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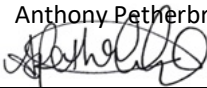
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Setting the Scene Report

Knox Green Areas and Rural Strategy

February 2019

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1. INTRODUCTION

This paper summarises the research and analysis undertaken as part of Stage 1: Setting the Scene for the Green Areas and Rural Strategy (GARS) project.

Part 2 of this paper sets the strategic context by reviewing relevant strategies, plans and policies at state, regional and local levels. Part 3 outlines the external studies that have been completed to inform this project and Part 4 provides an overview of the relevant planning controls that are applicable under the Knox Planning Scheme. Finally, Part 5 brings all the information together for each precinct and incorporates GIS mapping that overlays various layers of information. This paper and the GIS maps provide the information base for the next stage of the project, Issues and Opportunities Analysis. Specific actions for future stages are identified at the end of this paper.

1.1. About the Project

The GARS project is a strategic review of four precincts within the City of Knox (the City) that contain areas predominantly used for rural, conservation, resources, parkland, recreation and public purposes. The Study Area covers some of the key areas of environmental and landscape significance within the City (Refer to **Figure 1**).

The project will deliver a strategy that will present objectives and strategic directions for the Study Area. The key focus area is land use planning in order to inform the City's statutory framework and future decision making. However, the investigation may also provide recommendations and actions for other areas of City administration including environmental management, economic development, recreation, art and health services.

The project was initiated in 2016 with the title of "Protecting Our Rural Land". The original Project Plan/Scope was signed off in October 2016.

Some internal research and analysis and a number of external studies were previously undertaken as part of this project, however, the project has been placed on hold since mid-2016 to enable progression of other priority projects.

At its Ordinary Council Meeting on 26 February 2018, Council received and noted an officer report which advised of progression of the project from mid-2018.

Subsequently a revised Project Plan has been approved for the project which includes an amended project scope, methodology and timelines which reflect the changes since project conception.

1.2. Study Area

The Study Area contains land within the peripheries of the City's municipal area as indicated in **Figure 1**. It includes areas of public and private land which are used for a variety of rural, recreation, resources (quarries) or environmental conservation purposes. The Study Area has been divided into the following four Precincts based on location, landscape characteristics and existing planning controls:

Precinct 1: The Basin Rural Landscape

Precinct 2a: Lysterfield Valley and Hills

Precinct 2b: Lysterfield Quarries and Surrounds

Precinct 3: Dandenong Creek Valley Precinct

Precinct 4: Healesville Freeway Reservation and Surrounds

The Study Area comprises all land outside the Urban Growth Boundary in The Basin and Lysterfield Valley which are predominantly zoned Green Wedge or Rural Conservation and provide a transition between the central urban areas and Dandenong Foothills to the east. The Study Area also includes land within the Urban Growth Boundary including areas used for rural living purposes and parklands/public land in the Dandenong Creek Valley to the west of the City.

Whilst the Study Area is defined by fixed boundaries, the project needs to also take into consideration regional context, including adjoining land in the neighbouring local governments of Maroondah, Yarra Ranges, Whitehorse, Monash and Casey.

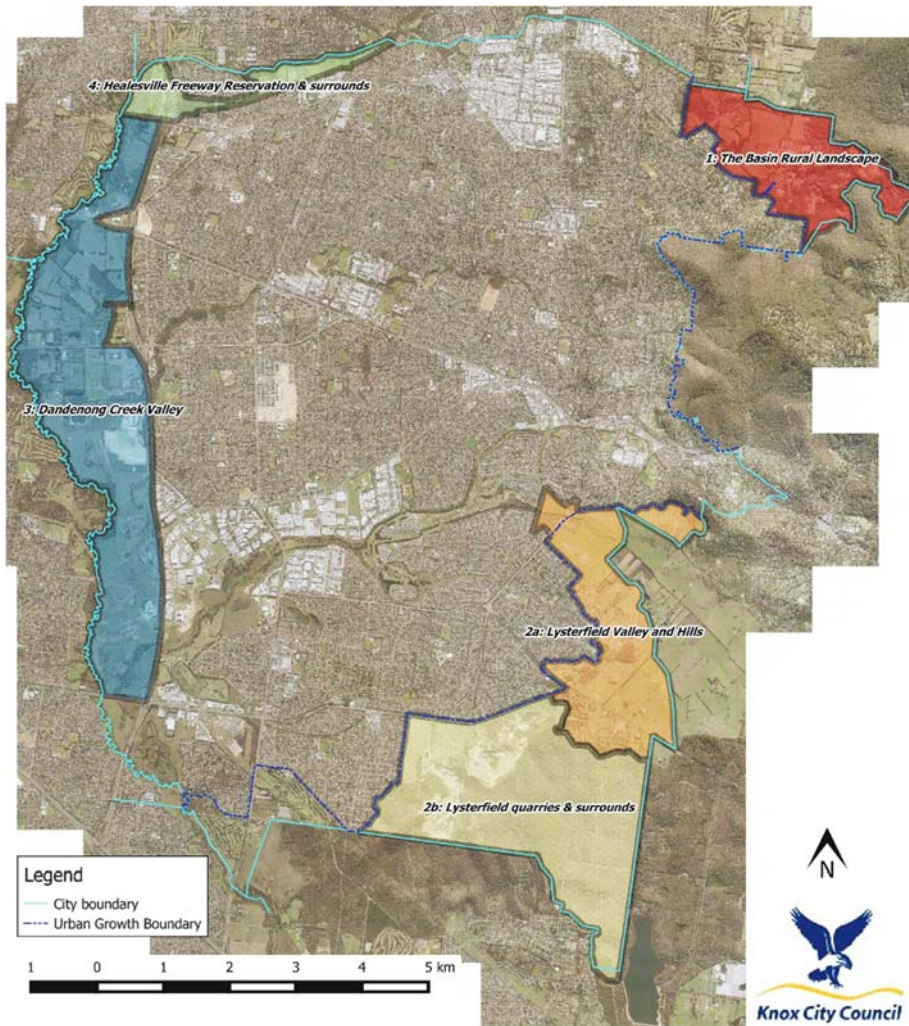
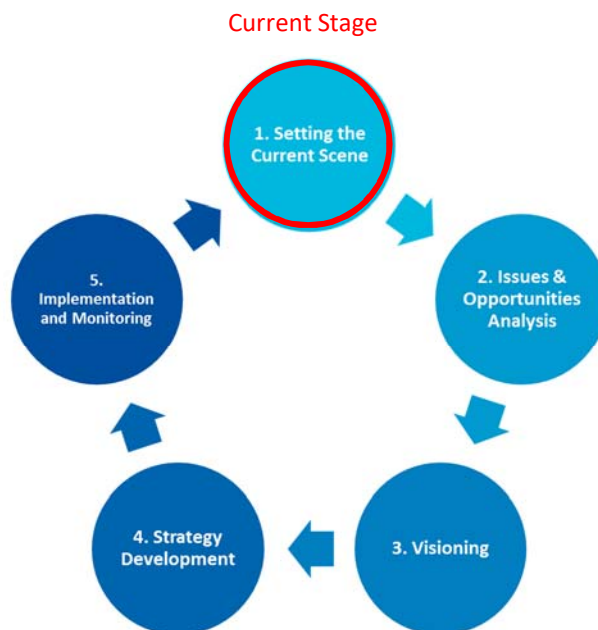


Figure 1 – GARS Project Precincts

1.3. Project Methodology

The project will be undertaken in five stages that are depicted below. This paper is the key output of Stage 1.



Stage 1: Setting the Current Scene

Stage 1 compiles the existing knowledge base relevant to the project and provides a preliminary analysis of the existing situation. This “Setting the Scene” paper represents the key output of Stage 1 and provides a summary of the analysis. Following to this paper, scoping documents will be prepared for any additional external studies required.

Stage 2: Issues and Opportunities Analysis

Stage 2 will include an analysis of the issues and opportunities for the study area. This analysis is intended to:

- Bring all collated information together for each precinct
- Identify issues and opportunities
- Consider best practice and relevant studies from other Councils, in particular adjoining Councils
- Synthesise recommendations from internal analysis and consultants’ reports (preventing duplication, contradictions, overlaps)
- Summarise issues and opportunities for each precinct
- Possibly provide priorities (short term/long term)

Stage 3: Visioning

Stage 3 will develop a future vision and themes to guide strategy development:

- State-wide Vision incl. Plan Melbourne, the Planning Policy Framework the strategic directions from the Knox Planning Scheme (the Scheme)
- Council Vision incl. Community and Council Plan (CCP) and Municipal Strategic Statement (MSS) in the Scheme
- Community Vision – This stage will include community engagement. The scope and approach to community engagement will be determined prior to Stage 3 in collaboration with the Knox Communications and Marketing team.

Stage 4: Strategy Development

This stage will include developing strategies and compiling the outcomes of the project into a draft strategy document (in-house). The draft strategy is expected to:

- Adopt the vision and objectives from Stage 3
- Use issues and opportunities identified in Stage 2
- Evaluate recommendations (are they reasonable, practical, achievable etc.)
- Develop strategies to address the “issues”
- Develop strategies to facilitate the “opportunities”
- Divide strategies into “general” and “precinct-specific”
- Link the strategies to each Theme/Objective
- Implementation/action plan: Translate the strategies into specific actions including recommendations for amendments to the Scheme or undertake further studies,
- Specifying monitoring mechanisms

The draft strategy will be presented to Council prior to being advertised for public comment. The strategy will be finalised after the consideration of public comments.

Stage 5: Implementation and Monitoring

A key implementation measure of the Strategy is likely to be a Scheme amendment. Other implementation measures may include internal or external partnerships, business cases for other studies and ongoing education/advocacy.

2. STRATEGIC CONTEXT

2.1. State Strategies and Plans

2.1.1. Plan Melbourne 2017-2050

Plan Melbourne 2017-2050 (Plan Melbourne) is the State Government’s key strategic plan that sets high level directions for land use planning in metropolitan Melbourne and regional Victoria. The plan seeks to manage future projected population growth whilst creating a balance between the needs of the community, the economy and the environment.

Plan Melbourne sets the vision for Melbourne as a “Global city of opportunity and choice” and is guided by the following nine principles:

Principle 1: A distinctive Melbourne

Principle 2: A globally connected and competitive city

Principle 3: A city of centres linked to regional Victoria

Principle 4: Environmental resilience and sustainability

Principle 5: Living locally—20-minute neighbourhoods

Principle 6: Social and economic participation

Principle 7: Strong and healthy communities

Principle 8: Infrastructure investment that supports balanced city growth

Principle 9: Leadership and partnership



In line with the above principles, Plan Melbourne introduces seven outcomes and for each outcome, provides directions and policies. The key outcomes, directions and policies that are relevant to this project are outlined below:

Outcome 1 Melbourne is a productive city that attracts investment, supports innovation and creates jobs
Direction 1.4 Support the productive use of land and resources in Melbourne’s non-urban areas

Outcome 3 Melbourne has an integrated transport system that connects people to jobs and services and goods to market

Direction 3.2 Improve transport in Melbourne’s outer suburbs

Direction 3.4 Improve freight efficiency and increase capacity of gateways while protecting urban amenity

Outcome 4: Melbourne is a distinctive and liveable city with quality design and amenity

Direction 4.5: Plan for Melbourne’s green wedges and peri-urban areas

Outcome 6: Melbourne is a sustainable and resilient city

Direction 6.4: Make Melbourne cooler and greener

Policy 6.4.2 Strengthen the integrated metropolitan open space network

Direction 6.5 Protect and restore natural habitats

Policy 6.5.1 Create a network of green spaces that support biodiversity conservation and opportunities to connect with nature

Policy 6.5.2 Protect and enhance the health of urban waterways

Plan Melbourne 5-Year Implementation Plan

Key relevant actions:

- Preparation of Green Wedge Management Plans (Action 73)
- Whole-of-government approach to cooling and greening Melbourne (Action 91) – This will be achieved through the preparation of an Urban Forest Strategy (refer to 2.1.3)
- Preparation of a Metropolitan Open Space Strategy (Action 93) – by DELWP

2.1.2. Resilient Melbourne (2016)

Resilient Melbourne was published by the City of Melbourne in May 2016 as a joint project of 32 metropolitan Melbourne councils, Melbourne’s academic, business and community sectors, and the Victorian Government. It represents the first resilience strategy for Greater Melbourne in order to prepare it for the challenges associated with the trends of urbanisation, globalisation and climate change. The plan considers how Melbourne can respond to both chronic stresses - including sea level rise, increasing pressures on healthcare services, unemployment, and deeper social inequality - and acute shocks – such as heatwaves, bushfires, floods, influenza pandemics, and extremist acts, including cyber-crime.

Resilient Melbourne identifies four long-term (30 years or more) resilience objectives and an action framework under four action areas of Adapt, Survive, Thrive and Embed. The objectives and action framework of resilient Melbourne are summarised in the figure to the right. For each of the actions, local government can take a leading role, in partnership with other sectors.

Resilient Melbourne provides direction for this project as the Study Area contains some of the City’s most significant areas in terms of biodiversity, tree canopy, water systems, parkland and recreation. These areas are key to the resilience of Knox and the broader Melbourne community.

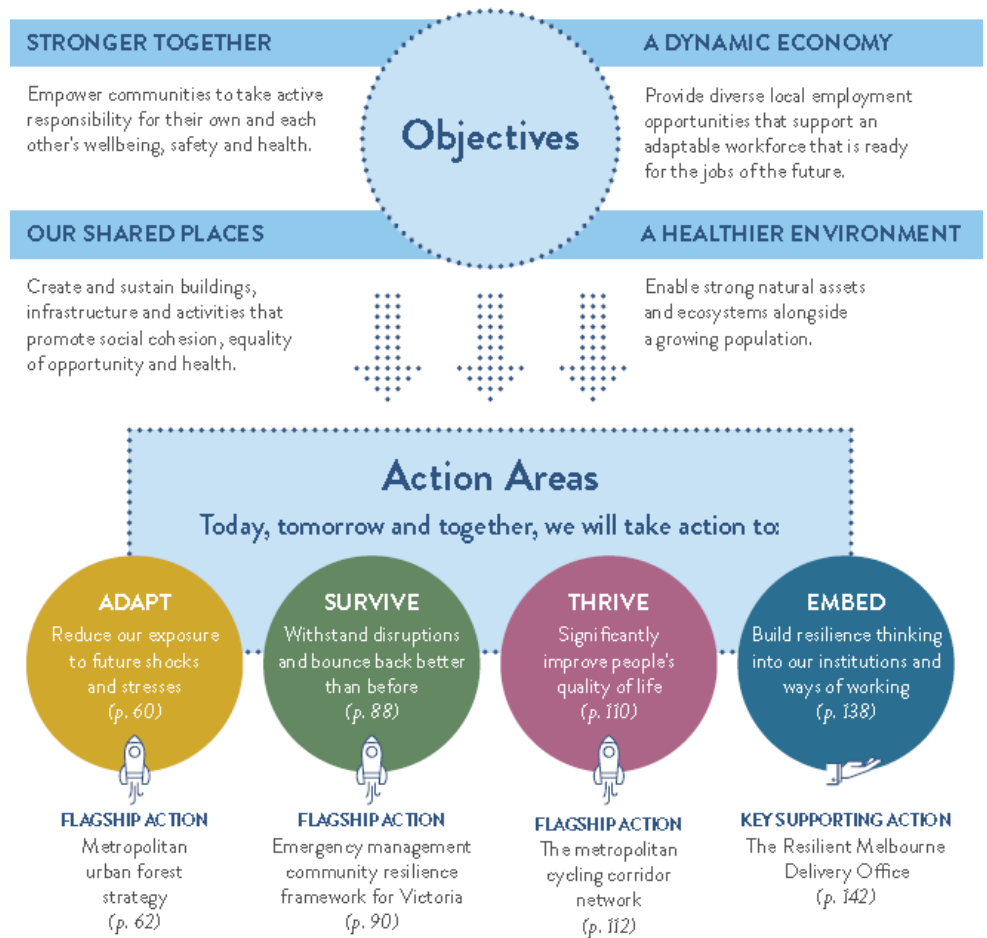


Figure 2: Resilient Melbourne objectives and action areas (Source: Resilient Melbourne P. 5)

2.1.3. Metropolitan Urban Forest Strategy (underway)

A key recommendation of Resilient Melbourne is the preparation of a Metropolitan Urban Forest Strategy. This is currently being prepared by the Nature Conservancy Australia on behalf of the metropolitan councils, including Knox City Council (KCC). A preliminary draft has been prepared and is currently under consultation. The document’s implications for the GARS Study Area will be considered along the upcoming stages of the project.

2.1.4. Protecting Victoria’s Environment – Biodiversity 2037 (2017)

Prepared by the Department of Environment, Land, Water and Planning (DELWP) in 2017, this document is Victoria’s plan to stop the decline of native plants and animals and improve the natural environment. Coupled with reviews of the Flora and Fauna Guarantee Act 1988 (FFG Act) and native vegetation clearing regulations, the Plan seeks to ensure that Victoria has an effective approach to protecting and managing biodiversity. It sets high level directions for community engagement, planning (in particular for protections in reserves) funding and delivery of biodiversity related projects.

2.1.5. Green Wedge Management

Green Wedges are defined in Plan Melbourne as the non-urban areas outside Melbourne’s urban growth boundary serving as a buffer between urban and peri-urban areas. Green wedge areas were first set aside in the 1970s to conserve rural activities and significant natural features and resources between the growth areas of metropolitan Melbourne as they spread out along major road and rail links. Since 2002, green wedge land has been defined under the Planning and Environment Act 1987. New planning zones and stronger regulations were also introduced at this time to better control the subdivision and use of green wedge land. There are 12 designated green wedge areas situated within the 17 metropolitan-fringe local government areas. Municipalities with significant proportions of both urban and green wedge land have also formed a group known as the Interface Councils to represent their shared interests and challenges.

DELWP’s *Planning Practice Note 31: Preparing a Green Wedge Management Plan* sets out the process for the preparation and adoption of Green Wedge Management Plans (GWMPs) by Councils. It establishes the role and purpose of GWMPs and the information these plans need to cover.

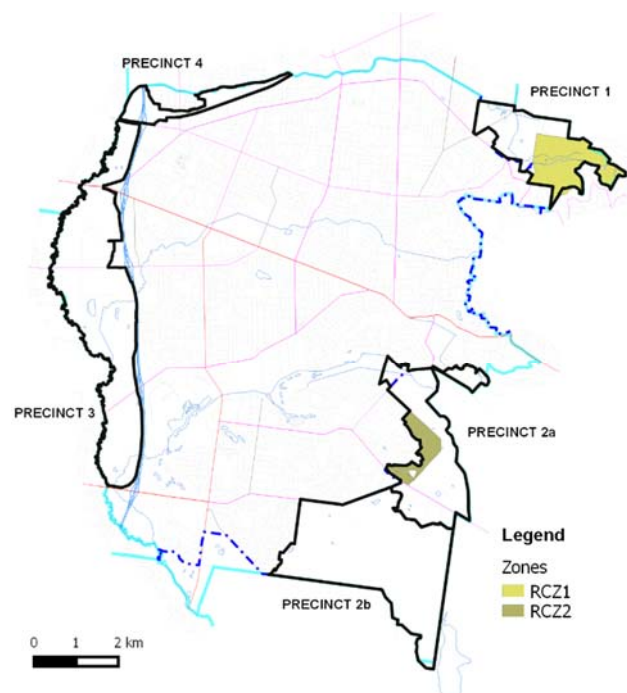


Figure 3. Land zoned Green Wedge within the Study Area



Figure 4. Green Wedge systems across metropolitan Melbourne – The Green Wedges Zones in Knox form part of the broader Yarra Valley and Dandenong Ranges Green Wedge

Informal advice from the DELWP has indicated that the City is not required to prepare a GWMP, as relatively small portions of Green Wedge fall within the City’s jurisdiction. It is expected that instead of having separate GWMPs, the City’s policy regarding these areas should align with broader Green Wedge planning by the Shire of Yarra Ranges. This project will confirm and formalise such a position and will provide direction on the best approach to ensure adequate controls and management practices are in place for these areas in the absence of a stand-alone GWMP.

2.1.6. Integrated Water Management Framework (2017)

Representing another key recommendation of Resilient Melbourne, an Integrated Water Management (IWM) Framework was prepared in September 2017. The document sets out the management framework to deliver a safe and secure water supply, efficient stormwater management, healthy and valued urban landscapes and reflecting community values in place-based planning. It sets out a governance framework of IWM forums at state and regional levels and IWM Working Groups to deliver place-based IWM Plans.

2.1.7. Other Water-Related Plans and Programs

Below are the higher order plans and programs by Melbourne Water. It is considered that these have been reflected in the KCC local stormwater planning framework and daily management operations:

- Water for Victoria
- Melbourne Water's Urban Cooling Program
- Healthy Waterways Strategy – Melbourne Water
- Water for a future thriving Melbourne

2.1.8. Linking People and Spaces: A Strategy for Melbourne's Open Space Network (Parks Victoria, 2002)

This document is a regional level strategy for Melbourne's open space network and specifies actions for parks, trails and waterways. The document is out of date and its recommendations regarding the trail network are superseded by the Regional Trail Strategy, which is discussed later in this report. An action item of Plan Melbourne is also to prepare a new Metropolitan Public Open Space Strategy.

2.1.9. Victorian Cycling Strategy 2018-28

The Victorian Cycling Strategy 2018-28 is prepared by Transport for Victoria and seeks to increase the number, frequency and diversity of Victorians cycling for transport through the following goals and strategies:

Goal 1: Invest in a safer, lower-stress, better-connected network

- 1.2 Provide a lower-stress cycling experience
- 1.3 Prioritise strategic cycling corridors for investment
- 1.4 Update guidelines for strategic cycling corridors
- 1.5 Integrate cycling and public transport
- 1.6 Work with local councils to address gaps in strategic cycling corridors
- 1.7 Incorporate new cycling infrastructure in major transport projects
- 1.8 Improve outcomes for cyclists in planning

Goal 2: Make cycling a more inclusive experience

- 2.1 Improve awareness and acceptance of cycling as a mode of transport
- 2.2 Increase the participation of underrepresented groups
- 2.3 Support cycling to school
- 2.4 Plan for emerging technologies
- 2.5 Support recreational cycling and sport, tourism and community events

2.1.10. Principal Bicycle Network (PBN)

The PBN is designed by VicRoads and is a network of proposed and existing bicycle routes that provide access to major destinations in the Melbourne Metropolitan area. The PBN was last reviewed in 2010 in partnership with Councils, the Department of Transport, Parks Victoria and Bicycle Network Victoria. The main purpose of the PBN is to guide State Government investment in bicycle infrastructure and facilities.

In addition to the PBN, a network of Bicycle Priority Routes (BPR) has also been identified which represents those routes of a higher priority which are included in SmartRoads road use hierarchy maps.

The PBN routes (existing and proposed) have been incorporated into the Access and Movement maps prepared for each precinct, under Part 5 of this paper.

2.1.11. Agriculture Victoria Strategy

In May 2017, Agriculture Victoria released its ten-year Agriculture Victoria Strategy. This is a reform framework articulating Agriculture Victoria's priorities to enhance Victorian agriculture's global competitiveness, innovation and resilience. The strategy focuses on large-scale agriculture and more intense agricultural activity. While it has limited direct action affecting the study area, it sets general guidance on preserving existing agriculture land and production activities.

2.1.12. Extractive Resources in Victoria: Demand and Supply Study 2015-2050

In 2016, the then Department of Economic Development, Jobs, Transport and Resources (DEDJTR) released the “Extractive Resources in Victoria: Demand and Supply Study 2015-2050”. The Study identified 15 Local Government Areas that are critical for supplying extractive resources for Victoria’s future construction needs. Knox was rated as the 4th most critical resource location in Victoria. This was mostly due to the two Lysterfield hard rock quarries – which are significant suppliers to the Melbourne construction industry and are well located for supplying the Melbourne region.

2.2. Regional Strategies and Plans

2.2.1. Draft Land Use Framework Plan: Eastern Metro Region

The second draft framework was advertised for comment in September 2018 and is still subject to finalisation. The framework – once finalised – will be a key instrument to implement *Plan Melbourne* outcomes at a regional scale.

The draft framework includes a regional vision, future directions, associated strategies and an implementation plan. It will be used to inform the Regional and Local Planning Policy, and to identify a series of actions which can be delivered through new partnerships.

Building on existing strategic planning work undertaken by the Victorian Government and local councils, including Plan Melbourne, the LUF will provide:

- Long-term strategies (30 years) around population growth, jobs, housing, infrastructure, major transport improvements, open space and urban forests; and
- Short-term actions (5 years) for State and local government to implement the LUF’s priorities and achieve the outcomes of Plan Melbourne.

2.2.2. Melbourne East Sport and Recreation Strategy 2016

Key messages from the Melbourne East Sport and Recreation Strategy 2016 are:

- There are high participation rates in primary sports across the region, including basketball, netball, football, cricket and soccer.
- There is current demand for more indoor courts for basketball and netball, and an immediate need for a gymnastics facility.
- There is an immediate need for additional hockey pitches in the region.
- Formalised sports such as tennis, basketball, soccer, netball, football and cricket are prominent and are the highest structured participation sports in the region.

2.2.3. Dandenong Valley Parklands Future Direction Plan (2006)

The plan covers areas within the Cities of Knox, Monash and Whitehorse and provides strategic management directions, and identifies management zones and key actions to guide decision making about current and future uses. The document states that the time horizon of the plan is 10-15 years, which means the plan is due for a review.

2.2.4. Living Links

Living Links is an urban nature project working to create a web of green spaces across Melbourne’s south-east. By linking up the many parks, reserves and other natural places, it aims to make the area a world-class urban ecosystem, improving habitat for wildlife and making it easier for people to connect with nature as part of their daily lives.

The initiative represents a partnership between the local governments in the south-east region, Melbourne Water, Parks Victoria, South East Water, Conservation Volunteers Australia and Bushwalking Victoria.

