

Lara West

Precinct Structure Plan





Neil M Craigie Pty Ltd

ACN 074 582 282 ABN 29 074 582 282 *Waterway Management Consultants*



Authors

SMEC Urban Pty Ltd

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Prepared by	Melissa Griffin/ Lisette Schlesinger
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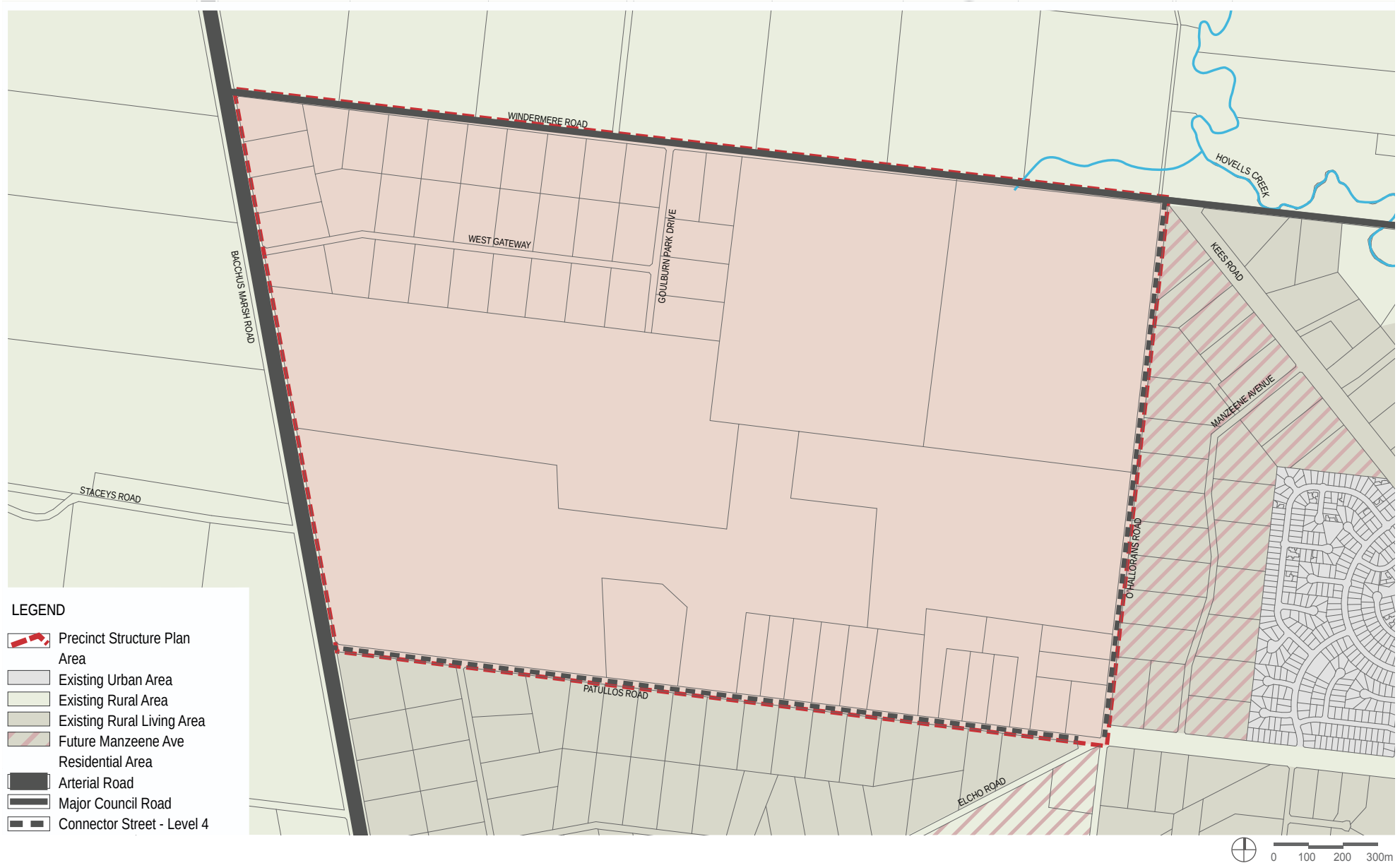
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Plan 1: Precinct Structure Plan Area



1 Introduction

1.1 Role of the Precinct Structure Plan

In April 2011 the City of Greater Geelong (CoGG) adopted the Lara Structure Plan. Implementation of the Structure Plan's key principles and directions into Clause 21.13 of the Greater Geelong Planning Scheme was achieved via Amendment C198, and approved by the Minister for Planning in August 2011.

The Lara Structure Plan and Clause 21.13 identify the Lara West Precinct as 'Future Residential' and supports implementation via a precinct planning approach.

A precinct structure plan (PSP) is the planning mechanism used to plan for major new urban development together with the infrastructure and services required by its future community. It is the link between the State and local planning policies and the planning permit for development and use of land.

The PSP therefore, is at a higher or broader level than the plans that form the required documents to accompany a planning permit application. It is a long-term plan to guide future urban development. It describes how the land is expected to be developed and how and where services are planned to support development.

The PSP:

- is a strategic plan setting out the vision and structure for the creation of a new urban area that implements Victorian Government guidelines;
- provides the basis for planning controls that apply in the Schedule to the Urban Growth Zone in the relevant planning scheme;
- provides the framework for the consideration of planning permits that provide for urban development under the provisions of the relevant planning scheme;
- details requirements or conditions that must be met by future development and use;
- outlines projects required to ensure that the future community within the area is provided, as early as possible, with access to infrastructure and services to support a quality, affordable lifestyle; and
- provides developers, investors and local communities with certainty regarding the nature of future development within the PSP area.

A PSP over land in Lara West must be generally in accordance with the Lara Structure Plan 2011 (the Structure Plan).

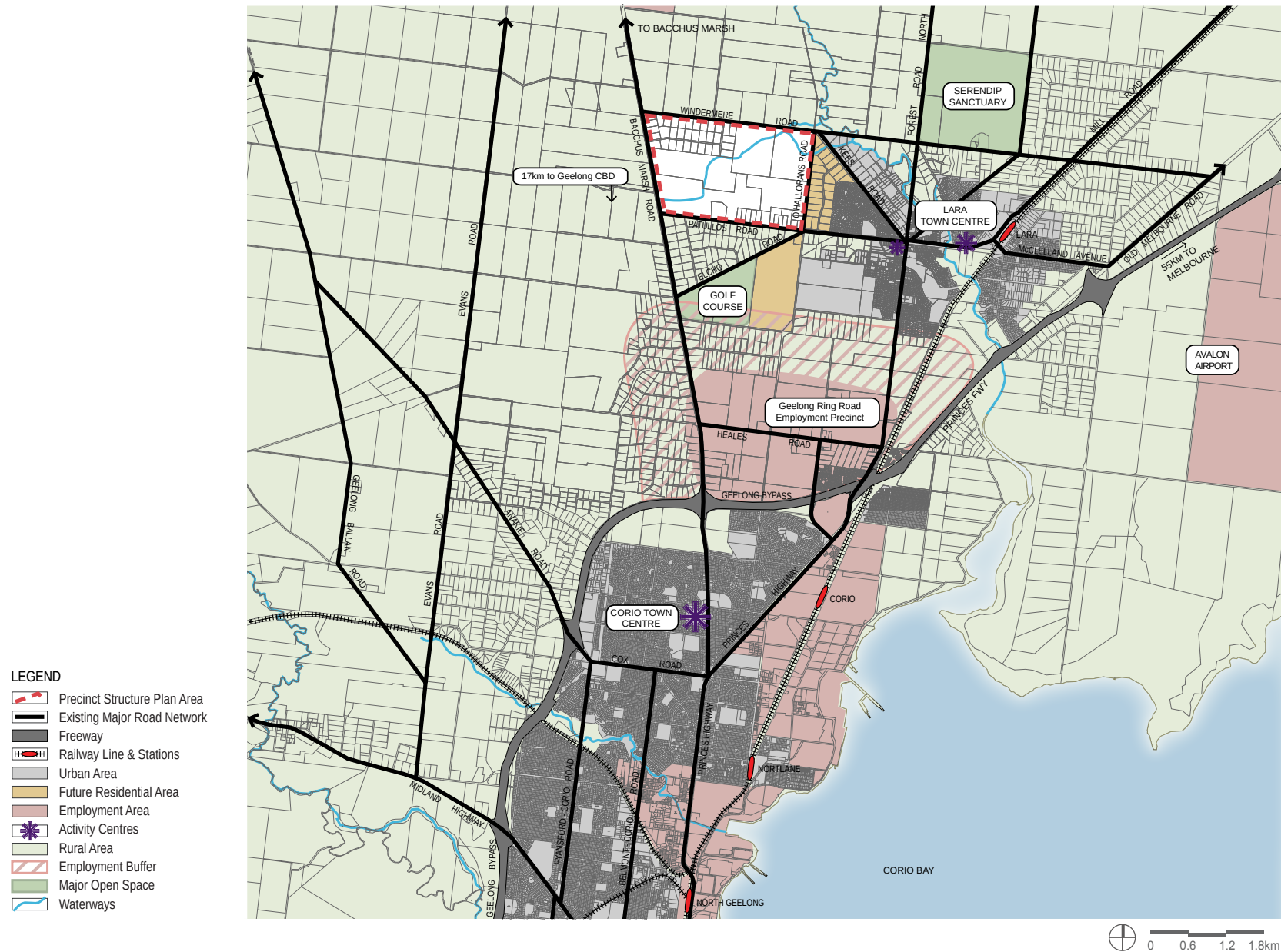
The Lara Structure Plan establishes the strategic context and vision for urban development for Lara West.

The Lara West Precinct Structure Plan (LWPSP) sets objectives and provides for their implementation in relation to eight key elements:

- Image and Character;
- Subdivision and Housing;
- Community Facilities;
- Public Open Space, Natural Systems and Biodiversity;
- Activity Centres and Employment;
- Transport and Movement;
- Utilities and Energy; and
- Integrated Water Management.

These are set out in detail in Section 4.

Plan 2: Regional Context



1.2 Land to which the Precinct Structure Plan applies and its context

As the Melbourne metropolitan area continues to grow further, growth is being experienced in regional areas which offer alternative lifestyle options, affordable housing and strong employment opportunities. Geelong and its wider surrounding region continues to capture this growth and is fast establishing itself as a self sustainable metropolitan centre.

Geelong's population is anticipated to increase from 222,000 in 2011 to 304,000 in 2031. The population of the broader G21 region - the municipalities of Surfcoast, Greater Geelong, Colac Otway and Golden Plains – is anticipated to rise from 167,802 in 2006 to 216,971 in 2026. The Lara West Precinct (LWP) will accommodate for a portion of this growth, along with the other identified growth areas located at Armstrong Creek and Bellarine.

Plan 2 (Regional Context) shows the LWP in its regional context. It is located approximately 3 kilometres west of Lara town centre, 17 kilometres from Geelong and 61 kilometres from Melbourne. The LWP is a strategic land parcel intended to provide for growth in the G21 region and is an 'identified planned growth area' under the draft G21 Regional Growth Plan (2012) and 'future residential area' under the Lara Structure Plan 2011.

The LWP covers a gross land area of 389.4 hectares and is defined generally by the bounding roads of Patullos Road, O'Hallorans Road, Windermere Road and Bacchus Marsh Road. Refer to Plan 1 – Precinct Structure Plan Area.

The LWPSP will facilitate the transition of this land from rural and rural living uses to a well integrated expansion of the Lara urban area. This includes the establishment of a range of housing choices serviced by community infrastructure and activity centres.

The area surrounding the LWP has existing infrastructure and resources that make it attractive for urban development. In terms of transport infrastructure, the area has access to regional V-line services, local bus services and the Princes Highway. The area also contains significant employment and industrial areas located in close proximity to the LWP at Werribee and Geelong. The area is supported by a network of principal and major activity centres including Melbourne and Geelong which offer a range of community services, retail commercial facilities and non-retail commercial facilities. The amenity of the area is promoted by environmental features such as the existing Hovell Creek reserve (to the east of the site) and contained patches of vegetation.

1.2.1 Key Existing Roads

As mentioned the LWP is bound by Bacchus Marsh Road (west), Patullos Road (south), O'Hallorans Road (east) and Windermere Road (north). Two (2) existing roads (West Gateway and Goulburn Park Drive) are located within the north western corner of the LWP, providing access to the established rural residential neighbourhood.

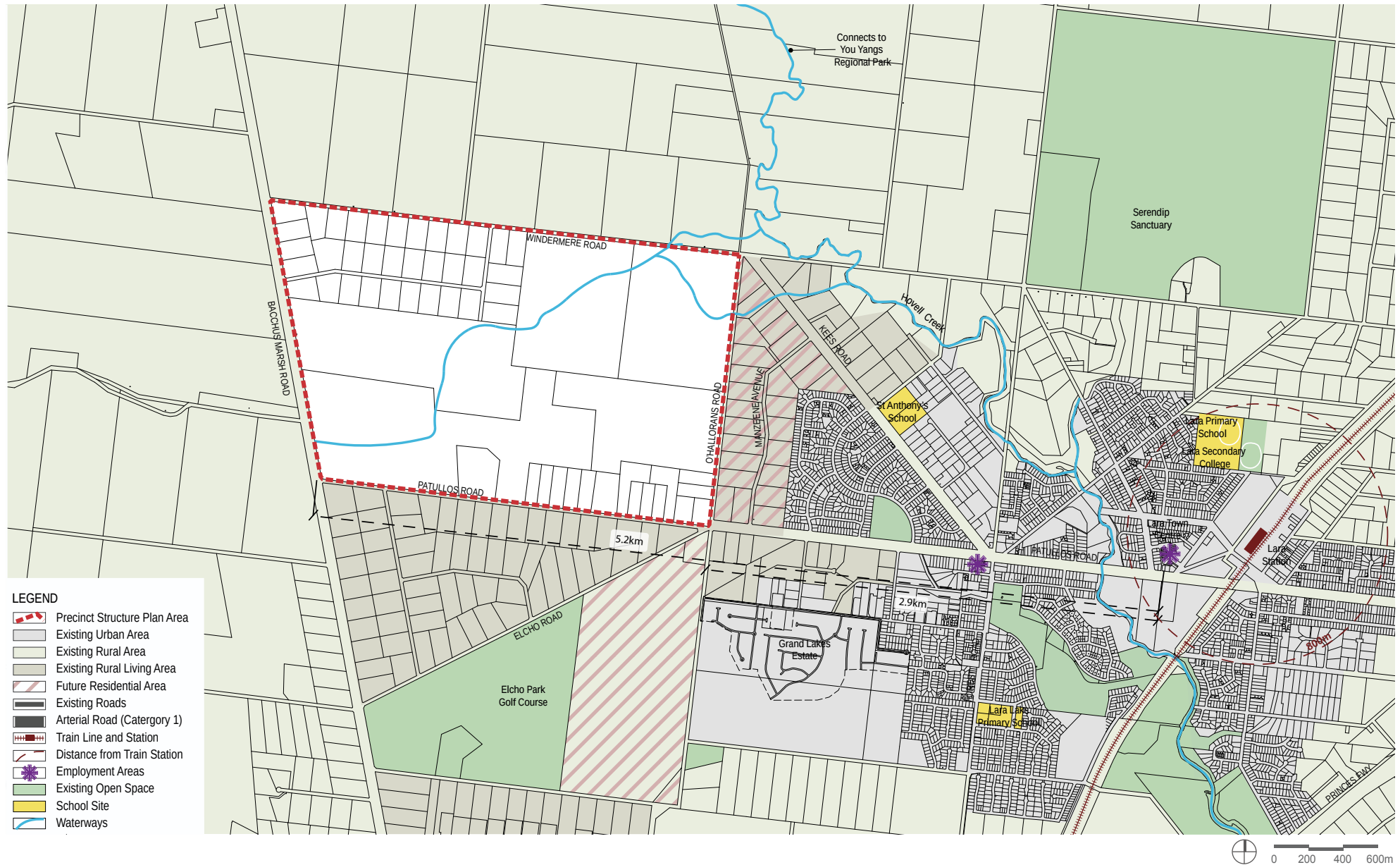
Bacchus Marsh Road is a primary state arterial road and a Road Zone – Category 1. It runs in a north-south orientation on Lara's western edge, and connects Bacchus Marsh and Geelong. In the vicinity of the LWP, Bacchus-Marsh Road is an undivided road consisting of one traffic lane in each direction with sealed shoulders. The road is relatively straight and flat and has a carriageway width of approximately 13.1 metres and a road reserve width of 60 metres. The existing 60 metre road reserve would be adequate to cater for future duplication with the provision of a four or six traffic lane cross-section.

Windermere Road is classified as a major Council road which connects Bacchus Marsh Road to Mill Road in the east. It has a carriageway width of approximately 6.4 metres adjacent to the LWP and provides one traffic lane in each direction. The road reserve is 20 metres wide which is adequate to provide for future traffic.

Patullos Road is classified as a local street between Bacchus Marsh Road and Elcho Road. It has a carriageway width of approximately 6.6 metres along the site frontage, and a road reserve of 20 metres. The existing 20 metre road reservation of Patullos Road will have more than sufficient capacity to accommodate future development occurring from the LWP.

O'Hallorans Road is a local road which runs between Windermere Road and Gibbons Road. It is unsealed and in the vicinity of the subject site it has a carriageway width of approximately 4 metres. The road reserve is 20m wide. O'Hallorans Road is to be fully constructed and include two (2) traffic lanes and verge on both sides, in support of the LWP.

Plan 3: Local Context



1.2.2 Existing Public Transport

The Lara Township is serviced by V/Line train services between Geelong and Melbourne via the Lara railway station, located approximately 3.3 kilometres east of the LWP. Travel times between Lara and Geelong (Railway Terrace) generally vary between 13-18 minutes, whilst travel times between Lara and Melbourne (Southern Cross Station) generally vary between 50-56 minutes.

