encourage and maximise active transport options.

In particular linkages to the Warrnambool Port Fairy Rail Trail, provision of on road cycling paths, off road shared paths (especially along the Merri River Corridor) and adequate footpaths throughout the development are specifically identified as priorities of the plan.

Active Ageing Plan 2008-2013 - currently under review

This plan identifies opportunities for older residents to maximize their quality of life in Warrnambool.

The NDSP (Revised Structure Plan) should consider accessibility issues and the needs of older resident when planning for the needs of the community.

Municipal Early Years Plan 2009-2013 – currently under review

The NDSP will be home to a significant proportion of Warrnambool’s families with young children. In planning for the future use of this growth area to meet community needs in relation open space and community facilities, the Plan will must address the needs of young families in providing safe and accessible facilities which work towards achieving a “child friendly” city.

Open Space Strategy – under development:

An open space strategy is currently being prepared to identify current supply and future needs for open space in the city.

The draft Open Space Strategy identifies the Dennington Recreation Reserve as a municipal park identified for sport at a municipal level.

The size of the reserve (5.3 hectares) also supports the status of the park which has capacity to meet the active recreation needs of the growth area for a range of activities including formal sports and active play.

The draft Open Space Strategy also identifies the future Merri River Floodplain Corridor which provides passive open space opportunities. This land is subject to flooding and is considered encumbered land and is not suitable for urban development. However this land can be used for drainage purposes and passive open space. A pedestrian and cycle path within the river corridor will provide linkages and accessibility to the community while additional open space embellishments will provide a range of passive recreation options.

Connectivity to open space in Dennington is poor. The draft Open Space Strategy suggests investigating options for linking North Dennington with the rail trail to provide pedestrian and cycle links.

These open space areas will likely require embellishment to meet the Dennington North community’s needs, funded via open space contributions collected via Clause 52.01 of the Warrnambool Planning Scheme and Development Contributions.

An open space monetary contribution within the growth area is required. This contribution will be in the form of cash, and will be used to embellish the Dennington Recreation Reserve and the future river corridor (passive open space), as considered appropriate by Council.

Embellishment may include:

- Provision of cycle/ walking paths along the Merri River funded by the Development Contributions Plan.
- Provision of passive open space embellishments such as BBQ's, bench seating, playgrounds etc in the Merri River Parkland.
- Upgrades and development of the Active Open Space at the Dennington Recreation Reserve to service the additional demand created in Dennington North.

Warrnambool Land Use Strategy, 2004

The Warrnambool Land Use Strategy, adopted in September 2004, presents a strategy for Warrnambool's future land use and development needs over a 20 year horizon. It addresses the need for an increase in developable land over the forthcoming twenty year period (2004-2024).

The Strategy identifies demographic forecasts of the Warrnambool region. It establishes that 1950 additional allotments over the next 15 years will be required to be created in order to meet residential land supply requirements. It also identifies opportunities for more efficient and effective use of existing urban areas and identifies growth areas, assesses infrastructure capabilities, environmental considerations and social indicators. A commitment to sustainability and best practice development techniques also underpins the strategy.

The North Dennington Area is one of four areas identified as major residential growth corridors needed to accommodate predicted population growth. The reasons given are that the Merri River could act as a natural boundary to prevent over expansion of the residential area, land can be easily serviced and the expansion could support new retail and community services within Dennington.

The Strategy highlights the importance of protecting sensitive interfaces and implementing a 500 metre buffer between the Saleyards and the future residential land. The river reserve will also be enhanced by development, by the implementation of open space areas for passive recreation, riparian habitat preservation and management of storm water runoff.

Dennington Neighbourhood Activity Centre Structure Plan, 2009

The Dennington Neighbourhood Activity Centre Structure Plan 2009 sets out a long term planning and design vision for evolution of the precinct. The plan identifies the location, form and configuration of the Neighbourhood Activity Centre in light of the location of existing commercial and community facilities. A further purpose of the study is to determine a suitable built form that ensures a centre that is functional, attractive and effective as a community focal point with the capacity to grow.

Warrnambool Environmental Sustainability Strategy 2008-2013

This Environmental Sustainability Strategy (ESS) presents a range of strategic directions, planning and management options for targeted day to day actions adopted by Council to meet the challenges of environmental sustainability. The ESS aims to reduce

negative impacts on the environment by driving behavioural change that will make Warrnambool a more environmentally sustainable city.

Community Services and Infrastructure Plan, Draft September 2013

The CSIP review current community service infrastructure provisions in the context of Warrnambool's changing needs, and identifies additional services and infrastructure that are likely to be required as a result of a number of factors (including land use changes and future development in growth areas such as Dennington North).

The CSIP notes that there are 4 existing council owned facilities servicing the Dennington/ Warrnambool West area, and identifies that, due to significant growth in the area, additional facilities are required, including a kindergarten, child care, maternal and child health and community meeting spaces. Warrnambool will no longer plan for stand-alone facilities and notes that required facilities will be provided through an integrated community hub (Neighbourhood-level facility).

Potential locations for the neighbourhood hub are identified in the vicinity of the existing primary school and the Dennington Recreation Reserve.

5. stakeholder engagement

Extensive consultation took place during the development of the original Structure Plan in 2008. At several stages during the preparation of the original project, information sessions and meetings with key service providers and agencies, as well as owners of land within the study area and the broader community took place. Key issues emerging from these consultation activities are detailed in the Connell Wagner Structure Plan Report.

Further consultation with landowners occurred as a result of the Planning Scheme Amendment C66 between December 2008 and January 2009. There was also an opportunity for all submitters to Amendment C66 to be heard before an independent Planning Panel established by the Minister for Planning to review the merits of the Amendment.

Following release of the Panel Report, Council appointed Hansen Partnership to review the Amendment C66 Panel Report and update the original Structure Plan Report accordingly. As part of that process an intensive day of stakeholder meetings took place in March 2012. Stakeholders included Council Officers, DPCD, Wannon Water and landowners. Each landowner was given an opportunity to speak one-on-one with the consultants in order to find out more about the review, the Panel's recommendations and to provide information on their interest in developing land and feedback on the Structure Plan itself.

6. demographic trends

The purpose of this section of the Structure Plan is to describe the likely dwelling and population forecasts for the NDSP area.

6.1 development yields

As described in Section 9 below, the gross land area of the NDSP is approximately 160 ha. However, as a result of encumbered land associated with the Merri River floodplain and Fonterra buffer requirements, and land that will be set aside for road widening, as well as land that has already been developed within the Structure Plan boundary (which includes St John's Primary School and the Dennington Rise Estate) the net developable area is 104ha.

Based on an average density of 12 dwellings per hectare this equates to approximately future 1,248 dwellings. This lot yield has increased from that proposed in the 2008 Connell Wagner Report as a result of the Panel not supporting lower density development along the river frontage, and as a result of Council's desire to increase densities in line with other Structure Planning activities occurring in the City.