Figure 4a indicates the 17 inter-connecting corridors that have been identified through the Living Links master-planning process as offering particularly important opportunities for new or improved links across the region. In Knox, The Dandenong Creek, Blind Creek, Corhanwarrabul Creek/Monbulk Creek corridors are identified as Living Links. Figure 4b indicates individual projects



Figure 4a Living Links Corridors

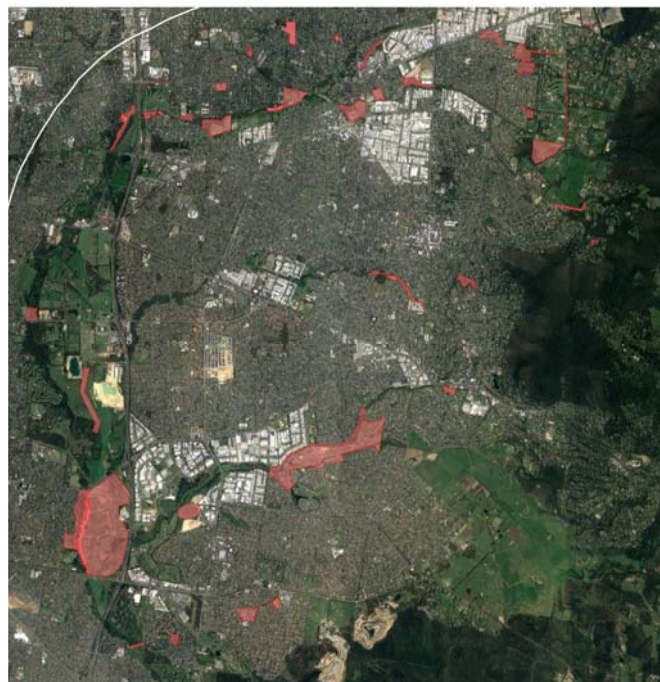


Figure 4b Living Links Projects in Knox City Council

2.2.5. Enhancing Our Dandenong Creek

In 2013 Melbourne Water and EPA designed a program to protect public health and improve storm water quality impacting Dandenong Creek between Bayswater and Endeavour Hills. A Natural Amenity Working Group was established in 2014 to represent a range of local community views. We worked together to identify priority projects to revitalise our creek.

As a result, a five-year program was developed that seeks to:

- construct new habitats for threatened fish species
- increase the natural amenity and signage of the creek
- focus on pollution prevention and detection
- manage uncontrolled sewage spills for customers

2.2.6. Eastern Regional Trail Strategy (September 2018)

The strategy sets out actions for the below four trails that affect Precinct 3 (Dandenong Creek Valley):

- Dandenong Creek Trail
- Ferny Creek Trail
- Blind Creek Trail

2.2.7. Dandenong Integrated Water Management Forum: Draft Strategic Directions Statement (7 August 2018)

The Forum was convened in December 2017 with subsequent Forums meeting throughout 2018 to discuss and prioritise integrated water planning and management in the catchments flowing into Port Phillip Bay from Port Melbourne to Point Nepean. City of Knox was a member of this forum and features as a collaborative partner in a number of initiatives in this paper.

2.3. Local Strategies and Plans

2.3.1. Knox Community and Council Plan 2017-21 (CCP)

Element	Relevance to Project
<p>Knox Vision 2035: Nestled between the foothills of the Dandenong Ranges and the wetlands of the Dandenong Creek Valley, Knox has a rich natural environment and picturesque landscape, highly valued by residents and visitors alike. Knox encompasses the best of city and suburban living. From the thriving modern</p>	<p>The project is to align with the vision in terms of supporting a rich natural environment, picturesque landscape, public open spaces and leafy suburban character.</p>

city vibe of Knox Central at its heart, plentiful public open spaces, outstanding civic facilities and diverse residential offerings to its leafy suburban centres with abundant space, clean air, excellent schools and good transport links, Knox is the preferred place to live, work and play today and for generations to come.		
Goal 1 – We value our natural and built environment	Strategy 1.1 Protect and enhance our natural environment	Including vegetation cover, creek systems, and biodiversity corridors.
	Strategy 1.2 Create a greener city with more large trees, indigenous flora and fauna	
	Strategy 1.3 Ensure the Knox local character is protected and enhanced through the design and location of urban development and infrastructure	The project precincts each play a key part in protecting the key landscapes and view lines to the Dandenong foothills.
Goal 3 – <i>We can move around easily</i>	Strategy 3.1 Enable improved transport choices supported by integrated and sustainable transport systems and infrastructure	The Study Area includes some of Knox’ key recreational walking and cycling trails.
	Strategy 3.2 Improve bike and footpath connectivity, including identifying gaps between existing bike routes, footpaths and key places	
Goal 4 – <i>We are safe and secure</i>	Strategy 4.3 Maintain and manage the safety of the natural and built environment	Safety and perception of safety should be considered as a key objective in all precincts.
	Strategy 4.4. Protect and promote public health, safety and amenity	
Goal 5 – <i>We have a strong regional economy, local employment and learning opportunities</i>	Strategy 5.4 Increase and strengthen local opportunities for lifelong learning, formal education pathways and skills development to improve economic capacity of the community	The Study area play a role in Knox’ economy as it contains agriculture, tourism and agri-tourism uses.
Goal 6 – <i>We are healthy, happy and well</i>	Strategy 6.2 Support the community to enable positive physical and mental health	The Study Area contains some of the key areas of parkland, conservation reserves and sporting facilities in Knox.
Goal 7 – <i>We are inclusive, feel a sense of belonging and value our identity</i>	Strategy 7.1 Protect and preserve our local cultural heritage	The Study Area has significant character and heritage values and contributes to Knox’ identity as a green/leafy City providing gateways and corridors to the Dandenongs.
Goal 8 – <i>We have confidence in decision making</i>	Strategy 8.1 Build, strengthen and promote good governance practices across government and community organisations	The GARS strategy will provide strategic direction and evidence base to better inform future decision making.

2.3.2. Knox Urban Design Framework 2020 (UDF)

Under the Victorian planning system, an Urban Design Frameworks (UDF) is an important strategic planning tool which is used at the local government level and translates the broad aims of Municipal Strategic Statements (MSS) to practical and precinct-specific urban design initiatives. UDFs seek to improve the design quality of the urban environment by providing policy direction and specific actions which are implemented through Planning Schemes.

The current *Knox Urban Design Framework 2020* was prepared in 2003 and has been incorporated into the Scheme. The Study Area is represented in the UDF within two “Suburb” areas of Dandenong Ranges and Lysterfield Valley for which, a vision, objectives, strategies, actions and design guidelines are provided

2.3.3. Dandenong Foothills Urban and Landscape Review (March 2006)

Prepared by Hansen Partnership on behalf of KCC, this document has been incorporated into the Scheme and has informed the current planning scheme controls. However, the background information in the report are useful to this study. Of particular relevance is the analysis and mapping of key landscape qualities and significant view corridors for Precincts 1 and 2 (The Basin and Lysterfield).

2.3.4. Knox WSUD and Stormwater Management Strategy (2010)

The Water Sensitive Urban Design (WSUD) and Stormwater Management Strategy aims to protect and improve the health of Knox’s streams and creeks while ensuring that flooding impacts are minimised.

It identifies the high value catchments in Knox which include Dobsons Creek (GARS Precinct 1), Blind Creek, Ferny Creek and Monbulk Creek (GARS Precinct 2a). For each catchment, it includes strategies and actions to improve catchment health, with a focus on WSUD. Some of the actions include disconnection of directly connected impervious surfaces, construction of WSUD systems, and appropriate monitoring and management of the Directly Connected Impervious (DCI) areas.

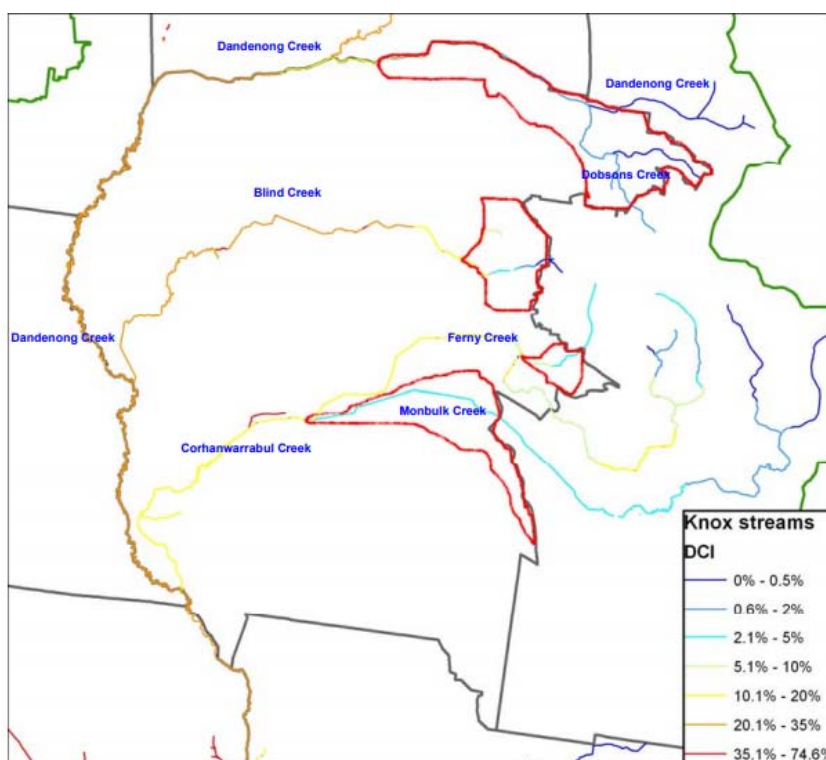


Figure 5. High Value Catchments identified by the WSUD and Stormwater Management Strategy

2.3.5. City of Knox Flood Modelling Project (underway)

The City and Melbourne Water are currently undertaking modelling of their stormwater infrastructure with an updated flood model likely to become available by the end of 2019. Once completed, the modelling is likely to lead to an amendment to the SBO and possibly LSIO overlays. Depending on the timing of new information becoming available, this project will need to consider any consequences within the study area.

2.3.6. Knox Integrated Transport Plan 2015-2025

Prepared in February 2015, this plan sets objectives and strategies, and provides detailed and costed action and initiatives for all modes of transport. Covers all modes of transport. Actions are prioritised: high priority (1-2 yrs), medium priority (3-5 yrs) and low priority (beyond 5 yrs).

The plan includes a public transport vision map, however, this is superseded by a more recent position paper endorsed by Council (refer to the next item below).

The plan does not provide a proposed cycling or pedestrian network, however, it includes action items to review the Knox Pedestrian Plan (which was reviewed in 2017) and the Knox Bicycle Plan (due for a review).

2.3.7. Public Transport: A Vision for the East

This is a position paper endorsed by Council which represents KCC's vision and position for advocacy of public transport in the area. Relevant initiatives that have implications for the Study Area (mainly Precinct 3) are:

- A new heavy rail line along Wellington Road connecting to Rowville
- A new light rail route along Burwood Highway connecting to Upper Ferntree Gully

The Traffic and Transport team has advised that these proposals can be accommodated within the existing road reserves and do not create any need for land acquisition within the Study Area.

2.3.8. Knox Bicycle Plan Review (2008)

The plan details individual projects which include new on-road and off-road bicycle facilities, upgrades, end of trip facilities and initiatives to improve safety and community awareness. It also incorporates a costed action plan and provides detailed precinct-scale mapping of existing and proposed facilities. The plan is due for a review.

2.3.9. Knox Principal Pedestrian Network (2017)

Provides an in-depth analysis of pedestrian connectivity and accessibility in Knox and provides a Principal Pedestrian Network (PPN) plan with detailed implementation actions. There are PPN actions within all GARS precincts including new shared paths, footpaths, and intersection improvements. These actions will need to be considered as part of the analysis of issues and opportunities for each precinct.

2.3.10. Knox Liveable Streets Plan 2012-2022

Promotes and provides tools to facilitate:

- More use of streets and an increase in health and wellbeing of residents;
- Less reliance on car travel for short and medium length journey;
- More nature in the streets, healthier ecologies;
- More attractive streets to promote business and local use;
- Safer streets; and
- Streets for services and infrastructure.

2.3.11. Green Streets Policy Review (underway)

A review is currently being undertaken by consultants - managed by the Open Space and Landscape team.

2.3.12. Knox Open Space Plan 2012-2022

Builds on the 2004-14 Open Space Plan and provides a strategic framework for areas open space across the City. These strategic directions encompass themes of sustainability, community involvement, greater community use of open space and linkages between open space areas. It operates alongside Council's Open Space Asset Management Plan which defines Council open space asset and service management performance.

2.3.13. Knox Leisure Plan 2014-2019

Encourages greater use and connectivity of urban and natural environments to cater for leisure needs.

It includes an Implementation Plan which identifies opportunities for additional sports fields and infrastructure:

Action 16 of the Implementation Plan provides opportunities for GARS Precinct 2:

"Investigate opportunities for the provision of additional sports reserves, with a particular focus on opportunities in Rowville."

2.3.14. Knox Arts and Cultural Plan 2012-22

The Knox Arts and Cultural Plan sets the vision and framework for the provision and direction of Council-supported arts initiatives across the City, ranging from improving the City's dedicated art facilities and events, to working with and supporting third party providers.

The only art facility covered in this document which falls within the GARS Study Area is The Basin Theatre in Precinct 1, which is owned and operated by The Basin Theatre Company.

2.3.15. Knox Strategic Assets and Investment Strategy (underway)

The Strategic Assets and Investment Strategy (SAIS) is currently being developed as part of the tool-kit Council uses to determine the value of its assets to the community. The SAIS will provide Council with the evidence base required to understand how its public asset base can be leveraged to build equitable community 'wealth', create sustainable and diverse revenue streams, and achieve its social housing, affordable housing, lifelong learning, and mental and physical health priorities.

To deliver on this objective, the SAIS establishes the locational 'value' of an asset before proposing which of three possible strategic solutions are required to realise an asset's commercial, social, environmental and/ or economic value. These solutions fall into three main categories:

- (a) Investment in an asset if it is well located but could function better;
- (b) Conversion of an asset to alternative community uses or multiple activities if the asset is strategically better located for those alternative uses; and
- (c) Divestment of an asset (land and / or building) to realise revenue in order to fund other community uses.

A fourth designation may also be invoked so that Council continues to have a relevant and sustainable asset base. This relates to the:

- (d) Acquisition of a new asset (land and / or building) to address an identified gap in Knox's assets provision / impact if there are no other Knox assets which can address that gap.

The only SAIS asset that falls within the Study Area is the Wantirna Reserve. At this stage it is still unknown whether there will be any impact on the Wantirna Reserve as part of SAIS. Future further confirmation will be sought at future project stages from the SAIS project team.

2.3.16. Knox Land for Business Directions Plan

Approved by Council in December 2018, the Knox Land for Business Directions Plan provides strategic directions regarding land requirements taking into account employment projections, current land supply, economic trends, drivers of change and planning policy. It includes strategic planning, investment support, business support and other recommendations.

The Land for Business Strategy identifies the Boral Quarry in Watirna South as a potential site to provide a component of business land as part of future comprehensive planning. This matter is discussed further under Part 5 of this paper.

2.3.17. Regional Pest Animal Strategy

KCC is currently working with several neighbouring councils in the eastern region as well as Parks Vic, Vic Roads and Melbourne Water to develop a Regional Pest Animal Strategy. A Strategic Pest Animal Action Plan for Knox will be developed, once the Regional Strategy is developed.

The above strategy will contribute to the management and protection of native wildlife in the GARS precincts.

2.3.18. Gardens for Wildlife Program

The Gardens for Wildlife (G4W) program is a partnership between Knox City Council, Knox Environment Society (KES) and the Knox community. The program encourages Knox residents and businesses to create an area in their garden to support local wildlife. This can be done by providing habitat planted with locally indigenous, Australian native or suitable introduced species. The program is free to join and provides residents with access to specialist advisors who do site visits and provide advice to the participants.

There are a number of participating properties within the study area. These properties have been considered in the GARS biodiversity assessment for their contribution to wildlife habitat and movement.

2.3.19. Gardens for Harvest Program

A partnership between KCC and the Shire of Yarra Ranges, the Gardens for Harvest program aims to help build skills and knowledge in residents to grow and maintain a veggie garden.

The Knox Gardens for Harvest program provides residents with information guides, workshops on various gardening topics and access to Gardens for Harvest competitions and special offers.

There are a small number of participating properties within the residential properties in the study area. However, the relevance of this program has been identified to be minor for the GARS precincts (It is more relevant in the urban residential areas) and may be removed from future stages of the GARS assessment.

3. STUDIES UNDERTAKEN

This section provides an overview of the external studies undertaken to inform this project. Full studies are available separately to this paper. The outcomes of these studies have been incorporated into the precinct-specific analysis under Part 5 of this paper.

3.1. Agriculture Assessment

The City engaged RMCG to undertake an assessment to establish whether rural land in Knox is capable of supporting agriculture, what agricultural production it is suitable for, and whether there are any relevant externalities, which may exclude agriculture. The outcomes of this assessment are presented in the report titled “Assessment of Agricultural Potential of Rural Land in Knox”.

Methodology

The study has included the following assessments informed by desktop analysis, spatial analysis and site validation:

1. Agricultural capability assessment takes into account the physical nature of the land, such as soil type, climatic condition and topography to determine the capability of the land to support sustainable soil-based agriculture.
2. Agricultural suitability assessment considers the economic, social and/or policy factors such as the economics of production, distance from markets and the strategic or policy context that may impact the production opportunity for specific agricultural commodities.
3. Externalities assessment - Any remaining agricultural activities that have not been eliminated through either the capability or suitability assessments will be assessed based on other relevant externalities such as land use conflict and landscape value.

Results

The study provides an analysis of each precinct’s potential for different types of agriculture, agri-tourism, and related activities and presents future directions for parcels of land within each precinct.

3.2. Wildlife Conservation and Connectivity Assessment

The City engaged the services of Ecology and Infrastructure International Pty Ltd, in collaboration with EcoAerial and Urban Ecology in Action Pty Ltd, to prepare the Knox Wildlife Conservation and Connectivity Report. While scope of the study was initially limited to this project’s precincts, the scope was later expanded to cover the entire Knox Local Government Area (LGA) due to the realisation that it was critical to include the broader landscape and wildlife movement context.

Methodology

The study sets the scene by reviewing the existing state of flora and fauna in Knox, sites of biological significance and connectivity corridors such as creeks and roadside habitats. The study then defines and analyses concepts including connectivity, habitat loss and fragmentation and connectivity in a wildlife context. It then undertakes a review of relevant legislation, agreements and strategies at various scales ranging from international to local, to identify trends and best practise in conservation and facilitation of wildlife movement and connectivity, in both urban and peri-urban landscapes.

A key component of the study has been the collation and incorporation of existing wildlife records including observation data and evidence within the Knox LGA. In addition to the report, a “Knox Wildlife Atlas” has been compiled which includes all wildlife records collated from various sources during the course of this study. This atlas provides the City with a comprehensive snapshot of current wildlife occurrence within the municipality, which can be expanded in the future as new observations are made.

The study then selects ten focal species to provide a more accurate and relevant analysis. The ten focal species are Australian Reed-warbler, White-throated Treecreeper, Eastern Yellow Robin, Superb Fairy-wren, Black Wallaby, Sugar Glider, Short-beaked Echidna, Blue-tongue Lizard, Eastern Snake-necked Turtle and Southern Bullfrog.

For each species the study focusses on identifying:

- Suitable breeding or resident habitat and preferences within a range of suitable habitats;
- Suitable dispersal habitat;
- Maximum and average movement or dispersal distances; and

- Barriers or filters to dispersal, and the level of each barrier to movement.

The study then uses GIS modelling and mapping to present and summarise the analysis. The report provides mapping of buffers over different landscape elements. The buffers used and the justification behind them are as follows:

- 180 m buffers around treed Ecological Vegetation Classes (EVCs) - in line with the distance that Sugar Gliders and Eastern Yellow Robins have been recorded travelling outside bushland.
- 300m buffers around EVCs represent distances travelled by Black Wallabies and Blue-tongued Lizards.
- Farm dams are buffered by 375m as a study of Eastern Long-necked Turtles found that 95% of all records were within this distance from the nearest dam.
- As per State Government guidelines, watercourses are buffered by 200m to support Growling Grass Frogs.
- Melbourne Water recommend that the 1 in 100 year ARI flood level be protected, and they also provide a minimum buffer width of water courses depending on stream order, ranging from 50 m along Dandenong Creek to a minimum of 20m for the smallest creeks.

Results

The report concludes that the GARS study area plays a critically important role in both the conservation and movement of wildlife within Knox. The five precincts are unique from each other and the remainder of Knox in overall area, average property size, amount of open space, road density and extent of native vegetation cover (**Figure 6**). Each precinct provides different values and functions from each other and each is valuable in its own right. The unique role of each Precinct in supporting different EVC Groups is described in Part 5 of this paper.

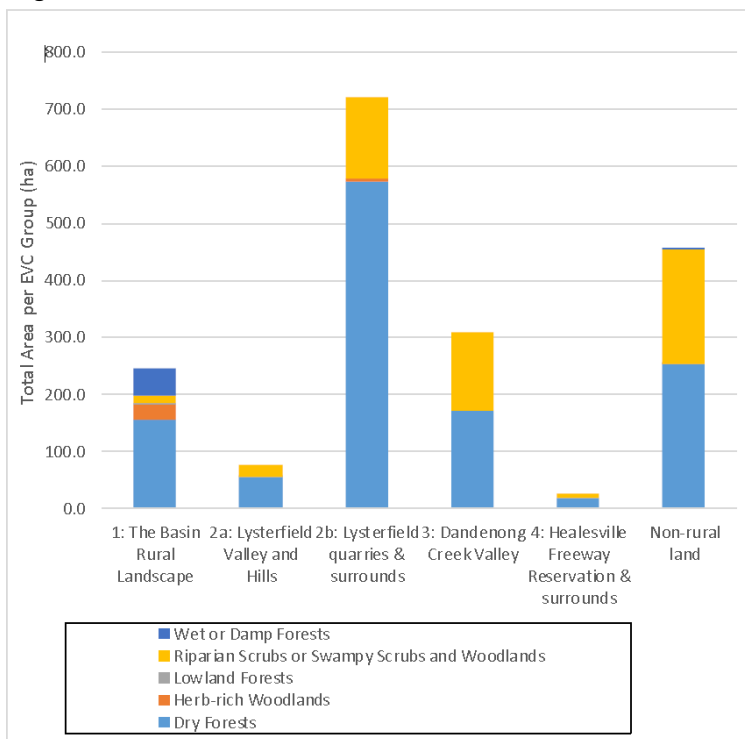


Figure 6. Extent of EVC Group in each of the Project Precincts and elsewhere in Knox.

A key output of the study is the mapping of important areas for conservation and movement of wildlife using the ten focal species. As discussed earlier, this is done through applying a number of buffers around different landscape elements, which based on the needs of the ten focal species. By overlaying the various buffers, the report identifies the location and extent of areas that are likely critical for the conservation of the focal species. These areas are indicated in **Figure 7** with detailed description provided in **Table 1**.

Specific implication for each GARS precinct are discussed in Part 5 of this paper.

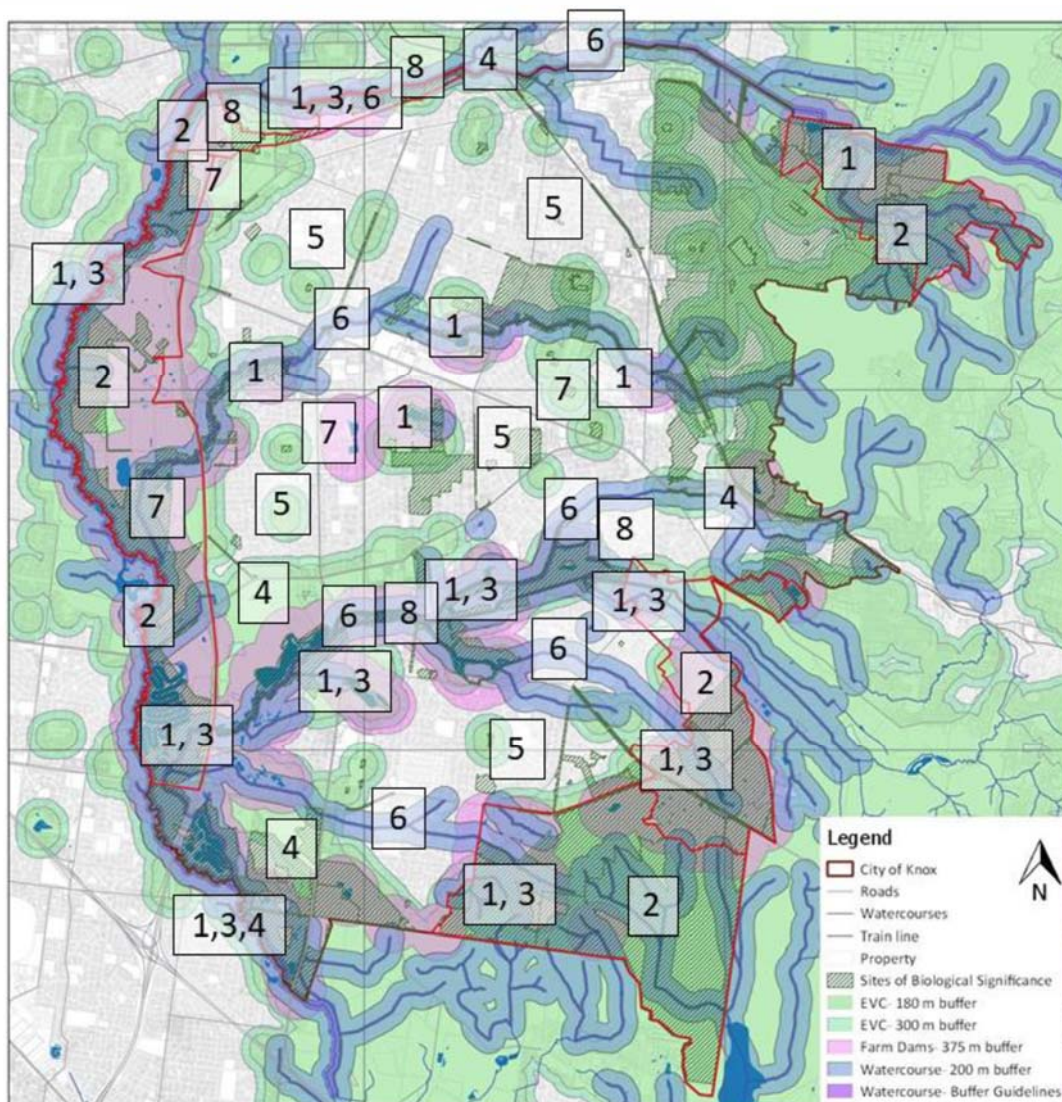


Figure 7. Important areas for protecting habitat quality and wildlife movement within KCC. The darker shaded areas indicate a larger number of overlapping values, and hence greater importance for wildlife conservation. For interpretation of numbered labels refer to **Table 1**.