Local public transport is provided by bus. Existing bus route 12 (Geelong City - Lara) operates along the eastern section of Patullos Road, within 580 metres of the LWP. Buses currently operate seven (7) days per week at approximately 60 minute intervals. Local bus services in Lara will expand or be supplemented by new services as development and occupation of dwellings and activity nodes occurs in the LWP.

1.2.3 Key Existing and Planned Activity Centres

The LWP is served by a hierarchy of activity centres in the region, the pre-eminent regional centre of these being the central activities area of Geelong. Other more significant existing activity centres servicing the LWP area are:

- the existing Lara activity centre (town centre);
- the sub-regional retail destination of Corio Village Shopping Centre; and
- Melbourne CBD.

The new residents moving into the LWP will form part of the core catchment for planned activity centres which include:

- an employment precinct on Bacchus Marsh Road which has a land area of 3.5 hectares and includes non-retail commercial floorspace;
- a neighbourhood activity centre comprising 4.0 hectares of retail and non-retail commercial; and
- local activity centre of approximately 0.5 hectares of convenience shops and services; associated jobs; schools and community centre.

Local employment opportunities are anticipated to develop concurrently with new growth arising from the LWP. At full development the LWP will directly employ approximately 185 people on an ongoing basis.

1.2.4 Key Existing Public Open Space

The Lara community has access to the full hierarchy of passive open space – major/regional, district and neighbourhood parks. The You Yangs Regional Park is located 3 kilometres from the LWP and within a 5 minute drive. Other major/regional parks located within a 30 minute drive include the Brisbane Ranges Park, Geelong Foreshore (Eastern Beach) and the parklands along the Werribee River.

Hovell Creek and its tributaries flow through the existing Lara township and identified growth areas. A planned linear park and walking trails is located along the creek in the existing urban area. A number of district parklands are located in or close to Lara. These include the Serendip Sanctuary; Lakeland Wetlands; Hovell Creek Reserve and the Grand Lakes Wetland.

The LWP will have access to a range of active open space and passive open space networks and builds on the natural characteristics of the area by further enhancing the waterway and open space corridor which runs through the area.

These will be complemented by the establishment of planned new passive and active local and regional public open space in the LWP.

The encumbered waterway reserve in the LWP will be improved to provide a linear and local passive open space reserve, and include a wetlands network which will run through the area. The function of the open space will be mutually beneficial by providing key recreation areas and trails, and improving biodiversity and water quality.

District open space is provided within the LWPSP adjacent to the neighbourhood activity centre and is well placed to serve the future residents. The District open space is 11.5 hectares in size which is capable of accommodating a diverse range of sports activity able to be adapted to the needs of the growing community.

Local parks are also provided within the LWPSP and strategically located within walkable catchments to service future residents. In some areas, these local parks have been located to incorporate existing trees and services for the benefit of the wider community.

1.2.5 Key Existing Community Facilities

Existing urban areas surrounding the LWP include significant existing and planned social, health, and community infrastructure.

The area contains a number of existing primary and secondary schools including Lara Primary School; Lara Lakes Primary School; Lara Secondary College; St Anthony's Primary School; Clonard Girls College; St Joseph's Boys College; Geelong College; Geelong Grammar; Northern Bay Secondary College and Geelong Baptist College. There are a number of existing child care and child health services provided in Lara and the surrounding area.

Health services are provided at Geelong Hospital and St John of God Hospital both located in Geelong; Barwon Health Services located in Corio; and multiple day centres located in proximity to the LWP. An interim library was opened in 2012 within the Lara Town Centre and ultimately will be replaced with a new purpose built library preferably in the Town Centre. These services will continue to serve the population of Lara and the LWP.

Residential growth generated by the LWP will increase demand for municipal, regional and local level community infrastructure. In addition to existing and planned services outside the LWP, provision of land for community centres has been provided within the LWPSP. The Lara Structure Plan 2011 identifies a possible school to be located within the LWP which is also accommodated in the LWPSP.

1.2.6 Other Existing Features

Existing parallel 220 kV transmission lines are contained within an existing 64 metre transmission line easement which is aligned in a north/south direction generally through the centre of the LWP.

The transmission line tower locations and the positions of maximum conductor sag between the towers will significantly impact on access connection and urban design options within the subject site. Accordingly assessments have been conducted to calculate maximum conductor sag under peak load conditions and these have determined “no go” zones along the transmission line route where, based on minimum clearance requirements, future roads and infrastructure are proposed to be located.

Barwon Water has completed construction work on the 800 millimetre diameter Melbourne-Geelong interconnecting pipeline that will connect Geelong to the Melbourne water supply grid. This pipeline is located along an alignment in a 10 metre wide easement on the east side and within the 220 kV transmission line easement running through the LWP.

To ensure future urban development within the LWP is not compromised this pipeline has been designed and lowered in a number of locations to satisfy minimum clearances for:

- Road construction and associated works;
- Infrastructure/utility services and minor drainage;
- Main drainage including piped drains and waterways / floodways proposed under the stormwater management strategy; and
- Sewerage infrastructure.

An existing APA GasNet 500 mm millimetre diameter gas supply pipeline traverses the south section of the subject site on generally a slightly meandering east / west alignment as shown in Plan 4. The pipeline is contained within an existing 20 metre wide easement.

The same requirements apply to this pipeline as for the above two cases as it will potentially impact on urban design options. Pipeline location and clearances must accordingly be given due weight when considering subdivision design and layout alternatives for the overall development.

Nominated areas of ‘Potential Environmental Interest’ have been identified in the Precinct. These areas will be subject to a future environmental assessment prior to development occurring in accordance with the LWPSP.

The Regional Bushfire Planning Assessment April 2012 for the Barwon South West Region generally identifies where future and existing land uses have an interface with a bushfire hazard. Under this Assessment, the Municipal Overview for the City of Greater Geelong identifies grasslands in the areas around the You Yangs Regional Park, Serendip Sanctuary and Anakie as known bushfire hazard.

The City’s Municipal Fire Management Planning Committee has reviewed the municipality and assessed the Lara Township as being a “high” fire risk. The threat of grassfire impacting on Lara would likely come from the north and north-west and on a day of very high or above fire danger rating a grassfire would be expected to run into the LWP.

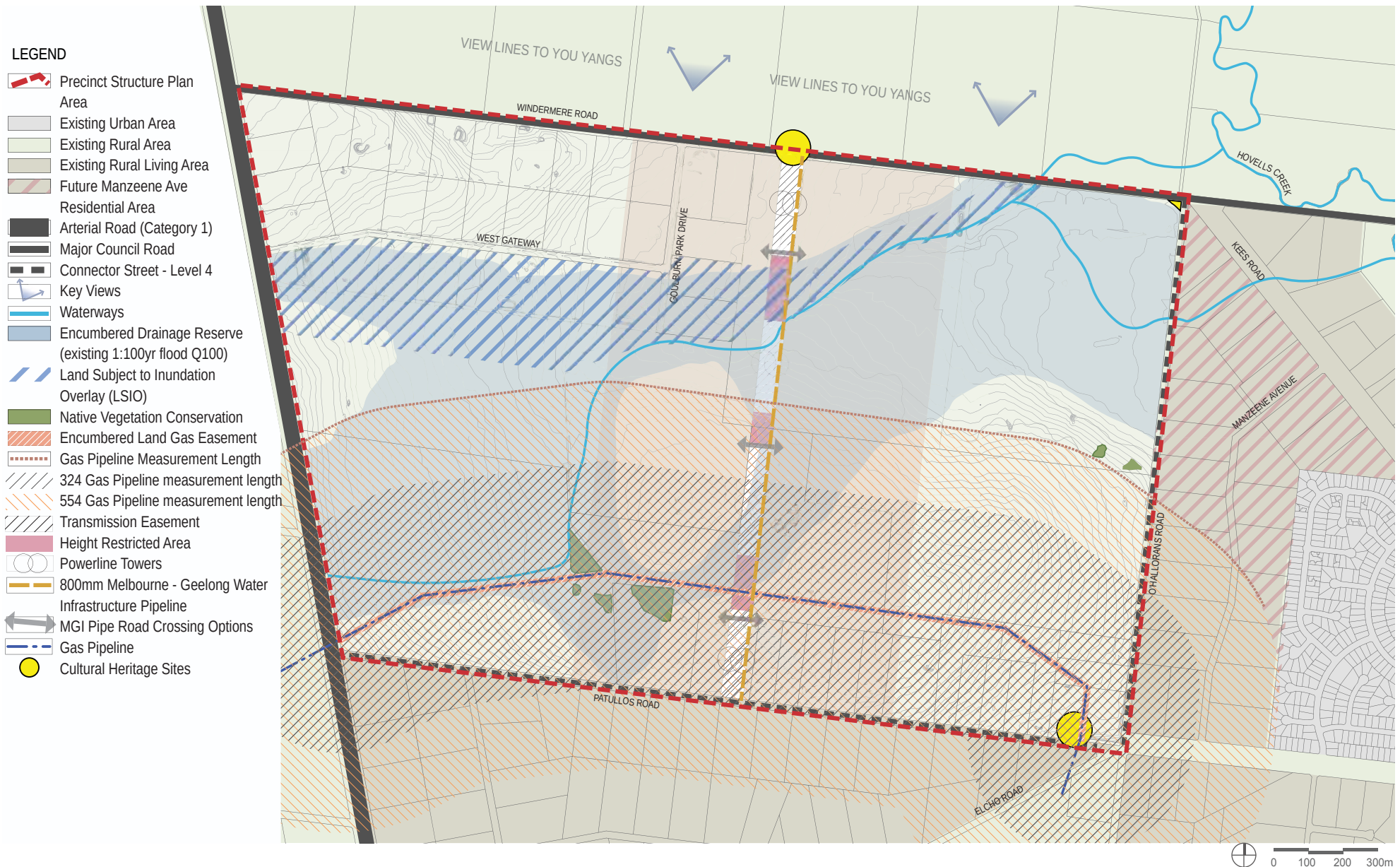
The LWPSP has been designed to mitigate bushfire risk by providing road and drainage buffers between grasslands and future residential areas. Future design of the LWP will also allow adequate access, management and control in emergencies.

Refer Plan 4: Precinct Features.

1.3 Monitoring and Review

The City of Greater Geelong (CoGG) will monitor the implementation of this LWPSP. Its effectiveness will be evaluated regularly, at least every four years. It is expected that this LWPSP will be revised and updated as required.

Plan 4: Precinct Features



2 Precinct Features

Plan 4 (Precinct Features) shows the key features of LWP as described in the sections following.

2.1 Heritage

There is one previously registered Aboriginal heritage site within the boundary of the LWP. The site comprises a single isolated artefact identified during monitoring of excavation of a gas pipeline trench. The existence of this site of relatively low significance is not envisaged to impact on future development.

The presence of other areas of cultural heritage sensitivity external to but within close proximity of the boundary of the LWP, particularly in the north (within Windermere Road and powerline easement intersection) and to the north-east of the LWP will trigger the need to prepare a Cultural Heritage Management Plan, prior to development of affected lands.

2.2 Biodiversity

Key biodiversity areas and values within the LWP include six small patches of native Low-rainfall Plains Grassland, one area of Plains Grassy Wetland and native grassland vegetation along some stretches of Bacchus Marsh Road and O'Hallorans Road totalling an area of 4.78 hectares.

It is important that wherever possible, biodiversity conservation is achieved and enhanced throughout the LWP. The majority of significant vegetation will be retained in the LWP, however some areas will be removed in accordance with the NVPP.

Much of the LWP has been cleared for agricultural purposes and, subject to the protection of biodiversity areas summarised above. A native vegetation precinct plan has been prepared as part of the PSP process and protect areas of high conservation significance.

Note the West Gateway (Property 1) and Patullos Road (Rural Living Zone) (Property 7) native vegetation assessment needs to be completed to accurately identify the existing native vegetation within these areas (refer to Plan 6).

The native vegetation assessment undertaken in January 2012 did identify some areas of native vegetation, however access was not given to all properties within these areas. Further assessments need to be undertaken at the development stage for these areas, this is why these areas have not been included in the Native Vegetation Precinct Plan (NVPP).

2.3 Topography and Landform

LWP is relatively flat with slight fall across the site towards the north-east corner. A land subject to inundation overlay affects part of the site, which indicated some constraints in terms of drainage management across the site.

Given the flat nature of the site, views exist to hills both to the north-east (You Yangs) and the west.

2.4 Catchments and Drainage

The primary catchment that drains through and comprises the majority of the LWP area includes a substantial area of rural land west of Bacchus Marsh Road that is dominated by a steep escarpment that parallels Bacchus Marsh Road. This catchment drains to the northeast corner of the LWP. The Patullos Road / O'Hallorans Road catchment is in the southeast corner of the LWP and drains easterly along Patullos Road. An un-named waterway is identified within the LWP and is to be retained in future development of the area. The LWP generally drains into Hovell Creek to the north east of the precinct, which goes on to flow into the Port Phillip (western shore) and Bellarine Peninsula Ramsar area.

2.5 APA Gas Easement and Pipeline

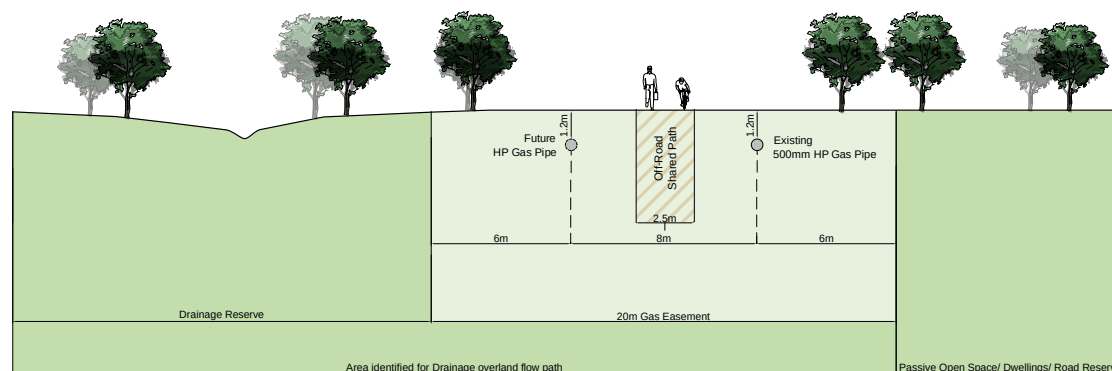
APA Gasnet Australia Pty Ltd ('APA') owns and operates an existing 20 metre wide easement which incorporates a 500 millimetre pipeline and traverses through the southern areas in the LWP. The pipeline is situated approximately 6 metres from the southern edge of the easement. A new 500 millimetre pipeline is proposed within the existing 20 metre easement and will be located approximately 6 metres from the northern edge of the easement.

The existing APA easement is to be retained through the LWPSP and incorporated (where possible) into the open space network, whilst retaining the integrity and purpose of the easement. Construction works within the easement are strictly limited to minor landscaping embellishments including planting, footpaths and street furniture.

Change in land use surrounding the easement, as established in the LWPSP, must consider the requirements of Australian Standard AS2885 in relation to risk of pipeline rupture. It is recognised that risk of pipeline rupture is increased with intensity of land uses. Through consultation with APA and Energy Safe Victoria ('ESV') risk of rupture to the existing and proposed pipelines has been assessed relative to potential impacts experienced for particular land uses.

The APA assessment identified a "Gas Pipeline Measurement Length" as being up to 554 metres from the pipeline where certain intense or sensitive land uses should be excluded and residential density should not exceed 30 lots per hectare. Any permit application for the use, development or subdivision of land within the "Gas Pipeline Measurement Length" as shown in the Lara West Precinct Structure Plan must be referred to the Minister administering the Pipelines Act 2005 for consideration and its advice will be taken into account in the decision.

Figure A: APA Gas Easement and Pipeline (indicative cross section)



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Plan 5: Future Urban Structure



3 Vision

Lara West will be developed into a sustainable community that will incorporate leading Environmental Sustainable Design practice into the urban form. Natural features will be protected and enhanced to create a distinct urban character. Lara West will become a highly sought-after location for living, working and recreation, forming an attractive addition to the Greater Geelong area.

Lara West will provide a range of housing types and densities in an urban structure based on walkable neighbourhoods with access to public transport along with a mixed use activity centre supported by schools and community facilities.

All residents will be within close proximity of public open space that will offer a network of passive and active open spaces catering for a range of recreational interests.

Lara West will form a seamless extension to the existing Lara Township and future residential development to occur on Manzeene Avenue. This Precinct is a key urban extension to Greater Geelong and will accommodate major population expansion for the next 20 plus years.

Lara West will be characterised by:

- an inter-linked public open space and path network, with public open space nodes that build on the existing landscape character while protecting the biodiversity in habitat conservation areas through native vegetation retention and protection;
- transport and movement systems planned from the outset to facilitate the ability to move about safely by walking and cycling to promote healthy activity, energy conservation and social interaction and, in a co-ordinated planning manner, to provide for essential vehicle traffic; and
- human-scale facilities including a neighbourhood activity centre and a range of other planned and co-located community facilities that are accessible safely by all means of transport and throughout Lara West and beyond

Refer to Plan 5: Future Urban Structure

3.1 Integrated Neighbourhood Design

Lara West will draw on and continue Geelong's excellent service provision, employment and recreational prospects whilst establishing its own identity and neighbourhood character that integrates with the surrounding communities.

The integrated neighbourhood design is summarised under the headings that follow.

3.1.1 Sense of Place and Community

A sense of place and community is fostered through people of all ages having opportunities to meet and interact in appropriate spaces. It requires community development over time but is facilitated through the careful planning of active and passive open space, community facilities and connectivity opportunities.

The vision for Lara West is to create a sustainable community with a diversity of housing choice that is supported by community and recreational facilities, open spaces, strong public transportation links, and employment opportunities that incorporate the surrounding rural ambience.