6.2 population forecasts

In recent times Warrnambool has experienced unprecedented growth. The population contains a large number of young people who are drawn to the City from surrounding small towns and rural areas by factors such as employment and education. At the same time the population is aging, particularly in areas closer to the CBD, with a decline in household sizes expected.

According to the 2011 ABS census the average household size in Warrnambool in 2011 was 2.4 persons. This household size is not expected to materially decline by 2031. In contrast in 2011 the average household size in Dennington was 2.9 persons and this is anticipated to decline to 2.77 persons by 2031. The higher household sizes in Dennington in comparison to the rest of Warrnambool City reflect the presence of families that have been attracted to new residential development in the area.

As a result of the anticipated growth in dwellings within North Dennington, a population of between 3,450 and 3,600 is likely to be accommodated within the Structure Plan area. Like what is already occurring in Dennington, the population of the NDSP area is likely to be mostly families. However, over time smaller household sizes are anticipated, creating a need for a range of dwelling types and lot sizes.

7. community infrastructure

Due to anticipated population growth in North Dennington, there will be a need for additional and improved community infrastructure in the future. Community infrastructure is generally defined as public and private, State, council and non-council facilities (e.g. cultural buildings, recreation buildings and open space) which accommodate community services, programs and activities (e.g. preschool services, child care, youth services, aged services, community meetings, sporting competition, informal recreation, cultural activities, health programs, education, emergency services, etc.).

7.1 community facilities

A neighbourhood level community hub providing a range of services is required to meet the needs of both the existing Dennington community, and to service the additional growth in Dennington North. The preferred location for this facility is within proximity to the St Johns Catholic School and the Dennington Recreation Reserve (refer to Community Services Infrastructure Policy and the CSIP). The Warrnambool West Primary School is located on Hoddle Street, approximately 2 kms from the NDSP area and has sufficient capacity to meet the needs of this area.

Clause 56 of the Warrnambool Planning Scheme requires that community facilities should be located on sites that are in or near activity centres and public transport.

7.2 open space

Clause 56 of the Warrnambool Planning Scheme sets out objectives and standards for the provision of a network of quality, well-distributed, multi-functional and cost-effective public open space in new residential areas. In this regard, the NDSP area should be provided with the following:

- Local parks (generally one ha in area if not incorporating active open space) should be provided within 400 m safe walking distance of at least 95% of all dwellings.
- Additional small local parks or public squares should be provided in activity centres and higher density residential areas.
- Active open space areas of at least 8 hectares should be provided within 1 kilometre of 95 % of all dwellings. Notably such active open space areas should be:
 - Sufficient to incorporate two football/cricket ovals.
 - Located on flat land (which can be cost effectively graded).
 - Located with access to, or making provision for, a recycled or sustainable water supply.
 - Adjoin schools and other community facilities where practical.
- Linear parks and trails along waterways, vegetation corridors and road reserves within 1 kilometre of 95 % of all dwellings.

Generally the Clause 56 active open space standards are met within the broader locale by the Dennington Reserve, which will remain a key activity node within North Dennington. Council's preference is to further invest in this existing recreation facility.

There is however a need for the provision of cycling/ walking paths within the Merri River flood plain.

The planned Merri River Parkland provides open space opportunities that generally meet the passive open space requirements of Clause 56.

These open space areas will likely require embellishment to meet the Dennington North community's needs, funded via open space contributions collected via Clause 52.01 and Development Contributions. Embellishment may include:

- Provision of cycle/ walking paths along the Merri River.
- Provision of passive open space embellishments such as BBQs, bench seating, playgrounds etc. in the Merri River Parkland.
- Upgrades to the Dennington Recreation Reserve facilities.

8. the structure plan

8.1 vision

The vision for North Dennington was established as follows in the previous structure plan report.

A residential community providing for diverse housing densities and lifestyle opportunities, with high quality and sustainable urban design outcomes that reflect the environmental assets and landscape attributes of the location abutting the Merri River. (Page 33)

8.2 key principles

The vision the Structure Plan is underpinned by the following planning and design principles. These principles are primarily borrowed from the original Structure Plan report and have been reviewed and assessed in relation to the changes Council is considering in response to the Amendment C66 Panel Report. The principles have been re-assigned to key Structure Plan themes further expanded upon in Section 9.

1. land use and density

- Ensure a variety of residential densities and lifestyle opportunities are provided.
- Plan for growth to meet forecast demographic change.
- Provide a centrally located community node within the Structure Plan area.
- Provide appropriate buffer distances between existing industries and new residential development.

2. movement and access

- Build upon the existing grid structure of existing road reserves to provide for efficient internal and external transport links.
- Provide for an attractive and active interface with future open space along the Merri River
- Ensure that development is designed to facilitate the provision of efficient and effective public transport systems.
- Provides for high levels of connectivity for pedestrians and cyclists.
- Enhance links to the existing Dennington residential areas and community nodes.

3. open space and natural environment

- Utilise and enhance the Merri River floodplain environs as a linear open space network providing accessible and attractive recreation areas for residents and a biodiversity corridor.
- Provide safe, inviting and accessible open space nodes and linear linkages to the Merri River.
- Accommodate a range of active and passive recreation pursuits within the Structure Plan area and immediate surrounds.
- Ensure new residential development incorporates water sensitive urban design principles.

4. built environment and heritage

- Encourage development that incorporates a high standard of urban design, providing safe and inviting streetscapes, roads, gateways, open space areas and pedestrian linkages.
- Use local character, history and natural environmental features to distinguish development in North Dennington,
- Encourage urban design and management practices that help to reduce, reuse and recycle consumable resources such as water, energy and waste.

5. services, utilities and staging

- Provide cost-effective infrastructure services that address the ongoing needs of the community while protecting the environmental values of the area.
- Provide for the location and staging of new growth in appropriate areas to minimise environmental, economic and social impacts.
- Ensure that necessary community and physical infrastructure is adequately funded and delivered in a timely fashion.

8.3 structure plan description

The North Dennington Structure Plan provides a framework for development of the land at low, conventional and medium residential densities, responding primarily to topography and land features, and the existing and desired character of the North Dennington area. It seeks to connect residents within the development and to and from other areas of Warrnambool.

A linear open space network adjacent to the Merri River will increase the function of that space and allow residents from North Dennington and Dennington to enjoy the benefits of the River environs.

The environmental quality of the Merri River and environs will be protected from pollutants from stormwater discharge through the use of wetland bio-filters at various intervals along the linear open space network.

Pedestrian and cyclist connectivity will be enhanced through a network of pathways throughout the development. These will link through the area in both a north-south and east west direction.

9. key structure plan themes

Within the overall vision and principles presented in the preceding section there are a number of key themes that require specific attention in the preparation of the structure plan. These include:

- land use and density;
- access and movement;
- open space and natural environment ;
- built environment and heritage;
- services and utilities; and
- staging.