Table 1: Reference details for Figure 1 - Important areas of wildlife habitat and movement within KCC

Type	Important ecological value for wildlife conservation and connectivity	Actions to retain and enhance ecological values
1	Locations with multiple overlapping ecological values, where remnant vegetation, riparian areas and farm dams or other waterbodies exist in close proximity to each other. These areas provide a diversity of habitat values and are likely to be hotspots for biodiversity as they will support not only the habitat specialists (e.g. riparian species), but will also provide a critical opportunity for species with multiple and diverse habitat needs to	<ul style="list-style-type: none"> • Protect and conserve the multiple ecological features that provide these values • Minimize any potential barriers to movement in these areas, including linear infrastructure (e.g. roads), large buildings, and fences at ground level • Mitigate the barrier effect for any essential infrastructure that cannot be placed elsewhere • Actively manage environmental weeds, predators or other threats to habitat quality • Augment the vegetation in these areas and apply appropriate vegetation management practices to increase the habitat value
2	Large consolidated areas of greenspace with ecological values are largely restricted to the Rural Land Precincts. Maintaining the continuous cover of natural vegetation is critical to the long-term viability of wildlife as more they will support larger populations and	<ul style="list-style-type: none"> • Preserve and protect large consolidated areas of greenspace, such as those in the Rural Land Precincts • Protect against incremental habitat loss in these areas by restricting development of built structures, such as buildings and roads • Protect against reduction in habitat condition by minimising degrading processes such as decreasing minimum lot sizes, or

	offer greater opportunities for movement and dispersal in multiple directions	<p>allowing additional impacts such as artificial light at night or noise pollution to intrude on these areas</p> <ul style="list-style-type: none"> • Pro-actively augment and enhance existing ecological values through restoration and revegetation activities and controlling environmental weeds, introduced predators and other species that have detrimental effects on wildlife communities
3	High density of farm dams, offering opportunity for wetland species (turtles, frogs) to move in search of food, nesting sites or mates. Higher density of farm dams support larger populations, with more individuals and greater genetic diversity and therefore a higher likelihood of surviving future challenges	<ul style="list-style-type: none"> • Allow activities that retain continuous areas of longer grass, trees and shrubs between ponds. These provide cover and protection while animals move between ponds (e.g. low to medium density stocking of livestock grazing) • Support and encourage activities that improve the quality of the water and vegetation surrounding farm dams, potentially through Knox's Gardens For Wildlife program, or by linking in with other initiatives that have a stronger rural focus (e.g. Land for Wildlife, Landcare Australia, Greening Australia) • Limit intensive activities (increased building densities, market gardens, heavy stock grazing) that drastically alter the intensity of human activity and impact on the quality of the farm dams or surrounding vegetation • Locate septic tanks and animal manure collection areas away from farm dams to reduce risk of nutrient impacts during leaching, seepage or overflow events • Minimize water runoff from impermeable surfaces directly entering farm dams to reduce risk of erosion and pollution impacts
4	Areas with very high ecological values for wildlife connectivity outside of Rural Land Precinct zones provide important connections between large areas of remnant vegetation (e.g. National Parks) which can act as source populations for areas that may not support viable populations of wildlife on their own, but which play a crucial role in adding additional habitat and thus supporting a larger population in the region	<ul style="list-style-type: none"> • Protect existing connections along Dandenong Creek and inland connections from Corhanwarrabul Creek to Waverley Golf Club via Kingston Links Golf Club by limiting new roads and buildings in these areas in favour of compatible land uses such as golf-courses, community farms, outdoor recreational uses and other nature-based activities • Enhance and augment existing ecological values through bushland restoration efforts and other initiatives that add ecologically important habitat features to the area
5	Developed areas with small, isolated locations with one or two high ecological values for wildlife. The scarcity of these ecological features within a landscape confers extra importance to any locations where they are still present	<ul style="list-style-type: none"> • Protect and conserve the native vegetation and other ecological features that provide these values • Complementary planting in the surrounding streetscapes and encouraging strong uptake of Gardens For Wildlife participation, particularly within the buffer areas surrounding the ecological features will enhance their long-term viability and increase their ecological impact • Adding new habitat in the areas between isolated features will increase the ability of wildlife to move through those landscapes and recolonise patches following local extinction events
6	Areas within high ecological value buffer zones where development has already occurred still offer important opportunities for wildlife connectivity and conservation (e.g. along Blind Creek and Corhanwarrabul Creek, and Dandenong Creek between Precincts 1 and 4)	<ul style="list-style-type: none"> • Incorporate habitat elements into nature strips and other areas in surrounding streetscapes. Habitat elements include connected tree canopy, multi-story vegetation (ground cover, mid-level shrubs, tree canopy) drawing from indigenous plant species found in remnant. • Encourage similar actions on private land through initiatives such as Gardens for Wildlife. • Place stronger requirements for green cover on private land in these areas as wildlife will use backyards as supplementary habitat (e.g. limit infill development, mandate a minimum 30% green space per property) • Encourage wildlife friendly fences that allow wildlife to go over or under them, whilst still functioning as fences for human purposes (e.g. keeping pets in yards)

		<ul style="list-style-type: none"> • Encourage consolidation of private greenspaces e.g. neighbours coordinate planting so that small plantings on each block form part of a larger ecological feature • Encourage "city as a catchment" approaches to water management
7	New developments in areas containing or adjacent to features of ecological value (e.g. golf courses, hobby farms, horse agistment) provide a critical opportunity to retain and enhance ecological values in the area while also meeting the needs for an increasing human population	<ul style="list-style-type: none"> • New locations for residential development are critical to the long-term prosperity of Knox. However, where future large-scale developments are planned for largely natural sites, such as golf courses, opportunities should be sought to: • Protect and retain existing ecological features, such as large old trees, remnant vegetation, natural wetlands and connections among nearby features. • Engage and encourage the developer to consider working with existing ecological features on site and incorporating them into the planning, design, construction and ongoing liveability phases for that development
8	Construction of linear infrastructure (e.g. roads, bridges) in locations that are currently held as reserves has the potential to significantly decrease connectivity and habitat values for wildlife in those locations, through both the loss of existing habitat, and the replacement of corridors with barriers	<ul style="list-style-type: none"> • Wherever possible, (re)align the road or bridge so that it has the least impact on the existing ecological assets in the areas • If construction must proceed, design the new infrastructure such that it is compatible with the existing ecological values of the site through: • Use of part of the reserve to create parallel corridors for wildlife and/or people (e.g. Appendix 8) • Add wildlife crossing structures (Refer to Appendix 7 of the Wildlife Conservation and Connectivity Report)

3.3. Heritage Review

Context Pty Ltd, on behalf of KCC has undertaken a preliminary review of 27 places of heritage significance which are included in the *City of Knox Heritage Study 1993*, and fall within the Study Area. Some of these places are already on the City's Heritage Overlay with the others not having statutory protections in place. The consultant was asked to undertake the following tasks:

- Confirmation of whether the 27 heritage places still exist;
- Photograph of the relevant places;
- Map the places (analogue mapping) or provide an indication of the locality;
- Note whether further heritage investigation of the place is worthwhile; and
- Outline any other recommendations (e.g. what further work is required to determine whether changes to the Knox Planning Scheme are needed).

The scope did not include a fresh heritage assessment of the places.

Methodology

1. Desktop Research: involved a range of sources including a range of heritage databases, National Trust, Parks Victoria, Melways, Google maps and the Knox Heritage Study. Documentary work on sites previously visited by Context consultants as part of other work in Knox was also utilised.
2. Site Inspections: It was confirmed that for the larger area landscapes, desktop work would be of more benefit than site visits. Hence inspections were undertaken for 18 sites and only desktop assessment for the remaining 9. Of the 18 sites inspected, 14 were located.

The final report, completed on 9 March 2017, includes a place note for each place and provides recommendations for each place, as well as overall recommendations at the end of the report. Where sites have been able to be accessed and found, the majority of recommendations are to retain existing Heritage and other Overlays. Where sites were not found or insufficient information has been available, a recommendation for further investigation has been made. Many of the sites without current statutory protection are recommended for assessment. The assessments have not been prioritised, however it is generally recommended to undertake assessments for places on private land as public land is less subject to change and sites may already be protected through land management practices.

Recommendations for each Precinct are included in Part 5 of this paper.

4. THE PLANNING SCHEME

This section reviews existing provisions in the Knox Planning Scheme (the Scheme). Whilst there are a variety of clauses and provisions of the Scheme that have some level of application within the Study Area, this section only focuses on those provisions that have specific relevance or significant implications.

The provisions of the Scheme discussed in this section are not word-for-word quotations, but rather present summaries or extracts of those clauses of the Scheme that are of higher importance to this project. For exact wording reference should be made to the Scheme ordinance text.

4.1. Planning Policy Framework (Statewide)

The Scheme includes the Victoria Planning Provisions (VPP) which are consistently applied across all Victorian Planning Schemes and reflect state-wide objectives, strategies and plans. A key part of the VPP is the Planning Policy Framework (PPF), which has been partially updated through VC148. The new PPF contains objectives and strategies organised under nine themes. Key applicable clauses of the PPF and their implications for the Study Area discussed below.

An upcoming Scheme amendment is currently being prepared to translate the existing Local Planning Policy Framework into the new PPF. Implications of this transformation will be considered in Stage 2 of the project.

CLAUSE 11 SETTLEMENT

Clause 11 Victoria, 11.01-1S Settlement

Sets the basis for the Urban Growth Boundary and contains strategies including:

- Create and reinforce settlement boundaries;
- Preserve and protect features of rural land and natural resources to enhance their contribution to settlements and landscapes; and
- Limit urban sprawl and direct growth into existing settlement.

Clause 11.01-1R Green wedges – Metropolitan Melbourne

Sets the policy basis behind the establishment of the Green Wedge Zone and contains strategies including:

- Support development in the green wedge that provides for environmental, economic and social benefits.
- Consolidate new residential development in existing settlements and in locations where planned services are available and green wedge values are protected.
- Plan and protect major state infrastructure and resource assets, such as airports and ports with their associated access corridors, water supply dams, water catchments and waste management and recycling facilities.
- Support existing and potential agribusiness activities, forestry, food production and tourism.
- Protect areas of environmental, landscape and scenic value such as biodiversity assets and, national and state parks.
- Protect significant resources of stone, sand and other mineral resources for extraction purposes.
- Provide opportunities for renewable energy generation

Clause 12 Environment and Landscape Values

States that planning should help to protect the health of ecological systems and the biodiversity they support (including ecosystems, habitats, species and genetic diversity) and conserve areas with identified environmental and landscape values. Planning should protect, restore and enhance sites and features of nature conservation, biodiversity, geological or landscape value.

Clause 12.01-1S Protection of biodiversity requires that important areas of biodiversity, including key habitat for rare or threatened species and communities be identified, and be strategically planned for protection and conservation. It states that decision making should take into account the impacts of land use and development on Victoria's biodiversity including national parks, conservation reserves or nationally and internationally significant sites.

Clause 12.01-2S Native vegetation management aims at no net loss to biodiversity as a result of the removal, destruction or lopping of native vegetation, through the application of a three step approach (avoid, minimize impacts, offset).

Clause 12.03-1S River corridors, waterways, lakes and wetlands provides the strategic support to protect the environmental, cultural and landscape values of all water bodies and wetlands.

Clause 12.05-1S Environmentally sensitive areas: Dandenong Ranges is included as an environmentally sensitive area with significant recreational value to be protected from development.

Clause 12.05-2S Landscapes

Aims to protect and enhance significant landscapes and open spaces that contribute to character, identity and sustainable environments. Strategies:

- Ensure development does not detract from the natural qualities of significant landscape areas.
- Improve the landscape qualities, open space linkages and environmental performance in significant landscapes and open spaces, including green wedges, conservation areas and non-urban areas.
- Recognise the natural landscape for its aesthetic value and as a fully functioning system.
- Ensure important natural features are protected and enhanced.

CLAUSE 13 ENVIRONMENTAL RISKS AND AMENITY

Clause 13.01-1S Natural hazards and climate change

Aims to minimise the impacts of natural hazards and adapt to the impacts of climate change through risk-based planning.

Clause 13.02 Bushfire

Applies to land that is

- Within a designated bushfire prone area;
- Subject to a Bushfire Management Overlay; or
- Proposed to be used or developed in a way that may create a bushfire hazard.

Strategies:

- Protect of human life: as a priority over all other policy considerations.
- Identify and assess bushfire hazard: Provide policy basis for the Bushfire Management Overlay (BMO).
- Settlement planning: Direct population growth and development to low risk locations; Do not approve any strategic planning document, local planning policy, or planning scheme amendment that will result in the introduction or intensification of development in an area that has, or will on completion have, more than a BAL-12.5 rating.
- In areas of biodiversity conservation value, discourage settlement growth and development in bushfire affected areas that are important areas of biodiversity.
- Require bushfire risk assessments at planning application stage.

Clause 13.03 Floodplains

Objective:

To assist the protection of:

- Life, property and community infrastructure from flood hazard.
- The natural flood carrying capacity of rivers, streams and floodways.
- The flood storage function of floodplains and waterways.
- Floodplain areas of environmental significance or of importance to river health.

Strategies:

- Identify land affected by flooding, including land inundated by the 1 in 100 year flood event.
- Avoid intensifying the impact of flooding through inappropriately located use and development.
- Locate emergency and community facilities outside the floodplain.

CLAUSE 14 NATURAL RESOURCE MANAGEMENT

Clause 14.01 Agriculture aims at protecting the state's agricultural base by preserving productive farmland, including those in Green Wedges, and encouraging sustainable agricultural land use.

Clause 14.02 Water requires the protection and restoration of catchments, water bodies, groundwater, and the marine environment.

Clause 14.03 Earth and Energy Resources encourages exploration and extraction of natural resources in accordance with acceptable environmental standards, and provides for buffer areas and the consideration of impacts on adjacent land.

CLAUSE 15 BUILT ENVIRONMENT AND HERITAGE

Planning is to recognise the role of urban design, building design, heritage and energy and resource efficiency in delivering liveable and sustainable cities, towns and neighbourhoods.

15.01 Built Environment

- Promote **urban design** to create liveable, high amenity and well-designed spaces.
- Support the development and growth of **cultural precincts** and creative industries.
- Support and protect **neighbourhood character**, cultural identity, and sense of place.

- **Design for rural areas** to ensure development respects valued areas of rural character.
- Achieve neighbourhoods that foster **healthy and active living** and community wellbeing.

15.02 Sustainable Development supports:

- Improve the energy, water and waste performance of buildings and subdivisions through environmentally sustainable development.
- Support low energy forms of transport such as walking and cycling.
- Reduce the urban heat island effect by greening the urban areas.
- Retain existing vegetation and plant new vegetation as part of development and subdivision.

15.03 Heritage sets the basis for the conservation and enhancement of places of heritage significance including Aboriginal cultural heritage.

CLAUSE 17 ECONOMIC DEVELOPMENT

Aims to encourage tourism development to maximise the economic, social and cultural benefits of developing the state as a competitive domestic and international tourist destination.

CLAUSE 18 TRANSPORT

Planning to ensure an integrated and sustainable transport system that provides equitable access to social and economic opportunities and contributes to environmental sustainability. Makes reference to improvements to public transport, walking and cycling networks with the ongoing development and redevelopment of urban areas.

CLAUSE 19 INFRASTRUCTURE

19.02-6R Open Space – Metropolitan Melbourne

Provides for long term planning protection to meet demand for future open space along the **Dandenong Valley parklands**.

4.2. Planning Policy Framework (Local)

4.2.1. Municipal Strategic Statement

The Municipal Strategic Statement (MSS) is a part of the Local Planning Policy Framework (LPPF) and is a statement of the key strategic planning, land use and development objectives for the City and the strategies and actions for achieving those objectives. It promotes the objectives of planning in Victoria to the extent that is applicable in Knox.

The LPPF and MSS provide the strategic basis for the application of the zones, overlays and particular provisions in the planning scheme and decision making by the City. The MSS provides for an integrated approach to planning across all areas of Council's operations. The MSS is dynamic and enables community involvement in its ongoing review. The MSS should be continually refined as the City develops and revises its strategic directions in response to the changing needs of the community.

Clause 21.02 Vision

The Strategic Framework Plan (Clause 21.02-1) sets out the general pattern for land use development and major strategic directions for the City. Within Dandenong Foothills and Dandenong Creek Valley, the Strategic Framework Plan requires the protection of major environmental and landscape features. The Strategic Framework Plan also identifies two Strategic Investigation Sites (Jenkins Orchard and Boral Quarry) within Dandenong Creek Valley (Precinct 3) with opportunities to accommodate future residential and supporting uses.

Figure 1 within the Strategic Framework Plan:

- Dandenong Foothills and Dandenong Creek Valley are marked on the plan, but no strategic direction is provided
- Future Rowville Rail
- Future Burwood Highway tram extension.
- Strategic Investigation Sites: No.11 Boral Quarry
- A Neighbourhood Activity Centre is identified in The Basin (on the edge of Precinct 1).
- A Neighbourhood Activity Centre is identified within Jenkins Orchard (on the edge of Precinct 3).

CLAUSE 21.03 ENVIRONMENTAL AND LANDSCAPE VALUES

Sub-clause 21.03-1 A treed city

Objective 1: To protect and strengthen treed character and landscape value across all areas in Knox.

Strategies:

- 1.1 Create a greener and more liveable City with more canopy trees and vegetation in public and private spaces.
- 1.2 Require vegetation to be retained where it contributes to landscape value and character, along ridgelines, waterways, streetscapes, transport corridors, and where it contributes to significant views, vistas and local amenity values.
- 1.3 Ensure new development proposals consider the impact on the health and viability of existing vegetation, and respond to the landscape values of the site and local area.
- 1.4 Incorporate the planting of new vegetation, including canopy trees within development proposals to enhance natural values of the site and of the local area.

Sub-clause 21.03-2 Biodiversity and native vegetation

All provisions are relevant and need to be considered.

Sub-clause 21.03-5 Significant landscapes

Further strategic work:

- Complete an assessment of agricultural land in rural and green wedge areas to better understand its productivity (including potential food production) and economy.
- Complete an assessment of and provide strategic directions for all rural and green wedge land that consider its aesthetic, biodiversity, landscape, amenity, cultural and agricultural values.
- Work with State Government agencies and neighbouring municipalities to strategically plan for, consolidate and improve the recreational activities and landscape characteristics of the Dandenong Valley parklands, and to address interface issues between parkland and urban development.
- Review planning strategies and zoning in the area surrounding the Dandenong Valley Parklands to ensure consistency with objectives for development of the park.

CLAUSE 21.04 ENVIRONMENTAL RISKS

Sub-clause 21.04-1 Bushfire

Areas susceptible to bushfire in Knox are predominantly focused on the interface between urban development and the foothills of the Dandenong Ranges and bushland in Lysterfield.

Objective 1: To ensure that new development responds to bushfire risk to life and property.

CLAUSE 21.05 BUILT ENVIRONMENT AND HERITAGE

Sub-clause 21.05-1 Local character, identity and sense of place provides for an integrated place-based approach to planning which fosters partnerships between Council and the community, local businesses and other key stakeholders.

Sub-clause 21.05 – 3 Bush Boulevards and gateways

The Study Area contains/abuts a number of Bush Boulevards, Paths into the Hills, and Gateways (**Figure 8**).

'**Bush Boulevards**' are arterial roads with wide reservations running east-west through Knox (except Stud Road, which runs north-south) that are planted with informal avenues of native trees. As 'Bush Boulevards' extend eastwards into the Foothills they become '**Paths into the Hills**' that have roadside verges containing significant understorey and canopy vegetation. Buildings along these roads generally contribute to this character with setbacks from the street and canopy tree planting. These attractive road corridors link the suburbs of Knox to the landscape character of the Dandenong Foothills.

LEGEND

-  RAIL CORRIDOR / TRAIN STATION
 -  MUNICIPAL BOUNDARY
 -  DECLARED ARTERIAL ROAD
 -  EASTLINK
 -  TOURIST GATEWAY
 -  DANDENONG CREEK VALLEY GATEWAY
 -  BUSH BOULEVARD
 -  PATHS INTO THE HILLS
 -  CREEK
 -  FOOTHILLS
 -  DANDENONG CREEK VALLEY
 -  NATIONAL PARK
- HIERARCHY OF ACTIVITY CENTRES:**
-  ACTIVITY CENTRE
 -  NEIGHBOURHOOD ACTIVITY CENTRE

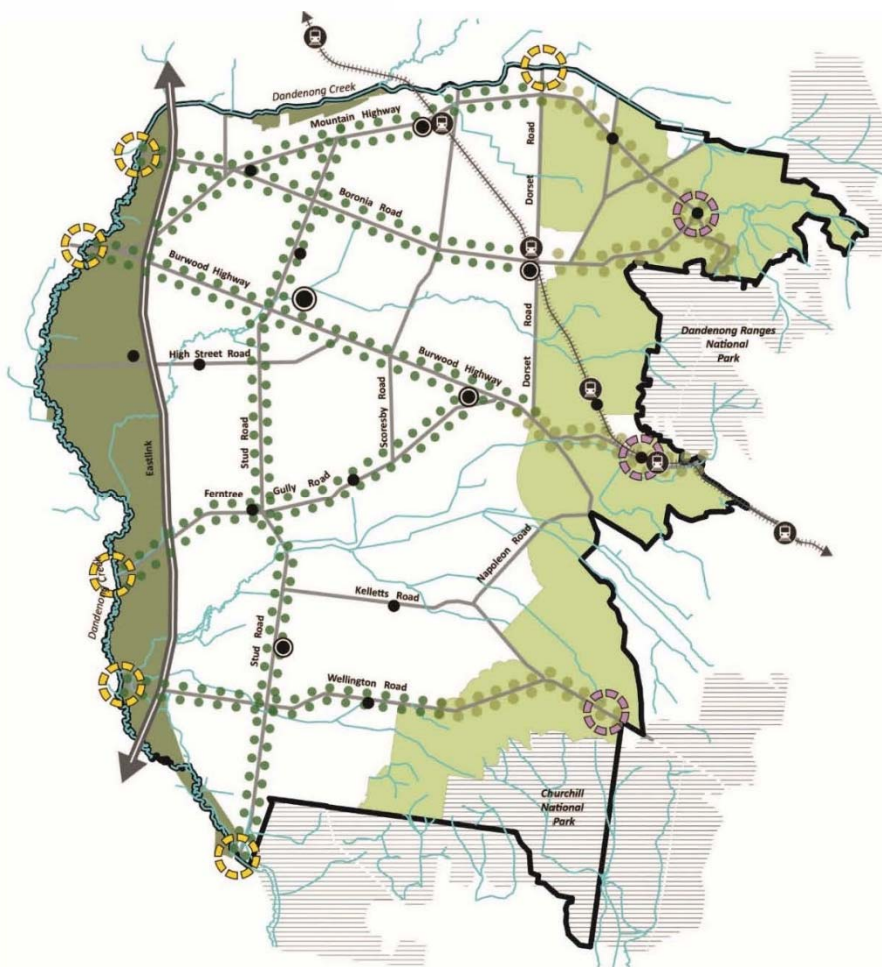


Figure 8. Clause 21.05 Built Environment And Heritage

‘Gateways’ are landscape-dominant entry points into the City that intersect with the natural significant landscapes of the Dandenong Foothills, the Lysterfield Valley and the Dandenong Creek Valley.

‘Dandenong Creek Valley Gateways’ (shown in **Figure 8**) are located at entry points along the western and northern boundaries of Knox, where main roads pass through Dandenong Creek Valley’s broad corridor of green space separating Knox from adjoining municipalities. These gateways welcome visitors to Knox with a sense of openness and views into the creek valley, promoting the City’s green landscape identity.

‘Tourist Gateways’ (shown in **Figure 8**) are integrated built form and landscape entry points near the eastern boundary of Knox that are on the tourist route for visitors to the Dandenong Ranges.

Clause 21.07 Economic Development

Further Strategic Work: Review rural and green wedge areas to provide strategic guidance for land use and development for land outside the urban growth boundary.

CLAUSE 21.06 HOUSING

Identifies a **Strategic Investigation Site** at 191 George Street, Wantirna South (Boral Quarry) which could be suitable for future residential development (either entirely or in part), including a component of social housing. This site has been considered in the discussions of Precinct 3 under Part 5 of this paper.

CLAUSE 21.10 LOCAL AREAS

This clause provides important strategic direction for the Dandenong Foothills.

Sub-clause 21.10.1 Dandenong Foothills

Precincts 1, 2a and 2b are within the Dandenong Foothills Local Area where the following vision applies:

The metropolitan landscape significance of the Dandenong Foothills will be protected and enhanced. Uninterrupted view lines of the Foothills from within the municipality and around metropolitan Melbourne will be maintained by ensuring

retention of canopy trees and buildings and works are sensitively designed and sited to sit below the dominant tree canopy height.

Objective 1 To maintain and improve the continuous closed tree canopy of the Foothills.

Strategies:

- Provide sufficient open space within development to ensure that existing canopy vegetation can be retained and that new canopy vegetation can establish.

Objective 2 To maintain the low density residential character of the Foothills by ensuring that existing subdivision patterns and lot sizes are retained.

Strategies:

- Recognise that the environment and landscape significance of the Dandenong Foothills outweighs the need for urban consolidation.
- Reinforce the existing subdivision pattern and lot sizes.
- Avoid the subdivision and rezoning of land for urban purposes in areas of high bushfire risk.

Objective 3 To protect and enhance the aesthetic, environmental and metropolitan landscape significance of the Dandenong Foothills.

Strategies:

- Maintain uninterrupted viewlines of the Dandenong Foothills by requiring all buildings and works to be sensitively designed and sited to sit below the dominant tree canopy height.
- Facilitate development in accordance with the direction for each precinct, as shown on **Figure 9**. (These are detailed in Part 5 of this paper for relevant GARS precincts)

- Precinct 1 – Lysterfield Valley and Lysterfield Hills Rural Landscape
- Precinct 2 – Dandenong Foothills: Lower Slope and Valley Area
- Precinct 3 – Dandenong Foothills: Foothills Backdrop and Ridgeline Area
- Precinct 4 – The Basin Rural Landscape
- Precinct 5 – Lysterfield Urban/Rural Transition and Lysterfield Valley Contributory Area

Objective 4 To protect the rural environments of The Basin and the Lysterfield Valley and Lysterfield Hills.