Public art within the LWP will provide opportunities for local communities (and broader audiences) to relate in new ways to the natural built environment. Art is an important element in the urban fabric, providing interest and opportunity for a deeper connection with place, environment, story telling, wayfinding and community identity.

3.1.2 Housing Choice, Diversity and Affordability

The LWPSP encourages a variety of lot sizes, density and housing types to be developed to cater for different levels of affordability and lifestyle choices. The variety in housing choice will allow for the creation of a community that attracts a diverse mix of people.

3.1.3 Accessible and Vibrant Activity Centres

The LWPSP provides for a network of accessible activity centres that will offer a mix of retail, non-retail, community services and employment opportunities to the Lara West community. The activity centres will be accessed via safe cycling, pedestrian, vehicle and public transport networks and will interlink throughout the PSP area and beyond.

The neighbourhood activity centre (NAC) is centrally located fronting the main east – west arterial road within the LWP area. The activity centre will be supported by other facilities such as District Open Space, Neighbourhood Parks, a Community Centre and educational facilities.

The NAC shall create a range of public art opportunities to enhance sense of place, interpret heritage and landscape and promote the identity and character of the LWP.

The local activity centre (LAC) will be much smaller than the neighbourhood activity centre and will be located on the eastern side of the LWP area with frontage to O'Hallorans Road to provide additional local convenience to the residents of the broader area.

3.1.4 Local Employment and Business Activity

The LWPSP area contains a proposed employment precinct with frontage to Bacchus Marsh Road and Patullos Road. The development of an employment precinct and non-retail commercial area will provide important employment and business opportunities for the Lara community.

A mix of commercial uses such as office, showrooms, light manufacturing and service industry located at the site will

benefit from the accessibility and exposure to potential customers provided by excellent north-south and east-west access.

In general terms, an area of approximately 3.5 hectares is suitable for the 'Lara West Employment Precinct', which would accommodate approximately 15,000 square metres of floorspace, depending on the eventual mix of uses in the precinct. It is not anticipated that the employment precinct will undermine the role and function of the Lara West NAC or the Lara town centre.

3.1.5 Better Transport Options

The Lara West land use structure has been planned with the underlying goal that new urban development should be more sustainable ecologically, socially and economically. An essential ingredient of this is reduced distances for required travel and increased efficiency and overall community health in travel movements. The LWPSP is designed to maximise these opportunities through the provision of:

- a planned hierarchy of walking and cycling paths that provide safe, attractive and convenient access from residential sub-precincts to other sub-precincts and to all activity, key active and passive open space areas and links into neighbouring precincts and their attractions;
- ready train access to Melbourne and Geelong available from Lara station located approximately 3.3 kilometres east of the subject site;
- ready access to the Geelong bus network route 12 currently available via Patullos Road to Geelong. The current bus service stop is located approximately 580 metres east of the Patullos Road / Elcho Road intersection. The road design for the LWP allows for this service to be extended to efficiently service the Precinct;
- an internal road design hierarchy that provides for a local bus service within 400 metres of the majority of households and with links to key activity centres and other nodes;

- a permeable and efficient local street network connecting to higher order roads at appropriate points with safe crossing control, including proposed traffic signals (for safe pedestrian and cyclist crossings and traffic control and safety) at key entry points within Lara West adjacent to the NAC;
- an efficient higher order road network which aims to improve convenience and travel times;
- a new east-west connector road to provide central access to the PSP area. This road is to be of a “Boulevard” standard;
- well-designed siting and spacing of roads to cater for necessary vehicle trips including service requirements;
- activity centres sited and designed to encourage and make them attractive for walking and cycling access and to provide a scale that is 'people friendly' rather than car-dominated; and
- convenient access to local employment opportunities within LWP. The LWP is also within close proximity to the existing employment precinct in Geelong CBD, the Geelong Ring Road Employment Precinct and to Avalon airfield located approximately 5 kilometres east of the subject land.

3.1.6 Climate Change and Environmental Sustainability

The aim for the LWP is to deliver a sustainable community that is designed to:

- maximise passive solar design through lot orientation and building design;
- reduce car dependence through a convenient network of

walking / cycling links to local employment opportunities and community infrastructure;

- retain native vegetation; and
- manage on site stormwater collection and treatment.

The early delivery of public transport will contribute significantly to the overall sustainability of the LWP.

By virtue of its inland location, the LWP is unlikely to be subject to the expected future increase in storm surges and sea levels along the Victorian coastline generated by climate change.

The Surface Water Management Strategy (refer Background Report) has been undertaken which seeks to maximise environmental sustainability through integrated systems analysis techniques to develop a surface water management strategy tailored specifically to the unique topography and stream corridor within LWP. The strategy has considered stormwater runoff volumes, flood mitigation, if any potential impacts from sea level rise due to climate change, and stormwater quality objectives for public safety and environmental protection of Lara West and the downstream Ramsar wetland.

The Surface Water Management Strategy aims to meet the objectives of the stormwater management policy for the CoGG (the relevant drainage authority).

Stormwater re-use through public areas will be available throughout the precinct where possible.

Low water use gardens will be encouraged. Water sensitive urban design principles will be incorporated throughout LWP through adopting the following measures:

- retardation basins;
- utilisation of storm water to conserve potable water;

- use of vegetation for filtering purposes;
- water efficient landscaping;
- gross pollutant traps ;
- environmental buffers;
- swales;
- wetlands;
- porous pavements, where possible; and
- localised water harvesting.

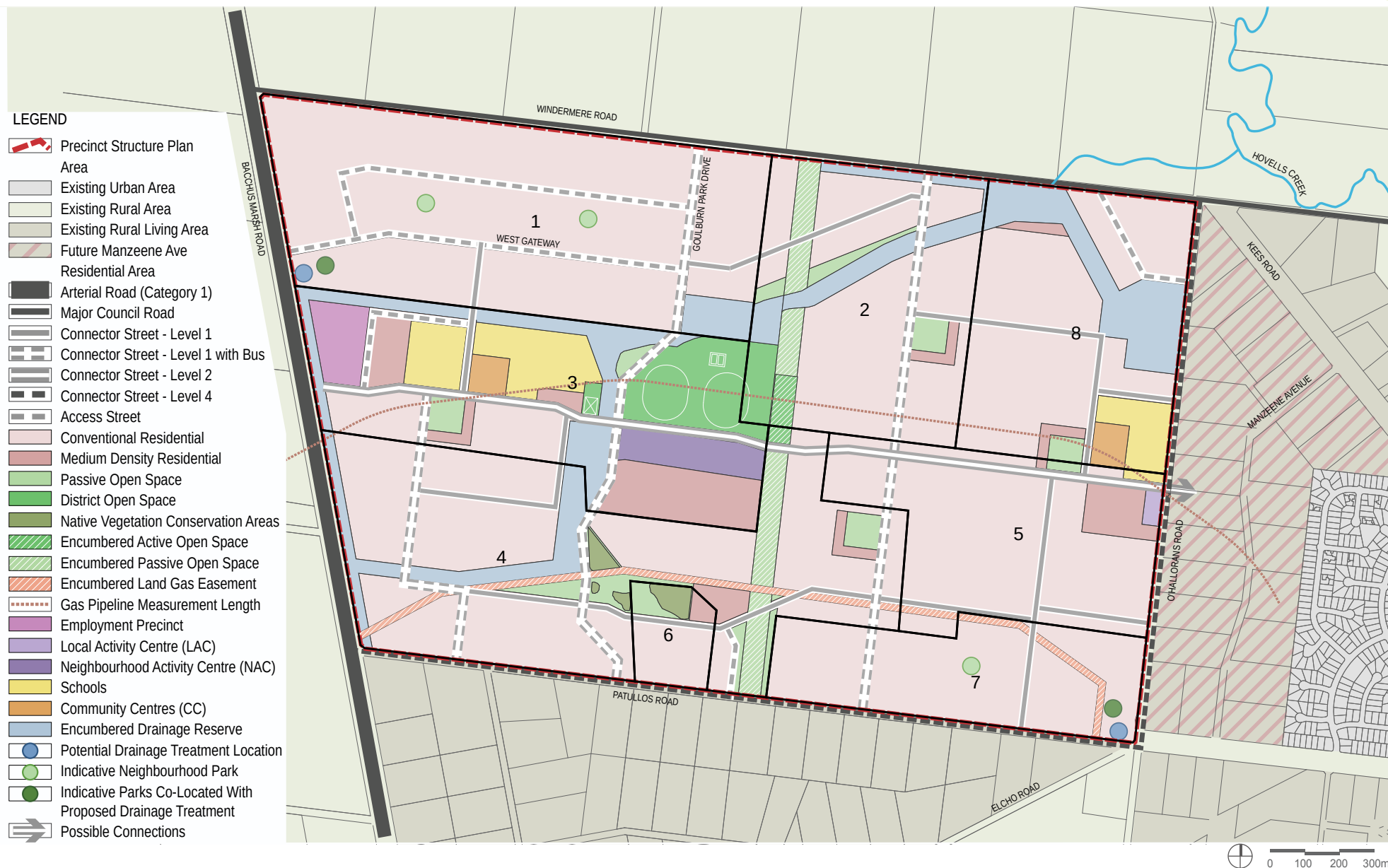
3.1.7 Accessible, integrated and adaptable Community Facilities

There are a variety of community facilities proposed to service the needs of the Lara West community. A comprehensive network of active and passive public open spaces and recreation facilities are co-located for accessibility and to create a focal point for community activity.

Schools and Community Centres are also co-located with Open Space to ensure there are integrated nodes of facilities with the LWP.

The open space network comprises a number of neighbourhood parks and a vast district open space that will provide for a number of diverse uses, interests and people. Linking the public open space and recreation facilities will be a network of greenways, leisure trails and more direct walking / cycling paths, contributing to the formation of a healthy community.

Plan 6: Land Use Budget



3.2 Land Use Budget

LWP covers a gross development area (GDA) (all inclusive land within its boundaries irrespective of its use or condition) of 389.4 hectares and of this gross area, 266.73 hectares are the net developable area (NDA - the proportion of the gross land that is able to be developed). That is 69 per cent of LWP is available for development.

The NDA excludes a range of proposed developments and land uses that do not include dwellings (such as government schools, public open space, arterial roads and community facilities).

The summary land use budget (refer Table 1: Summary Land Use Budget) and summary yield analysis (refer Table 2: Summary Residential Lot Yield Analysis) provide target land budget and target lot yield details on the future urban structure as a whole.

Lot Yield has been derived using conventional calculation (ie. residential areas at 15 lots / ha with medium density at 20 lots / ha) for the purpose of initial lot yield projections. The expected overall density required is at least 15 dwellings / ha for the overall precinct. Therefore if higher density is achieved in medium density areas, lower density is expected in conventional residential areas.

3.3 Demographic Projections

- Population projections have anticipated ongoing growth within the Geelong Statistical District with the population expected to increase from 180,802 in 2011 to 231,087 in 2026, an increase of 50,285 (at an average rate of 1.5% to 1.75% p.a.) according to Victoria in Future ("VIF" (2012) DPCD).

Since the VIF report the population growth within the Geelong Statistical District has been higher than anticipated, with Australian Bureau of Statistics ("ABS") estimating at 30

June 2012 the population is 1,136 greater than originally projected;

- The future dwelling requirements within the Geelong Statistical District based on ABS growth projections equates to have average requirement of 1,852 dwelling per annum between 2011 and 2026 assuming an average household size calculated in the VIF 2012 projections;
- Lara is positioned to be a key source of building activity within the Geelong Statistical District due to its geographic proximity to Geelong and transportation linkages such as the Princes Highway, Geelong Ring Road and access to frequent rail services. In the year 2009/2010 and 2010/11 Lara represented 19.2 per cent and 20.8 per cent respectively of the Geelong Statistical District's total building approvals. Assuming Lara will continue to represent 15% of Geelong's future dwelling requirements between 2011 and 2026, this would equate to approximately 250 dwelling per annum; and
- Lara West PSP area is anticipated to accommodate between 3,500 and 4,000 lots for residential development. At an average of 15 dwellings per net developable hectare and 2.9 persons per household, the LWP will house in the order of 10,150 to 11,600 people assuming one household per lot.

Table 1: Summary Land Use Budget

Property Number	Total Area (Hectares)	TRANSPORT	ENCUMBERED LAND					COMMUNITY		UNENCUMBERED LAND OPEN SPACE		Total Net Developable Area	OTHER USES		Total Net Residential Area	CONVENTIONAL DENSITY (15 Dwellings/NRHa)		MEDIUM DENSITY (20 Dwellings/NRHa)		TOTAL COMBINED		
		Road Reserve	Drainage Reserve	Powerline Easement	Gas Easement	Environmental Conservation Area	Road Widening	Community Facilities	Schools	Active Open Space	Passive Open Space (Local Parks)		Activity Centre (Retail, Office, Mixed Use)	Industrial/Commercial		NRHa (Conventional)	Indicative Dwellings	NRHa (Medium Density)	Indicative Dwellings	NRHa	Indicative Dwellings/NRHa	Indicative Dwellings
		Not Included in NDA	Not Included on OS%	Not Included on OS%	Not Included on OS%	Not Included on OS%	Not Included on OS%	Not Included in NDA	Not Included in NDA	Included in NDA	Included in NDA											
PROPERTY 1	76.22	3.42	2.83	0	0	16.76	0	0	0	0	4.84	48.37	0.00	0.00	48.37	48.37	726	0	0	48.37	15	726
PROPERTY 2	48.46	0.00	5.85	4.69	0.00	0.00	0.00	0.00	0.00	1.96	2.41	33.56	0.00	0.00	33.56	32.87	493	0.69	14	33.56	15	507
PROPERTY 3	60.00	0.00	9.02	0.00	0.00	0.00	0.00	1.20	8.50	8.60	1.45	31.23	4.04	3.30	23.89	12.21	183	11.68	234	23.89	17	417
PROPERTY 4	79.59	0.00	6.51	4.87	3.22	0.80	0.19	0.00	0.00	0.00	3.97	60.02	0.00	0.00	60.02	58.26	874	1.77	35	60.02	15	909
PROPERTY 5	40.48	0.00	0.00	0.00	0.34	0.00	0.07	0.00	0.33	0.00	0.28	39.46	0.00	0.50	38.96	36.21	543	2.75	55	38.96	15	598
PROPERTY 6	6.54	0.00	0.00	0.00	0.00	0.84	0.04	0.00	0.00	0.00	0.80	4.86	0.00	0.00	4.86	4.35	65	0.50	10	4.86	16	75
PROPERTY 7	29.46	0.00	0.75	0.00	1.26	10.32	0.26	0.00	0.00	0.00	1.53	15.33	0.00	0.00	15.33	15.33	230	0.00	0	15.33	15	230
PROPERTY 8	48.64	0.00	9.49	0.00	0.00	0.00	0.12	1.25	3.17	0.00	0.72	33.90	0.00	0.00	33.90	32.79	492	1.10	22	33.90	15	514
TOTAL	389.40	3.42	34.45	9.56	4.82	28.72	0.69	2.45	12.00	10.56	16.00	266.73	4.04	3.80	258.89	240.39	3606	18.50	370	258.89	15	3976

Note: Property 1 & 7 include environmental conservation areas equalling 27.08 Ha. This includes low rainfall plains grassland, inaccessible & natural temperate grasslands identified in Figure 3 of the Flora and Fauna NGA Report *BL&A April 2012)

Note: Property 1 & 7 require further detail to identify 9% (of the NDA) for medium density housing at master planning stage

4 Elements

There are eight main elements that summarise the key ingredients of the LWPSP:

- Image and Character;
- Subdivision and Housing;
- Community Facilities;
- Public Open Space, Natural Systems and Biodiversity;
- Activity Centres and Mixed Use Areas;
- Transport and Movement;
- Utilities and Energy; and
- Integrated Water Management.

These elements are detailed in this section with objectives, implementation requirements and any specific planning and design guidelines, set out for each, where:

- objectives describe the desired outcome to be achieved in the completed development;
- plans / figures are a spatial expression of objectives;
- implementation summaries describe how the objectives are met;
- planning and design guidelines including figures and tables, depending on the specific guideline, are indicated as must or should be met; and
- planning and design should be consistent with the document: Sustainable Communities, Infrastructure Development Guidelines, City of Greater Geelong, October 2010.

If the responsible authority is satisfied that an application for an alternative to a planning and design guideline that should be met, meets the objective, the alternative may be approved to the satisfaction of the responsible authority.

Plan 7: Image and Character



4.1 Image and Character

4.1.1 Objectives: Image and Character

To ensure future development resembles the proposed image and character, the following objectives should inform growth:

- Encourage the development of vibrant neighbourhoods and attractive streetscapes, that are flexible and adaptable to the changing needs of the community;
- Protect and promote the value of natural features by incorporating them into open space and linear links;
- To enhance and utilise the drainage corridor as a significant landscape feature and path network corridor. Adjacent interfaces should front this space, maximising visibility and accessibility for residents;
- To create human-scale public spaces, which are logically connected by linear links. These links should provide safe passage for pedestrians and cyclists, facilitating connections between activity centres, open space and community facilities;
- To promote the use of indigenous landscape and street tree planting throughout the development. Inclusion of exotic species may be used to compliment native species or enhance passive solar access where appropriate;
- To ensure integration between road and path networks;
- To avoid big box style activity centres. Centres should be located fronting main streets, ensuring a smooth integration into interfacing residential and rural areas; and
- Lara West will form a seamless extension to the existing Lara township and future residential development to occur in Manzeene Avenue; and
- Built form to address interface with central transmission easement.

4.1.2 Implementation: Image and Character

The objectives for enhancing or developing the image and character are met by implementation of all of the following.

- Plan 7: Image and Character;
- Figure A: Drainage Reserve Interface Cross Sections;
- Figures B – C: Road Cross Sections; and
- Planning and design guidelines under Section 4.1.3.