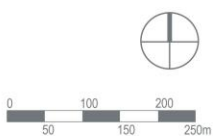
The following sections of the report provide a statement about what the Structure Plan is seeking to achieve in relation to each of these themes through a series of objectives. The objectives are supported by more detailed guidelines.

The objectives of the Structure Plan must be responded to during preparation of Development Plans and subsequent Planning Permit applications to subdivide the land. Specific guidelines for Development Plans and planning permit applications are provided following the set of objectives to provide guidance on more detailed matters and to assist Council in its decision-making capacity as the Responsible Authority.

north dennington structure plan structure plan

legend

- study area
- mixed density residential areas
- residential areas
- lower density residential areas due to slope
- farming zone within wwtp buffer
- community hub indicative location
- public open space
- potential future link (long term)
- proposed wetlands
- connector street: 25m road reserve
- local streets: 20m road reserve
- loop road: 12m road reserve
- indicative pedestrian/vehicle locations
- pedestrian connections
- historical rail line trail
- saleyards buffer 500m
- waste water treatment plant buffer 300m
- existing school
- dennington town centre
- water ways
- contours (2m intervals)



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9.1 land use and density

- Ensure a variety of residential densities and lifestyle opportunities are provided.
- Plan for growth to meet forecast demographic change.
- Provide a centrally located community node within the Structure Plan area.
- Provide appropriate buffer distances between existing industries and new residential development.

The NDSP covers an area of approximately 160 hectares and comprises a range of different land use activities.

The Net Developable Area (NDA) is land within the study area that is available for development. In order to determine the NDA, certain land use components, residential subdivision and other land uses, open space, flood prone land along the river etc, have been deducted from the total area of the NDSP area (refer table below)

The total net developable area is approximately 126 hectares.

North Dennington Land Budget (ha)	
Total Precinct Area	126.53
Encumbered land	
Floodplain and wetlands	22.27
Other Uses	
Road widening and school	4.45

The NDSP aims to achieve a density of 12 dwellings per net developable hectare across the Structure Plan area resulting in an anticipated lot yield of 1, 250 dwellings. The NDSP area comprises three residential development types.

The majority of the NDSP area is considered a natural extension of existing 'conventional' density residential development in Dennington, and currently contains a small number of rural dwellings on large allotments.

Preferred locations for smaller lots are identified along Coghlan Road and adjacent to the Dennington Recreation Reserve. These locations generally occur where higher amenity is available and where physical features such as wider road reserves and open space frontages mean that higher densities can be accommodated without having a negative impact on streetscape character and the public realm. These areas are designated 'mixed density residential' on the Structure Plan.

Land on the west side of Station Street and south of Coghlan Road (within the buffer to the Fonterra waste water treatment plant) will remain in the Farming Zone in recognition of its role as a buffer to protect residential amenity and ensure the ongoing operations of the plant. The property at 69 Station Street, Dennington, is partly within the Fonterra buffer. The landowner is able to seek a site specific planning scheme amendment to rezone land that falls outside the 300m buffer to enable the development of that part of the land.

other land uses

The Structure Plan identifies a future community hub in the vicinity of St Johns Primary School and the Dennington Recreation Reserve. Approximately 0.5ha of land is

required for this hub. Council is exploring options to locate the neighbourhood community hub on the St Johns Catholic School land.

Non-residential uses that are currently occurring in the area, such as market gardens and plant nurseries, are encouraged to continue as long as residential amenity is not affected.

objectives

- To identify preferred locations for higher density housing and smaller lots in locations that are close to services and amenities such as open space, St John's Primary School and future convenience retail and the community hub.
- To provide for larger lots in areas with significant slope and / or prominent ridgelines.
- To co-locate a small scale community hub with the St Johns Primary School or Dennington Recreation Reserve.
- To enhance opportunities for shared use of facilities at St Johns Primary School in accordance with current Council agreements.

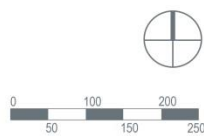
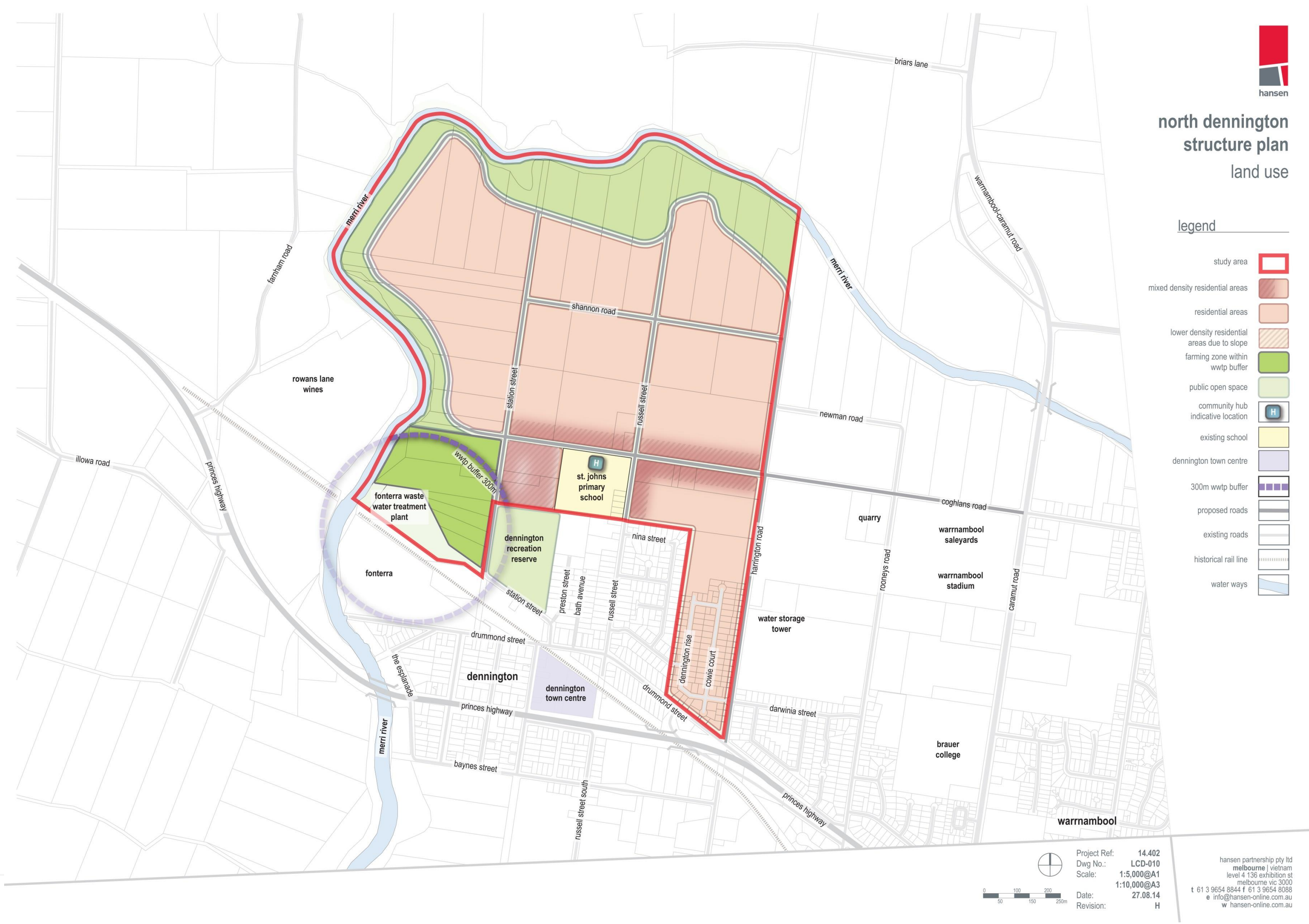
guidelines