Strategies:

- Protect the rural landscape and environment within Precinct 1 and Precinct 4.

Objective 5 To require new buildings, works and landscaping in The Basin and the Lysterfield Valley and Lysterfield Hills to protect the physical and visual amenity of the open pastoral setting.

Strategies:

- Protect the physical and visual amenity of the open pastoral setting.

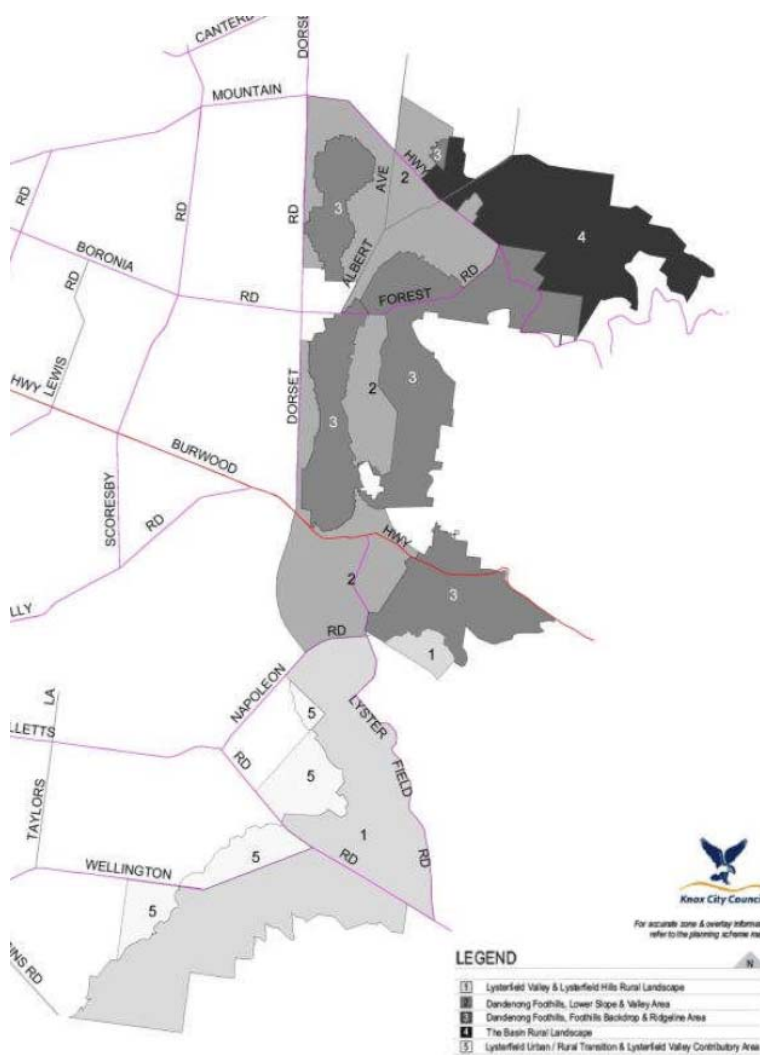


Figure 9. Dandenong Foothills Policy Area

4.2.2. Local Planning Policies

Whilst some of the existing Local Planning Policies (LPPs) may have provisions applicable to individual developments within the Study Area, there are currently no specific or place-based LPPs that provide direction for the Study Area.

4.3. Existing Zones

This section provides an overview of those Scheme zones that apply within the Study Area. The extracts from the Scheme provided below are not word for word quotations but rather present extracts of key provisions that have relevance to the Study Area.

RURAL LIVING ZONE (RLZ)

Precincts affected: Small pockets of land within Precincts 2a, 3 and 4.

Zone Purpose

- To provide for residential use in a rural environment.
- To provide for agricultural land uses which do not adversely affect the amenity of surrounding land uses.
- To protect and enhance the natural resources, biodiversity and landscape and heritage values of the area.
- To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision.

Minimum subdivision area:

Zone Default: 2ha
RLZ Schedule: **4ha**.

RURAL CONSERVATION ZONE (RCZ)

Precincts affected: 1 and 2a

Zone purpose:

- To protect and enhance the natural environment and natural processes for their historic, archaeological and scientific interest, landscape, faunal habitat and cultural values.
- To protect and enhance natural resources and the biodiversity of the area.
- To encourage development and use of land which is consistent with sustainable land management and land capability practices, and which takes into account the conservation values and environmental sensitivity of the locality.
- To provide for agricultural use consistent with the conservation of environmental and landscape values of the area.
- To conserve and enhance the cultural significance and character of open rural and scenic non urban landscapes.

Min subdivision area:

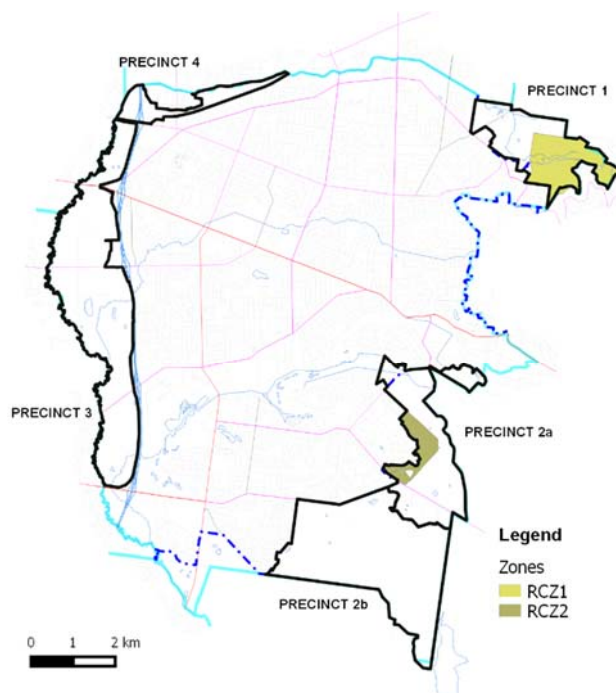
Zone default: 40ha
RCZ1: **4ha**
RCZ2: **0.5ha**

RCZ1 (Precinct 1) – applies to rural residential areas in The Basin
Conservation Values:

- To conserve and enhance the environment of Dobsons Creek and immediate surrounds as a natural system.
- To conserve areas of remnant vegetation and habitat identified in Council’s Remnant Tree Study.
- To provide development which complements the adjoining Dandenong Ranges National Park.

RCZ2 (Precinct 2a) – applies to rural residential areas in the Lysterfield Valley
Conservation Values:

- To provide an appropriate visual transition from urban development to the west of this land and the significant rural landscape to the east



FARMING ZONE (FZ)

Precincts affected: Small pockets of land within Precinct 3

Zone purpose:

- To provide for the use of land for agriculture.
- To encourage the retention of productive agricultural land.
- To ensure that non-agricultural uses, including dwellings, do not adversely affect the use of land for agriculture.
- To encourage the retention of employment and population to support rural communities.
- To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision.

Min subdivision area:

Zone default: 40ha

FZ Schedule: **20ha**

GREEN WEDGE ZONE (GWZ)

Precincts affected: 1, 2a and 2b

Zone purpose:

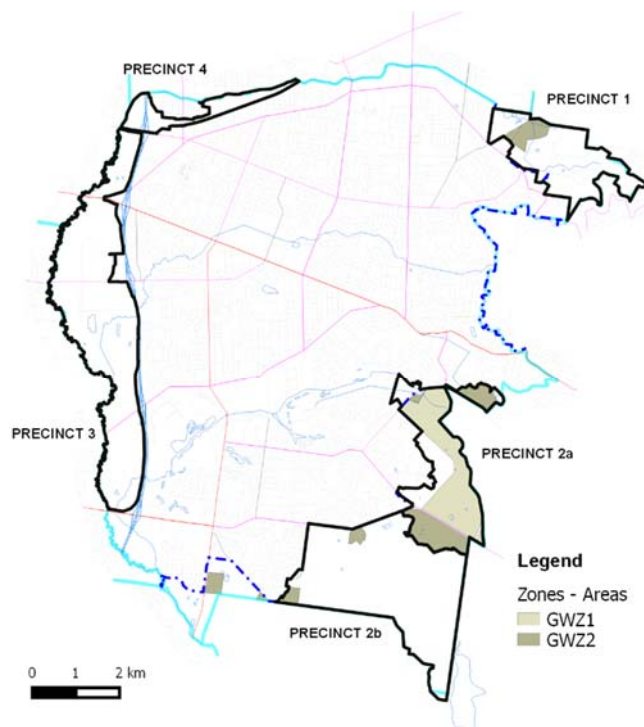
- To recognise, protect and conserve green wedge land for its agricultural, environmental, historic, landscape, recreational and tourism opportunities, and mineral and stone resources.
- To encourage use and development that is consistent with sustainable land management practices.
- To encourage sustainable farming activities and provide opportunity for a variety of productive agricultural uses.
- To protect, conserve and enhance the cultural heritage significance and the character of open rural and scenic non-urban landscapes.
- To protect and enhance the biodiversity of the area.

Min subdivision area

Zone default: 40ha

GWZ1: **20ha**

GWZ2: **4ha**



PUBLIC PARK AND RECREATION ZONE (PPRZ)

Precincts affected: 1, 2b and 3

Zone purpose:

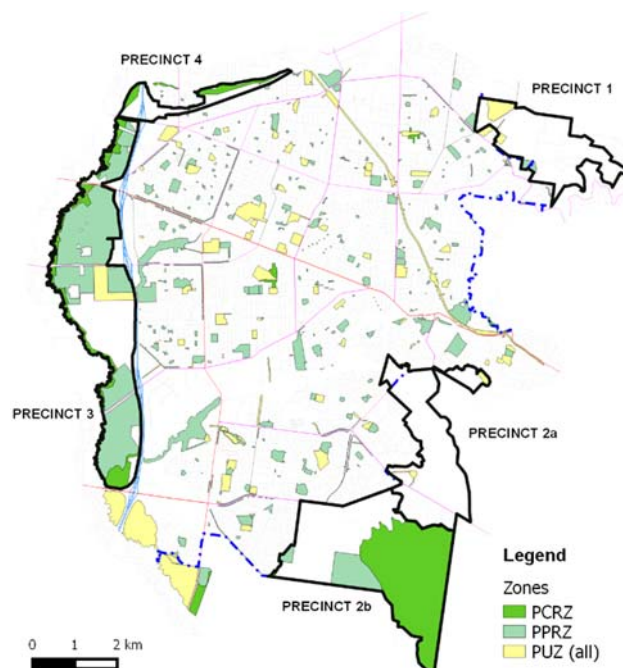
- To recognise areas for public recreation and open space.
- To protect and conserve areas of significance where appropriate.
- To provide for commercial uses where appropriate.

PUBLIC CONSERVATION AND RESOURCES ZONE (PCRZ)

Precinct affected: 2b, 3 and 4

Zone purpose:

- To protect and conserve the natural environment and natural processes for their historic, scientific, landscape, habitat or cultural values.
- To provide facilities which assist in public education and interpretation of the natural environment with minimal degradation of the natural environment or natural processes.
- To provide for appropriate resource based uses



PUBLIC USE ZONE (PUZ1)

Precincts affected: 1, 2a and 3

Zone purpose:

- To recognise public land use for public utility and community services and facilities.
- To provide for associated public uses

The PUZ covers areas of infrastructure including the Liverpool Road Retarding Basin (The Basin) and KCC Landfill site in Wantirna South. Detailed uses are discussed in Part 5 of this report.

SPECIAL USE ZONE (SUZ)

Precinct affected: 1 (SUZ1), 2b and 3 (SUZ2)

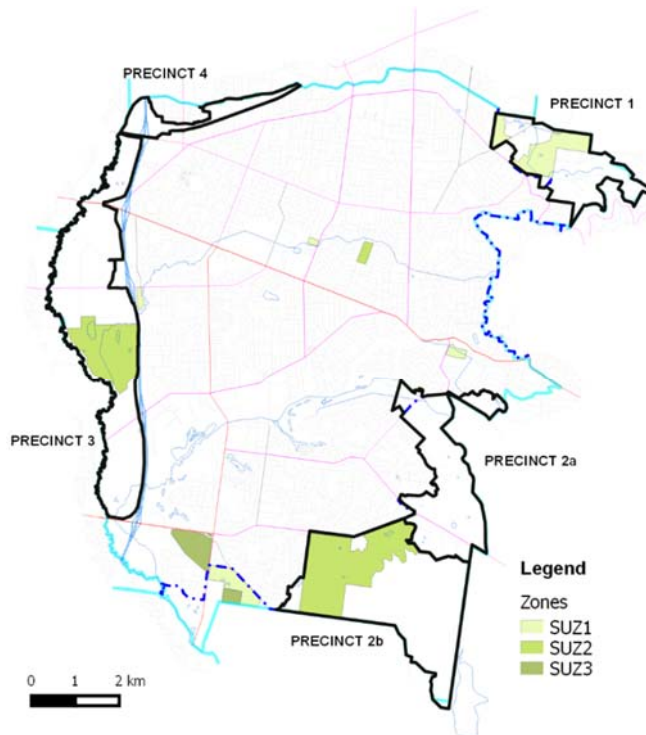
SUZ1 – Applies to the Salvation Army sites in the Basin.

Purpose:

- The use of private facilities including community, sporting leisure, recreation, education and religious facilities.
- To consider flood risk on or near land subject to flooding.

SUZ2 – Applies to the quarries in Lysterfield and Scoresby

- The use and development of land for earth and energy resources industry.
- Interim uses compatible with nearby uses
- Land management practices to minimise adverse impact on nearby land.



URBAN FLOODWAY ZONE (UFZ)

Precincts affected: 1, 2A, 3 and 4

Zone purpose:

- To identify waterways, major floodpaths, drainage depressions and high hazard areas within urban areas which have the greatest risk and frequency of being affected by flooding.

ROAD ZONE (RDZ)

Precincts affected: all

Zone purpose:

- To identify significant existing roads.
- To identify land which has been acquired for a significant proposed road.

RDZ1 (Category 1 Road) applies to a number of road reservations within all precincts. These are indicated on the Existing Zones and Uses maps for individual precincts.

4.4. Existing Overlays

ENVIRONMENTAL SIGNIFICANCE OVERLAY (ESO)

Precinct affected: All precincts are partially affected by ESO2. A portion of Precinct 1 is also affected by ESO3.

Purpose

- To identify areas where the development of land may be affected by environmental constraints.
- To ensure that development is compatible with identified environmental values.

ESO2 Sites of Biological Significance

The area covered by this schedule includes a range of sites of biological significance identified in ‘*Sites of Biological Significance in Knox – 2nd Edition*,’ 2010 (SBS report). Their protection and appropriate management is of particular importance for the maintenance of both Knox’s and Victoria’s biodiversity, as well as for liveability and the health and wellbeing of the community. The area covered by this overlay is 26.42 square kilometres or 23.12% of the Knox municipality.

The areas covered by this overlay include some of the most significant indigenous remnant vegetation in Knox. The indigenous vegetation on the slopes, particularly the higher or steeper areas, provide habitat, land stability and a characteristic, bushy landscape that can often be seen from a broad viewing area.

Key permit triggers:

- Construct a building or carry out works – some minor or public works are exempted

- Removal of indigenous vegetation (indigenous within Knox). Minor maintenance and removal of trees in proximity to existing buildings are exempted.
- Subdivision of land

Key decision guidelines:

- The environmental value of vegetation affected by the proposal
- Any threatened species, ecological community or EVCs on the site
- Whether siting, design and management measures have been used to minimize impacts on indigenous vegetation
- Offset measures
- Ecological restoration or enhancement of the site
- Bushfire risk and measures to minimise ecological damage while achieving fire safety

ESO3 Dandenong Ranges Buffer

The area covered by this schedule is also identified in the SBS report. The protection and appropriate management of this area is of particular importance as it forms a buffer to the Dandenong Ranges National Park and abuts other identified sites of biological significance, both at its edge and within the area.

Many residential lots within this area, in part due to their lot size and site coverage have been able to retain indigenous trees and intact understorey. The canopy often includes higher numbers of large old indigenous trees than elsewhere in Knox. These trees are irreplaceable in terms of the lifetimes of current residents and their children. They are often critical for habitat, particularly for species like the Powerful Owl and bats.

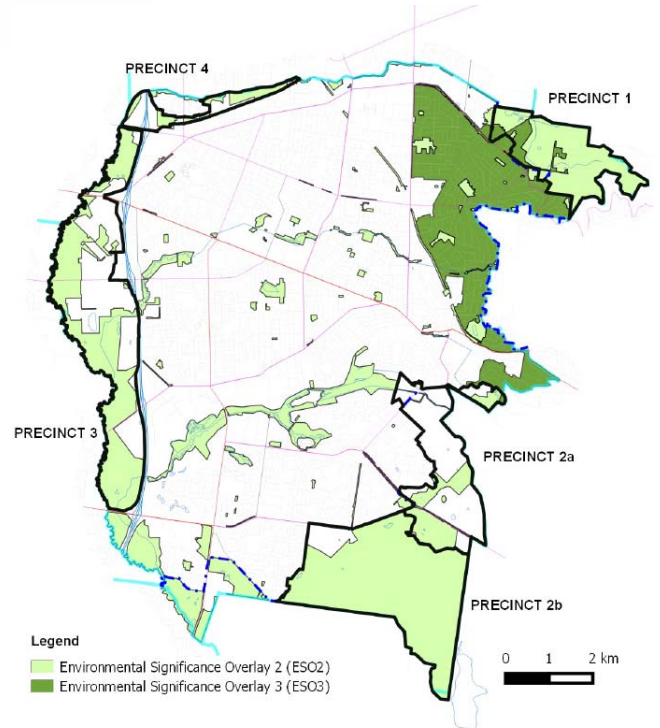
Permit triggers are similar to those of ESO2 with the exception of:

- Subdivision of land is exempted if the lot is at least 10m from a watercourse, water body or indigenous vegetation.

Decision guidelines are similar to those of ESO2.

SIGNIFICANT LANDSCAPE OVERLAY (SLO)

Precincts affected: The key SLO schedules are SLO4 which covers the majority of Precinct 1 and SLO1 which covers large portions of Precincts 2a and 2b. The north-western corner of the Hansen quarry site within Precinct 2b is affected by SLO5. Some smaller areas within the Study Area are also affected by SLO2 and 3.



SLO1 Lysterfield Valley and Lysterfield Hills Rural Landscape

The landscape is centred on the enclosed Monbulk Creek Valley. The purpose is to maintain the character and views of rolling rural landscapes that are mainly pastoral. Hills on either side of the valley are bare or very lightly treed, with this openness contrasting with the treed slopes of the Dandenong Ranges. The character of this landscape is unique and is particularly sensitive to further subdivision and development.

Key landscape character objectives:

- To protect the broad scale pastoral landscape character and the open, bold hillsides of the Lysterfield Valley
- To protect and enhance the scenic, visual, cultural and environmental values of the Lysterfield Valley, including the contrast between this area and the forested slopes of the Dandenong Ranges
- Vegetation retention

Key permit triggers:

- Buildings and works with a height of over 7.5m
- Trees with a height of 5m or more or a trunk girth greater than 0.5m; exemptions apply
- Non-complying fences (permeability, height, material, etc.)

Some of the decision guidelines:

- Whether development above 115m AHD is appropriate
- Impact on views to the Dandenong Ranges and ridgelines
- Development being sympathetic to the landscape qualities
- Materials and colours
- Buildings to be sited on low-lying positions, follow the topography and avoid earthworks

SLO4 The Basin Rural Landscape

Development is to be sited and designed so as to maintain the landscape character of the area and the distinctive views of this pastoral landscape surrounded by bush. This landscape is particularly sensitive to further subdivision and development.

Key landscape character objectives:

- To recognise the environmental and visual sensitivity of this rural area at the foot of the Dandenong Ranges
- To protect and enhance the scenic, visual, cultural and environmental values of The Basin
- To retain vegetation

Key permit triggers:

- To construct a building or carry out works
- Trees with a height of 5m or more or a trunk girth greater than 0.5m; exemptions apply
- Non-complying fences (permeability, height, material, etc.)

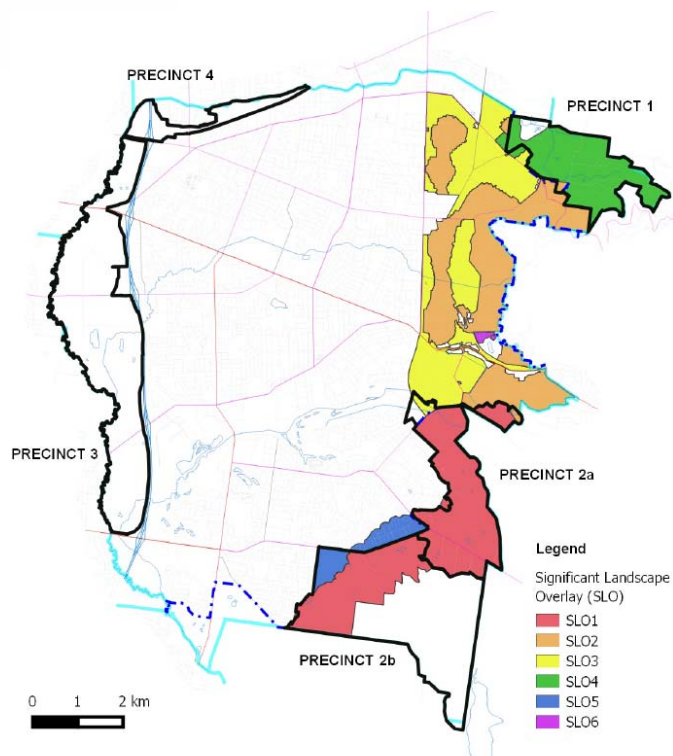
Some of the decision guidelines:

- Buildings to be sited on low-lying positions, follow topography and avoid earthworks
- Building bulk, size, materials and finishes to reflect the landscape character

SLO5 Lysterfield Urban/Rural Transition and Lysterfield Valley Contributory Area

Lysterfield Valley forms the major “gateway” to the Dandenongs from the metropolitan area. The excellent views of this landscape from Glenfern Road and Mount Morton highlight its importance as a buffer between urban and rural areas and as a visual transition between the metropolitan suburbia and the elevated and forested slopes of the Dandenongs. The major attraction of this landscape is its simplicity of colour, shape and texture in contrast to the forested areas to the south and south-east, the suburban development to the west and the forest residential character of Belgrave.

Key landscape character objectives:



- To ensure that development is compatible with the scale of development and landscape character of the Lysterfield Valley and Lysterfield Hills
- To ensure that development is sensitive to the natural characteristics of the land including slope, terrain and any remnant vegetation, and responds to bushfire risk.
- To ensure that development recognises local views and minimises impact on views of the Dandenong Ranges, Lysterfield Valley, Lysterfield Hills and significant ridgelines.

Key permit triggers:

- Building or works other than certain extensions and ancillary buildings/works
- Excavation or filling of more than 1m in depth
- Trees with a height of 5m or more or a trunk girth greater than 0.5m; exemptions apply
- Non-complying fences (permeability, height, material, etc.)

Some of the decision guidelines:

- The impact from the scale, shape, bulk, design and external finishes of any development upon the landscape qualities of the area
- Whether buildings exceeding a height of 7.5m have an impact on landscape character
- Landscape and vegetation retention
- Whether building on slopes greater than 20% is appropriate

VEGETATION PROTECTION OVERLAY (VPO)

Only small pockets within the Study Area are affected. This is because the majority of the Study Area is covered by other overlays (ESO or SLO) or conservation-type zones that have vegetation controls in place.

VPO1 (Precinct 3)

Retains and protects remnant overstorey vegetation – 5m high or more.

VPO2 (Precincts 1 and 4)

Protects significant exotic and non indigenous native trees which were identified in the *Vegetation Assessment and Protection Strategy for the City of Knox* (Water Ecoscience, February 1998). The Schedule includes a list of the protected trees.

VPO4 (Precinct 4)

Canopy tree protection – aims to protect and retain the continuity of tree cover, with particular emphasis on indigenous species and large old native trees. Applies to trees of a height of 5m or more (other conditions also apply).

BUSHFIRE MANAGEMENT OVERLAY (BMO)

Precincts affected:

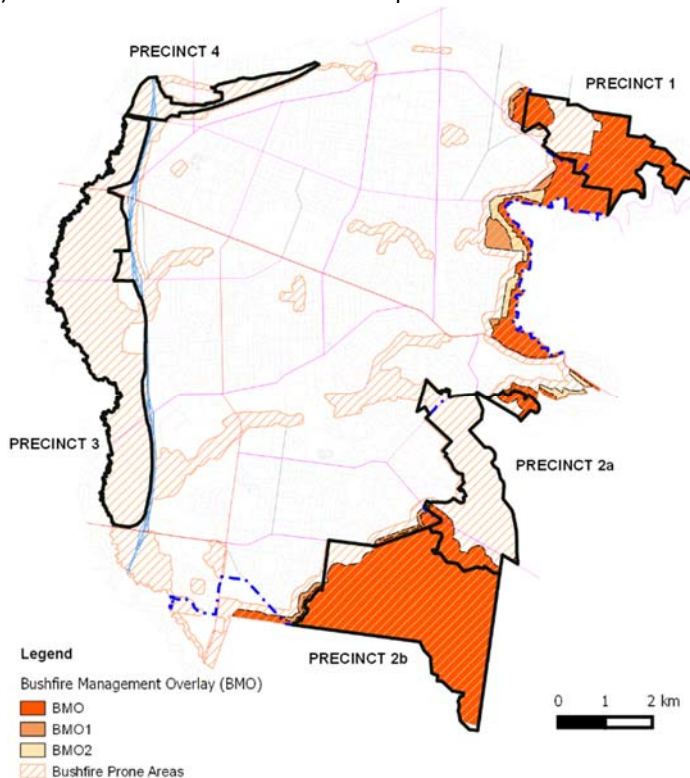
Precincts 1, 2a and 2b (by BMO – no BMO1 or BMO2 within the Study Area)

Purpose:

- To identify areas where bushfire protection measures are needed.
- To ensure development is only permitted where the risk to life and property from bushfire can be reduced to an acceptable level.

Key requirements:

- Triggers planning permits for most development and subdivision and requires the following as part of applications:
 - A bushfire hazard assessment of bushfire hazard within 150m of proposal
 - A bushfire hazard landscape assessment of the locality more than 150m of proposal.
 - A bushfire management statement describing how development responds to the fire requirements
- Requires referral of applications to the fire authority (CFA)
- Sets out mandatory conditions to be included in planning permits.