4.1.3 Planning and Design Guidelines: Image and Character

The following planning and design guidelines must be met.

- New development interfacing the proposed drainage reserve must be designed to address this open space while promoting public use and passive surveillance;
- New development must implement (construction and landscaping) the footpaths and shared paths as detailed in Section 4.6;
- Street trees along declared arterial roads must be selected and planted in accordance with the clear zone guidelines to the satisfaction of the relevant road authority;
- The local and neighbourhood activity centres must be designed on 'main street' principles of street front activity rather than 'big box' shops or internal malls surrounded by highly visible car parking areas;
- Development along arterial roads must consider the future amenity (visual and noise) for future dwellings;
- Landscaped service roads or internal access roads must be provided to dwellings fronting arterial roads or duplicated link roads;
- No lots should directly abut the creek/drainage reserve and the native vegetation conservation area. These areas must be separated by an internal road or public open space buffer;
- Active frontage is to be provided to public open space on 3 sides;
- Public open spaces including linear parks must provide for active and passive recreation and accommodate a range of facilities including playgrounds, shelters and seating;
- Street tree planting is to be in accordance with Appendix 4 - Indicative Street Tree Planting;
- The drainage corridor must include a high quality open space link which connects activity centres, open spaces and community facilities through a safe shared path trail; and

- Landscape design should incorporate, where appropriate, linear corridors with shared paths;
- Landscape plans need to be submitted as part of future planning permit applications;
- All future subdivision should facilitate a built form outcome which provides an appropriate interface with the transmission easement, open space, reserves and commercial development;
- Incorporate Water Sensitive Urban Design such as retarding basins and wetlands to manage stormwater flows and create habitat for native plants and animals along the creeks and drainage lines.

The following planning and design guidelines should be met.

- New development should maximise the potential for safe road crossings by pedestrians and cyclists on key shared use paths;
- New development should not include actions or results that harm or lessen the values within environmentally significant areas;
- Define key entries to the Precinct and important character areas through the use of landscape treatments or built form;
- Provide opportunities for landmark buildings, public spaces and public art within the activity centres;
- Design and arrange lots to maximise solar efficiency through orientation;
- Landscape plans to consider safer design guidelines, loading bay design requirements, signage, screen planting and equipment, bicycle parking facilities;
- Public art is encouraged and where provided should meet the requirements of the responsible authority;

- Planning for public art needs to identify opportunities of different types for artist to respond to the design of new development, its context and the makeup of the community;
- Street trees should:
 - be selected to suit the scale of the street and pedestrian environments, ensuring the tree fits its planting area and provides an appropriate future form and character;
 - be selected wherever possible to encourage pedestrian movement and promote low speed traffic environments;
 - be selected on the basis that future growth of the root ball will fit in allocated planting area, and that the species chosen will thrive in local growing conditions;
 - be selected and placed to identify different sub-precincts (such as marking arrival at the neighbourhood activity centre or a key public open space area);
 - be selected to enhance and be compatible with existing trees at key interface locations (such as along the drainage reserve); and
 - be guided by Plan 12: Landscape Master Plan;
- Landscape design within activity centres, neighbourhood parks and streets should:
 - Contribute to the creation of visually interesting public spaces that create a sense of place and identity;
 - Consider the impacts of landscaping on the microclimate, including the need for wind protection and summer shade;
 - Provide for the retention of existing vegetation that

contributes to the character of the area, where possible;
and

- Ensure landscaping of public spaces create safe public spaces that have ample passive surveillance;
- Landscaping along creek lines and within encumbered land should:
 - Be planted with species indigenous to Lara where possible, enhance and improve biodiversity along creek corridors and provide potential habitat;
 - Create linear corridors with shared paths; and
 - Allow opportunities for passive recreation;
- Vegetation selection should be suitable for Lara West's climate, minimise the need for ongoing irrigation and have regard to ease of maintenance; and
- The rural urban interface should minimise adverse impacts at the precinct boundary between urban land uses and rural activity by:
 - achieving a well designed transition, including physical separation of the urban land use from the rural boundary by locating a combination of roads / access lanes, vegetated linear reserves and pathways, drainage reserves, basins and systems or infrastructure and easements; and
 - ensuring the adjacent street network is arranged to provide good visual integration and physical access for emergency services.

Plan 8: Subdivision and Housing



4.2 Subdivision and Housing

4.2.1 Objectives: Subdivision and Housing

The objectives for subdivision and housing are:

- to ensure staging for subdivision generally proceeds from east to west, beginning at O'Hallorans Rd and aligned with efficient service provisions;
- to create walkable residential neighbourhoods that have accessibility to local services, community facilities, a range of open spaces and offer a high standard of living;
- to provide a diversity of lots sizes that can accommodate different housing types;
- to achieve an overall density of at least 15 dwellings per net developable hectare (NDH);
- medium density areas to achieve an overall density of at least 20 dwellings per net developable hectare (NDH);
- to provide lot sizes and housing types which are responsive to the character of the natural and built environment in the area and respond to principles of environmental sustainability;
- to ensure subdivision and lot layouts maximise solar efficiency through the orientation of lots;
- to encourage large integrated housing sites (including for example medium density housing, retirement villages or other specialised housing forms) within or at the interface of activity centres and overlooking open space;
- to avoid gated communities in order to maximise residential permeability and neighbourhood integration; and
- to facilitate the re-subdivision and new development of large lots in accordance with the PSP. Development on the edge of the PSP with an immediate non-urban interface must be responsive and respective to its context.

4.2.2 Implementation: Subdivision and Housing

The objectives for housing are met by the implementation of all of the following.

- Plan 5: Lara West Future Urban Structure;
- Table 2: Summary Residential Lot Yield Analysis;
- Plan 8: Subdivision and Housing;
- Plan 16: Walking and Trails; and
- Planning and design guidelines as set out in section 4.2.3.

4.2.3 Planning and Design Guidelines: Subdivision and Housing

The following planning and design guidelines must be met:

- Subdivision must provide for higher density housing adjacent to and near public open space, planned public transport routes and retail, community and commercial facilities;
- Eliminate the need for a planning permit for small lot housing (less than 300 square metres) in appropriate locations where the requirements of the Small Lot Housing Code (Appendix 2) are met;
- Development of conventional density housing should:
 - achieve an overall (site) average of at least 15 dwellings per Net Residential Hectare (NHRa);
 - provide a mix of lot sizes and dwelling types throughout the Precinct; and
 - ensure dwellings address streets and public spaces and maximise passive surveillance;
- Development of medium density housing should:
 - achieve an overall average of at least 20 dwellings per Net Residential Hectare (NHRa);
 - be overlooking, abutting or be within close proximity to activity centres, community hubs, public transport stops or open space; and
 - be provided in a variety of forms including terrace/ townhouse development, integrated development sites and/or retirement villages;
- Housing abutting open spaces and linear links must:
 - enhance passive surveillance of the open space through design features such as having dual frontage to the road and open space; and
 - have low or semi-transparent fencing along boundaries to public space;

The following planning and design guidelines should be met.

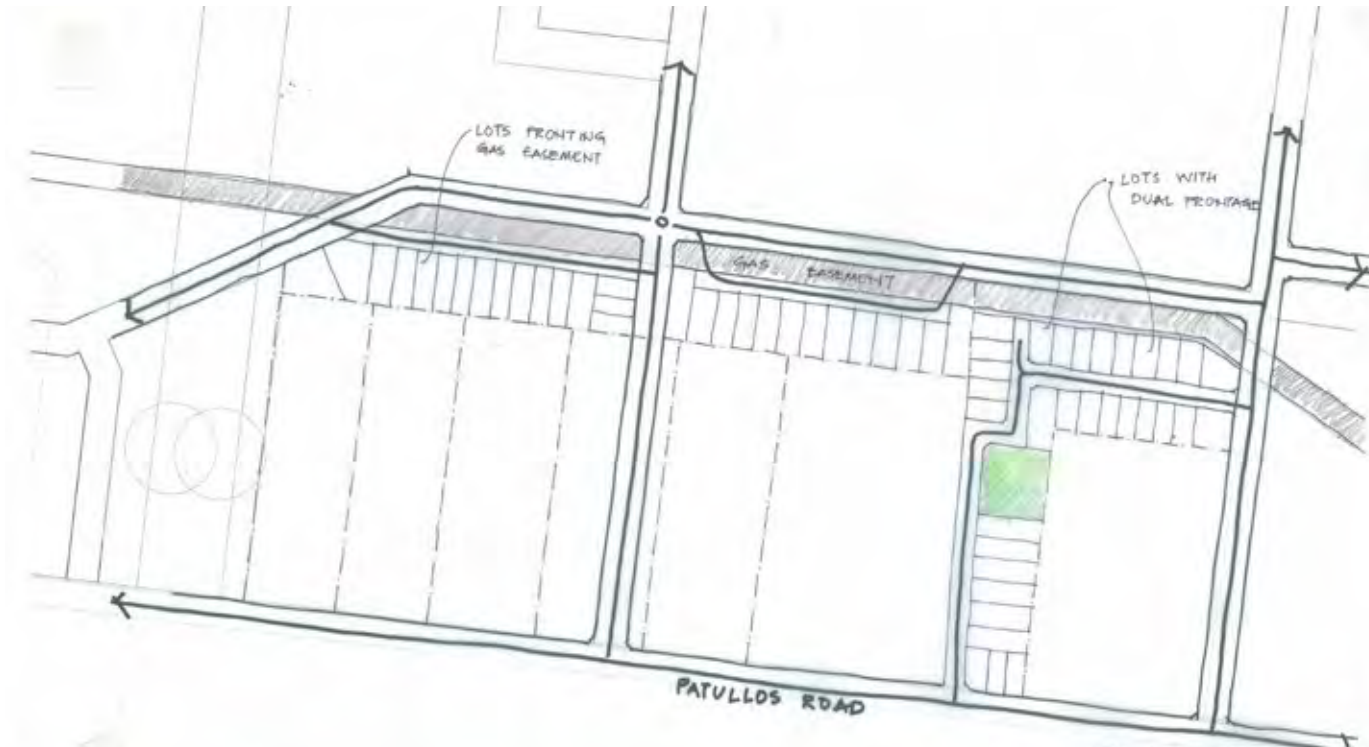
- approved building envelopes are in accordance with the provisions of the Small Lot Housing Code (refer to Appendix 2);
- medium density developments or lots less than 250 square meters should avoid locating garages fronting parks and linear links;
- subdivision design is to accord with Sustainable Communities Infrastructure Guidelines, October 2010;
- housing abutting open spaces and linear links should:
 - integrate open spaces into the design of subdivisions;
 - have a strong built form along the park edges to provide a backdrop and interface to the open spaces;
 - provide a secondary entry to dwellings from the park to give them a sense of address;
 - provide a clear transition between public and private spaces; and
 - provide opportunities for passive surveillance and pedestrian activities along laneways and all open space areas;
- higher density housing (in excess of 25 dwellings per hectare) may be acceptable in close proximity to the Neighbourhood Activity Centre and Local Activity Centres;
- Subdivision of existing rural-residential areas to conventional density must:
 - create an integrated road network within the existing rural-residential area and provide opportunities for road connections to abutting landholdings where possible;
 - avoid the creation of cul-de-sacs unless there are well-designed pedestrian linkages; and
 - provide through-connections (road, walking and cycling) between the existing rural-residential area and surrounding parcels to integrate the rural-residential area with the broader community;

- The subdivision of existing rural residential areas to conventional density should:
 - consider the character of existing residences to be retained within future developments; and
 - facilitate re-landscaping to more natural species through street tree selection and setbacks.

Table 2: Summary Residential Lot Yield Analysis

Property Number	Total Area (Hectares)	Total net Developable Area (Hectares)	OTHER LAND USES		Total Net Residential Area (Ha)	CONVENTIONAL DENSITY (15 Dwellings/NRHa)		MEDIUM DENSITY (20 Dwellings/NRHa)		TOTAL COMBINED		
			Activity Centre (retail/office/mixed use)	Industrial/ Commercial		NRHa	Indicative Dwellings	NRHa	Indicative Dwellings	NRHa	Indicative Dwellings/NRHa	Indicative Dwellings
Property 1	76.22	48.37	0.00	0.00	48.37	48.37	726	0.00	0.00	48.37	15	726
Property 2	48.46	33.56	0.00	0.00	33.56	32.87	493	0.69	14.00	33.56	15	507
Property 3	60.00	31.23	4.04	3.30	23.89	12.21	183	11.68	234	23.89	17	417
Property 4	79.59	60.02	0.00	0.00	60.02	58.26	874	1.77	35	60.02	15	909
Property 5	40.48	39.46	0.50	0.50	38.96	36.21	543	2.75	55	38.96	15	598
Property 6	6.54	4.86	0.00	0.00	4.86	4.35	65	0.50	10	4.86	16	75
Property 7	29.46	15.33	0.00	0.00	15.33	15.33	230	0.00	0	15.33	15	230
Property 8	48.64	33.90	0.00	0.00	37.06	32.79	492	1.10	22	33.90	15	514
Total	389.40	266.73	4.04	3.80	258.89	240.39	3606	18.50	370	258.89	15	3976

Figure B: APA Gas Easement and Pipeline (indicative cross section)



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Plan 9: Community Facilities



4.3 Community Facilities

4.3.1 Objectives: Community Facilities

The objectives for community facilities are:

- To provide community hubs throughout the Precinct at required locations as the focal point for community activity and interaction;
- To provide community facilities and services to meet the varying needs of local residents;
- To provide community facilities in line with future population growth;
- To plan for community facilities to have safe and convenient access by public transport, walking and cycling;
- To allow for the timely delivery of community facilities such as schools, health and children's services and formal recreation facilities as population thresholds are reached; and
- Design is to be provided and delivered through consultation with community user groups.

4.3.2 Implementation: Community Facilities

The objectives for community facilities are met by the implementation of all of the following.

- Plan 5: Lara West Future Urban Structure;
- Plan 9: Community Facilities;
- Table 3: Community Facilities;
- Plan 10: Open Space;
- Plan 16: Walking and Trails;
- Plan 17: Public Transport; and
- Planning and design guidelines as set out in section 4.3.3.

4.3.3 Planning and Design Guidelines: Community Facilities

The following planning and design guidelines should be met:

- Community facilities should be co-located and where possible integrated with other CoGG and government facilities, appropriate commercial facilities and / or proposed public open spaces;
- Education and community services (public and private) and other activities (such as childcare centres and nursing homes) should be:
 - within or adjoining community hubs;
 - within or on the edge of activity centres; or
 - on either connector streets or arterial roads where access can be provided safely.
- The NAC community hub will be developed to the satisfaction of the responsible authority to meet the objectives for community facilities;
- The LAC community hub will be developed to the satisfaction of the responsible authority to meet the objectives; and
- School sites should be serviced by three street frontages.

Funding for community facilities will be from a range of sources including the Lara West Precinct Development Contributions Plan (LWDCP).

4.3.4 Community Facilities Delivery Statement

Appendix 1 contains a CoGG community facilities delivery statement which identifies the intentions it has for such delivery and provides insights on how all facility and service providers might be expected to assist.

Table 3: Community Facilities

Facilities and Services	Size	Land Area Location	Lead Agency
Develop a multipurpose community centre/hub which incorporates a 3 room preschool, 2 M&CH rooms, 2 consulting rooms, meeting rooms, general activity rooms and a 120 place child care centre (childcare centre subject to feasibility assessment)	1.25ha	Near proposed state primary school	CoGG
Develop a multipurpose community centre/hub which incorporates a 2 room kindergarden, youth activity space, consulting rooms, general activity rooms	1.2ha	Near western activity centre	CoGG
Make provision for a civic/cultural space in the western community centre (note: if the venue cannot be located in the redeveloped Town Centre in existing Lara)	0.2ha	In multipurpose community centre/hub near western activity centre	CoGG
Develop an active recreation reserve which includes 2 football/cricket ovals, 2 netball courts, pavilion, district playground and passive area	10.5ha	Near proposed secondary school	CoGG
Develop a 3 court indoor stadium in the active reserve / district open space	1.0ha	In or adjacent to secondary college (note: the stadium is shown in the active reserve in the LwP)	CoGG
Make use of secondary school and primary school playing fields for community sports. Use them for lower age junior sport and lower profile sports such as baseball, softball, lacrosse and rugby		Secondary college and primary school	DEECD
Make provision for a health precinct in the activity centre	-	Activity centre	CoGG
Make provision for Government Primary School	3.5ha	In eastern portion of Future Growth Zone	DEECD
Make provision for Y10-12 campus of Lara Secondary College	5.4ha	Near activity centre	DEECD
Develop a theatre at the secondary college		Secondary college	DEECD
Make provision for a private primary school	3ha	Near activity	Private school provider
Develop a linear park along the Hovell Creek Tributary and Drains. Provide walking paths and playgrounds in the park	8ha (could include drainage reserve)	Hovell Creek tributary and drains	Developer
Develop neighbourhood parks at appropriate locations. Ensure the 500m locational requirement is met	5ha (in addition to linear park and active recreation reserve already accounted for)	Hovell Creek tributary and drains, active reserve and other locations in east section of Lara West Growth Area and Elcho land	Developer

4.4 Public Open Space, Natural Systems and Biodiversity

4.4.1 Objectives: Public Open Space, Natural Systems and Biodiversity

- The objectives for public open space and natural systems are:
 - to provide inter-connected public open spaces, residential areas, activity centres and the public transport network through safe and attractive on and off-road pavement walking / cycling links;
 - to ensure the appropriate landscape treatment of public open spaces in keeping with their intended character and functions and the objective of life-cycle sustainability (care, growth and maintenance);
 - to promote the early provision of public open space in its intended functional form;
 - develop street and landscape designs that provide amenity for the residents by the creation of air quality improvement, microclimate modification and noise attenuation;
 - ensure the LWP is sympathetic to the continuing conservation management of areas of significant native vegetation and fauna habitat in accordance with the Lara West Native Vegetation Precinct Plan;
 - maximise retention of biodiversity values within the LWP and to facilitate their function as corridors linking habitats across the area and beyond;
 - enhance the biodiversity of the area, including the designation of areas in the LWP in which to concentrate on revegetation activities to provide habitat;

- ensure open space and reserve are managed and landscaped to mitigate bushfire risk;
- fit for purpose water, rather than potable water, is to be considered for public open space;
- minimise further extinctions of indigenous flora, fauna or vegetation communities within the site boundaries; and
- ensure Lara West is developed in ways sympathetic to the continuing conservation management of areas of significant native vegetation and fauna habitat in accordance with the Lara West Native Vegetation Precinct Plan.