- Whilst an overall density of 12 dwellings per hectare across the Structure Plan area is to be achieved, each Development Plan should provide a range of lot sizes based on the site context, landscape, topography and viewlines.
- Providing smaller lots or lots capable of future further subdivision/development in areas designated 'mixed density residential' along the main thoroughfare of Coghlan Road and adjacent to open space.
- Encourage subdivision layouts to provide creative and innovative design solutions to fragmented land ownership in order to facilitate integrated development outcomes.
- The community hub should have a main road frontage and provide an easily identifiable community node within the NDSP area.
- Other opportunities for non-residential uses that may be appropriate within a residential area are not discouraged by the Structure Plan, particularly in locations along the river corridor or at community/open space nodes within the NDSP area.

north dennington structure plan land use

legend

- study area 
- mixed density residential areas 
- residential areas 
- lower density residential areas due to slope 
- farming zone within wwtp buffer 
- public open space 
- community hub indicative location 
- existing school 
- dennington town centre 
- 300m wwtp buffer 
- proposed roads 
- existing roads 
- historical rail line 
- water ways 



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Scale: 1:5,000@A1
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Date: 27.08.14
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9.2 access and movement

- Build upon the existing grid structure of existing road reserves to provide for efficient internal and external transport links.
- Provide for an attractive and active interface with future open space along the Merri River and other open spaces.
- Facilitate the efficient and effective provision of public transport systems.
- Provide for high levels of connectivity for pedestrians and cyclists.
- Enhance links to the existing Dennington residential areas and community nodes.

The proposed movement network utilises Coghlan Road and an external connection to Caramut Road to create a connector road that will be the main thoroughfare connecting North Dennington to Warrnambool. Russell Street will be upgraded as a secondary access opportunity, providing access to Dennington Town Centre. The existing local north-south and east-west roads will provide internal linkages and assist to define a series of neighbourhoods.

The road network has been designed so that a public transport network can be accommodated within Coghlan Road, Station Street, Shannon Road and Harrington Road. This public transport network will provide a high level of service to the new community. Each of these road cross-sections has been designed to cater for buses. Coghlan Road is to include wide nature strips to provide for significant tree planting, consistent with the high quality streetscape character of the broader Warrnambool area.

A new park-edge loop road will follow the Merri River providing a high amenity frontage and access to the open space. Generally the road will be located outside the floodplain. Parking will be provided on the housing side of the road, with indented parking bays provided on the river side at appropriate locations to provide convenient visitor access to parkland facilities. The location of indented parking bays to be determined by Council at more detailed planning stages.

A shared pedestrian / cyclist path through the Merri River Corridor will be the main bicycle and pedestrian link. Separate shared bicycle / pedestrian paths on both sides of Coghlan Road will form additional east-west connections through the NDSP area. The Coghlan Road link will perform an essential role in connecting future residents to open space and the River, and to important services such as local shops and schools. The opportunity for the unused rail reserve to the south of the NDSP area being utilised as a pedestrian / bicycle trail is also identified on the Structure Plan. The location and operation of the Fonterra Plant adjacent to the Merri River requires that the shared path is initially diverted around this site due to lack of access. However, it is Council's long-term vision that the shared path will ultimately extend along the length of the Merri River.

The potential for future bus services to be extended into the North Dennington Structure Plan area must be taken into the consideration of the preparation of Development Plans.

objectives

- To utilise and reinforce Coghlan Road as the main thoroughfare servicing the NDSP area and to provide the main connection to the east providing direct access to Warrnambool via Caramut Road.

- To provide a Loop Road along the edge of the open space network adjoining the Merri River as an active interface.
- To provide an active edge to all other open space areas, via local streets fronting these areas.
- To extend the unmade road reserves of Russell Street, Station Street and Harrington Road to the Merri River Loop Road to enable future local access and connections to the open space network.
- To provide a grid based local road network that builds upon the existing alignment of road reservations within the Structure Plan area and responds to topography in locations where steep land is a constraint.
- To create better links to the Dennington Town Centre through intersection upgrades and the establishment of pedestrian connections across the extension of Station and Russell Streets
- To identify Coghlan Road as the primary bus route and expand public transport out to Station Street, Shannon Road and Harrington Road as the NDSP area develops.
- To improve biodiversity through the integration of landscaping/revegetation and retention of stormwater treatment for habitat. Unless otherwise approved by Council, having regard to hazards such as frequency and depth of flooding, width of the floodplain and environmental matters.

guidelines

Coghlan Road

Figure 1(overleaf) shows a typical cross-section of Coghlan Road:

- Coghlan Road is to be widened to meet its key connector road status. This will require some land acquisition on the north-side of the road.
- The Coghlan Road reserve is to be 25m wide to accommodate buses and shared bicycle / pedestrian paths are also to be accommodated within the road reserve.
- Coghlan Road should be reinforced as a major road through the provision of dual purpose pedestrian and cycle paths on both sides of the road and themed planting of indigenous trees.

Loop Road

The Loop Road is a key design feature of the North Dennington Structure Plan. Figure 4 overleaf shows the proposed cross section of the loop road.

Good design of land adjacent to an open space feature such as the Merri River corridor suggests that the Loop Road should only have houses on one side, with the other side of the road providing access and open views across the river corridor, as distinct from having houses backing directly onto the corridor. Such a treatment also provides a 'hard edge' to the growth area as required by Council's Infrastructure Design Manual. In addition, a clear delineation between public and private property provided by the road will also aid the vegetation and management of the river environment:

- The Loop Road is required to provide access to residential lots fronting the road. Principles of good design suggest it should have housing constructed on one side only. The cross section of the road reflects this function. Accordingly it is considered appropriate to be funded by developers at the time subdivision occurs.