It is also important to note that the declared **Bush Prone Area (BPA)** covers the entirety of the Study Area including those areas not covered by the BMO. While this layer does not trigger planning permits, it triggers building controls and requires fire assessment at Building Permit stage. A strategic implication of the BPA is that it triggers the application of clause 13.02 Bushfire, which requires Bushfire Hazard Assessment for any strategic applications such as proposed Scheme amendments.

LAND SUBJECT TO INUNDATION OVERLAY (LSIO)

Precincts affected:

Precincts 2a, 3 and 4

Purpose:

Identifies land within the 1 in 100 year floodplain managed by Melbourne Water.

Key requirements:

- Triggers a planning permit for most building, works and subdivisions.
- Assessment of floor levels are required
- Triggers referral to Melbourne Water

SPECIAL BUILDING OVERLAY (SBO)

Precincts affected:

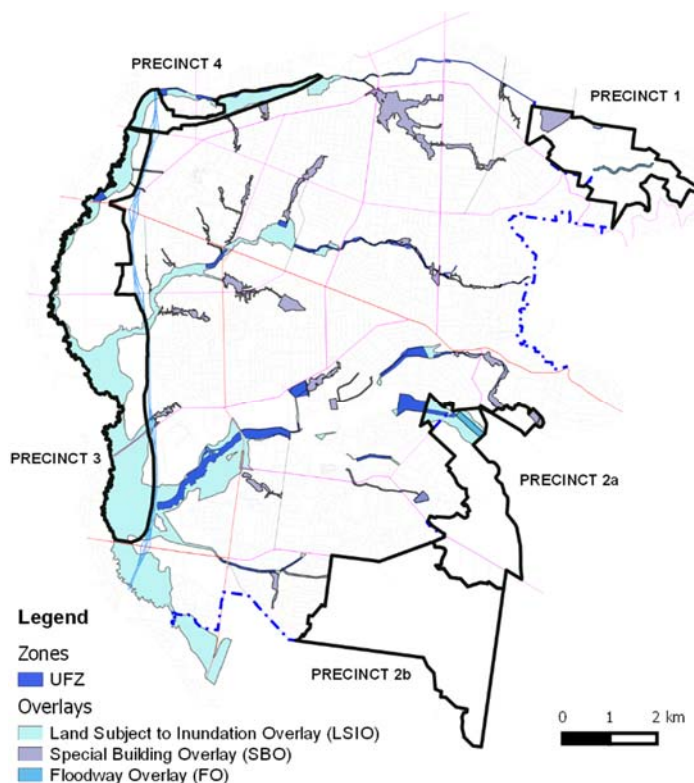
Precinct 1 (Liverpool Road Retarding Basin) and a small pocket in Precinct 2a

Purpose:

Identifies land within the 1 in 100 year floodplain managed by KCC.

Key requirements:

- Triggers a planning permit for most building, works and subdivisions.
- Assessment of floor levels are required
- Exemptions for certain works or structures with floor levels at specified heights above flood level.
- Triggers referral to the KCC Stormwater team.



FLOODWAY OVERLAY

Precincts affected:

Stretches of Dobsons Creek in Precinct 1 and Monbulk Creek in Precinct 2a (refer to Figure).

Purpose:

To identify floodpaths, protect water quality and ensure that development maintains the free passage and temporary storage of floodwater.

Key requirements:

- Triggers a planning permit for most building, works and subdivisions.
- Planning applications are to be accompanied by a Local Floodplain Development Plan (LFDP), and where no LFDP exists, a Flood Risk Report is required.
- Referral to Melbourne Water is required.

PUBLIC ACQUISITION OVERLAY (PAO)

Precincts affected:

Specific lots in all precincts

Purpose:

- To identify land which is proposed to be acquired for a public purpose
- To ensure that changes to the use or development of the land do not prejudice the purpose for which the land is to be acquired.

Schedule to PAO:

PAO1

Acquiring authority: Roads Corporation
 Purpose of acquisition: Road

PAO2

Acquiring authority: Parks Victoria
 Purpose of acquisition: Public Park and Recreation

DEVELOPMENT PLAN OVERLAY (DPO)

Precincts affected:

Part of Precinct 2a only

Applicable requirements are outlined in Part 5 under Precinct 2a discussions.

DESIGN AND DEVELOPMENT OVERLAY (DDO)

Precincts affected:

Precincts 1 (DDO1 over Wicks Reserve), 2a (DDO5 over Gilmour Park/Ferny Creek) and 2b (DDO3 over portions of Hanson’s quarry site)

Applicable requirements are outlined in Part 5 under individual precincts.

4.5. Other Relevant Controls in the Scheme

51.01 Specific Sites and Exclusions:

GARS Precinct	Scheme reference	Current Address	Purpose and title of incorporated document
2b	27 Reservoir Crescent, Rowville	5a, 17 and 23 Reservoir Crescent, Rowville	Specifies a minimum subdivision size of 4ha. Site Specific Control- 27 Reservoir Crescent, Rowville June 2011 Incorporated document. Knox City Council.
4	Certificate of Title Vol. 6983 Fol. 470, land generally bounded by University Road and Dandenong Creek, Bayswater	27 Havelock Road, Bayswater	Proposed Knox Driving Range, April 2004

51.02 Metropolitan Green Wedge Land: Core Planning Provisions - Applies to all land outside the UGB, excluding certain zones.

52.12 Exemptions

53.02 Bushfire Planning

62.01 Uses not requiring a permit - Subject to compliance with certain legislation or clauses of the Scheme, a number of public, incidental or temporary uses are exempted through this clause.

Relevant Planning Practice Notes:

PPN 18 – Planning Considerations for Horticultural Structures

PPN 37 – Rural Residential Development

5. PRECINCTS - SITUATION ANALYSIS

This part of the paper collates the data for each precinct and is supported by a set of mapping for each precinct. The purpose of this section is to:

- a) set the existing situation for each precinct;
- b) facilitate the planned consultation and issues/opportunities analysis as part of Stage 2 of the project; and
- c) identify the gaps in knowledge base to determine what other technical studies or external consultation is required.

For each precinct, four types of maps have been produced. The maps are numbering with the following convention:

Map [precinct No.]. [Map type] - For example, **Map 3.1** presents **Precinct 3 - Existing Zones and Land Use**.

Map Types:

Map 1 – Existing Zones and Land Use – Numbering of the annotations correlates with the discussions in this paper under the Land Use and Zones section for each precinct.

Map 2 – Environmental and Land Management Overlays

Map 3 – Landscape, Heritage and Built Form

5.1. Precinct 1: The Basin Rural Landscape

5.1.1. Precinct Characteristics

Precinct 1, the Basin Rural Landscape, is 383ha in size and is located in the north-east corner of the Knox LGA. The precinct abuts rural areas within the municipalities of Maroondah and Yarra Ranges to the north, the Dandenong Ranges National Park and Doongalla State Forest (Yarra Ranges Shire Council) to the east and south-east, and residential areas within the Knox suburbs of Boronia and The Basin to the west and south-west (Refer to Map 1.1).

The precinct is characterised by large allotment sizes has an attractive rural amenity, including idyllic views of Mount Corhanwarrabul. A key land-owner is the Salvation Army that owns the Salvation Army dairy farm located on the flood plain of Dobsons Creek as well as Boronia Corps accessed from Liverpool Road. The eastern part of the precinct rises up to the Sassafras Forest, and is dominated by privately owned rural residential properties scattered amongst indigenous vegetation. A number of mixed grazing properties including sheep, goats, alpacas and horse agistment are present, ranging from semi-commercial scale to hobby farming.

Almost two-thirds of this precinct supports native vegetation, and the entire precinct has been classified as Sites of Biological Significance for Knox, based primarily on the occurrence of native vegetation. The precinct also features nine of Gardens for Wildlife memberships (see Map 1.1 for locations).

The entire precinct is outside the Urban Growth Boundary.

5.1.2. Existing Zones and Land Use

This section discusses the various zones designated under the Scheme, and details the land use characteristics within each zone (also refer to Map 1.1).

1. Public Use Zone (PUZ1)

Zone Purpose: Service and Utility

As indicated on Map 1.1, there are two parcels of land within PUZ1 which are owned by Melbourne Water and accommodate water infrastructure including the Liverpool Road retarding basin which is located in the north-western part of the Precinct abutting land within Maroondah City Council.

The Liverpool Road Retarding Basin was developed to prevent flooding downstream along the creek by providing a centralised water collection point. Apart from its services function, the retarding basin also serves as a bushy parkland and provides recreational opportunities including fishing, cycling and dog walks. Shared paths near the rerating basin provide panoramic views of the mountain hills. Car parking is available off Liverpool Road.

2. Special Use Zone (SUZ1)

Zone Purpose:

- The use of private facilities including community, sporting leisure, recreation, education and religious facilities.
- To consider flood risk on or near land subject to flooding.

There are two large lots within SUZ1 which are owned by the Salvation Army. The key land use in this area is the Basin Centre which runs rehabilitation programs for both voluntary clients and clients who are required to undertake rehabilitation by Courts or Corrections. The Salvation Army runs the Bridge Program on its 112ha property which is a residential therapeutic program focused around the benefits of farming, growing crops, raising livestock, bakery and dairy activities. The past and present involvement of the Salvation Army in The Basin is a major contributor to its current rural outlook.

The other Salvation Army site within SUZ1 is the Boronia Corps located adjacent to Miller Park which accommodates multiple uses including worship services, community activities, a thrift shop, laser strike and a community garden.

3. Public Park and Recreation Zone (PPRZ)

The PPRZ in Precinct 1 consists of Wicks Reserve and Wicks East Nature Reserve which are located to the south of Basin-Olinda Road. The reserves are owned and managed by KCC and provide recreational opportunities in a bushland environment. Facilities include toilets, picnic benches and shelter, children's play area and large area for car parking.

Wicks Reserve also contains a bio-infiltration basin (Ferdinand Von Mueller Rain Garden) which has been designed and constructed by KCC as part of Water Sensitive Urban Design (WSUD) projects.

4. Green Wedge Zone (GWZ2)

Min subdivision area: **4ha**

The GWZ2 zone in Precinct 1 consists of privately owned lots. Apart from two lots of approximately 2,700m² which are used for residential purposes, this zone is dominated by large lots containing flood plains of the Dandenong Creek and rural farming/grazing land.

The GWZ2 zone connects to the north-east to land zoned Green Wedge A (GWA1,2) within the Shire of Yarra Ranges Planning Scheme. Providing for landscape consistency across the two municipalities is of high importance.

5. Rural Conservation Zone (RCZ1)

Min subdivision area: **4ha**

The RCZ1 zone is located in the eastern area of Precinct 1 within steep and highly vegetated foothills of the Dandenong Ranges. This zone mainly contains privately owned rural-residential lots of around 2-4ha in size, however, a number of smaller size lots in the range of 2,000m² are also present, in particular to the north of the zone along Simpsons Road and Milleara Street.

The Basin Theatre is located within this zone on Doongalla Road and has been providing local theatre for nearly 60 years. It is home to The Basin Theatre Group which presents four seasons each year, each of four weeks duration.

A number of properties within this zone are currently taking part in the KCC's Gardens for Harvest and Gardens for Wildlife programs as indicated on Map 1.1.

Desktop research suggests that at least one property in this zone is operating a Bed and Breakfast businesses.

5.1.3. Environmental Characteristics

Almost two-thirds of this Precinct supports native vegetation, and approximately the entire precinct has been classified as Sites of Biological Significance for Knox, based primarily on the occurrence of native vegetation. '

This section discusses the environmental overlays and the findings of the Wildlife Conservation and Connectivity Report (2017) (also refer to Map 1.2).

Environmental Significance Overlay (ESO2 and ESO3)

ESO3 covers a number of larger lots along Liverpool Road and Mountain Highway to the west of Dobsons Creek and a number of relatively smaller residential lots along Sheffield Road and Doongalla Road in the centre of the precinct. The rest of the precinct is overlaid by ESO2 (see Map 1.2).

The ESO generally requires planning permits for building, subdivision, carrying out of works and the removal of vegetation (including dead vegetation). Exemptions are provided for vegetation removal that are necessary for emergency works and management of land including fire management, weed control, infrastructure or resources where other permits exists.

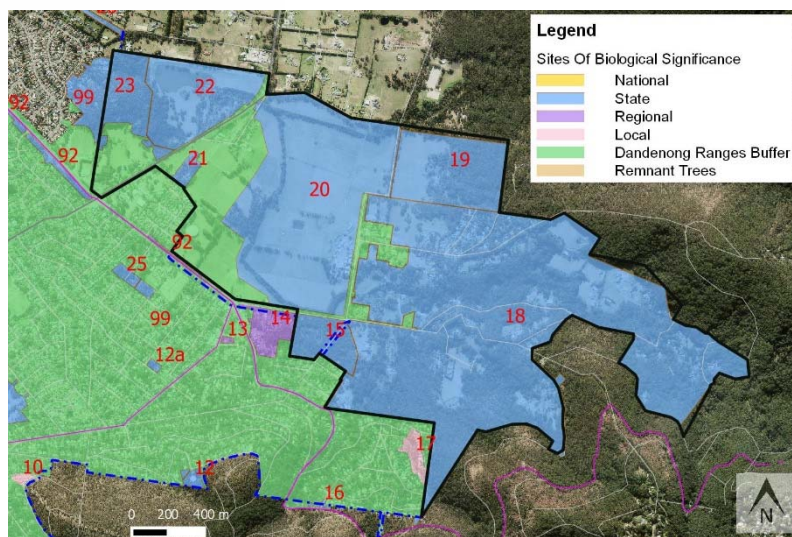


Figure 10. Sites of Biological Significance

ESO2 Sites of Biological Significance

The area covered by ESO2 covers a variety of land uses including the Salvation Army site, the Liverpool Road retarding basin and the rural-residential lots on the hillside approaching the Dandenong Ranges National Park. These areas are identified by the ‘*Sites of Biological Significance in Knox – 2nd Edition*,’ 2010 (SBS report) as seven Sites of Biological Significance with “State Significance” (see Figure 10) as discussed in the table below.

Site No.	Description	Significance (Sites of Biological Significance in Knox 2009)
15	Wicks Reserve and Wicks East Nature Reserve	<ul style="list-style-type: none"> • Contains Knox’s only occurrence of Wet Heathland, an EVC listed as regionally Depleted; • The regionally vulnerable EVCs, Swampy Woodland and Grassy Forest, are present; • There are at least twenty-seven plant species that are threatened with extinction in Knox, of which ten are rare or threatened throughout the Melbourne area and six are found nowhere else in Knox; • There is a large, breeding population of the Swordgrass Brown butterfly, which is locally rare; and • There is excellent birdlife.
18	The Basin - Sassafras Forest Precinct	<ul style="list-style-type: none"> • The largest and most spatially complex area of native habitat in Knox, with by far the largest areas in good or excellent ecological condition; • Six EVCs are represented. This includes approximately 26ha of Grassy Forest, which is regionally vulnerable; • 187 indigenous plant species were found overall, a very large number by Knox standards. This includes numerous species that are rare or threatened locally, regionally or at State level; and • Dobsons Creek and its tributaries support rare fauna, including Platypus and the Dandenong Freshwater Amphipod.
19	Hillside above Sheffield Road, The Basin	<ul style="list-style-type: none"> • Contains extensive areas of intact Grassy Forest with a moderately high diversity of indigenous ground flora; • Supports several significant plant species, including a substantial population of the Small Tongue-orchid <i>Cryptostylis leptochila</i>, which is rare in the Melbourne area; • Provides relatively undisturbed habitat for native wildlife in conjunction with the adjoining Dandenong Ranges National Park, particularly for forest birds, butterflies and ground-dwelling fauna; • Includes remnant trees containing natural hollows suitable for hollow-dependent fauna; and • Functions as an ecological buffer to the Dandenong Ranges National Park and the habitat
20	Lower Dobson Creek, The Basin	<ul style="list-style-type: none"> • Being on Dandenong Creek, the site is on a corridor for daily and seasonal movements of birds and insects; • The floodplain is important for waterway function. It also attracts thousands of waterbirds during floods (even where there is no native vegetation), and some of the waterbird species are threatened;

		<ul style="list-style-type: none"> • There is at least one roosting site for the Powerful Owl, which is listed as Vulnerable in Victoria; • The waters of Dandenong Ck and Dobsons Ck support platypus, fish (including a locally rare species) and the smaller organisms that support them; • Two regionally endangered EVCs are represented as well as one regionally vulnerable one. corridor along Dandenong Creek.
21	Dobson’s Treed Paddock, The Basin	<ul style="list-style-type: none"> • A treed area of 1.6 ha with grazed native understorey vegetation, in a semi-rural landscape, close to suburbia and also to more substantial areas of habitat for native flora and fauna. • Significant due to the presence of a vulnerable EVC
22	Liverpool Road Retarding Basin, Boronia	<ul style="list-style-type: none"> • There are five regionally endangered EVCs and one that is regionally vulnerable; • The site is known habitat for Swamp Skink and likely habitat for Powerful Owl, which are both vulnerable species listed under the Flora and Fauna Guarantee Act; • Together with Sugarloaf Hill, the site is a major ecological ‘stepping stone’ on the Dandenong Creek habitat corridor for daily and seasonal movements of birds and insects; • 113 indigenous plant species were found on the site in this study, or 170 if one takes this site and the adjoining Sugarloaf Hill together - large numbers by Knox standards; • There are numerous plant species and several fauna species that are rare or threatened in the Melbourne area; • The waters of Dandenong Creek and adjacent wetlands support aquatic life that deserves further investigation.
23	Sugarloaf Hill, Boronia	<ul style="list-style-type: none"> • The site is part of a major stepping-stone on the Dandenong Creek habitat corridor; • There are five (or arguably six) regionally threatened vegetation communities, partly in good ecological condition; • 129 indigenous plant species were found on the site in this study, or 170 if one takes this site and the adjoining Liverpool Road Retarding Basin together - large numbers by Knox standards; • Twenty-one of these species are rare or threatened in Knox, two of which are rare throughout the Melbourne area; • Even in the absence of a fauna survey, it is clear that the site has rich bird life, some excellent fauna habitat features (such as diverse vegetation and many large trees with hollows) and the likelihood of many reptile species.

ESO 3 Dandenong Ranges Buffer

The area covered by ESO3 contains the treed, mainly residential area at the foot of the Dandenong Ranges and is recognised by the SBS report as having “Local Significance”. The area affected by ESO3 within Precinct 1 falls within Site 99 of the SBS report which is described below.

Site No.	Description	Significance (Sites of Biological Significance in Knox 2009)
99	Dandenong Ranges Buffer	<ul style="list-style-type: none"> • There are large numbers of mature, indigenous eucalypts, forming a canopy that is somewhat fragmented but which supports rich bird life, including regionally uncommon species such as Australian King-Parrots in abundance; • There are many small populations of locally threatened plant species, particularly on roadsides.

Vegetation Protection Overlay (VPO2)

Apart from the vegetation that is protected for its biodiversity values, there is vegetation within Precinct 1 that is protected for their aesthetic and amenity significance. As indicated on Map 1.2, a U-shaped area of VPO2 affects part of 1267, 1281 and Lot P Mountain Highway, The Basin. Considering the location of existing vegetation on the aerial photo, it appears that the overlay has been mapped incorrectly. It is likely that the vegetation on the Melbourne Water hydro site (Lot P – Mountain Highway) was initially intended. This is part of a broader accuracy issue within the VPO in general and needs to be addressed as part of the planned VPO review.

According to Schedule 2 to VPO, a number of individual trees are also protected through VPO, including at least two trees along Mountain Highway (shown on Map 1.2) and the Chandler’s Oak Tree on Sheffield Road, which is also protected under the Heritage Overlay (HO). Although listed in Schedule 2 to VPO, Chandler’s Oak Tree does not seem to have been included in the City’s VPO GIS layer.

Waterways and Stormwater Management

Precinct 1 includes the Dobsons Creek catchment, which is identified as the highest valued waterway in Knox by the KCC’s WSUD and Stormwater Management Strategy (2010). Dobsons Creek is a small sub-catchment in Dandenong Creek catchment, and a tributary to Dandenong Creek.

KCC in partnership with Melbourne Water and South East Water has been working in the catchment for the last eight years to improve the catchment hydrology. This has included disconnecting impervious areas from the creek to improve its ecological health, providing stormwater tanks to residents and construction of the award winning Wicks Reserve (Ferdinand Von Mueller) Raingarden and the Golden Grove Raingarden (outside Precinct 1). An evaluation of this project is currently underway to be completed by the end of 2018. It is likely that an SBO overlay be recommended similar to the overlay applied in the Shire of Yarra Ranges to minimise direct connection of impervious areas to the creek in this catchment.

Situated along the creek path is also the Liverpool Road Retarding Basin which was developed by Melbourne Water to provide for temporary storage of stormwater and prevent flooding downstream along the creek by providing a centralised water collection point.

Floodway Overlay (FO)

Dobsons Creek runs through a number of rural and residential properties in The Basin. To protect the floodpath of the creek within relatively smaller rural properties, the FO has been applied to sections of the creek. This seeks to prevent incompatible use and development (See Map 1.2).

Findings of the Wildlife Conservation and Connectivity Report (2017)

Precinct 1 contains large extents of EVC Groups (Herb-rich Woodlands and Wet or Damp Forests) that rarely occur in other areas of Knox (see **Figure 11**). It is also surrounded on the southern, eastern and north-eastern boundaries by the Dandenong Ranges National Park, and provides an important consolidated link between Doongalla Forest and the Upper Ferntree Gully blocks. The current landscape has a high density of watercourses, farm dams and remnant vegetation (**Figure 12**), and a large diversity of native wildlife species have been recorded in the precinct.

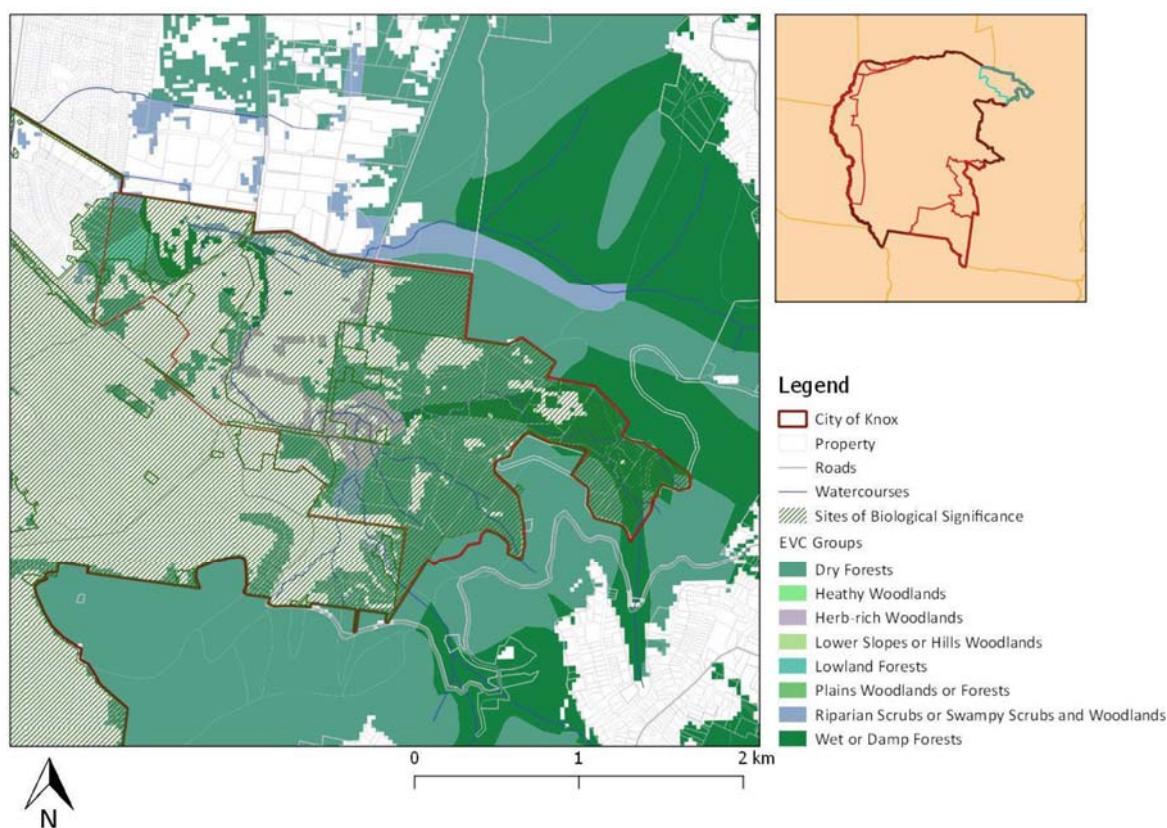


Figure 11. EVC Groups in Precinct 1

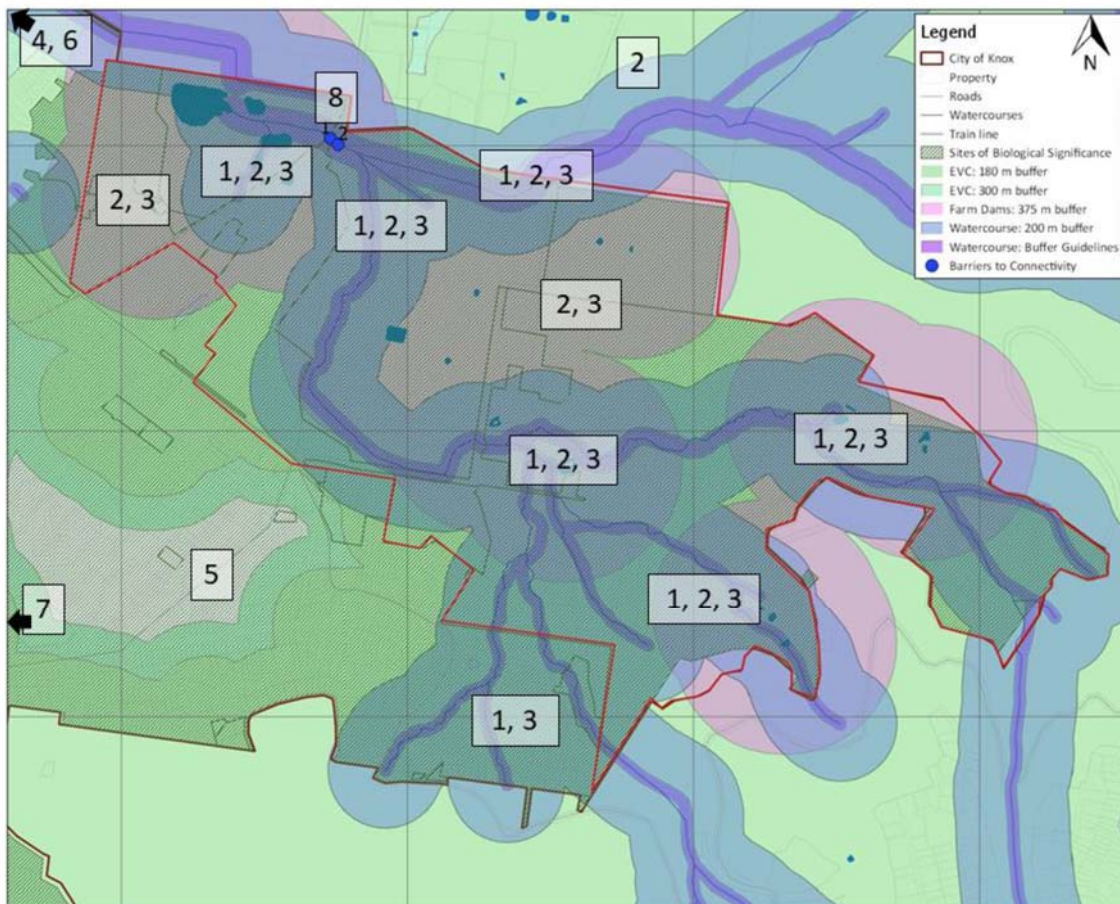


Figure 12 - Important areas for protecting habitat quality and movement opportunities for wildlife within The Basin Rural Land Precinct. For interpretation of numbered labels refer to Table 1

The eastern half of the precinct contains the largest consolidated areas of native vegetation, as well as many of the headwater streams that feed into Dandenong Creek via Dobsons Creek. The Salvation Army Site is likely to play an important role in protecting the adjacent Rural Conservation Zone, as well as providing opportunities for connection to the Liverpool Rd Retarding Basin, and offers complementary and additional resources to wildlife in these areas. Any future development in this zone should be minimal and restricted to non-intensive and ecologically-compatible activities, such as grazing or perennial horticulture as outlined in the Assessment of Agricultural Potential of Rural Land in Knox Report.