4.4.2 Implementation: Public Open Space, Natural Systems and Biodiversity

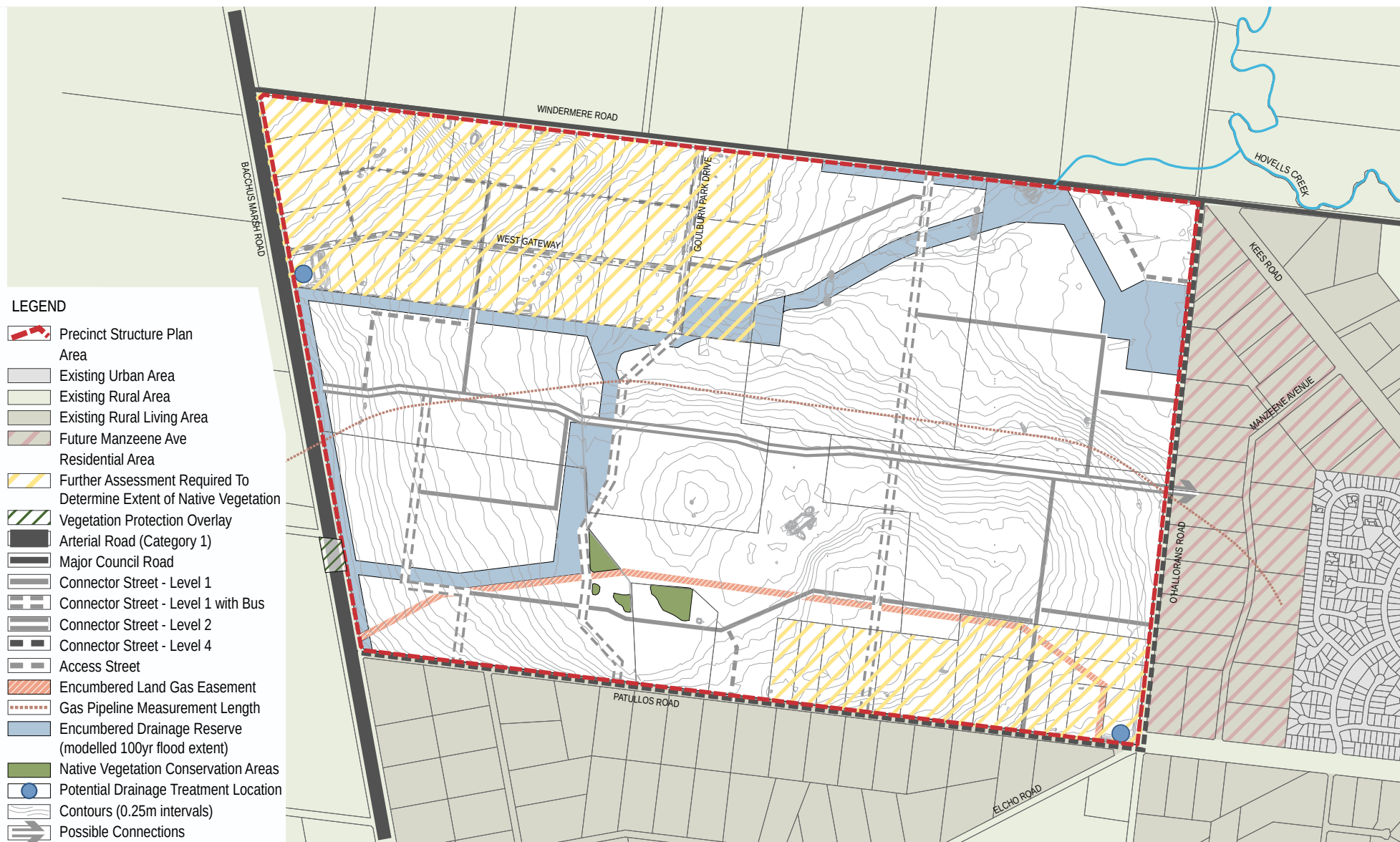
The objectives for public open space, natural systems and biodiversity are met by the implementation of all of the following:

- Plan 5: Lara West Future Urban Structure;
- Plan 10: Open Space;
- Plan 11: Biodiversity;
- Plan 12: Landscape Master Plan;
- Planning and design guidelines as set out in section 4.4.3;
- Lara West Development Contributions Plan;
- Lara West Native Vegetation Precinct Plan; and
- Sustainable Communities Infrastructure Development Guidelines, October 2010.

Plan 10: Open Space



Plan 11: Biodiversity



4.4.3 Planning and Design Guidelines: Public Open Space, Natural Systems and Biodiversity

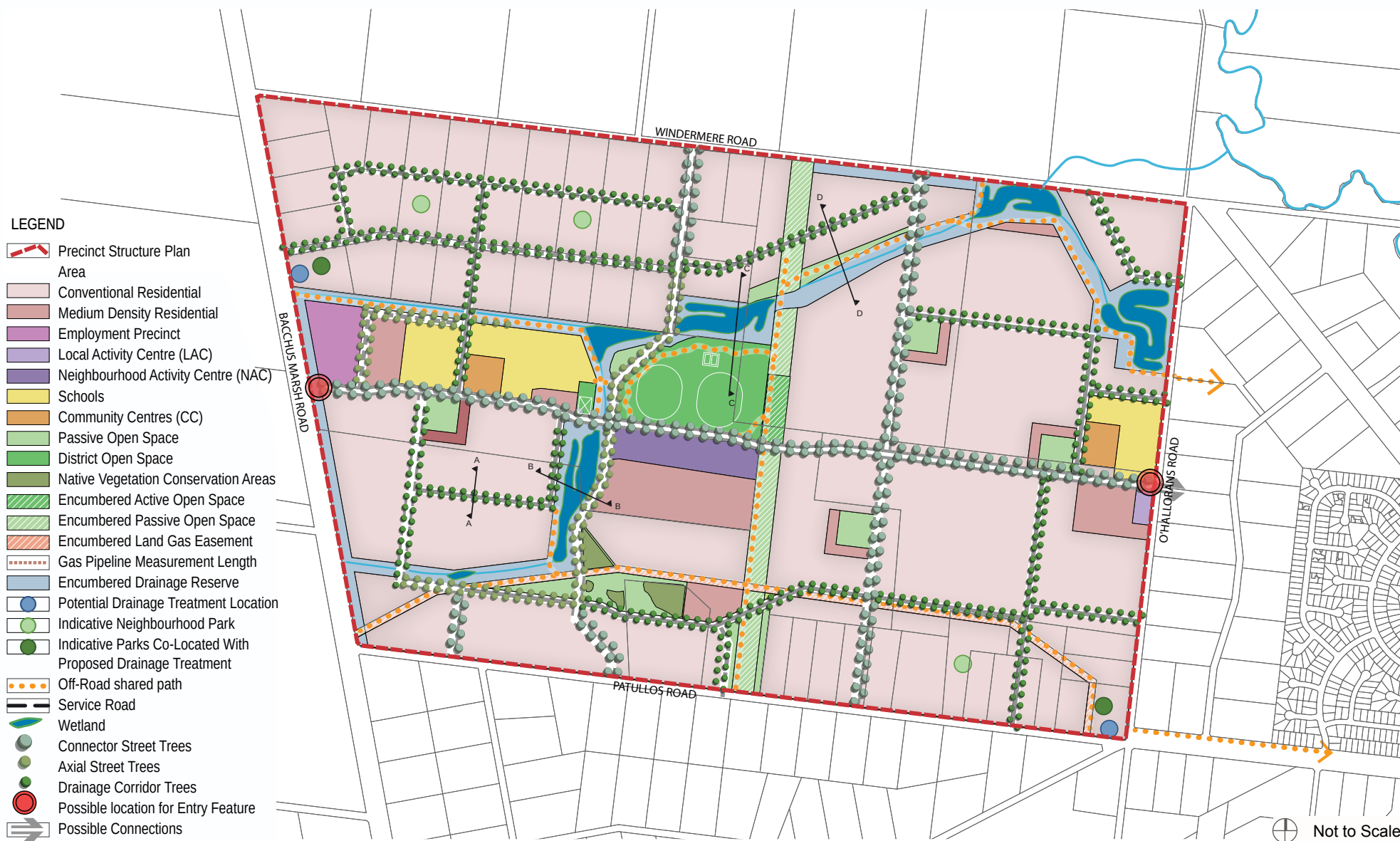
The following planning and design guidelines must be met:

- Incorporate Water Sensitive Urban Design such as retarding basins and wetlands to manage stormwater flows and create habitat for native plants and animals along the creeks and drainage lines;
- Local retardation basins, overland flow paths, water quality treatment trains and stream interface / outlet works, must be provided to the satisfaction of the responsible authority on relevant land parcels in accordance with the stormwater management strategy for the LWP, as approved by the relevant drainage authority;
- Wetlands and a treated stormwater storage basin (for re-use in the irrigation system where possible for the regional active recreation area) must be provided to the satisfaction of the responsible authority;
- Open space is to be filled to levels which comply with the requirements of unencumbered (not subject to flooding in the Q100 flood event) land to the satisfaction of the responsible authority and Corangamite Catchment Management Authority (CCMA);
- The drainage corridor includes a high quality open space link which connects activity centres, open spaces and community facilities through a safe shared path trail;
- Entry features should take the form of public art or a landscape treatment, branded feature walls or other branded features will not be permitted on Council land;
- Where possible, public open space is to make use of fit for purpose water for irrigation purposes;
- All public open space (excluding habitat conservation areas) must be provided to the satisfaction of the responsible authority before the transfer of land:
 - with completed bulk earthworks where required, fit for intended purpose;
 - cleared of all rubbish and environmental weeds, top soiled and grassed with warm climate grass;
 - with a stormwater tapping point for recycled and potable water;
 - with landscaping including drought-resistant tree and other planting;
 - with shared paths and footpaths, as appropriate;
 - with vehicle exclusion devices and maintenance access points;
 - active recreation spaces will be connected to all appropriate utilities;
 - with the installation of basic play equipment, as appropriate; and
 - funding for these works will include development contributions collected under the development infrastructure levy in the LWDCP;
- Subdivision design is to incorporate the environmental, cultural and historical values of a site;
- Development in proximity to trees identified for protection in the Lara West Native Vegetation Precinct Plan must be completed in accordance with any Tree Protection and Construction Management Plan. Any Tree Protection and Construction Management Plan prepared is to address landscape and useability of protected areas;
- Any Tree Protection and Construction Management Plan developed in consultation with the Department of Environment and Primary Industries and the relevant authority must address the need for measures to be used that will limit and manage earthworks in subdivisional and public open space to support the health of existing vegetation;
- Vegetation conservation areas require a management plan and are not to be used as vegetation offset sites;
- Detailed edge treatment design for open space reserve areas is to be provided as part of a future Planning Permit application; and
- Ensure any environmental and noxious weeds are removed from open space and drainage areas.

The following planning and design guidelines should be met:

- Installations of street tree/storm water treatment systems that capture and utilise storm water to assist with tree irrigation;
- Inclusion of large iconic trees in public open space locations;
- Development of public open space and drainage works meet the design requirements for fauna habitat;
- Street trees and public open space landscaping contribute to habitat for indigenous fauna species in particular arboreal animals and avifauna (birds);
- Where appropriate, the use of indigenous trees is encouraged along streets and in parks. Lower level indigenous planting may be appropriate to the satisfaction of the relevant authority;
- Planting of drainage areas should promote the establishment of habitat suitable for local species such as the Growling Grass Frog (*Litoria raniformis*);
- Planting of open space and natural systems should be in accordance with Appendix 4 - Planting Schedule and draw on native species where possible;
- Linear parks, water ways, greenways and widened road reserves support the connection of areas capable of supporting the flora and fauna habitat through appropriate design and planting;
- Informal parks should be of a size and shape that provides for flexibility of use and a diverse range of activities including passive and active use;
- Informal parks are designed and constructed in response to the principles for provision of sport, recreation and open space;
- Neighbourhood parks should be developed on unencumbered land and in accordance with clause 56.02 of the Greater Geelong Planning Scheme and the PSP; and
- Linear parks, water ways, greenways and widened road reserves should support the connection of areas capable of supporting the flora and fauna habitat through appropriate design and planting;

Plan 12: Landscape Master Plan



Plan 13: District Park Sporting Facility Master Plan

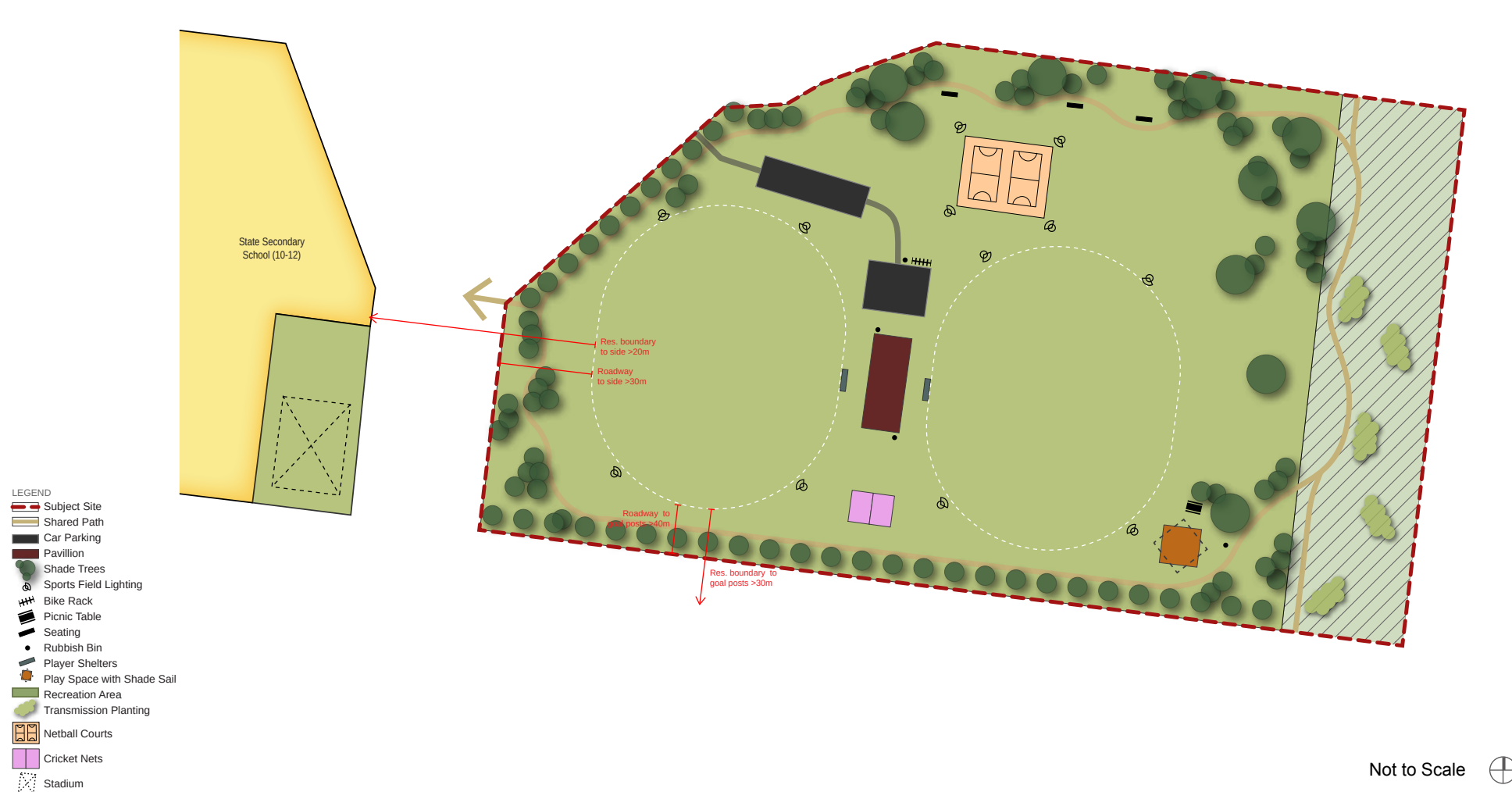
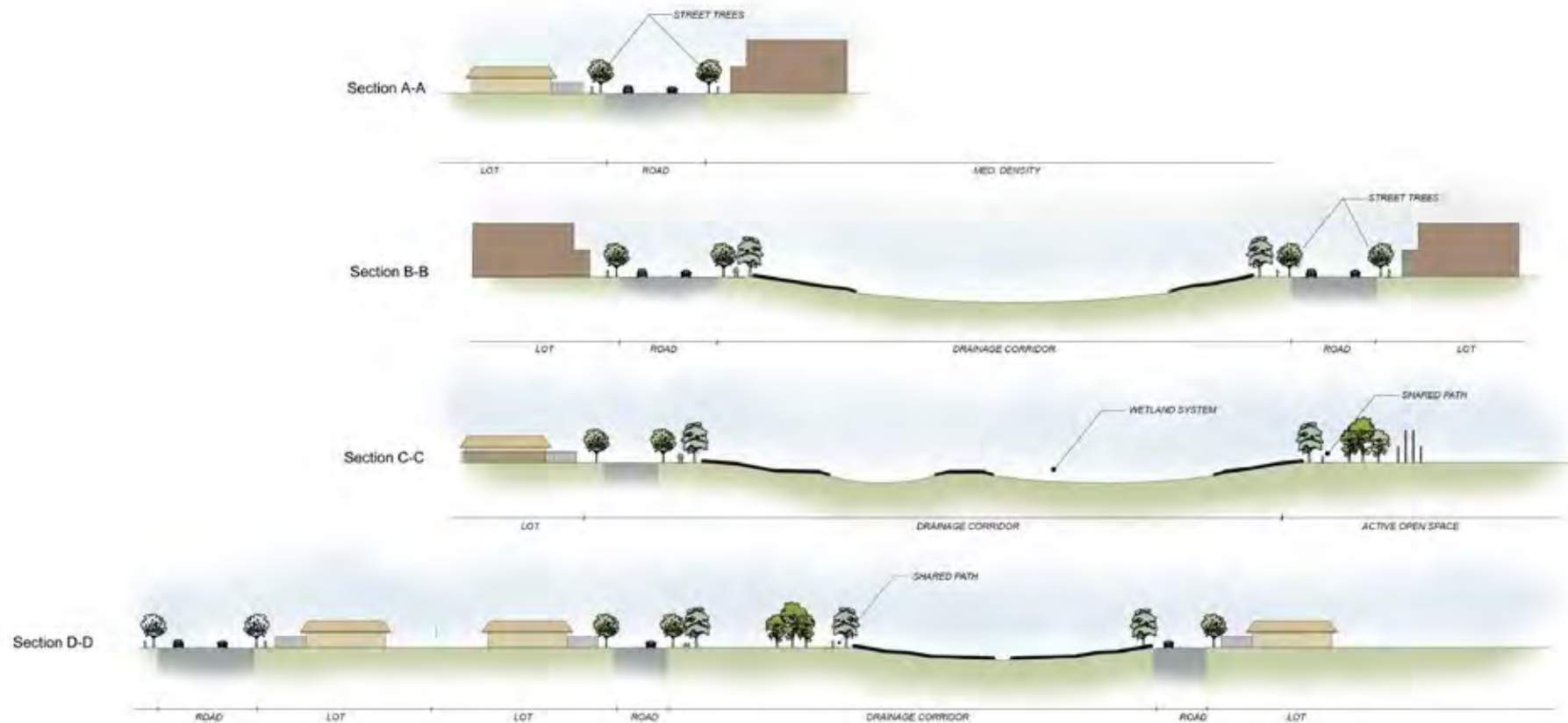