- The Loop Road is to follow the edge of the drainage/floodway corridor provided along the Merri River.
- The finished road surface level is to be located above the 1 in100 year ARI flood level.
- The road reservation is to incorporate car parking nodes to respond to locations of key open space nodes within the Merri River Floodplain Corridor. Locations to be determined at the development plan stage. Car parking should be funded by Council via the development contributions plan.
- A pedestrian footpath on the dwelling side of the Loop Road is to be provided.
- New development is to front the Loop Road.
- Bollards or an alternative treatment are to be incorporated along the Merri River Corridor side of the Loop Road to prevent vehicular access to this area.
- Detailed planning and design at the development plan stage is to ensure that the road avoids existing buildings.

Connector Roads

- All connector roads are to be designed to facilitate public transport access.
- Roads to be designed in accordance with Council's guidelines.
- All internal roads must incorporate footpaths on both sides to facilitate safe pedestrian movement.
- All roads must incorporate street tree planting

Figure 2: Coghlan's Road cross-section

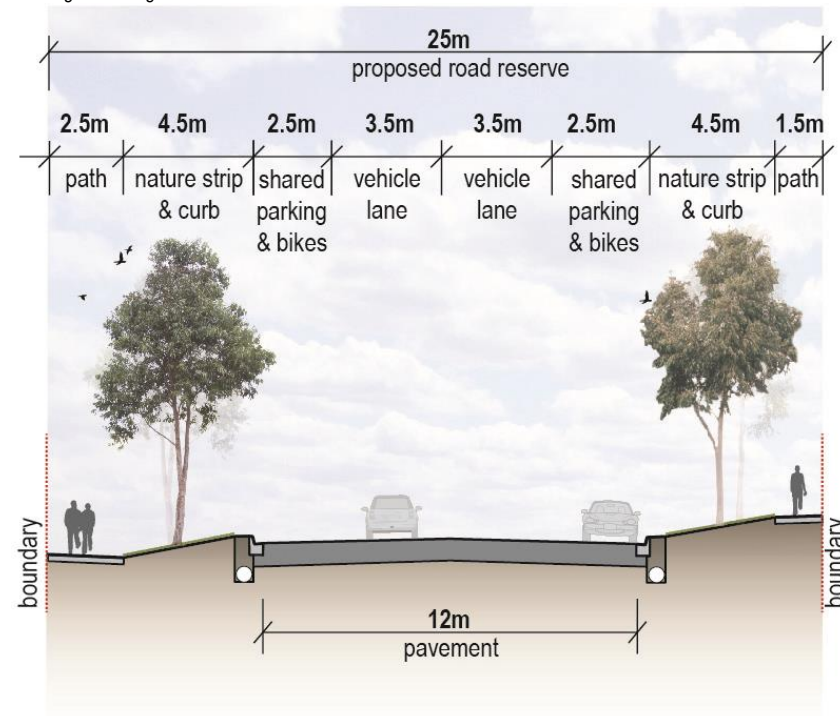


Figure 3: Harrington Road cross-section

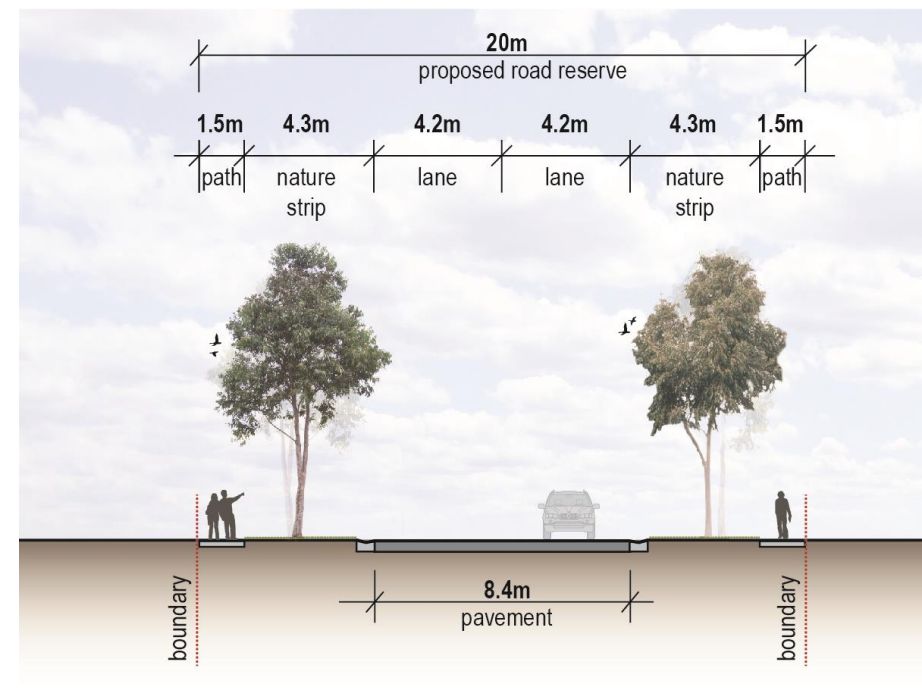


Figure 4: Loop Road cross-section (residential parking, parking ne side only)

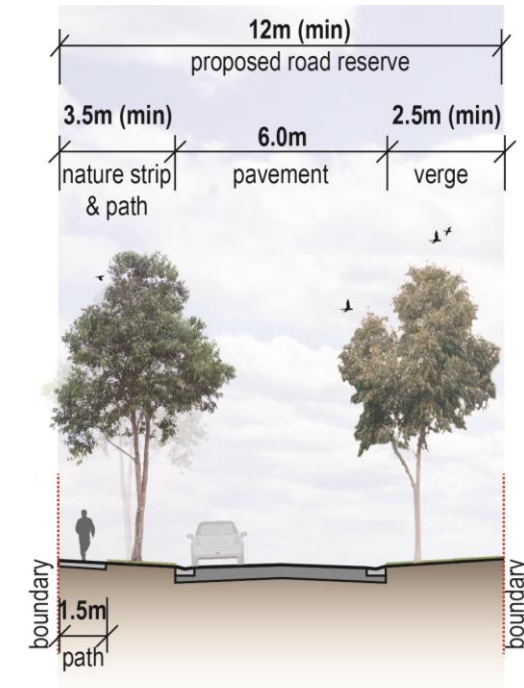


Figure 5: Loop Road cross-section (open space and residential parking, parking both sides)