Throughout the remainder of this Precinct, maintaining high levels of connectivity will be critical to retaining high quality conservation outcomes in this landscape. Opportunities for additional development are limited, and should be restricted to complementary land-uses, with any sub-division limited to minimum lot sizes of > 8.0 hectares (20 acres). Complementary land-uses include enterprises based around native vegetation such as the establishment of commercial seed growing properties, or native plant cut-flowers or nurseries, or sites for nature-based education or experiences.

5.1.4. Economy and Land Management

This section overviews existing land management overlays (also see Map 1.2), and economic aspects, including the findings of the Agricultural Assessment (2016).

Findings of Agricultural Assessment

The dominant agricultural feature within the precinct is the Salvation Army dairy farm, located on the flood plain of Dobsons Creek. A number of mixed grazing properties including sheep, goats, alpacas and horse agistment are present, ranging from semi-commercial scale to hobby farming. The eastern section of the precinct rises up to the Dandenong Ranges, and is characterised by rural residential properties scattered amongst indigenous vegetation. Road infrastructure is mainly gravel roads.

Agricultural capability in the precinct is mixed. Medium capability agricultural land is located around the Salvation Army farm, along the alluvial floodplain of Dobsons Creek through to the Liverpool Road Retarding Basin. Elsewhere the agricultural capability is low due to poor soil types and steep slopes.

Agricultural suitability

Based on land capability, predominance of small lot property sizes and mainly rural residential land use, it is considered that Precinct 1 is generally not suited to commercial-scale agriculture.

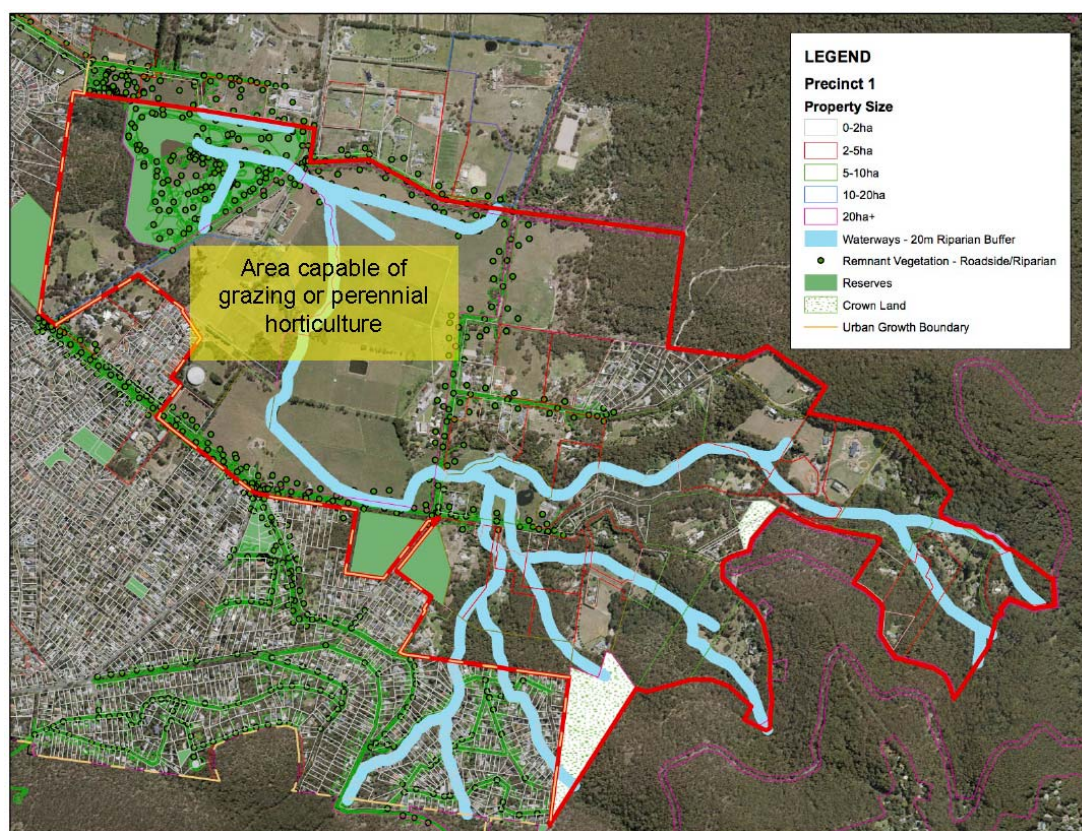


Figure 13. Precinct 1 agricultural land potential assessment

Future Directions

- Maintain and enhance the rural landscape values of the precinct
- Provide for rural lifestyle and hobby farming such as livestock grazing, horse agistment or perennial horticulture (Figure 7-1).

Bushfire Management

As indicated on Map 1.2, a large portion of Precinct is affected by BMO. The eastern part of the Precinct is mainly due to its proximity to the vegetation within the Dandenong Ranges National Park and covers the rural lots where the majority of residential use within the Precinct occurs. An area in the north-western portion of the Precinct is also affected by BMO which is associated with the vegetation in the hilly northern area of the Salvation Army Boronia Corps site.

The entire Precinct 1 is also within the declared Bushfire Prone Area which triggers bushfire assessment at building permit.

5.1.5. Landscape, Heritage and Built Form

This section is to be read in conjunction with Map 1.3.

Landscape Character

The current strategic framework defines the landscape character of The Basin as a pastoral landscape of rolling green hills, containing indigenous and exotic rural trees, creeks and the close backdrop of the heavily vegetated hills of the Dandenong Ranges National Park and the Doongalla State Forest.

MSS Direction

Precinct 1 is within the **Dandenong Foothills Local Area** defined under Clause 21.10 of the Scheme. In this area it is intended to protect significant viewlines to the Foothills, continuous closed tree canopy and low density residential and rural character of the area.

More specifically, the following strategies are set for The Basin Rural Landscape precinct:

- 3.17 *Maintain rural land use outside the urban growth boundary.*
- 3.18 *Limit development and subdivision to maintain land for rural uses and protect rural landscape qualities.*
- 3.19 *Support buildings and works that are sited and designed to protect and enhance rural landscape qualities.*
- 3.20 *Support development that is sited and designed to minimise the threat associated with bushfire.*
- 3.21 *Protect indigenous trees and understorey vegetation.*

The above strategies have been implemented through the application of zones and overlays including the SLO and DDOs.

Mountain Highway Tourist Gateway

As indicated on Map 1.3, the area surrounding the intersection of Mountain Highway and Basin-Olinda Road is identified as a 'Tourist Gateway' in the MSS. This gateway serves as an entry point to the Dandenong Ranges and provides convenience retail and other services, supporting tourism in the wider area. The MSS emphasises opportunities to strengthen the arrival experience at this gateway to capitalise on its Foothills setting and local character by integrating built form and landscape outcomes. It also sets strategies to support lower-scale built form that respects the village character, Foothills setting and maintains public realm view lines to the Dandenong Ranges.

Paths into the Hills

Mountain Highway is designated as a 'Paths into the Hills' corridor under the MSS. This corridor extends eastwards into the Foothills and has roadside verges containing significant understorey and canopy vegetation. Buildings along this corridor generally contribute to this character with setbacks from the street and canopy tree planting. This attractive road corridor links the northern suburbs of Knox to the landscape character of the Dandenong Foothills. It also has various environmental benefits such as supporting local biodiversity, providing wildlife corridors, enhancing native remnant bushland values and mitigating the effects of climate change

The MSS sets the following strategies for this corridor:

- Support a built form that does not dominate landscape character.
- Protect and enhance existing native trees and understorey planting and minimise crossovers and impacts to street trees.
- Outside of activity centres and high bushfire risk areas, require development to be setback and screened with a thick buffer of native vegetation and canopy trees, minimising visibility from the road.

Significant Landscape Overlay (SLO4)

Apart from the Liverpool Road retarding basin site, the entirety of Precinct 1 is covered by **SLO4 The Basin Rural Landscape** where development is to be sited and designed so as to maintain the landscape character of the area and the distinctive views of this pastoral landscape surrounded by bush. This landscape is particularly sensitive to further subdivision and development.

SLO4 recognises the environmental and visual sensitivity of this rural area and aims to protect and enhance the scenic, visual, cultural and environmental values of The Basin. It restricts the intensity of development, built form and visual elements of development and requires the retention of vegetation that contribute to the landscape qualities of this area.

Key permit triggers:

- Trees with a height of 5m or more or a trunk girth greater than 0.5m - exemptions apply
- Non-complying fences (permeability, height, material, etc.)

Key decision guidelines:

- Buildings to be sited on low-lying positions, follow topography and avoid earthworks
- Building bulk, size, materials and finishes to reflect the landscape character of the area

Findings from the Heritage Review (Landscape-related)

Precinct 1 plays a key role contributing to the significant landscapes of Dandenong Ranges in particular the **Western Face of the Dandenong Ranges** as identified by the National Trust in 1980 and described in Table 2.

Specifically, the distinct character within Precinct 1 is associated with the **Dobsons Creek historic landscape** within the Basin to Olinda/Sassafras area and including sites such as Wicks Reserve, Como Gardens (botanic garden) plant nursery, remnant exotic trees (Oaks especially) possibly other historic properties and all linked by the Basin-Olinda Road (and the Mountain Highway too possibly).

Landscape character is an enclosed, largely forested area, part of the Dandenong foothills and defined by the creek and valley sides.

Heritage Places

Precinct 1 contains three heritage places that are protected through the Scheme Heritage Overlay (HO), and seven places that are included in the City of Knox Heritage Study 1993 but not included in the Scheme.

Table 2 summarises each heritage place and the associated recommendations provided by Context Pty Ltd.

Table 2. Heritage Places in Precinct 1

Heritage Overlay Item No./ Place Name	Heritage Review Recommendations (2017)
HO Places	
HO5 Wicks Reserve	<ul style="list-style-type: none"> • Of historic and social/recreational significance. • Well documented and part of the area ESO, SLO and HO – no further research / assessment required. • Retain Environment, Heritage and Significant Landscape Overlays.
HO54 One Oak Tree (Basin Olinda Road, The Basin)	<ul style="list-style-type: none"> • Intact and in good condition • Of historic and aesthetic significance • No further consideration required • Retain Heritage Overlay
HO8 Chandler Oak Tree, Sheffield Road, The Basin	<ul style="list-style-type: none"> • Of historic and aesthetic significance due to age and size. • Well documented and no further consideration required. • Retain Heritage Overlay
Non-HO Places	
Western face of the Dandenongs The whole of the western and part of the north-western slopes of the main Dandenong Range stretching from Montrose to the southern boundary of the Ferntree Gully National Park	An Integrated Aboriginal, Natural and cultural heritage assessment to explore these different aspects of significance in a holistic manner.
Dandenong Ranges The whole of the Dandenong Ranges form a backdrop to Knox but are predominantly in Yarra Ranges	An integrated Aboriginal, Natural and cultural heritage assessment would be appropriate for the Dandenong Ranges. This would involve assessment to the state level as a minimum and involves other municipalities as well as Knox. There may also be a case for heritage values to be represented at the National level.
Salvation Army site 1 Liverpool Road, The Basin	While there are no known archaeological reviews of the site, given that it contains 2 watercourses (Dobsons and Dandenong Creeks), it is identified as an area of cultural sensitivity. Recommended for both Aboriginal and non-Aboriginal cultural heritage assessment. Potential Aboriginal, historic, aesthetic and social values.
Clevedon Gardens	<ul style="list-style-type: none"> • Of historic significance as a site only. • Difficult to put forward as a HO without further investigation into the garden? • 'Tentative list' – although it's possibly too far removed from its historic origins (not a priority). • Recommended for further investigation. Potential historic aesthetic and social values.
Glen Elbourne Gardens	<ul style="list-style-type: none"> • Worth following up, either on an 'open day' or with the owner. • Note the large wholesale nursery next door and other properties going up the Dobson Creek valley to Olinda plus Old Coach Road – worth considering as part of a larger historic landscape unit. • Worthy of further research and consideration. • Recommended for heritage assessment. Potential historic aesthetic and social values.
Old Coach Road	<ul style="list-style-type: none"> • Of historic significance. • Recommended for heritage assessment. Potential historic and aesthetic values.

Mountain Highway The Basin	<ul style="list-style-type: none"> • Further investigation is required to confirm the nature of the structure. • Recommended for heritage assessment. Potential historic aesthetic and social values.
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Built Form and Design

DDO Overlay

The only portion of the precinct which is affected by DDO is Wicks Reserve, which falls within DDO1 - Dandenong Foothills: Foothills Backdrop and Ridgeline Area. The purpose of this overlay is to:

- Ensure that residential development reflects the existing subdivision character of the area.
- Ensure that lots are large enough to accommodate development, while retaining natural or established vegetation cover and providing substantial areas for planting and revegetation to occur.
- Minimise site coverage and impervious surface cover to protect environmental values and minimise the visual dominance of development.

Through DDO1 the following controls generally apply:

- Maximum of 40% site cover
- Maximum of 60% impervious cover
- Minimum subdivision area of 1,000m²

Adjacent land to the west and south of the precinct are also covered by either DDO1 or DDO2. This is to ensure that any development considers the character and environmental sensitivities of the area.

5.1.6. Movement and Connectivity

This section is to be read in conjunction with Map 1.4.

Road Network

The arterial roads providing access to Precinct 1 are Mountain Highway and Basin-Olinda Road. These roads, as well as Old Coach Road, also play a key role in providing tourist routes for visitors to the Dandenong Ranges and connectivity to the residential areas in Sassafras. The precinct also contains some local roads, some of them being gravel roads. Liverpool Road and Sheffield Road provide north-south connectivity between the suburban areas of The Basin and Kilsyth/Kilsyth South to the north of the precinct.

Public Transport

The only public transport service in the area is the bus route 755 which runs along Mountain Highway and connects the Bayswater Station and Knox City Shopping Centre via Boronia, The Basin and Ferntree Gully. Other than the areas within the catchment of this route, the rest of Precinct 1 is not within walkable distance to public transport.

Walking and Cycling

Due to its location in proximity to recreational and tourist opportunities in the Dandenong Ranges National Park and Doongalla Forest, a key potential in Precinct 1 is pedestrian/cycling connectivity within and through the area. Map 1.4 indicates the existing and planned pedestrian and bicycle routes/trails within and around Precinct 1.

5.2. Precinct 2a: Lysterfield Valley and Hills

5.2.1. Precinct Characteristics

The Lysterfield Valley and Hills Precinct (Precinct 2a) is almost 500ha in area and provides an important rural green wedge between the suburban areas of Rowville and the Ferntree Gully-Belgrave ridge of the Dandenongs. Located around the Monbulk Creek Valley, which is characterised by a noticeable land use transition from suburb to pastoral and agricultural open landscapes. The primary land uses within this precinct are agricultural, with market gardening and grazing currently dominating, along with hobby farming, horse agistment and larger lifestyle residential allotments. A number of horticultural businesses are conducted along Lysterfield Road, including production of Brussel sprouts and nursery plants.

Excellent views across the landscape are available from Glenfern Road and Mount Morton highlighting the visual transition between the metropolitan fringes and the forested slopes of the Dandenongs.

Apart from a number of rural living lots to the north west of the precinct in Ferntree Gully, the rest of Precinct 2a is outside the Urban Growth boundary.

5.2.2. Existing Zones and Land Use

This section discusses the various zones designated under the Scheme, and details the land use characteristics within each zone (also refer to Map 2a.1).

1. Green Wedge Zone 1 (GWZ1)

Min subdivision area: **20ha**

GWZ1 covers land within or in proximity to the Monbulk Creek floodplain. This area is characterised by large land holdings with rural residential and hobby farms, extending to the east into abutting Yarra Ranges. The GWZ1 properties are used for a mix of large lifestyle properties, horse agistment, horticulture and rural stores along Lysterfield Road. A service station exists on the corner of Lysterfield Road and Wellington Road.

2. Green Wedge Zone 2 (GWZ2)

Min subdivision area: **4ha**

There are two areas of GWZ2 within Precinct 1a.

The northern pocket consists of grazing land on the hillside to the north of Glenfern Road. In 2014 this land was subdivided into five lots ranging between 4-6ha.

The southern pocket is located between Wellington Road and the southern boundary of Precinct 2a. This area contains smaller lots in the range of 2-3ha which are used for lifestyle living, hobby farming and dog kennels. Desktop research suggests that at least one bed and breakfast business operates in this zone.

3. Rural Conservation Zone 2 (RCZ2)

Min subdivision area: **0.5ha**

Zone (schedule) Conservation Values:

To provide an appropriate visual transition from urban development to the west of this land and the significant rural landscape to the east

This zone contains lots mostly in the range of 0.5ha to 2ha and are in proximity to the suburban residential areas of Lysterfield. These lots provide for lifestyle living options and most of them contain large single houses with outbuildings, pools, tennis courts etc.

4. Rural Living Zone (RLZ)

Min subdivision area: **4ha**

RLZ covers land to the north-west of Precinct 2a in the area surrounding Monbulk Creek. This area is within the Urban Growth Boundary and contains farming properties (incl. Brussel sprouts), vacant lots and rural lifestyle properties. UFZ also applies to parts of the creek within the privately owned properties here.

5. Public Use Zone 1 (PUZ1)

PUZ1 covers a public park (Gilmour Park) which includes a lake in a retarding basin with riparian vegetation along Ferny Creek. The land parcels are owned by Melbourne Water. Gilmour Park also contains a cricket oval.

Another area of PUZ1 is Reserve No. 1 located amongst the Rural Conservation properties and contains an area of native vegetation. This reserve is owned by South East Water Corporation. The current use is not clear.

5.2.3. Environmental Characteristics

This section discusses the environmental overlays and the findings of the Wildlife Conservation and Connectivity Report (2017) (also refer to Map 2a.2).

Environmental Significance Overlay (ESO2)

ESO2 is applied to portions of Precinct 2a including a number of Green Wedge or Rural Conservation lots (see Map 2a.2).

Designation of these areas is informed by Sites of Biological Significance report. Precinct 2a contains four Sites of Biological Significance which have “Regional Significance” and one site (Site 96 Wellington Road) which is of “State Significance”. These sites are indicated in **Figure 14** and outlined in the table below.

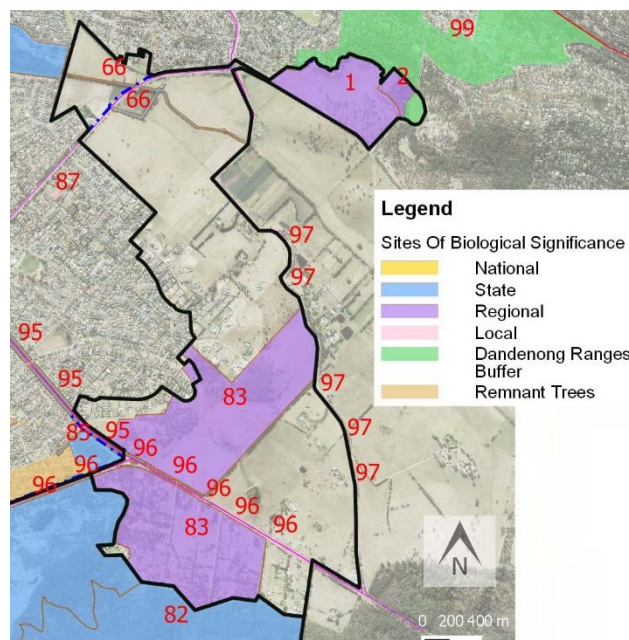


Figure 14 – Sites of Biological Significance in Precinct 2a

Site No.	Description	Significance (Sites of Biological Significance in Knox 2009)
1	Glenfern Road Woodland, Upper Ferntree Gully	<ul style="list-style-type: none"> Valley Grassy Forest is listed as regionally Vulnerable, and is rare in the Dandenong Ranges; There are many large, old trees in the Valley Grassy Forest and the Riparian Forest; Many regionally rare fauna species have been observed on adjoining land and there is strong potential for some of these species to be found within the site if a survey were to be conducted.
2	Gilmour Park, Upper Ferntree Gully	<ul style="list-style-type: none"> There are many majestic, large, old Manna Gums; Many regionally rare fauna species have been observed; Powerful Owls are likely to visit, given that they have been observed just over the road, in the Shire of Yarra Ranges.
83	Lysterfield Valley	<ul style="list-style-type: none"> There are remnants of threatened EVCs in poor ecological condition; Even though only part of the site could be visited, six plant species that are threatened in Knox were found, including two fern species that are extremely rare in the Melbourne region; Eastern Grey Kangaroos regularly appear in the site; The site’s ecological values are threatened by urban expansion.
96	Wellington Rd Roadside, Rowville & Lysterfield	<ul style="list-style-type: none"> Some segments of the site are contiguous with larger sites (particularly the Lysterfield Hills) and are hence effectively part of a larger area of State significance; The site contains remnants and regrowth of the threatened EVCs, Valley Heathy Forest, Valley Grassy Forest and Swampy Woodland, a small part of which is in good ecological condition; There are small or modest populations of six plant species that are threatened in Knox (or in one case, throughout metropolitan Melbourne).

Vegetation Protection Overlay (VPO2)

The only area covered by VPO2 is a strip of vegetation in the northern verge of Glenfern Road, in the area to the east of Glenfern road/Lysterfield Road intersection.

Waterways and Stormwater Management

Monbulk Creek runs through this precinct, before joining up with Ferny Creek and becoming Corhanwarrabul Creek.

KCC’s WSUD and Stormwater Management Strategy (2010) identifies Monbulk Creek as one of Knox’s “High-value waterways” and, as part of its high value catchment program, sets a target of reducing DCIs in the Munbulk Creek catchment to less than 2% by 2025. This is to be done through constructing WSUD systems focused on infiltration and stormwater harvesting.

Floodway Overlay (FO) and Land Subject to Inundation Overlay (LSIO)

As indicated on Map 2a.2, parts of the Monbulk Creek are affected by FO and the 1 in 100yr ARI floodplain of the creek is covered by LSIO. In these areas development is restricted and referral to Melbourne Water will be required.

Findings of the Wildlife Conservation and Connectivity Report (2017)

Precinct 2a supports the lowest percentage of area containing native vegetation (15.5%) compared to the other precincts (Figure 15). The most abundant broad EVC type is Dry Forests, with Riparian Scrubs and Swampy Scrubs and Woodlands patchily distributed along the waterways.