Figure C: Drainage Reserve Interface Cross-Sections



Not to Scale

Plan 14: Activity Centres and Employment



4.5 Activity Centres and Employment

4.5.1 Implementation: Activity Centres and Employment

The objectives for activity centres and employment areas are met by implementation of all of the following.

- Plan 5: Lara West Future Urban Structure;
- Plan 14: Activity Centres and Employment;
- Planning and design guidelines as set out in section 4.5.3; and
- Any relevant CoGG design guidelines.

4.5.2 Planning and Design Guidelines: Activity Centres and Employment

The following planning and design guidelines for activity centres and employment areas must be met:

- Before development starts an urban design framework must be completed for the neighbourhood activity centre to the satisfaction of the responsible authority;
- Prior to the development or use of the local activity centre, compliance with the planning and design guidelines must be demonstrated to the satisfaction of the responsible authority;
- Before development starts an urban design framework must be completed for the employment precinct to the satisfaction of the responsible authority.
- Prior to the development or use of the employment areas, compliance with the planning and design guidelines must be demonstrated to the satisfaction of the responsible authority; and
- The subdivision, development or use of the NAC, LAC and Employment areas must be generally in accordance with any Urban Design Framework and planning and design guidelines approved by the Responsible Authority.

Local Activity Centre (LAC)

The following planning and design guidelines for local activity centre precincts should be met:

- Demonstrate how the design appropriately interfaces with abutting residential development;
- Maximise architectural feature buildings on prominent or 'gateway' sites, such as the intersection of O'Hallorans Road and the new central boulevard, to provide a sense of arrival on main roads;
- Demonstrate how public access can be sited to encourage permeability through the mixed use areas to enable access to and from adjoining land uses and activities;
- Demonstrate how the development can be designed and sited to provide appropriate interfaces and address to abutting community facilities, primary school and road frontages; and
- Provide opportunities for mixed use development to interface directly with the community facilities and primary school.

Employment Precinct

The following planning and design guidelines for employment precincts should be met:

- Development should be designed interfacing appropriately with abutting development in the employment area;
- Development should be planned to maximise architectural feature buildings on prominent or 'gateway' sites to provide a sense of arrival on main roads;
- Development should be designed to provide view lines where possible from roads to abutting public open space;
- Development that incorporates public access should be sited to encourage permeability through the area to enable access to and from adjoining land uses and activities;
- Development should be designed and sited to provide appropriate interfaces and address to abutting public open space and road frontages; and
- The use of the land within the employment area for a shop should provide for local convenience services and not compete with the primary function of other activity centres within the LWP area.

The following planning and design guidelines should be met when preparing a NAC urban design framework:

4.5.3 Urban Design Framework

General

An urban design framework should:

- be consistent generally with the Table 4: Activity Centres Hierarchy;
- address the whole neighbourhood activity centre area;
- address any relevant design guidelines prepared by the CoGG;
- demonstrate the relationship and connectivity of the neighbourhood activity centre to proposed development beyond its boundaries;
- propose an overall landscape concept for the neighbourhood activity centre;
- set out guidelines to address positively environmental sustainability including integrated water management and energy conservation;
- incorporate public art into the design of the public realm and should be supported by a Public Art Masterplan;
- set out provisions for car parking including the location and design of car parking areas and car parking rates for proposed uses within the neighbourhood activity centre;
- set out design guidelines for the provision of service areas for deliveries and waste disposal including access for larger vehicles and measures to minimise the impact on the amenity of the activity centre and adjoining neighbourhoods;
- show how opportunities for medium density housing and future commercial expansion can be incorporated into the neighbourhood activity centre; and
- provide guidance on land uses and floor space areas.

Neighbourhood Activity Centre (NAC)

An urban design framework for the NAC should:

- establish a 'main street' structure that provides for:
 - Activated street frontages;
 - Pedestrian movement along and across streets including a pedestrian crossing to the District Open Space;
 - Diverse architecture to an appropriate scale;
 - Parking on street and in key discrete (but convenient) locations;
 - Containment of activities within a walkable core;
 - An adaptable/flexible design that supports changes in land uses over time;
 - Multiple access points and movement options; and
 - Safe places to cross the street;
- Include a specific cross-section for 'main street' and any other internal streets that provide an appropriate balance (for movement and parking) between pedestrians and vehicles;
- Demonstrate the relationship and connectivity of the neighbourhood activity centre to proposed development (including the community complex and the P10-12 school and private primary school) and open space areas beyond its boundaries (including the central waterway corridor and the active open space);
- Set out design guidelines for the provision of service areas for deliveries and waste disposal including access for larger vehicles and measures to minimise the impact on the amenity of the activity centre and adjoining neighbourhoods;
- Show how opportunities for medium density housing and future commercial expansion can be incorporated into the neighbourhood activity centre;
- Demonstrate how the roads and community spaces visually and physically connect with the surrounding residential neighbourhoods; and
- Avoid the creation of privately owned 'public spaces'.

Employment Precinct

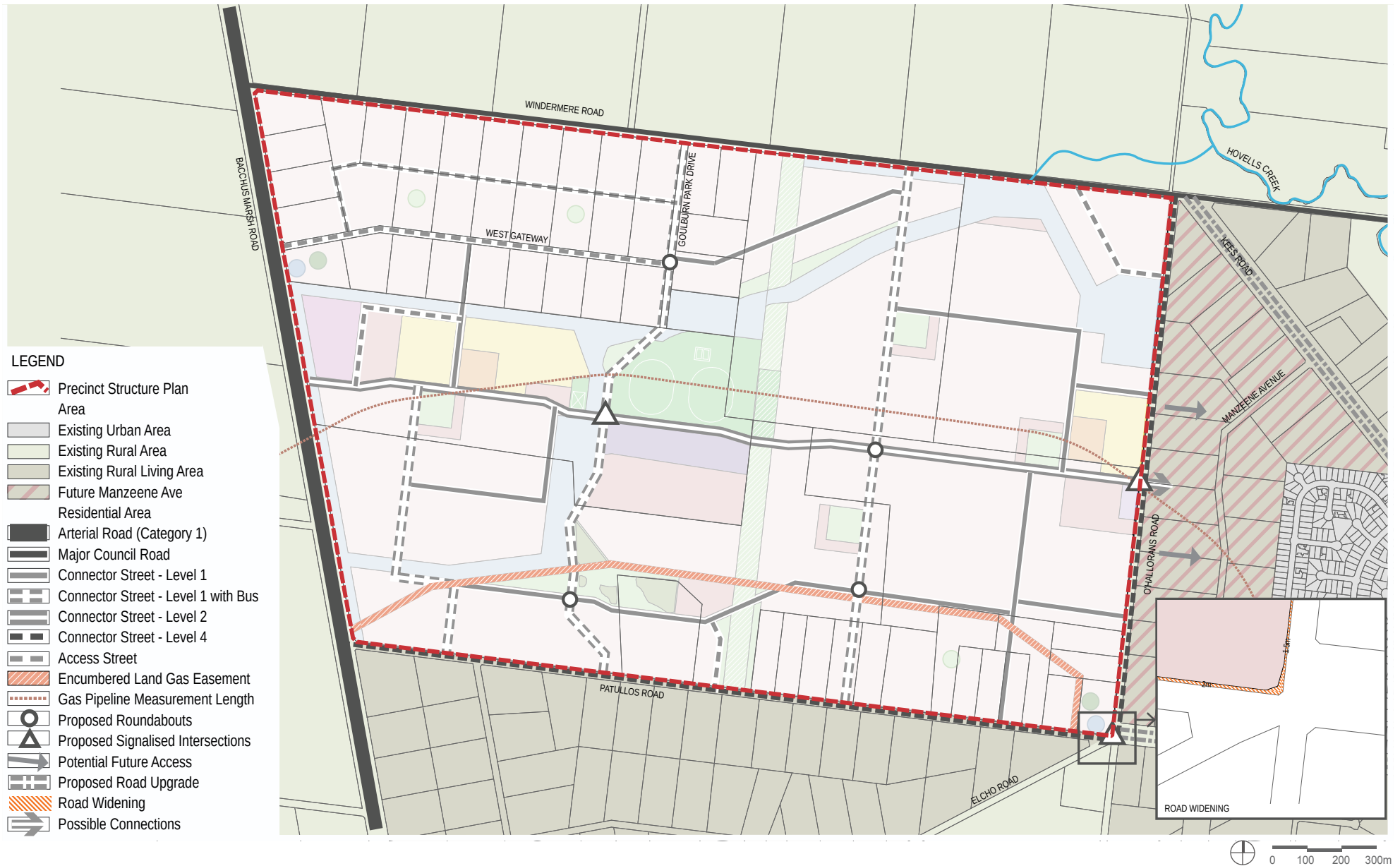
An urban design framework for the employment precinct should:

- Provide for activated ground floor street frontages;
- Demonstrate how the buildings will be articulated to avoid blank walls along street frontages;
- Provide an overall landscape concept for the whole employment precinct;
- Set out provisions for pedestrian and bicycle movement throughout the precinct;
- Provide guidelines for the provision of service areas for deliveries and waste disposal and access for large vehicles to minimise the impact on the amenity of adjoining uses; and
- Demonstrate how the employment precinct will visually and physically connect with the surrounding neighbours.

Table 4: Activity Centres Hierarchy

Activity Centre	Role and Function
Neighbourhood activity centre -	- Indicative shop and office floorspace of a maximum 4,700 square metres, or more subject to justification and permit. A permit may be granted to exceed this amount where a net community benefit is established in terms of the planned regional retail hierarchy. - A 'main street' centre anchored by a supermarket, and supported by specialty shops. - Provision for public health and other community facilities, private medical and allied medical services. - Provision for the development of non-retail commercial uses which include office and small office / home office development. - Economic development / business support services. - Planned walking / cycling links to community facilities throughout LWP and beyond.
Local activity centre -	- Indicative retail floorspace of up to 500 square metres. - Co-location with community facilities including a primary school.
Employment Centre	- Co-location with Medium Density housing. - Located on Major transport routes. - Provision of non-retail commercial uses which include office, showroom, light manufacturing and service industry.

Plan 15: Road Hierarchy



4.6 Transport and Movement

4.6.1 Objectives: Transport and Movement

The objectives for transport and movement as an essential part of the development of LWP are:

- to ensure the detailed planning of LWP facilitates a broad range of transport modes that start with making attractive, accessible and convenient walking and cycling trips;
- to develop shared paths or safe on-road links that provide a network of inter-connected walking and cycling routes throughout LWP that connect activity centres, open space facilities and activities outside the LWP;
- to establish strong pedestrian links with existing urban areas and future development to occur in Manzeene Avenue;
- to facilitate the upgrade of external roads;
- to develop a safe and appropriate road network that services LWP and beyond, that recognises the wider regional function of key existing highways and major roads but one that encourages trips by walking and cycling through the planning of movement links and mode choices; and
- to plan appropriately for and to facilitate the provision of public transport with good accessibility to all households and other destinations.

4.6.2 Implementation: Transport and Movement

The objectives for transport and movement are met by implementation of all of the following:

- Plan 5: Lara West Future Urban Structure;
- Plan 15: Road Hierarchy;
- Plan 16: Walking and Trails;
- Plan 17: Public Transport;
- Figures D – E: Road Cross Sections;
- Clause 56.06, Table C1; and
- Public Transport Guidelines for Land Use and Development.

Note: The road network in the Patullos Road Area and the West Gateway Area is indicative only and subject to detailed design within the PSP area generally, and more specifically, at the master planning stage for the individual Areas.

4.6.3 Planning and Design Guidelines: Transport and Movement

The following planning and design guidelines for transport and movement must be met:

- Connector streets (including any culverts and all related infrastructure) must be constructed progressively by development proponents as part of the subdivision works (before the issue of a statement of compliance for the relevant stages);
- All intersections with Bacchus Marsh Road must be designed, constructed and controlled in accordance with the Precinct Infrastructure Plan (Section 5) to the satisfaction of the Responsible Authority and the Roads Corporation;
- A 12 metre internal road reserve will be provided along the western boundary of the site to provide access to properties abutting Bacchus Marsh Road (i.e. all lots will not have direct access to Bacchus Marsh Road);
- Any planning permit granted for development that increases traffic to the Bacchus Marsh Road/West Gateway intersection will include a condition to require an intersection upgrade, as appropriate.
- A 12 metre internal road reserve is to be provided along the northern boundary of the LWP to provide access to properties with frontages to Windermere Road (i.e. all lots will not have direct access to Windermere Road);
- Subdivisions must be staged to provide for the timely connection of road links between properties and to the arterial road network to support transport and movement links (that is, walking, cycling and vehicular links);
- Where applicable, shared paths associated with any Connector Level 1 road category should be located on the side which is adjacent to the drainage reserve to create links with surrounding off-road shared paths.

- The design of Pattulos Road (west of Elcho Road) is to include traffic management infrastructure to mitigate vehicle volume and speed;
- Provision must be made for any bus route and bus stop (which must have direct and safe pedestrian access connected to an existing walking / cycling path) where nominated by the Public Transport Victoria;
- Walking and cycling path crossings must be provided at all relevant intersections and at the intersection of key LWP-wide shared paths and higher order roads;
- Cycle parking facilities must be provided in convenient and prominent locations at key destinations such as schools, community centres, activity centres and public transport interchanges;
- Courts that are not inter-connected for walking / cycling permeability should be avoided; and
- Courts where included must have a T-head, court bowl or equivalent except where providing vehicle access to four or less dwellings and garbage collection is to occur at the mouth of the court.

The following planning and design guidelines for transport and movement should be met:

- In order to minimise back fences along access controlled roads (e.g. Bacchus Marsh Road), dwellings or other land uses should be designed and sited to address, except in limited situations, those roads but be separated by service roads or inter-connected T-head courts;

- Bus stop facilities constructed by development proponents as part of the subdivision works (before the issue of a statement of compliance for the relevant stage or bonded) should be to a design standard approved by the Director of Public Transport;
- Bus stops should be designed as an integral part of activity centres and activity generating land uses, such as schools, community hubs and regional active public open space;
- Walking / cycling paths should be constructed by development proponents as part of subdivision works (before the issue of a statement of compliance for the relevant stage except if the works are bonded);
- Cycling lanes should be designed to allow for the smooth transition between on-road and off-road facilities;
- Walking / cycling paths and footpaths should be designed and located to maximise passive surveillance;
- The local street network should be designed to provide permeable and safe routes for walking / cycling to activity centres, community facilities, public open spaces and public transport;
- Future Windermere Road intersection design should be consistent with the future Lara Transport Study;
- Road and street cross sections should be consistent generally with those in the Road Cross Sections (Figures B to C) but with consideration of the need for adjustments within the overall specified road reserve widths if required to cater for existing utilities and existing street trees;
- All future shared paths should be rationalised to ensure a well connected shared path network throughout the whole precinct and to Manzeene Avenue as appropriate; and
- An efficient pathway network is to be achieved and therefore the final location of the pathway network will be subject to detailed design.