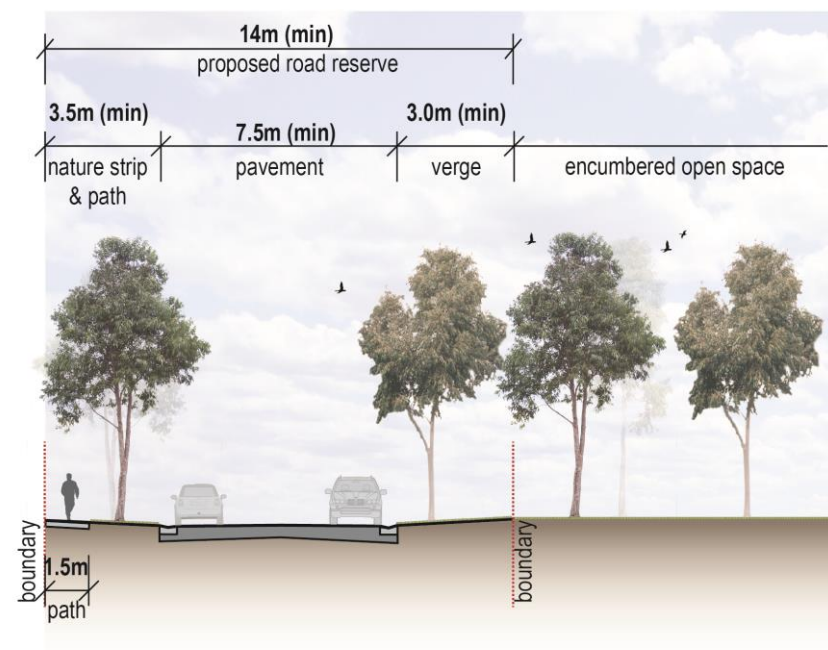
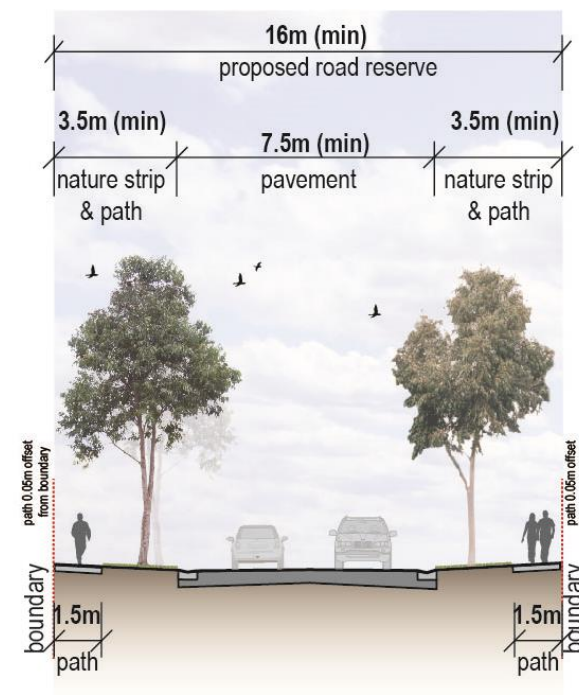


Figure 6: Typical road cross-section



north dennington structure plan access & movement

legend

- study area
- residential areas
- farming zone within
wwtp buffer
- connector street:
25m road reserve
- local streets:
20m road reserve
- loop road:
14m road reserve
- road upgrade
- potential bus route
- 3m floodplain trail
- 1.5m footpath
- 2.5m shared trail
- pedestrian connections
- pedestrian/vehicle
connections
- historical rail line trail
- existing bridges
- traffic management
treatment
- proposed roundabout
- proposed signalisation
- proposed intersection
upgrade
- existing roads
- historical rail line
- water ways

0 50 100 150 200 250m

Project Ref: 14.402
Dwg No.: LCD-008
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1:10,000@A3
Date: 27/08/14
Revision: H

Note:
Not all road and intersection treatments will be funded by the North Dennington Development Contributions plan.

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9.3 open space and natural environment

- Utilise and enhance the Merri River floodplain environs as a linear open space network providing accessible and attractive recreation areas for residents and a biodiversity corridor.
- Provide safe, inviting and accessible open space nodes and linear linkages to the Merri River.
- Accommodate a range of active and passive recreation pursuits within the Structure Plan area and immediate surrounds.
- Ensure new residential development incorporates water sensitive urban design principles.

The NDSP has a significant frontage to the Merri River and a large amount of land falls within the 1:100 year floodplain. This land is subject to flooding and is considered encumbered land and is not suitable for urban development. Its primary purpose is for drainage/ floodplain; however this land can be used for passive open space.

The NDSP provides a passive open space network within the Merri River Floodplain Corridor. The open space network will link the future residential community, provide for a major environmental upgrade of the Merri River Floodplain Corridor and ensure that all residents have access to scenic landscapes and recreational opportunities. An open space link from the Primary School through to Dennington Reserve will also provide linkages and access to open space.

objectives

- To set aside flood prone land along the Merri River for flooding and drainage purposes. This land can also be used for passive open space needs, thereby freeing up unencumbered land for development. The DCP includes provision to pay the land owners of the encumbered land that will form the River Park at a rural land value. Given the primary function of this land is for drainage/ floodway purposes, this land does not form part of Clause 52.01 calculations and credits.
- To recognise the proximity of Dennington Reserve to the NDSP area and its ability to generally meet the active open space needs of future residents..
- To provide for a shared path within the St Johns Primary School that will provide a link to Dennington Reserve.
- To provide an attractive, safe and active interface with all open space areas through use of roads frontages and passive surveillance.
- To encourage smaller pocket parks and widened road reserves on an as-required basis to protect and retain important cultural heritage or natural features as essential elements of the future character of the area.

guidelines

Merri River Floodplain Corridor

The majority of the open space area is within the 1:100 year floodplain of the Merri River, and is either within the 30 metre wide “biodiversity corridor” (as recommended under Clause 12 of the SPPF, Warrnambool Planning Scheme) or is within an area which is required for drainage for the future growth area (Section 199 of the Water Act

1989). In this regard, the land is required as “Drainage Reserve” and 30m from the bank of the Merri River, for biodiversity purposes. This land is considered encumbered for the purposes of the NDSP.

The NDSP relies on the floodplain as an integral part of the growth area to cater for stormwater management, using best practice Water Sensitive Urban Design. Water quality will be protected through the development of wetland bi-filters to remove sediment and rubbish, and Water Sensitive Urban Design principles will be used to ensure water quality is of a high standard prior to any discharge into the River.

In addition the biodiversity corridor is critical, with opportunities to significantly improve the riparian zone which is in a very poor state, reducing the impact of stock, improving bank stabilisation and improving water quality.

An overall landscape master plan will be prepared, by Council and funded by open space contributions, for the Merri River Floodplain Corridor incorporating the following:

- Clear delineation between floodplain, the 30m wide biodiversity corridor and shared pedestrian/bicycle paths and other park embellishments.
- Shared curvilinear pedestrian/bicycle concrete paths with a minimum width of 2m are to be provided in the open space area. It is noted that the paths shown on the Structure Plan are indicative.
- A consistent indigenous landscape theme.
- Park furniture and amenities that utilise a consistent theme that reflects the natural environmental qualities of the area, and where possible draws on natural materials.