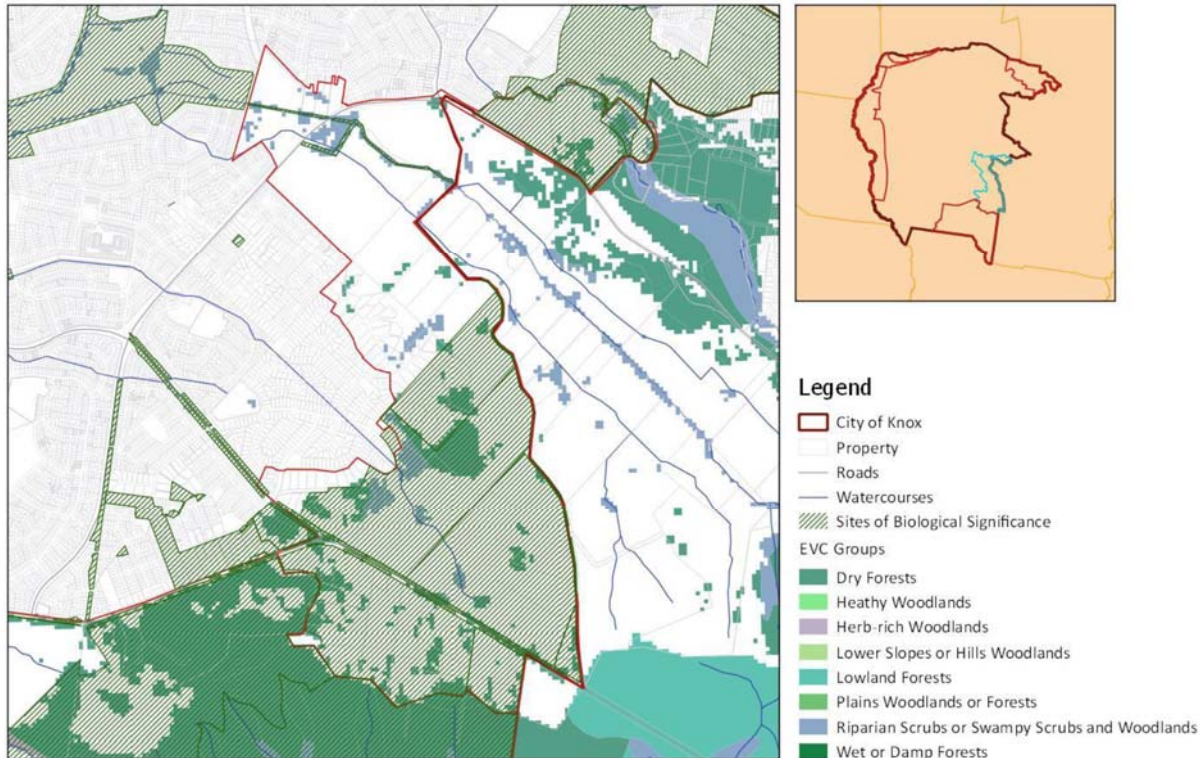
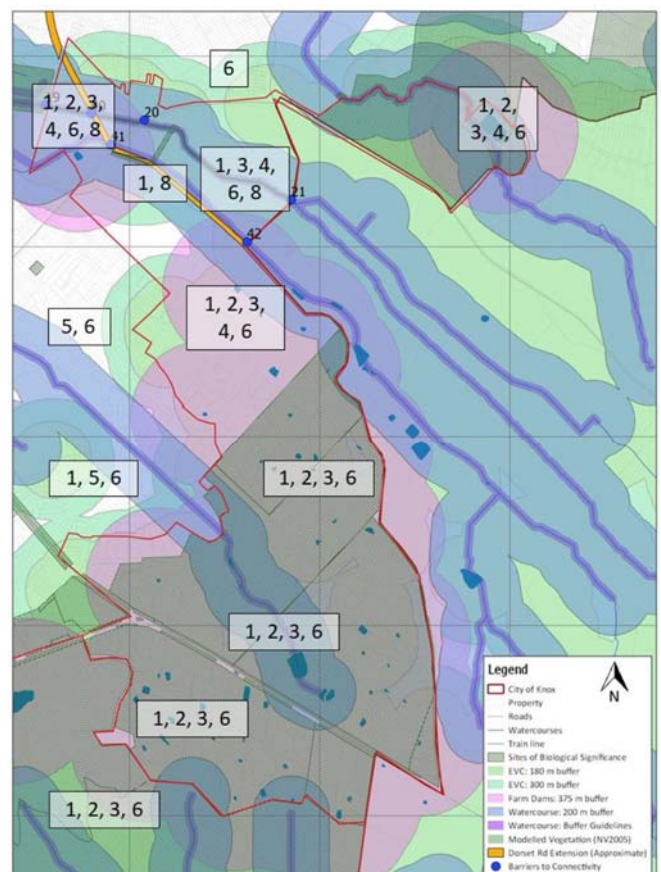


Figure 15. EVCs in Precinct 2a

Precinct 2a provides an important connection for wildlife movement between Lysterfield National Park and the Upper Ferntree Gully block of the Dandenong Ranges National Park. The southern two-thirds of this precinct contains well connected farm dams and is likely to provide important overland connections for meta-populations of water-dependent species. The Green Wedge Zone- Schedule 2 and the Rural Conservation Zones currently protect and support wildlife connectivity and conservation outcomes. Further protection and enhancement in the northern section of this precinct could help strengthen the resilience of this area. For example, habitat restoration activities within the 200 m zone adjacent to Monbulk Creek are likely to reduce the risk of flooding in the downstream Urban Flood Zones. This is something that will become increasingly important once construction has been completed in the Comprehensive Development Zone to the north-west of this precinct and when the future climate includes more extreme rainfall events.

The northern section of Precinct 2a is a critical junction point for connectivity, with this analysis showing it is currently a relatively narrow connection between the Green Wedge to the Corhanwarrabul Creek Corridor. As many ground-dwelling animals, use riparian corridors to facilitate movement between sub-populations, protecting this area of the landscape will maximise the probability that these species are able to persist and support viable populations in the western side of Knox (Precinct 3).



The proposed Dorset Road Extension is likely to have an impact on the wildlife conservation and connectivity values of this precinct, as it currently acts as an informal connector between Precinct 2a and Ferny Creek. However, there are opportunities to approach this road extension project in ways that also deliver improved connectivity benefits for wildlife and people.

5.2.4. Economy and Land Management

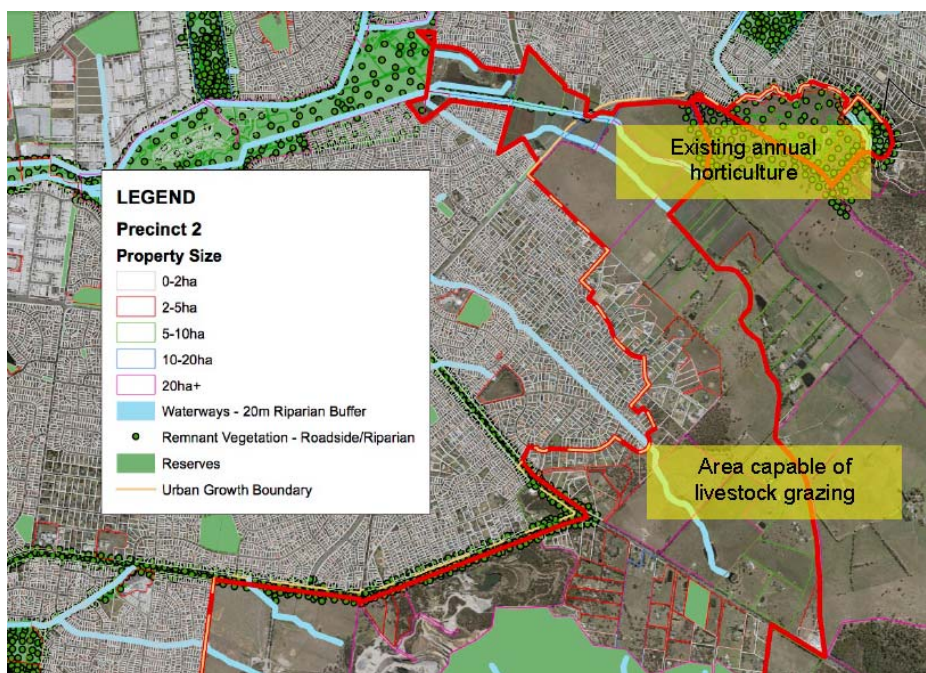
This section overviews existing land management overlays (also see Map 2a.2), and economic aspects, including the findings of the Agricultural Assessment (2016).

Findings of Agricultural Assessment

The precinct contains Monbulk Creek valley which represents an abrupt land use change from residential to pastoral and cultivated agricultural open landscapes. A number of annual horticultural businesses are conducted along Lysterfield Road, including production of brussel sprouts and nursery plants. Elsewhere land is used for rural residential and hobby farming including mixed livestock grazing of beef, alpacas, sheep, goats and horse agistment.

Some good quality soil is present in this precinct associated with the Monbulk Creek (Dermosol in north east and north-western areas of the precinct) with medium quality soil elsewhere. The topography is generally flat to gently undulating land associated with the floodplain of the Monbulk Creek.

The predominance of small lot property sizes and mainly rural residential land use, make Precinct 2 generally not suited to commercial-scale agriculture. Existing commercial horticulture enterprises are unlikely to continue in the long term due to high land values and encroachment issues.



Future Directions:

- Maintain and enhance rural landscape values in particular, policy direction is required to provide landscape transition between built urban environments and rural areas.

Bushfire Management

Gilmour Park and parts of privately owned rural lots in proximity to Ferny Creek are protected by the BMO. Also a number of rural lots to the south of the precinct, in proximity to Lysterfield Park, are affected by BMO.

The entirety of Precinct 2a is also within the declared Bushfire Prone Area which triggers bushfire assessment at building permit stage.

Public Acquisition Overlay (PAO1)

Precinct 2a contains parts of the corridor designated for the proposed Dorset Road extension. This corridor is covered by PAO1 and runs through the floodplains of Monbulk Creek connecting Lysterfield Road to the Dorset Road in Ferntree Gully.

5.2.5. Landscape, Heritage and Built Form

This section is to be read in conjunction with Map 2a.3.

Landscape Character

The Lysterfield Valley landscape is centred on the enclosed Monbulk Creek Valley. Monbulk Creek Valley is where the urban area has given way to rural, and no indication exists of the proximity of the suburbs. Views within the valley are of rolling rural landscapes that are mainly pastoral. Hills on either side of the valley are bare or very lightly treed, with this openness

contrasting with the treed slopes of the Dandenong Ranges. The character of this landscape is unique and is particularly sensitive to further subdivision and development.

[MSS Direction](#)

Precinct 2a is within the **Dandenong Foothills Local Area** defined under Clause 21.10 of the Scheme. In this area it is intended to protect significant viewlines to the Foothills, continuous closed tree canopy and low density residential and rural character of the area.

More specifically, the following strategies are set for Lysterfield Valley and Lysterfield Hills Rural Landscape precinct:

- Support development that is sited to ensure that the rural landscape character is maintained and enhanced.
- Protect and support rural land uses.
- Protect indigenous trees and understorey vegetation.
- Require 80 per cent of all new vegetation (both canopy trees and understorey) to be indigenous.

The above strategies have been implemented through the application of zones and overlays including the SLO and DDOs.

Upper Ferntree Gully Tourist Gateway

‘Tourist Gateways’ are integrated built form and landscape entry points near the eastern boundary of Knox that are on the tourist route for visitors to the Dandenong Ranges. The Scheme’s vision for the ‘Tourist Gateway’ at Upper Ferntree Gully is to support lower-scale built form that respects the village character, Foothills setting and maintains public realm view lines to the Dandenong Ranges.

Paths into the Hills and Bush Boulevards

As depicted on Map 2a.3, Wellington Road is a designated ‘Bush Boulevard’ which transitions into a ‘Paths into the Hills’ corridor as it enters the Lysterfield Valley.

[Significant Landscape Overlay](#)

SLO1 Lysterfield Valley and Lysterfield Hills Rural Landscape covers a large portion of the precinct. This overlay protects the broad scale pastoral landscape character and the open, bold hillsides of the Lysterfield Valley and seeks to enhance the scenic, visual, cultural and environmental values of the Valley.

Key permit triggers:

- Buildings and works with a height of over 7.5m
- Trees with a height of 5m or more or a trunk girth greater than 0.5m - exemptions apply
- Non-complying fences (permeability, height, material, etc.)

Key decision guidelines:

- Any impact on the views of the valley from the surrounding area
- Low intensity development to be sympathetic to the landscape qualities of the area
- Whether development above the 115m AHD contour is appropriate
- Tree retention and bushfire risk
- Materials and finishes to blend in with the landscape character

SLO2 Dandenong Foothills: Foothills Backdrop and Ridgeline Area covers Gilmour Park.

SLO3 Dandenong Foothills: Lower Slope and Valley Area also covers a small area consisting of rural lots within the Monbulk Creek floodplain in Ferntree Gully.

[Findings from the Heritage Review \(Landscape- related\)](#)

Monbulk Creek historic landscape character is of an open rural landscape with broad valley floor and rolling hills displaying evidence of past settlement and occupation.

The ‘Tourist Gateway’ of Lysterfield (Upper Ferntree Gully) is an entry point to both the City and the Lysterfield Valley and Lysterfield Hills, comprised of a landscape transition with no built form function. This landscape-dominant gateway is a key transition point between the pastoral landscape and the environmental qualities of the Lysterfield Valley and Lysterfield Hills and the significant environmental landscape of the Dandenong Ranges beyond.

Key character elements:

- Strong landscape values (National Trust citation): views, rolling pastoral hills and valleys, large rocks, buffer between urban and rural.
- Hills on either side of the Monbulk Creek Valley are bare or lightly treed, the openness contrasting with the nearby Dandenong Ranges

Heritage Places

Precinct 2a contains one place listed in the Heritage Overlay (HO) and five places from Heritage Study 1993 that are not included in the HO.

Table 3. Heritage Places in Precinct 2a

Place Name and Description	Heritage Review (2017) Recommendations
HO Places	
HO43 Avenue of Honour, Lysterfield Road (ten Silky Oaks, two English Oaks)	<ul style="list-style-type: none"> • Of historic and social significance • Needs an updated citation possibly, given the description given in the Knox Heritage Study, but otherwise no further consideration required. • Retain Heritage and Significant Landscape overlays.
Non-HO Places	
Lysterfield Valley Lysterfield	<ul style="list-style-type: none"> • Recommended for heritage assessment for sites within the landscape. • Recommended for Significant Landscape Assessment.
Fern Tree Gully Market Gardens (Remnant green corridor)	<ul style="list-style-type: none"> • Recommended for heritage assessment for sites within the landscape. Recommended for significant landscape assessment. • Need for more research to establish the historic landscape character and to help define significant sites and boundaries. • Recommended for heritage assessment for sites within the landscape. • Recommended for significant landscape assessment.
Lysterfield Boys' Farm site, Powells Road Lysterfield	<ul style="list-style-type: none"> • Recommended for heritage assessment. • Potential historic, aesthetic and social values. • Potential archaeological value. • High level of historical and archaeological research potential.
Former Lysterfield School, 1430 Wellington Road Lysterfield	<ul style="list-style-type: none"> • Recommended for heritage assessment. • Potential historic, aesthetic and social values.
Lysterfield cheese factory, Lysterfield Road	<ul style="list-style-type: none"> • Place is also part of the Lysterfield valley landscape. • Recommended for heritage assessment. • Potential historic, aesthetic and social values.

Built Form and Design

[Design and Development Overlay](#)

DDO2 Dandenong Foothills: Lower Slope and Valley Area applies to an area in Upper Ferntree Gully and requires the following design objectives:

- To reflect the existing subdivision character of the area
- To retain natural or established vegetation cover and providing substantial areas for planting and revegetation
- To minimise site coverage and impervious surface cover

Some of the design requirements are:

- Site coverage of the building not to exceed 40%.
- Site coverage of the buildings and impervious surfaces not to exceed 60%

DDO5 Dandenong Foothills: Foothills Backdrop and Ridgeline Central Area applies to Gilmour Park. Its applicable requirements are similar to DDO2.

[Development Plan Overlay \(DPO3\)](#)

A Development Plan has to be prepared prior to any subdivision or development. The specific matters that are to be addressed by the Development Plan are:

- Reticulated water supply to become available to all lots
- Traffic management works on Kelletts Road to be carried out at the cost of the owners of the land

5.2.6. Movement and Connectivity

This section is to be read in conjunction with Map 2a.4.

Road Network

Arterial roads (VicRoads roads) providing access to Precinct 2a are Wellington Road, Lysterfield Road, Napoleon Road, Glenfern Road and Kelletts Road. Some of these roads, also provide important routes for visitors to the Dandenong Ranges. As discussed previously, Wellington Road serves as a key gateway and touristic corridor to the hills. A number of local roads within the precinct provide access and connectivity to rural lots.

Public Transport

Bus Route 691 runs along Napoleon Road connecting the residents to Boronia and Waverley Gardens.

Routes 681 and 682 which are loop services to the Knox City Shopping Centre run via Kelletts Road, Rosewood Boulevard and Heritage Way. Most of the smaller rural residential lots are within walking distance to these routes.

Walking and Cycling

Roads in/abutting Precinct 2a do not provide segregated bike lanes/bike paths. As indicated on Map 2a.4, the Principal Cycle Network proposes new on-road bicycle lanes along Wellington Road, Kelletts Road and Napoleon Road.

Precinct 2a is also in close proximity to Lysterfield Park, which contains very popular and highly used bushwalking and mountain biking trails. There are opportunities to improve connectivity and access to these trails.

5.3. Precinct 2b

5.3.1. Precinct Characteristics

The Lysterfield Quarries and Surrounds Precinct (Precinct 2b) is approximately 877ha in area. Predominant features of Precinct 2b are the Boral and Hanson Quarries, the ridge top and slopes of the Lysterfield Hills and Lysterfield National Park, with the backdrop of Churchill National Park to the south. The precinct contains some of the areas of high environmental significance within Knox.

5.3.2. Existing Zones and Land Use

This section discusses the various zones designated under the Scheme, and details the land use characteristics within each zone (also refer to Map 2b.1).

1. Public Conservational and Resource Zone (PCRZ)

As indicated on Map 2b.1, PCRZ covers Lysterfield Park which is owned and managed by Parks Victoria. Lysterfield Park includes sloped areas of forest and woodland and is used by the community for a variety of recreational activities include walking, cycling, picnic, horse riding, mountain biking and orienteering.

The management framework for Lysterfield Park is outlined in Parks Victoria's document "Churchill National Park and Lysterfield Park Management Plan" which was prepared in 1998 and evaluated in 2009.

2. Public Parks and Recreation Zone (PPRZ)

PPRZ is applied to two areas within Precinct 2b (refer to Map 2b.1). One area is a portion of Churchill National Park which is owned and managed by Parks Victoria. This area is surrounded by PCRZ too the east and south (including the area of Churchill Park within Casey). It is not clear why a different zone has been applied to this area.

The other PPRZ area is Heany Park which is owned by KCC. Heany Park is a bushland with a lake, accommodates scout camps and is home to Heany Park Scout Group.

3. Special Use Zone (SUZ)

SUZ covers two quarries (Hanson and Boral Quarries) which are the located to the south of Wellington Road, adjoining the Lysterfield Park and Churchill National Park. The Hanson Quarry is located opposite Napoleon Road, and the Boral Quarry adjoins it to the east (refer Map 2b.1).

The two quarries contain reserves of hard rock comprising granodiorite and hornfels which are extracted and processed on site. Quarrying activity comprises extracting rock and transporting it to an onsite crushing plant, then stockpiling the processed stone for sale. The quarry supplies markets in the surrounding southern and eastern suburbs and the CBD with high quality construction materials for use in the concrete and road construction industries.

The quarries have operated for over 30 years, and are currently operating pursuant to a planning permit issued in 1999, and a Work Authority issued by the State Government.

Hanson Quarry Proposed Expansion

Hanson has indicated their intention to extend the operation of their quarry for an additional 5-10 years, and to expand the extraction limits of the existing quarry. In 2018, KCC was approached regarding this proposal and its comments were sought on the removal of the current Public Acquisition Overlay (Parks Victoria being the acquiring authority).

Figure 17 indicates Hanson’s proposed concept for the site.

In May 2018 Council resolved to advise DELWP that it has no objection to the PAO being removed from the site to facilitate this outcome and agree in principle with the proposal to extend the life of the quarry – subject to the development of a full proposal in consultation with the local community which provides for the following:

- The sustainable long term use of the land (including avoiding creating a lake if possible) following the completion of quarrying;
- An improved community outcome following the completion of quarrying, including ongoing protection of remaining significant vegetation outside the extent of extraction, and the provision of active and passive recreation opportunities; and
- Community benefit during the ongoing operation of the quarry through the provision of:
 - Land and facilities that may include an active recreation complex of multiple sporting ovals, with associated change facilities, club rooms, car parking and associated facilities;
 - The land and the facilities referred to above shall be made available to the community as soon as practical following completion of the necessary statutory processes, with improvements as negotiated; and
 - Community access to land for equestrian uses.

The northern half of the Hanson site is currently used for grazing/horse agistment purposes. The long term vision for the Hanson Quarry site (beyond the life of quarry) has been a combination of residential development, and active and passive parkland including a lake in the mined quarry pit (Develop as part of the Rehabilitation Plan for the site which was a requirement of the Work Authority). (See **Figure 17**) As part of the current proposal for expansion of the quarry, KCC is currently negotiating possible community facilities/ public open space to be provided to the north-east portion of the site and be made available to the public.



Figure 16 – Indicative proposal for Hanson’s Quarry site

- Existing PAO shaded yellow
- Current Work Authority Area outlined red
- Current Extraction Limit outlined black
- Proposed expansion to Extraction Limit outlined blue
- Possible early access open space areas (indicative only) outlined green

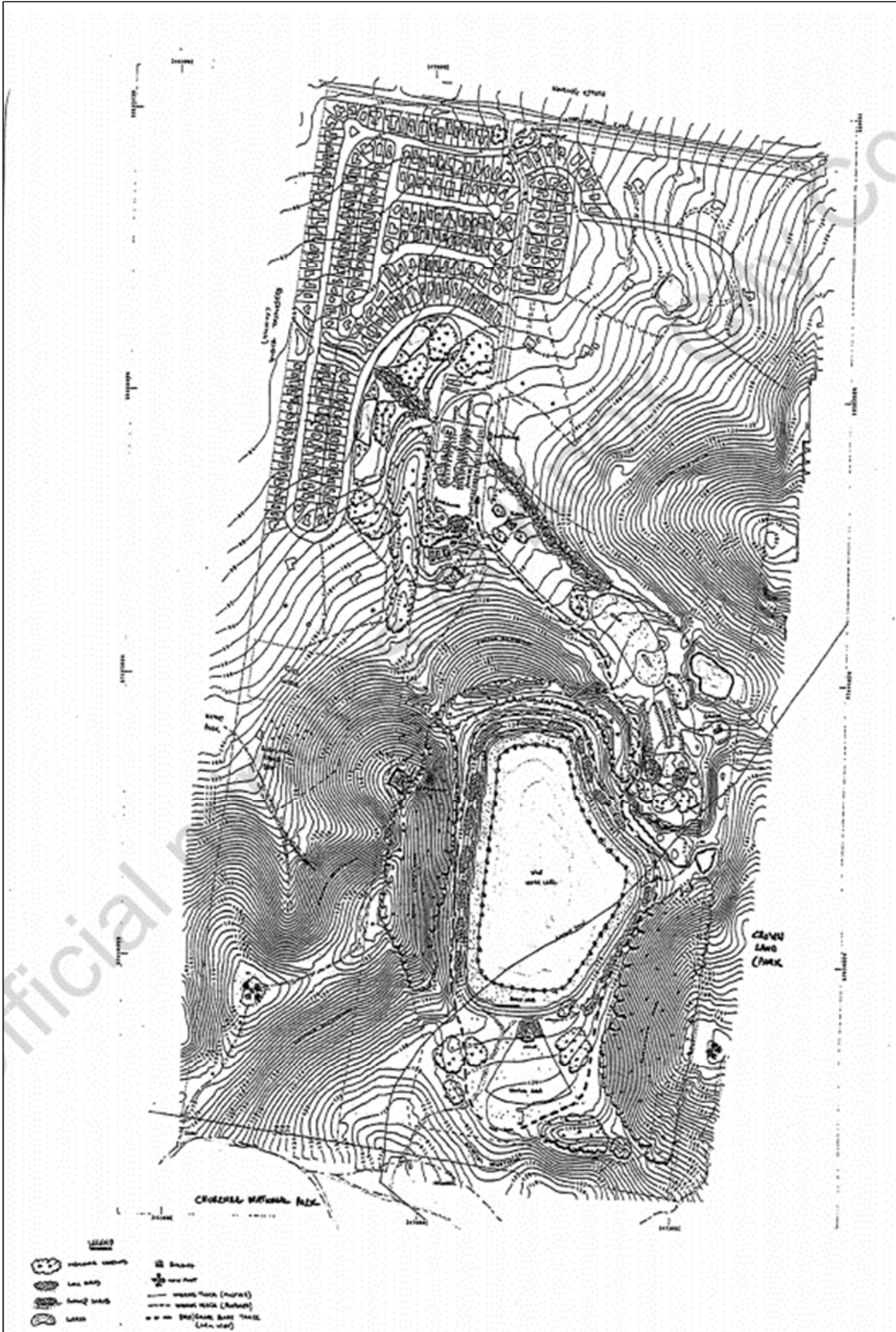


Figure 17 – Original post-quarry concept for Hanson’s site

4. Green Wedge Zone 2 (GWZ2)

GWZ2 is applied to two areas within Precinct 2b (refer to Map 2b.1) all privately owned and ranging between 2-5ha. The area abutting the western boundary of the precinct is mostly covered by bushland whereas the northern area (abutting Wellington Road) accommodates residences/buildings, grazing and horse agistment activities.

5.3.3. Environmental Characteristics

This section discusses the environmental overlays and the findings of the Wildlife Conservation and Connectivity Report (2017) (also refer to Map 2b.2).

Environmental Significance Overlay (ESO2)

As indicated on Map 2b.2, apart from the northern portion of the Hanson site, the entire Precinct 2b is affected by ESO2. These areas includes three Sites of Biological Significance identified by the SBS report, all being of “**State Significance**”. These sites are indicated in **Figure 18** and discussed in the table below.

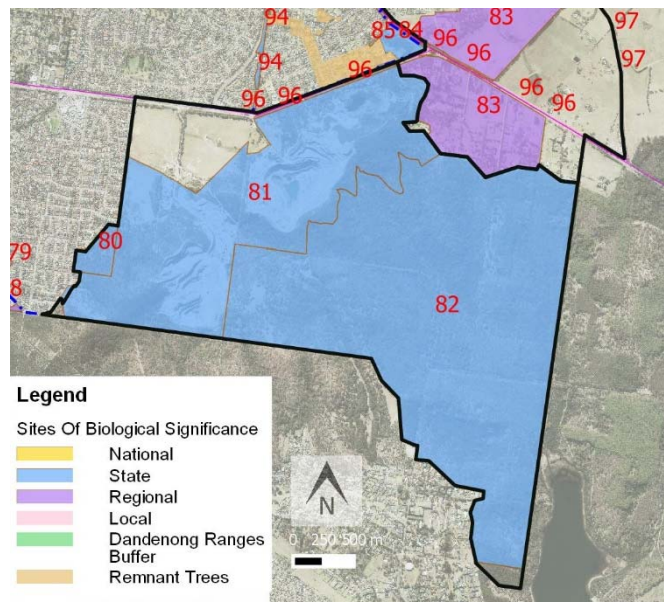


Figure 18 – Sites of Bio in Precinct 2a

Site No.	Description	Significance (Sites of Biological Significance in Knox 2009)
80	Heany Park, Rowville	<ul style="list-style-type: none"> • Contains possibly the highest quality native vegetation for kilometres around; • The vegetation with the best ecological condition is the very rare type, Lysterfield Grassy Dry Forest; • The other vegetation types present belong to threatened EVCs; • There are nine plant species that are threatened in Knox; • The park is habitat for several rare fauna species.
81	Lysterfield Hills	<ul style="list-style-type: none"> • Much of the vegetation present belongs to threatened EVCs; • A large number of indigenous plant species has been recorded from the half of the site for which data are available, and more would undoubtedly be found in a thorough survey; • Even though data is available from only part of the site, no fewer than 18 of the indigenous plant species that have been recorded are critically endangered in Knox, along with twenty other plant species that are threatened in Knox at levels lower than ‘critically endangered’; • The site is known habitat for several rare fauna species, including Powerful Owl and Speckled Warbler; • The site’s ecological values are threatened by quarry expansions.
82	Lysterfield Park	<ul style="list-style-type: none"> • Some of the native vegetation present belongs to regionally threatened EVCs; • Four plant species recorded from the park are listed as rare or threatened in Victoria, and at least some of these may be within the part of the park that lies within Knox; • Due to incomplete botanical surveying, there is a strong possibility that further rare or threatened plant species are present; • The site is known habitat for Powerful Owl and Speckled Warbler, which are both threatened in Victoria; • Other rare or threatened fauna that have been recorded within the park may occur in the part that lies inside Knox.