Plan 16: Walking and Trails



Plan 17: Public Transport



Figure D-1: O'Hallorans Road Cross Section -
Connector Road Category 4

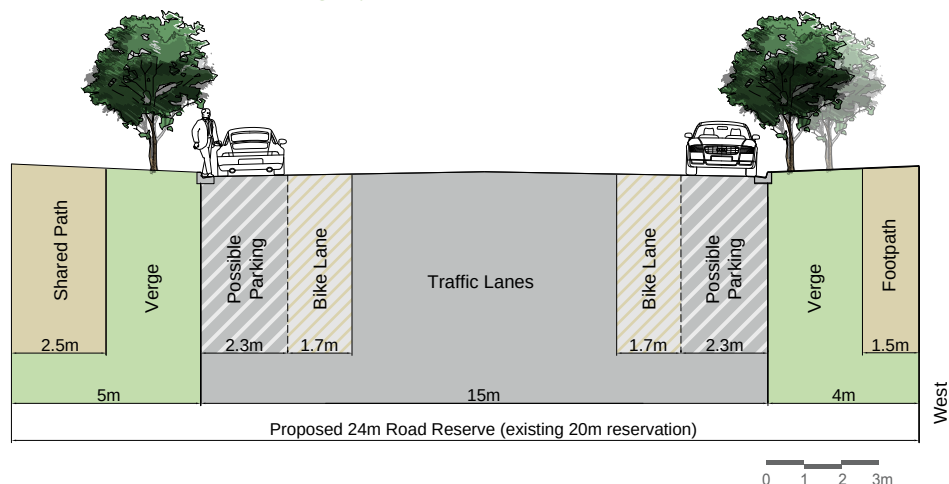


Figure D-2: Patullos Road Cross Section -
Connector Road Category 4

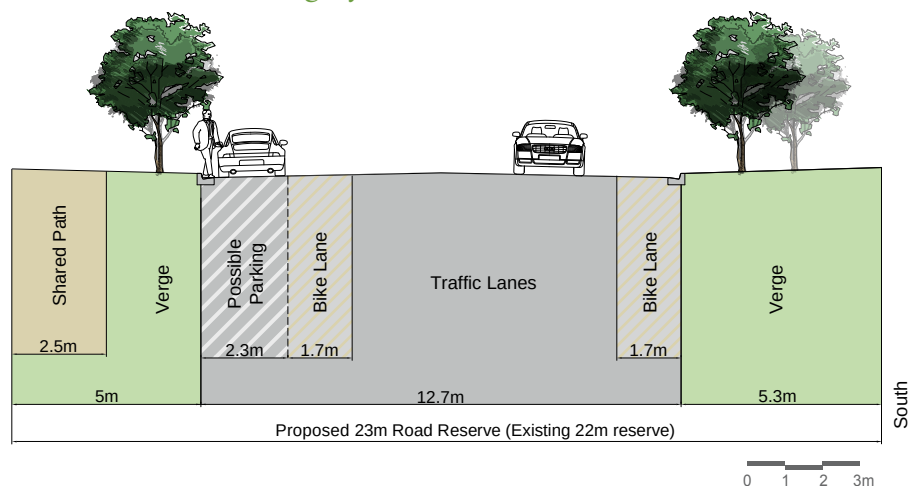


Figure D-3: Bacchus Marsh Road Cross Section

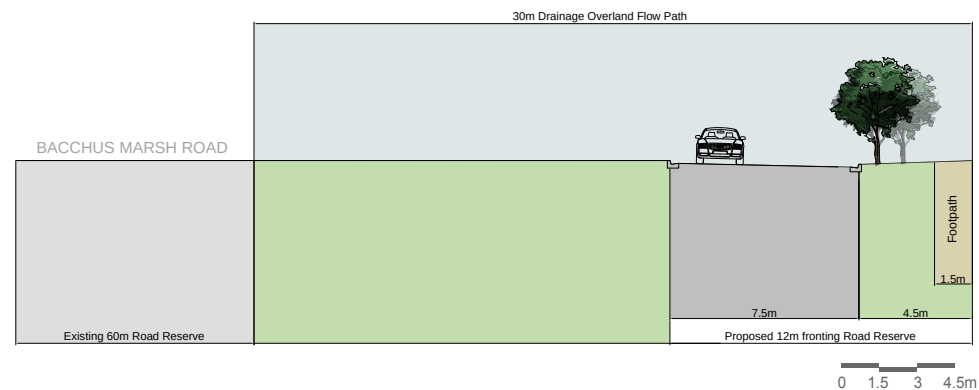


Figure D-4: Windermere Road Cross Section

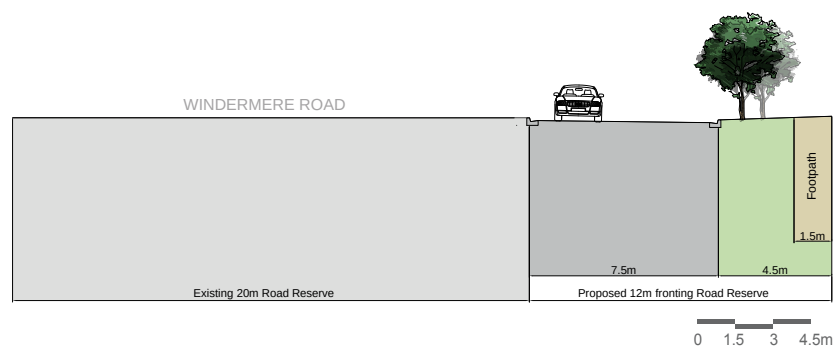


Figure E-1: Connector Street - Level 1

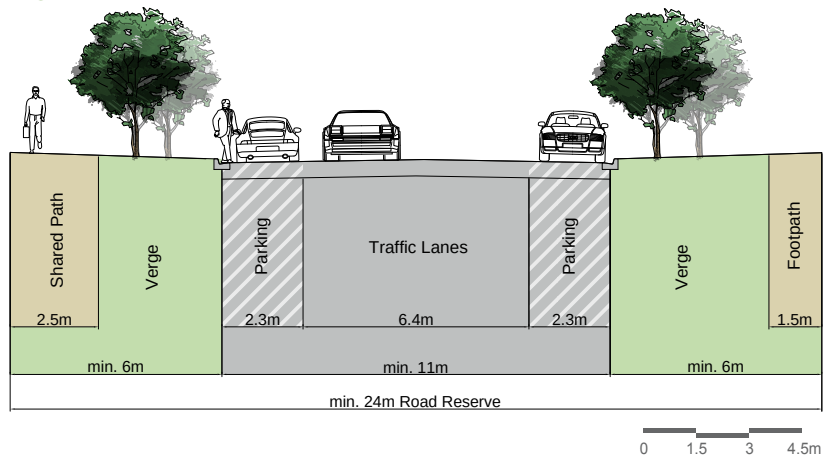


Figure E-2: Connector Street - Level 1 with Bus

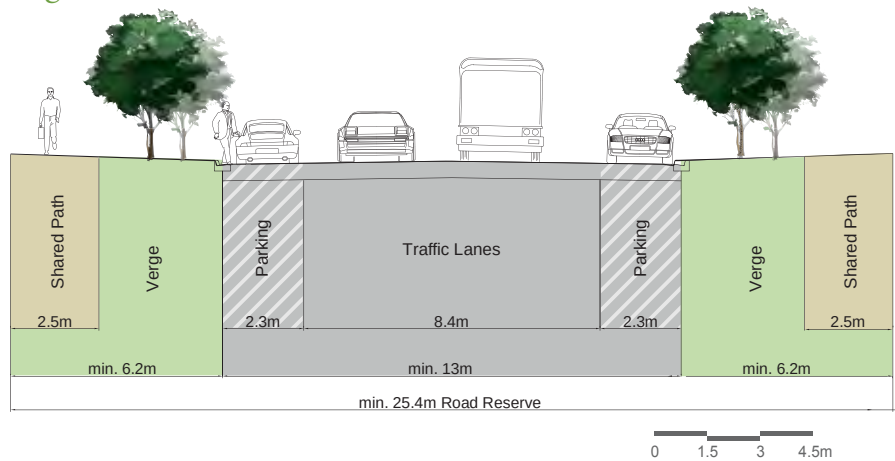


Figure E-3: Connector Street - Level 2

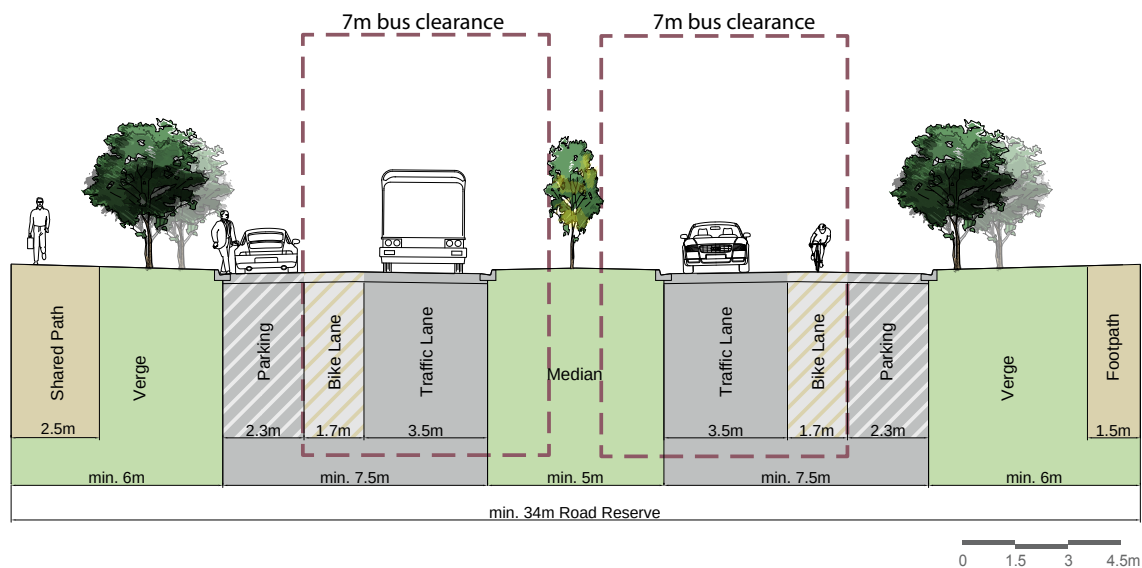


Figure E-4: Access Street

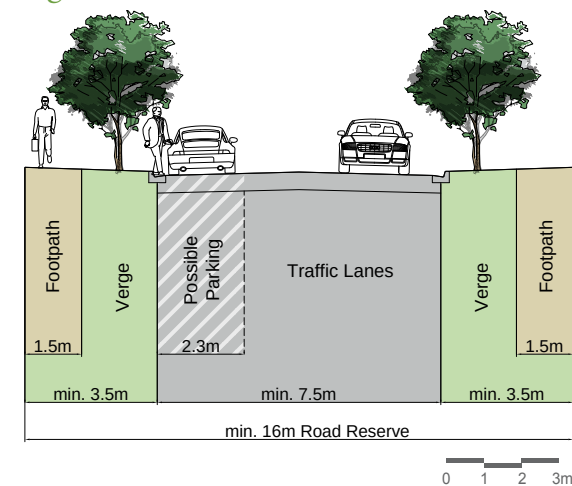


Figure E-6: Collector Street Level 1 with Gas Easement

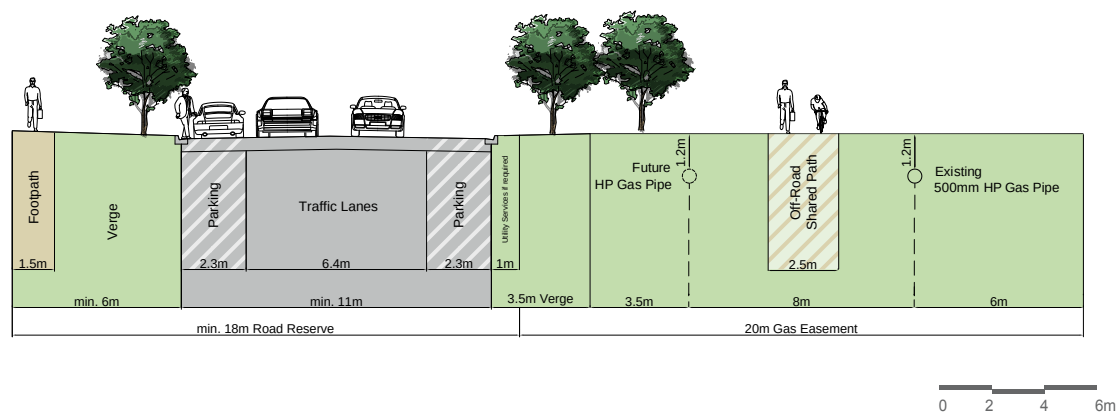
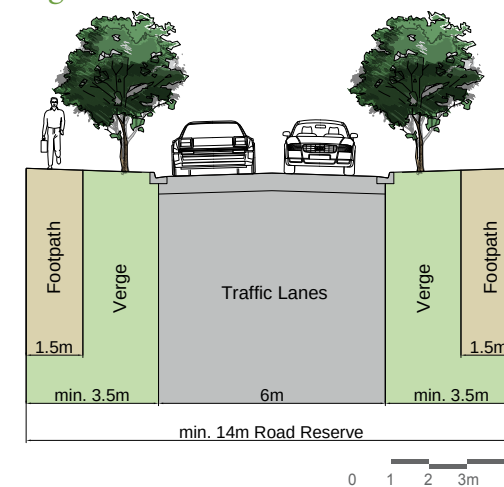


Figure E-5: Access Place



Plan 18: Utilities



4.7 Utilities and Energy

4.7.1 Objectives: Utilities and Energy

The objectives for the provision of utilities as an essential part of the development of LWP are:

- to ensure all land is serviced appropriately including the supply to all developed lots to the satisfaction of the relevant authority of:
 - a potable water supply;
 - reticulated sewerage;
 - gas;
 - underground electricity (except for infrastructure to support cables with a voltage greater than 66kv, sub-stations and the Powercore Australia power lines); and
 - telecommunications (including fibre to the lot);
- to encourage relevant authorities to work toward the undergrounding of existing electricity services; and
- to facilitate innovative, sustainable and energy efficient approaches to the provision of such servicing.

4.7.2 Implementation: Utilities and Energy

The objectives for the provision of utilities are met by implementation of all of the following.

- Plan 5: Lara West Future Urban Structure;
- Plan 18: Utilities;
- Plan 19: Integrated Water Management;
- Figure A: APA Gas Easement and Pipeline (indicative cross section)

The exact location of physical infrastructure and staging of development will be determined by proponents of development at the planning permit stage and will be implemented through appropriate permit conditions. To ensure efficient service provision is closely aligned to trunk infrastructure, development sequencing should generally proceed from east (O'Hallorans Road) to west (Bacchus Marsh Road).

4.7.3 Planning and Design Guidelines: Utilities and Energy

The following planning and design guidelines for utilities and energy must be met.

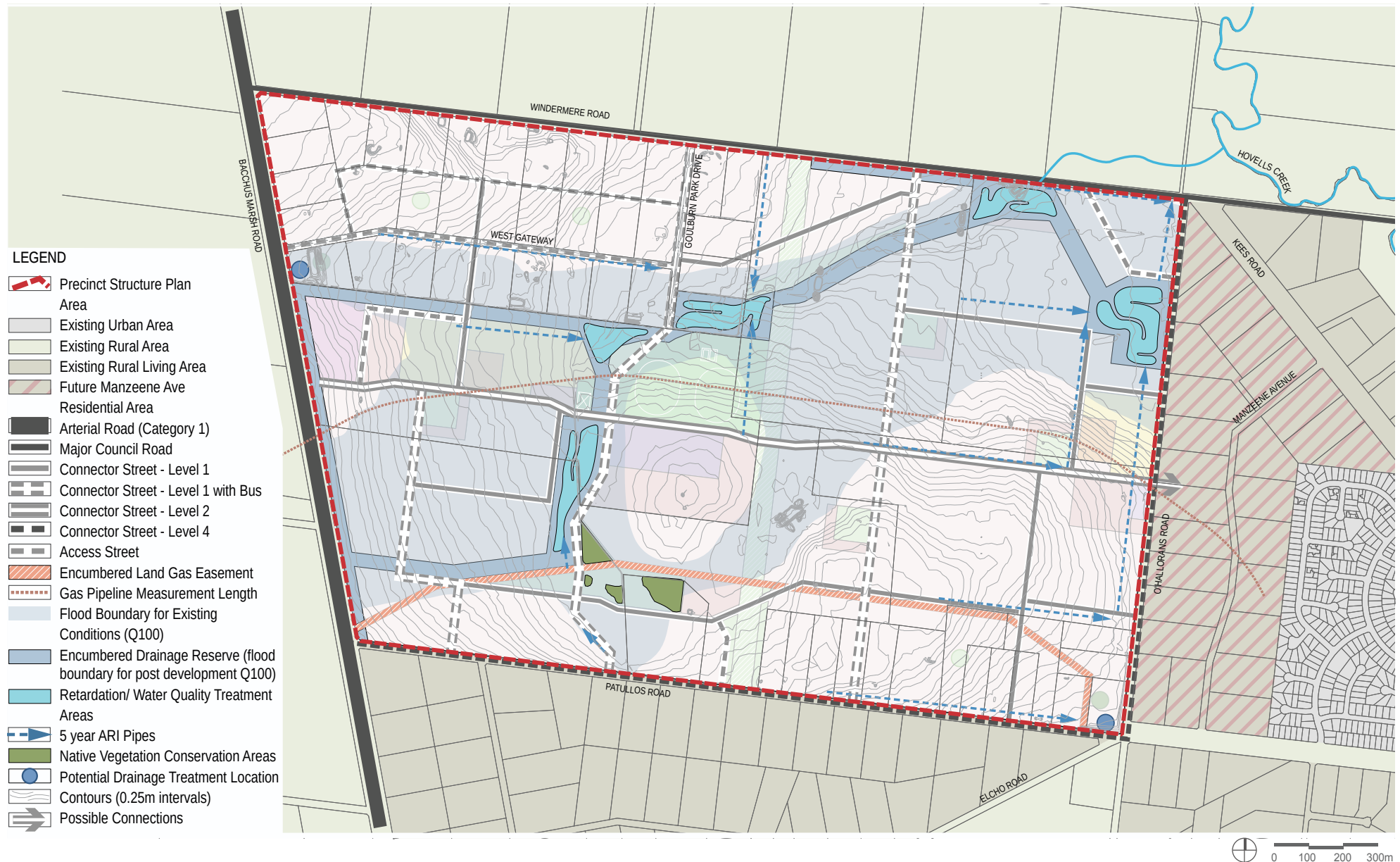
- Permits for the subdivision of land into lots must include a condition requiring the installation of infrastructure to the satisfaction of the responsible authority (Refer to Table 5);
- Development must retain and protect existing easements within the LWP. These assets are to be provided within a designated reserve or road reserve to the satisfaction of the relevant authority;
- Any development (including roads, earthworks, landscaping, wetlands etc) within 60 metres of the powerline transmission easement must be referred to SPI Powernet for approval prior to the commencement of any works on site;
- Any permit application for the use, development or subdivision of land within the "Gas Pipeline Measurement Length" as shown on Plan 4 or in the Lara West Precinct Structure Plan, must be referred to the Minister administering the Pipeline Act 2005 for consideration and its advice taken into account in the decision.