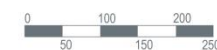
Active Open Space

Given the proximity of Dennington Reserve, as well as the shared usage potential of facilities at St Johns Primary School, there is no need to set aside land within the NDSP area for active open space purposes. It is envisaged that Dennington Reserve will continue to function as an important recreation node with a shared path providing a link between the St Johns Primary School and the Dennington Reserve. Improvements to the existing recreation facilities at Dennington Reserve may be funded through open space contributions.

north dennington structure plan open space, landscape & environment

legend

- study area 
- residential areas 
- public open space 
- proposed wetlands 
- proposed swale drain 
- existing exotic windbreak planting 
- farming zone within wwtp buffer 
- dennington recreation reserve 1000m catchment 
- proposed roads 
- 2.5m open space trail 
- historical rail line trail 
- existing roads 
- historical rail line 
- water ways 
- contours (2m intervals) 
- WWWTP buffer 300m 
- saleyards buffer 500m 



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9.4 built environment and heritage

- Encourage development that incorporates a high standard of urban design, providing safe and inviting streetscapes, roads, gateways, open space areas and pedestrian linkages.
- Use local character, history and natural environmental features to distinguish development in North Dennington.
- Encourage urban design and management practices that help to reduce, reuse and recycle consumable resources such as water, energy and waste.

objectives

- To provide safe, functional and attractive development that contributes to the township context of Dennington.
- To ensure aboriginal cultural heritage sites are identified and managed in accordance with statutory requirements.
- To protect and enhance significant heritage places identified in the Structure Plan area.
- To integrate significant heritage places / features with the open space network, road reserves and surrounding development, where possible.
- To encourage development near ridgelines that limit visual impact.
- To ensure that development addresses local streetscapes and open spaces.
- To ensure the design of new residential development enhances views to and from the Merri River and responds to the diverse topography of the area.
- To encourage integrated water resource use including rainwater tanks, recycled water and re-use of grey water and stormwater where practicable.

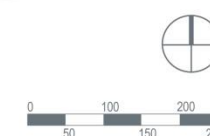
guidelines

- Create compact neighbourhoods that emphasis the landscape character, open space network and topographic features of the area.
- The design and layout of internal road networks should ensure that buildings can be sited to front both sides of roads.
- Further investigation is required to determine places of cultural and heritage significance and relevant management options.
 - Given the sensitive nature of interfaces with the Merri River Corridor the preparation of Development Plans must give effect to the following requirements:
 - All lots fronting the Loop Road must maintain a landscaped front setback and low, permeable front fencing.
 - Future development abutting open space should be well articulated and facilitate passive surveillance through use of glazing, balconies and access points
 - Avoid the rear of properties, blank walls, or high solid fences abutting open space.

north dennington structure plan built environment & heritage

legend

- study area 
- residential areas 
- land to remain in farming zone 
- place with identified heritage significance to be protected 
- existing stone wall with identified heritage significance 
- aboriginal cultural heritage sensitivity area 
- dennington town centre 
- proposed roads 
- existing roads 
- historical rail line 
- water ways 



Project Ref: 14.402
Dwg No.: LCD-011
Scale: 1:5,000@A1
1:10,000@A3
Date: 1.09.14
Revision: H

9.5 services and utilities

- Provide cost-effective infrastructure services that address the ongoing needs of the community while protecting the environmental values of the area.
- Provide for the location and staging of new growth in appropriate areas to minimise environmental, economic and social impacts.
- Ensure that necessary community and physical infrastructure is adequately funded and delivered in a timely fashion.

Sewerage

Sewerage infrastructure, provided by Wannon Water, will need significant upgrades to cater for new development in North Dennington, north of the ridge. This will consist of pumping sewage to existing connections either in Dennington or on Warrnambool-Caramut Road, or alternatively by providing a package treatment plant in the north west corner of the North Dennington area.

Water Supply

Wannon Water supplies water to the Dennington area via pipes that currently extend as far north as Coghlan's Road. That infrastructure will require extension to service new development occurring in North Dennington. As part of future subdivision works new development will need to meet the cost of delivering reticulated water as required by Wannon Water.

When developing land for residential purposes, the water supply requirements contained in Council's Infrastructure Design Manual must also be met.

Gas / Electricity Supply

Provision of gas to the North Dennington area will require an extension of the existing connection in Dennington. Tenix has advised that this extension can be provided.

Powercor has indicated that an extension of the existing high and low voltage connections would be required. The provision of electricity in this area will also require the installation of several new substations, however further design and verification by Powercor is required.

As part of future subdivision works new development will need to meet the cost of delivering gas and electricity infrastructure required by the relevant utility service providers.

Telecommunications

Telstra provides telecommunications infrastructure to new estates and has not identified any issues to extending existing infrastructure to North Dennington. Telstra covers headworks charges, although developers will be required to cover the cost of trenching.

Drainage

The drainage requirements of the NDSP area have been assessed by Cardno Pty Ltd. Drainage for the NDSP is to be separated into four catchments as shown in the figure below.

Figure 7: Drainage catchments



Sub-area A includes the north eastern portion of the site. Drainage for this sub-area will be via pipes and swale drains to a wetland adjacent to the Merri River. Sub-area B includes the north-western portion of the site. This area will drain to a wetland adjacent to the Merri River via swale drains.

Sub-area C includes the western portion of the site. Drainage is via pipes and swale drains to a wetland adjacent to the Merri River.

It is noted that Sub-area D relates to the Dennington Rise Estate, which is mostly fully developed with drainage infrastructure constructed. All drainage from Sub-area D is directed to a retarding basin south of the Princes Highway.

objectives

- To provide all developed lots within the NDSP area with:
 - potable water;
 - electricity;
 - reticulated sewerage;
 - drainage;
 - gas; and
 - telecommunications.
- To ensure Water Sensitive Urban Design measures are provided in the stormwater management system that meet the drainage requirements of the development and also protects the water quality of the Merri River. This approach provides for three sub-catchments that will drain to a series of combined wetlands and retarding basins to be located within the Merri River floodplain that will retard and treat water quality. The Water Sensitive Urban Design treatments will be supported by main drainage infrastructure to be incorporated within the local street network.

guidelines

- The location and details of services should be provided as part of Development Plans.
- Requirements of the relevant servicing authority or provider are to be met.
- Ensure water quality objectives outlined in 'Urban Stormwater – Best Practice Environmental Management Guidelines', 1999 are met.

9.6 staging

The Staging Plan overleaf depicts two indicative stages for the release of the land.

Some earlier release of land could be brought forward in terms of delivering housing diversity and choice, however this could only follow the satisfactory resolution of servicing issues and the preparation of the development plan (refer Section 10.2).

objectives




- Provide for orderly and efficient delivery of infrastructure and services to the NDSP area.
- Enable Coghlan's Road to transition to a connector street once the Caramut Road intersection has been upgraded.