Table 5: Responsible Service Authorities

Service	Responsible Authority
Water	Barwon Water
Sewerage	Barwon Water
Gas	APA GasNet, SP Power Net
Electricity	Powercor
Telecommunications	Telstra

Note: National Broadband Network Co. will install fibre into new developments. Developers are responsible for designing and installing pit and pipe infrastructure to NBN Co's specifications and NBN Co. will be responsible for designing and installing fibre infrastructure.

Plan 19: Integrated Water Management



4.8 Integrated Water Management

4.8.1 Objectives: Integrated Water Management

The objectives for the provision of drainage and floodplain management as an essential part of the development of LWP are:

- to ensure appropriate floodplain management in LWP and beyond;
- to protect and/or enhance downstream environments including recognised social, environmental and economic values, by managing appropriately the quality and quantity of stormwater runoff;
- to integrate appropriately stormwater systems into the natural and built environments whilst optimising the potential uses of drainage corridors;
- to ensure the peak stormwater discharge from developed catchments is not greater than peak discharges from the same catchment subject to existing conditions; and
- to avoid impervious surfaces and piped drainage systems that are directly connected to waterways.

4.8.2 Implementation: Integrated Water Management

The objectives for drainage and floodplain management are met by implementation of all of the following:

- Plan 5: Lara West Future Urban Structure; and
- Plan 19: Integrated Water Management.

4.8.3 Planning and Design Guidelines: Integrated Water Management

The following planning and design guidelines for Integrated Water Management must be met:

- Development must meet stormwater quality best practice guidelines;
- Development including subdivision within the Q100 flood event (existing and proposed) (refer to Plan 19) must be designed to satisfy the requirements of the Corangamite Catchment Management Authority (CCMA), including any interim flood mitigation works, to the satisfaction of the Responsible Authority;
- The minimum surface gradient on all lots to allow for appropriate drainage must be 1:150 (0.67 per cent);
- The minimum finished surface level (excluding access driveways and paths) on all lots must be 300 millimetres above the Q100 flood event;
- The minimum floor level on all buildings must be 300 millimetres above the Q100 flood event;
- Underground drainage must cater for the flood event as specified in the drainage strategy endorsed by CoGG for LWP;
- Lara West central drainage area must be restored as a stream corridor with a meandering creek alignment including linear retardation, water quality treatment 'trains', billabongs and such;
- Piped and open drains, water quality treatment trains and end-of-line retardation, must be provided to the satisfaction of the responsible authority in the south major drainage system (located generally within the depression on the south boundary of LWP);
- Piped and open drains, water quality treatment trains and end-of-line retardation must be provided to the satisfaction of the responsible authority in the east major drainage system within LWP;

- A functional design of the south east WLRB catchment drainage must be determined from detailed field survey and must include design of basin, pipelines and outfall type and capacity;
- Outfall works to Hovell's Creek must be contained within road reserves and within easements created and appropriately sized to accommodate an approved design including maintenance access;
- Local retardation basins, overland flow paths, water quality treatment trains and stream interface / outlet works, must be provided to the satisfaction of the responsible authority on relevant land parcels in accordance with the stormwater management strategy for LWP, as approved by the relevant drainage authority; and
- Wetlands and a treated stormwater storage basin must be provided to the satisfaction of the responsible authority adjacent to the central wetland area.

The following planning and design guidelines should be met:

- Use of fit for purpose water is encouraged in development; and
- Stormwater re-use for irrigation of major sports fields should be considered where appropriate.

Table 6: Drainage and Floodplain Management Authorities

Management Item	Relevant Authority
Drainage	CoGG
Floodplain and Waterway Management	Corangamite Catchment Management Authority

5 Precinct Infrastructure Plan

5.1 Introduction

This Precinct Infrastructure Plan (refer Table 7: Infrastructure Required in Lara West Precinct) summarises the infrastructure required to ensure the appropriate development of LWP generally in accordance with the LWSP. The infrastructure is to be provided through a number of mechanisms including:

- land development works and / or full funding by developers (individually or jointly in some cases);
- development contributions (community infrastructure levy and development infrastructure levy);
- utility service provider works and / or funding;
- capital works and / or funding by the Australian Government, State Government, CoGG and other agencies and non-Government organisations; and
- grants funding available from a variety of sources.

Table 7: Infrastructure Required in Lara West Precinct

5.1.1 Land Development Works by Developers

As part of land development works, new development by a developer must provide and fully fund the cost of delivering the following infrastructure on or where abutting or related to the land:

- land and construction of roads including related culverts, intersection works and traffic management measures for all category B to D roads and streets;
- landscaping of all category B to D roads and streets;
- local walking / cycling paths along category B to D roads and streets in accordance with the relevant road cross-sections;
- unencumbered land equal to 10 per cent of the net developable area for public open space, to be located as specified on Plan 5 or cash-in-lieu to the equivalent value, all subject to equalisation;
- local infrastructure as required by utility service providers including water, sewerage, electricity, gas and telecommunications; and
- all drainage system and flood mitigation works.

5.1.2 Development Contributions Plan

A development contribution plan (DCP) has been prepared for LWP in conjunction with this LWSP. The LWDCP is an incorporated document in the Scheme.

5.2 Infrastructure and Services required outside LWP to support development of LWSP

The infrastructure and services outside the LWP required to be provided by developers or through the LWDCP to support the development include:

- upgrade works to Elcho Road / Patullos Road / O'Hallorans Road intersection;
- drainage to Hovells Creek;
- shared path continuation east along Patullos Road; and
- upgrade of Bacchus Marsh Road and Windermere Road.

5.3 Project Co-ordination

A number of projects can be grouped as, if delivered together or in a co-ordinated way, they have potential to deliver significant benefits to the community beyond the benefits of each project if delivered separately.

Examples of the projects that could be grouped for co-ordinated delivery include:

- the schools and community facilities of the NAC or LAC; and
- combinations of sub-projects that make up the regional active open space;

5.4 Delivery and Monitoring

CoGG will monitor the implementation of the Precinct Infrastructure Plan.

Table 7: Infrastructure Required in Lara West Precinct

No.	Infrastructure Item	Works	Comments	Funding Responsibility
TRAFFIC - as per OBT report				
Intersection Works				
1	Bacchus Marsh Rd, intersection with Windermere Rd	construction	pavement widening/turning lane, as per OBT functional design	DCP (DIL)
2	Bacchus Marsh Rd, intersection with West Gateway	construction	pavement widening/turning lane, as per OBT functional design	Developer
3	Bacchus Marsh Rd, intersection with main E-W road	construction	pavement widening/turning lane, as per OBT functional design	DCP (DIL)
4	Bacchus Marsh Rd, intersection with Patullos Rd	construction	pavement widening/turning lane, as per OBT functional design	DCP (DIL)
5	Windermere Rd, intersection with Goulburn Park Dve	construction	pavement widening/turning lane, as per OBT functional design	Developer
6	Windermere Rd, intersection with new internal roads	construction	pavement widening/turning lane, as per OBT functional design	Developer
7	Windermere Rd, intersection with O'Hallorans Rd	construction	pavement widening/turning lane, as per OBT functional design	DCP (DIL)
8	Windermere Rd, intersection with Kees Rd	construction	pavement widening/turning lane, as per OBT functional design	DCP (DIL)
9	O'Hallorans Rd, intersection with Patullos & Elcho Rds	construction & land	signalised intersection treatment	DCP (DIL)
10	Patullos Rd, intersection with new internal roads	construction		Developer
11	NAC intersection signals	construction	signalised intersection	DCP (DIL), if required
Roads Works				
12	O'Hallorans Rd	construction		Developer, shared cost b/w LWGA & Manzeene Ave developments
13	Patullos Rd, West (B-Marsh to O'Hallorans Rd)	construction upgrade	connector road, 12.7m pavement	Developer
14	Patullos Rd, East (O'Hallorans to Forest Rd)	construction upgrade	widen existing pavement as per 2002 Lara Traffic Study report for Council. No bikes lanes as covered by item 21	DCP (DIL)
15	West Gateway Rd	construction upgrade	when West Gateway area is developed	Developer
16	Goulburn Park Rd	construction upgrade	when West Gateway area is developed	Developer
17	Kees Rd	construction upgrade	scope TBC, and consideration of Manzeene Ave works	Developer
18	Connector & Local roads	construction	constructed to Council standards	Developer
19	Connector road waterway crossings	construction	constructed to Council standards	Developer
20	Service/fronting roads	construction	constructed to Council standards	Developer
21	Patullos Rd East, Shared Path	construction	O'Hallorans to Forest Rd, within existing road reserve	DCP (DIL)
PUBLIC TRANSPORT				
22	Bus Service			DOT
23	Bus Stops	construction	within LWGA	Developer

No.	Infrastructure Item	Works	Comments	Funding Responsibility
DRAINAGE WORKS - as per Neil Craigie report				
24	Waterways	land & construction	inclusive of shared paths	Developer
25	Retarding Basins	land & construction	excluding West Gateway RB land	Developer
26	Wetlands Treatments	land & construction		Developer
COMMUNITY FACILITIES - as per ASR report				
27	East Multipurpose CC	land & construction	on 1.25ha site	DCP (DIL)
28	West Multipurpose CC	land & construction	on 1.2ha site, if Youth Space and Civic & Cultural Centre included.	DCP (DIL)
29	Govt primary school	land & construction	on 3.5ha site	DEECD
30	P10-P12 secondary college	land & construction	on 5.5ha site	DEECD
31	Possible non-Govt primary school	land & construction	on 3.0ha site. If not required then to be developed as residential	Private
32	Library	construction	to be located in existing township	DCP (CIL)
33	Civic & Cultural Centre	construction	located within West CC. Alternate location could be P10-P12 school site or within existing township	Council / DEECD
RECREATION FACILITIES - as per ASR report				
34	2 x sports ovals	construction	located on DOS site	DCP (DIL)
35	1 x sports oval	construction	located on P10-P12 School site	DEECD
36	2 x netball courts	construction	located on DOS site	DCP (DIL)
37	Pavilion	construction	located on DOS site, with shared use for netball and sports grounds	DCP (CIL)
38	Passive area	construction	located on DOS site, includes paths, landscaping & other improvements	DCP (DIL)
39	District playground	construction	located on DOS site, including play equipment	DCP (DIL)
40	3 court indoor stadium	construction	located adjacent to secondary school site	DCP (DIL) and Council / DEECD
41	Neighbourhood parks	construction	including play equipment	Developer
42	Transmission easement, Landscaping	construction		Developer
43	Transmission easement, Shared Path	construction		Developer
BIODIVERSITY				
44	Conservation areas	construction	for protection of existing native veg. areas	Developer
UTILITIES - as per SMEC report				
45	Potable Water	construction		Barwon Water
46	Sewerage	construction	including 2 x sewer pump stations	Barwon Water
47	Electricity	construction		Power Cor
48	Gas	construction		SP Aus Net
49	Telecommunications	construction		NBN Co or other provider

6 Other Information

6.1 Glossary of Terms

Active public open space	Land set aside for the specific purpose of active recreation, including playing fields and courts and their associated buildings and infrastructure.
Bulk earthworks	The general shaping of land to levels suitable as a base for the construction of ovals and other planned recreation activities.
Co-location	Locating land uses adjoining each other or very nearby to enable complementary programs, activities and services and shared use of resources and facilities.
Community facilities	Infrastructure provided by government or non-government organisations for accommodating a range of community support services, programs and activities. This includes facilities for education and learning (such as childcare, pre-schools, government and non-government primary and secondary schools, universities, adult learning centres), health and community services (such as maternal and child health, hospitals, aged care, doctors, dentists, family and youth services, specialist health services); community (such as civic centres, libraries, neighbourhood houses), arts and culture (such as galleries, museums, performance space), sport, recreation and leisure (such as public open space, swimming pools and other recreation), justice (such as law courts), voluntary and faith (such as places of worship) and emergency services (such as police, fire and ambulance stations).
Conventional Density Housing	Housing with average density of 10 to 15 dwellings per net developable hectare.
Developer	The proponent for the proposed development of land or the planning permit applicant for a proposed new land use or development.
Development	Includes: a) the construction or exterior alteration or exterior decoration of a building; and b) the demolition or removal of a building or works; and c) the construction or carrying out of works; and d) the subdivision or consolidation of land, including buildings or airspace; and e) the placing or relocation of a building or works on land; and f) the construction or putting up for display of signs or hoardings;
Development Contributions Plan	Document that sets out the contributions expected from each individual landowner to fund infrastructure and services. Refer to Part 3B of the Planning and Environment Act 1987.

Equalisation - unencumbered land for public open space	Each property owner in LWP must provide land or cash-in-lieu equal to 10 per cent of the net developable area of LWP, at a pro-rata rate equivalent to the net developable area of that property. Plan 7 and the land use budget in section 3.2 of this LWSP provide jointly the relevant details for each property. A property with greater than 10 per cent unencumbered public open space will receive compensation for the value of the land above 10 per cent. A property with less than 10 per cent unencumbered public open space will be required to pay cash-in-lieu equal to the value of the land less than 10 per cent.
Encumbered public open space	Land for public open space that is constrained for development purposes by easements for electricity transmission lines, sewers or gas, by retarding basins or wetlands, by landfill and by habitat conservation areas. This land may be used for a range of activities including walking / cycling trails and active recreation.
Structure Plan	Lara Structure Plan 2011.
Frontage	The road alignment at the front of a lot. If a lot abuts two or more roads, the one to which the building or proposed building has its main pedestrian entry.
Gross residential density	Gross residential density means the number of dwellings per hectare of land excluding encumbered land, arterial roads and other roads with four or more lanes.
Linear public open space network	Corridors of public open space such as along waterways that link nodes of public open space or other activity areas or community facilities.
Native Vegetation Precinct Plan	A plan relating to native vegetation within LWP that must be implemented in conjunction with the LWSP. The LWNVPP is incorporated into the Scheme and listed in the schedule to Clause 52.16.
Medium density housing	Housing with an average density of 16 to 30 dwellings per net developable hectare.
Net development area	Total amount of land within LWP that is made available for development of housing and employment buildings, including lots, local and connector streets. Total LWP area minus community facilities, schools and educational facilities and open space, arterial roads and encumbered land. Small local parks defined at subdivision stage are included in the net developable area. Net developable area may be expressed in terms of hectare units (that is, net developable hectare (NDHa)).
Net residential area	As for net developable area but excludes neighbourhood activity centres, non-government schools and other existing or permitted non-residential land uses (such as golf course sites). Net residential area may be expressed in terms of hectare units (that is, net residential hectare (NRHa)).

Passive public open space	Public open space that is set aside for parks, gardens, linear corridors, habitat conservation, natural systems, nature reserves, public squares and community gardens that are made available for passive recreation, play and unstructured physical activity including walking, cycling, hiking, revitalisation, contemplation and enjoying nature.
Q10 flood event	In relation to land, is the area that may be flooded by the Hovell Creek topping its banks in a rainfall event that has a 10 per cent chance statistically of occurring in any year or, looking at it another way, is the area that statistically would be affected by such a flood on a once in 10 years average return interval.
Q100 flood event	In relation to land, is the area that may be flooded by the Hovell Creek topping its banks in a rainfall event that has a 1 per cent chance statistically of occurring in any year or, looking at it another way, is the area that statistically would be affected by such a flood on a once in 100 years average return interval.
Scheme	Greater Geelong Planning Scheme
Water Sensitive Urban Design	A sustainable water management approach that aims to provide water-quality treatment, flood management to reduce the pollution carried to our waterways and more sustainable urban 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 re-use of rain; encouraging on-site treatment to improve water quality and remove pollution and using temporary rainfall storage (retarding basins / wetlands) to reduce the load on drains and improve landscape viability.

6.2 Referenced Documents

Lara Lakes Heritage Due Dilligence Study and Implications for Development (October, 2011) prepared by Andrew Long and Associates Pty Ltd;

Lara West Growth Area Community Infrastructure Assessment (May, 2012)prepared by ASR Research Pty Ltd;

Lara West Native Vegetation Precinct Plan (June, 2012) prepared by Brett Lane and Associated Pty Ltd;

Lara West Activity Centre Assessment (June, 2012) prepared by Essential Economics Pty Ltd;

Assessment of the Adequacy of Land Supply at Lara (June, 2012) prepared by Spade Consultants Pty Ltd;

Lara West Surface Water Management Strategy (June, 2012) prepared by Neil M Craigie Pty Ltd;

Phase 1 Environmental Site Assessment (July, 2011) prepared by SMEC Pty Ltd;

Lara West Infrastruture Services Report (March, 2012) prepared by SMEC Urban Pty Ltd;

Lara West Transport Assessment (June, 2012) prepared by O'Brian Traffic Pty Ltd;