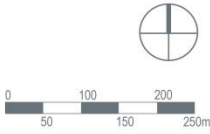
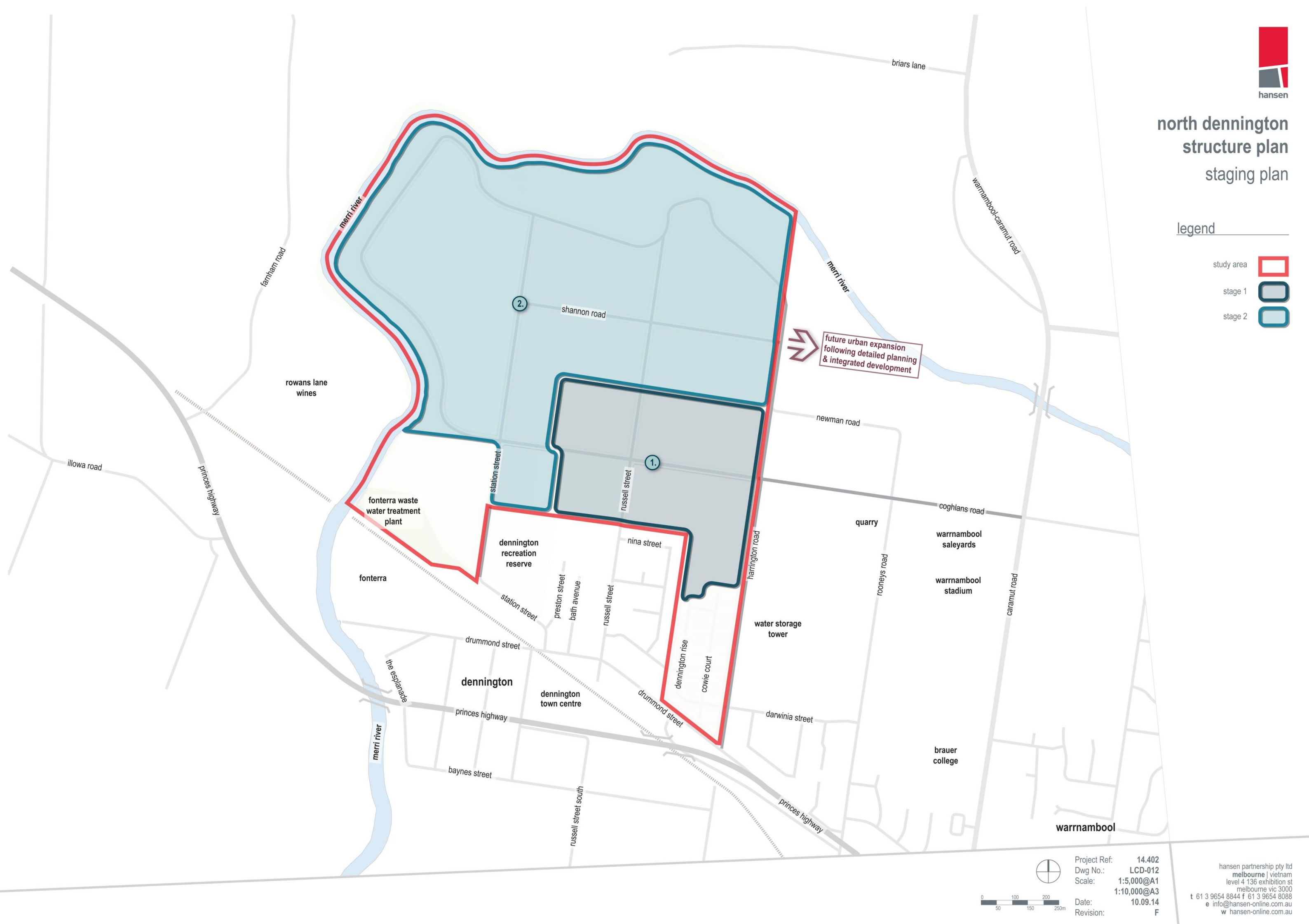
guidelines

- Staging should reflect the stages shown in the Staging Plan and be integrated with adjoining development, including the timely provision of roads and walking / cycling paths, where practicable.
- Out of sequence development will be considered on a case-by-case basis subject to consideration of land supply levels, housing affordability and diversity, and the need to ensure there is no net additional cost to the community.
- Access to each new lot must be via a sealed road.
- Stage development to enable the early delivery of community and open space facilities.

north dennington structure plan staging plan

legend

- study area 
- stage 1 
- stage 2 



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10. implementation

10.1 zoning and overlays

As part of a future amendment to the Warrnambool Planning Scheme application of the following zones and overlays to the NDSP area is recommended

- Rezoning of the majority of the NDSP area (developable area) to the Residential 1 Zone;
- Rezoning of the Merri River floodplain to the Urban Floodway Zone;
- Application of the Development Plan Overlay (DPO) to all of the NDSP area, which will require future subdivision or development to be generally in accordance with an approved Development Plan. The DPO will also ensure that a Development Plan is prepared on the basis of coordinating a number of landholdings and in accordance with the provisions of the NDSP.
- Application of the Development Contributions Plan Overlay to all of the NDSP area.

10.2 development plans

A Development Plan is required to be approved by the Responsible Authority before a planning permit can be issued to subdivide land. Development Plans must be prepared in accordance with the North Dennington Development Plan Overlay (Clause 43.04), and must be prepared for a development area that represents a logically defined precinct / stage.

The expectation is that a Development Plan will always be required to support multi-lot subdivision of land. However, there may be, from time to time, other exceptional circumstances where the Responsible Authority may consider, at its sole discretion, to issue a permit prior to approval of a Development Plan. These circumstances will generally be related to temporary uses/ developments or minor applications, where it can be demonstrated to the satisfaction of the responsible authority that the subdivision, use or development will result in a positive outcome for the North Dennington growth area, **and** that the requirement to prepare a Development Plan prior to issue of the permit would prejudice the subdivision, use or development.

10.3 development contributions plans

Development contributions exist in most growth areas and assist in equitably providing key infrastructure items including major road and public transport facilities, community facilities and the provision of open space.

North Dennington DCP should be read in conjunction with the DNSP. The Dennington North DCP has been prepared to enable equitable and efficient delivery of a range of essential infrastructure to service the future Dennington North community

Once adopted by Council, the Development Contributions Plan will be incorporated into the Warrnambool Planning Scheme and implemented through the Development Contributions Plan Overlay (DCPO).

10.4 open space

The open space requirements of the North Dennington Structure Plan are to be included under Clause 52.01 of the Warrnambool Planning Scheme. This will ensure that open space embellishment is apportioned equally and fairly across the NDSP area.

10.5 subdivision works

At the time of subdivision all roads, open space and street landscaping, basic improvements to local parks, local drainage systems and infrastructure required for utilities and services, except for those funded through the Development Contributions Plan must be delivered to the satisfaction of the Responsible Authority.