Vegetation Protection Overlay (VPO)

No areas within Precinct 2b are covered by VPO.

Waterways and Stormwater Management

Precinct 2b contains much of the catchment for the streams which feed into Lysterfield Lake. Also a number of small lakes exist in the precinct, including one within Heaney Park.

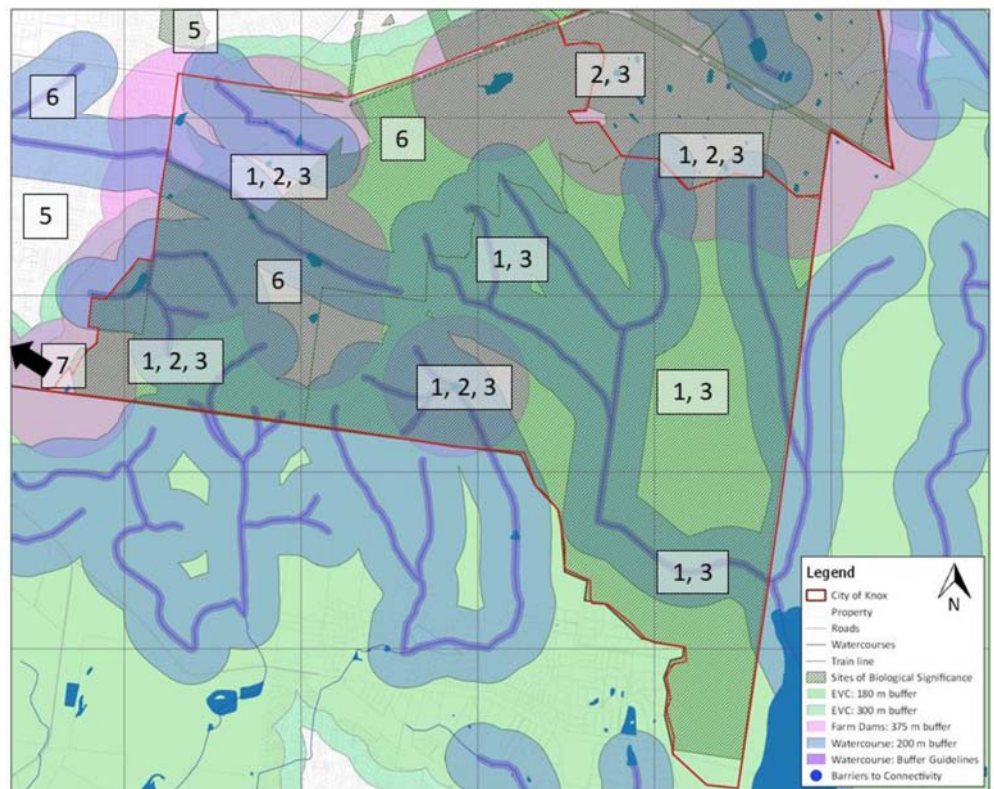
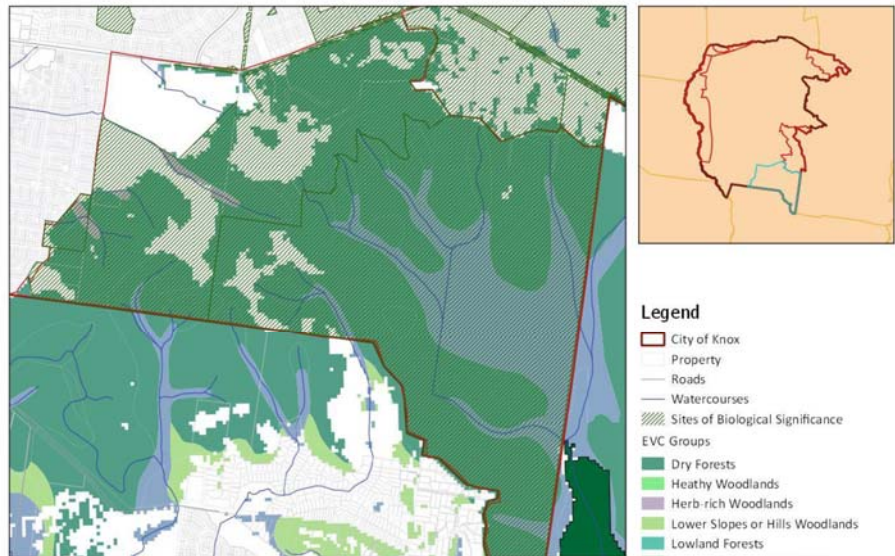
Findings of the Wildlife Conservation and Connectivity Report (2017)

Precinct 2b supports the highest percentage cover of native vegetation of all the precincts, with 82.4%. The majority of this native vegetation is Dry Forests, with Riparian Scrubs and Swampy Scrubs and Woodlands occurring along most of the waterways that pass through this precinct.

The north-east section of this precinct abuts Rural Land Precinct 2a, with the many farm dams and the adjacent catchment of Monbulk Creek. Maintaining this connection between the native vegetation and the adjacent agricultural lands will help preserve the populations of Short-beaked Echidna, Southern Bullfrog, Black Wallaby, and the four bird focal species that occur in this landscape.

The eastern section of this Precinct offers the closest point for connection across to Rural Land Precinct 3- Dandenong Valley Parklands (Figure 36), and any development that occurs in this area should consider the implications for these important wildlife connections. Land-uses that help retain the rural and natural landscape characteristics of this area would be the first priority, followed by moderate impact land uses (e.g., ecologically sensitive small scale residential developments) located adjacent to already developed lands, particularly when these moderate land uses can help secure long-term protection of dedicated habitat corridors nearby.

As much of the northern boundaries of this precinct are adjacent to residential development, they offer an important buffer against negative impacts from human activities or associated disturbances such as domestic cats and dogs. To protect the value of this buffer habitat, initiatives that encourage responsible pet ownership, or which restrict the number of domestic cats and dogs in the area will help to ensure that the biodiversity of this area remains high.



5.3.4. Economy and Land Management

This section overviews existing land management overlays (also see Map 2b.2), and economic aspects, including the findings of the Agricultural Assessment (2016).

Extractive Industries

DEDJTR's study "Extractive Resources in Victoria: Demand and Supply Study 2015-2050" has rated Knox as the 4th most critical resource location for supplying extractive resources for Victoria's future construction needs. This has been mostly due to the two Lysterfield hard rock quarries, which are significant suppliers to the Melbourne construction industry and are well located for supplying the Melbourne region.

Current assessments indicate a potential operational lifespan of up to a further 20 years (based on the current Planning Permit and Works Authority, but depending on the pace of excavation from the quarry). As discussed earlier, Hanson has indicated of their intention to extend the operation of their quarry for an additional 5-10 years, and to expand the extraction limits of the existing quarry. This outcome has been generally supported with the Council meeting in May 2018.

As part of the consultation for this project, it is essential to consult Boral regarding the status of their current operations and any future plans.

Findings of Agricultural Assessment

This precinct has very low agriculture potential as it is dominated by Lysterfield Park which is reserved for its recreational and environmental values, and the quarries which provide no long term prospect for agriculture (post life of the quarries) due to soil types and very steep slopes.

Future Direction

Maintain and enhance environmental values, in particular riparian vegetation protection and enhancement to promote habitat corridors and ecological connectivity within Lysterfield Park.

Bushfire Management

Due to the vegetation in Lysterfield Park and Churchill National Park, the majority of Precinct 2b is covered by BMO as indicated on Map 2b.2. The excluded area is the northern part of the Hanson Quarry site.

It is also noted that the entire precinct is within the designated Bushfire Prone Area which triggers bushfire assessment at building stage.

Public Acquisition Overlay (PAO2)

Parts of the Hanson Quarry site which are not subject to the existing Work Authority permits have been designated for acquisition by Parks Victoria. The proponent has applied to DELWP to remove the PAO and DELWP advises that Parks Victoria no longer seeks to acquire the land. In May 2018 KCC advised DELWP that it has no objection to the PAO being removed, subject to a number of conditions which were discussed earlier in this paper.

5.3.5. Landscape, Heritage and Built Form

This section is to be read in conjunction with Map 2b.3.

MSS Direction

Parts of Precinct 2b are within the **Dandenong Foothills Local Area** defined under Clause 21.10 of the Scheme. In this area it is intended to protect significant viewlines to the Foothills, continuous closed tree canopy and low density residential and rural character of the area.

More specifically, the following strategies are set for **Lysterfield Valley and Lysterfield Hills Rural Landscape** precinct:

- Support development that is sited to ensure that the rural landscape character is maintained and enhanced.
- Protect and support rural land uses.
- Protect indigenous trees and understorey vegetation.
- Require 80 per cent of all new vegetation (both canopy trees and understorey) to be indigenous.

Also the following strategies are set for **Precinct 5 – Lysterfield Urban/Rural Transition and Lysterfield Valley Contributory Area**:

- Provide roads that are aligned to facilitate an edge to the urban area and provide public access to reserves, parkland and views.
- Provide streets that connect with adjoining development and incorporate informal street treatments supporting indigenous vegetation and rollover kerbing.
- Require built form to not exceed a height of 7.5 metres.
- Support development that is sited and designed to minimise the threat associated with bushfire.
- Protect indigenous trees and understorey vegetation.

The above strategies have been implemented through the application of zones and overlays including the SLO and DDOs.

[Significant Landscape Overlay](#)

SLO1 Lysterfield Valley and Lysterfield Hills Rural Landscape covers a portion of the precinct including the two quarries. This overlay protects the broad scale pastoral landscape character and the open, bold hillsides of the Lysterfield Valley and seeks to enhance the scenic, visual, cultural and environmental values of the Valley.

Key permit triggers:

- Buildings and works with a height of over 7.5m
- Trees with a height of 5m or more or a trunk girth greater than 0.5m - exemptions apply
- Non-complying fences (permeability, height, material, etc.)

Key decision guidelines:

- Any impact on the views of the valley from the surrounding area
- Low intensity development to be sympathetic to the landscape qualities of the area
- Whether development above the 115m AHD contour is appropriate
- Tree retention and bushfire risk
- Materials and finishes to blend in with the landscape character

SLO5 Lysterfield Urban/Rural Transition and Lysterfield Valley Contributory Area covers an area in the north-western corner of Precinct 2b within Hanson Quarry site. This overlay requires that development is sensitive to the natural characteristics of the land including slope, terrain and any remnant vegetation, and that development minimises impact on views of the Dandenong Ranges, Lysterfield Valley, Lysterfield Hills and significant ridgelines.

[Heritage Places](#)

Precinct 2b includes two heritage places listed in the HO and two non-listed places as outlined below:

Table 4. Heritage Places in Precinct 2b

Place Name and Description	Heritage Review (2017) Recommendations
HO Places	
HO1 Lysterfield Lake Park	<ul style="list-style-type: none"> • Of historic (HO1) and environmental significance (ESO2) • Public land, recommend co-ordination with Parks Victoria for assessment of individual sites.
HO2 Heany Park	<ul style="list-style-type: none"> • Probably well documented so no further consideration • Retain heritage and other overlays.
Non-HO Places	
Churchill National Park, Churchill Road Rowville	<ul style="list-style-type: none"> • Public land, co-ordinate with Parks Victoria. • Recommend heritage assessment for specific sites within the Park.
Lysterfield Quarries	<ul style="list-style-type: none"> • Heritage assessment not recommended.

[Built Form and Design](#)

[Design and Development Overlay](#)

DDO3 Lysterfield Urban/Rural Transition and Lysterfield Valley Contributory Area

DDO3 applies to the north-western area of the Hanson Quarry site. It generally requires the following design objectives:

- To reflect the existing subdivision character of the area
- To retaining natural or established vegetation cover and providing substantial areas for planting and revegetation
- To minimise site coverage and impervious surface cover

Some of the design requirements are:

- Site coverage of the building not to exceed 40%.
- Site coverage of the buildings and impervious surfaces not to exceed 60%

5.3.6. Movement and Connectivity

This section is to be read in conjunction with Map 2b.4.

Road Network

Key arterial road access to Precinct 2b is through Wellington Road. The section of Wellington Road to the west of Napoleon road comprises a double lane, dual carriageway road with a median strip. The road transitions into a single lane single carriageway road west of Napoleon Road.

Public Transport

Routes 681 and 682 which are loop services to the Knox City Shopping Centre run along Dandelion Drive. Only the northern portion of Precinct 2b close to Wellington Road is within walking distance to these routes.

Walking and Cycling

Bike lanes currently exist on Wellington Road west of Napoleon Road. As indicated on Map 2b.4, the Principal Bicycle Plan proposes the bike lanes to continue eastward.

The Lysterfield Park has significant recreational cycling opportunities and accommodates a number of high quality mountain bike trails. There are opportunities for Precinct 2b to integrate with these facilities and improve connectivity and access from surrounding residential areas to these highly popular trails.

5.4. Precinct 3

5.4.1. Precinct Characteristics

The Dandenong Creek Valley is the largest precinct (975 ha) and incorporates the land corridor between EastLink and Dandenong Creek extending 10km along the Creek. This area accommodates large tracts of cleared farmland, semi-rural land, bushland, parklands and developed sporting facilities. It also includes large private properties designated for future public acquisition. Dandenong Creek runs along the Precinct's western boundary, which also serves as the municipal boundary between KCC and the neighbouring Cities of Whitehorse and Monash.

Unlike the other precincts, there are many individual landowners in this precinct, with Parks Victoria and Melbourne Water responsible for a relatively large amount of this precinct due to its proximity to Dandenong Creek. Almost two-thirds of the Dandenong Creek Valley is comprised of waterways, public open space, including sports fields, walking and cycling trails and water treatment and retention facilities.

The Dandenong Valley Parklands Future Directions Plan (Parks Victoria, 2006) sets out the vision, management framework and implementation for the wider Dandenong Valley Parklands area. The plan provides an overview of the important values of this land including: regional open space and linkages, visitor and recreation values, park identity, environment values, and cultural heritage values. The plan, produced in 2006 was intended as a 10-15 year plan. Parks Victoria has advised that there is no intention to review the Plan in the short term.

Recreational values within the Dandenong Valley Parklands are high, including the EastLink Trail which provides strong linkages with surrounding municipalities and several recreational reserves.

5.4.2. Existing Zones and Land Use

This section discusses the various zones designated under the Scheme, and details the land use characteristics within each zone (also refer to Map 3.1).

1. Public Parks and Recreation Zone (PPRZ)

PPRZ covers a number of parks and sport/recreational facilities within Precinct 3. It also includes key vegetation links connecting wetlands and riparian areas surrounding the creeks. The zone encompasses some isolated areas containing significant habitat values and remnant vegetation, and some modified areas south of Ferntree Gully Road.

Koomba Park is one of the parks comprising the Dandenong Valley Parklands. It consists of 92 hectares, of which 33 hectares (82 acres) are publicly accessible, and is bounded by the Dandenong Creek, Boronia Road, EastLink, Mountain Highway and Burwood Highway. The park opened in December 1981. Koomba Park contains large areas of natural bushland, billabongs and lakes fed by the Dandenong Creek. The Bird Hide provides a perfect way to observe birds in the natural habitat.

The trail network through Koomba Park incorporates both the Dandenong Creek Trail which branches off to a boardwalk section and the Eastlink Trail that continues on to follow the Eastlink Freeway.

An area of land zoned **Road Zone 1 (RDZ1)** exists within Koomba Park. Parks Victoria’s “Dandenong Valley Parklands Future Directions Plan” recommends the investigation of this land for potential rezoning an inclusion in Koomba Park.

Wantirna Reserve is on the corner of the Eastlink and Burwood Highway and is managed by KCC. It includes a sporting oval and facilities for activities such as cricket, football and tennis. The reserve also contains a children’s playground.

Knox Regional Sports Park is located on crown land managed by KCC. It currently includes an indoor sports stadium, two synthetic soccer pitches and associated soccer pavilion, open grassed areas for informal recreation, grassed field and operations area for the Victorian Association of Radio Model Soaring (VARMS), car parking areas and groups of predominantly native and indigenous trees.

KCC has recently approved a Masterplan for the sports park (August 2018) which provides for the following upgrades:

- Ten additional domestic basketball courts;
- A new gymnastics facility suitable for regional level competition;
- A Centre of Excellence facility and high-performance training centre;
- An 8,000 seat capacity sports/entertainment area with overflow parking for 2,500 vehicles within the adjacent Cathies Lane Landfill site;
- The conversion of the existing 5-a-side soccer pitches to one full size field, six new 5-1-side pitches and extension to the existing pavilion; and
- At grade car parking facilities and intersection upgrade works to facilitate parking demands and traffic flows.

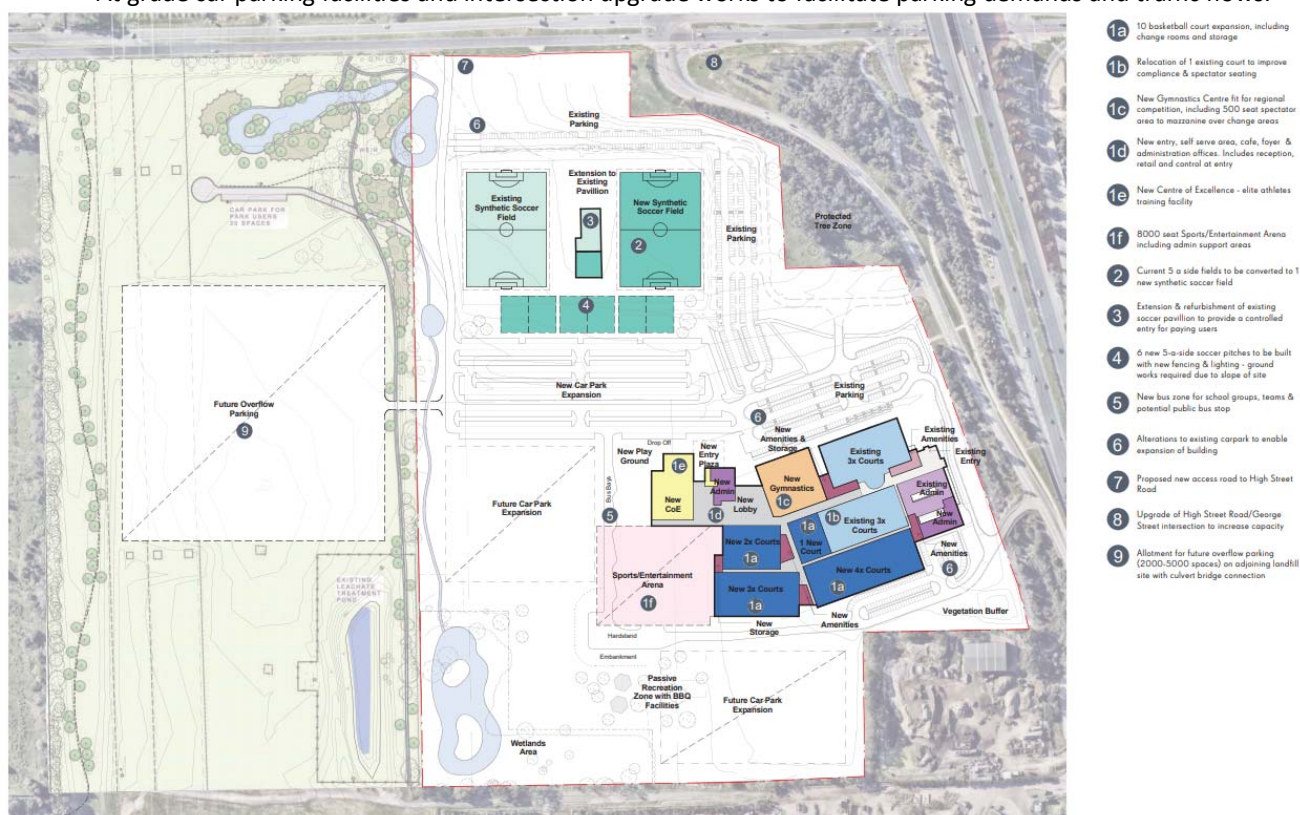


Figure 20. Knox Regional Sports Park Masterplan

The Masterplan supports the relocation of the Victorian Association of Radio Model Soaring (VARMS) to an alternative location at the conclusion of their current lease in 2022. Council is actively seeking to identify an alternative location.

The Masterplan is KCC's response to growing demand across Knox for high quality sporting and recreational facilities. Basketball, gymnastics and soccer are all experiencing significant growth and, as a result, demand for facilities at a local level is exceeding supply. Implementation of the Masterplan will be funded jointly by KCC (\$25 million) and the State Government (\$82 million).

Chesterfield Farm is on crown land located at 1221 Ferntree Gully Rd, Scoresby leased to a private business providing educational and tourism services such as interaction with farm animals, tractor rides and farm shows including hand milking the cows and watching sheepdogs at work.

2. Public Conservation and Recreation Zone (PCRZ)

The PCRZ area includes the land adjacent to the Dandenong Creek riparian strip along the western boundary of Precinct 3 and also a portion of the Corhanwarrabul Creek riparian corridor, in the southern part of Precinct 3.

3. Public Use Zone 6 (PUZ6)

Knox Transfer Station is allocated at 251 George Street Wantirna South and provides a resource recovery and waste sorting/disposal service. Recycling services include mattresses, e-waste, garden waste, scrap metal, car tyres and hard waste. Knox Transfer Station operates a reuse shop "Knox Treasure Chest" where items recovered from the waste stream are sold. Knox Transfer Station is run by KTS Recycling who also run waste transfer and recycling facilities at Coldstream, Skye and Wesburn.

PUZ also covers KCC's landfill site at Cathies Lane. This lot abuts the Knox Regional Sports Park and is designated for the accommodation of overflow parking from the Sports Park.

4. Special Use Zone 2 (SUZ2)

The **Boral Quarry** at 191 George Street, Wantirna South provides for clay extraction for brick making. The Scheme identifies this site as a "Strategic Investigation Site" suitable for future residential development (either entirely or in part), including a component of social housing. Also the Land for Business Directions Plan identifies it as a potential site to provide a business land component for employment generation purposes.

5. Rural Living Zone (RLZ)

RLZ covers a number of smaller size privately owned properties in the northern half of the precinct. These lots are used for residential and rural living purposes, There is a small vineyard (Wantirna Estate) currently operating at 8 Bushy Lane. Most of these lots are subject to a Public Acquisition Overlay with the acquiring Authority being Parks Victoria.

There is a small area of Dandenong Creek riparian vegetation – to the south of Whitehorse Waste Centre - within Crown Land zoned RLZ. The rationale behind this zoning is unknown. A more appropriate zoning would be PCRZ.

6. Farming Zone (FZ)

FZ covers a number of properties to the south of High Street Road. In addition to rural residential properties, this zone includes a fresh produce market facing High Street Road and a Missionary College near the quarry lake.

7. Urban Floodway Zone (UFZ)

There is one parcel of land abutting Burwood Highway (to the north) which is zoned UFZ. This lot is currently used for shops including the sale of gardening and landscaping supplies, bricks and paving supplies. This lot represents a gap in the connectivity of the vegetation (and PCRZ zoning) associated with the Dandenong Creek riparian corridor.

8. Commercial 2 Zone (C2Z)

Applies to a parcel of land abutting Eastlink south of Ferntree Gully Road. It currently includes a service station, a fast food outlet and a café.

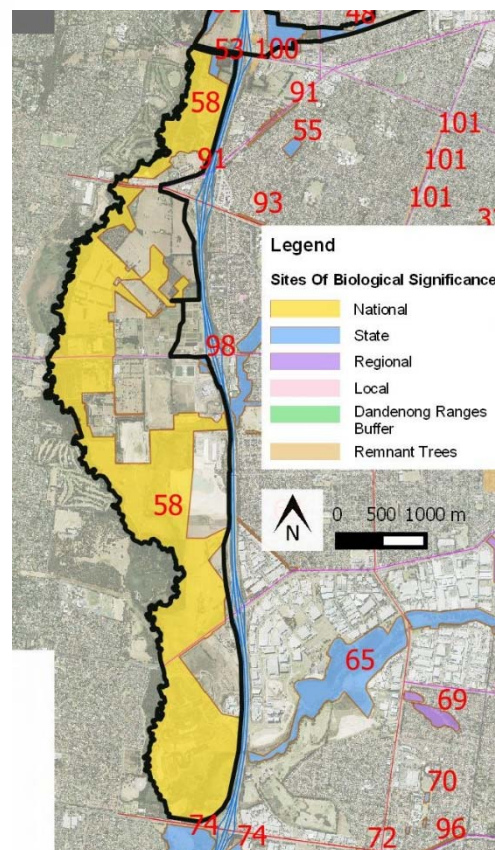
5.4.3. Environmental Characteristics

This section discusses the environmental overlays and the findings of the Wildlife Conservation and Connectivity Report (2017) (also refer to Map 3.2).

Environmental Significance Overlay (ESO2)

Slightly over half of the precinct has been classified as a Site of Biological Significance (ESO2). This area includes two Sites of Biological Significance which are of **“National Significance”**. The SBS report however notes that the national-level significance is due to the presence of Yarra Gums, otherwise a state-level significance would apply. The two sites are discussed in the table below:

Site No.	Description	Significance (Sites of Biological Significance in Knox 2009)
58	Dandenong Valley Parklands	<ul style="list-style-type: none"> • There are many plant species that are rare in Knox or in the whole Melbourne area, as well as many of the rare Yarra Gum (<i>Eucalyptus yarraensis</i>); • Dandenong Ck, Blind Ck and Corhanwarrabul Ck are corridors for daily and seasonal movements of fauna; • The streams and the many wetlands in the site are habitat for frogs, fish, other aquatic fauna and waterbirds, several species of which are threatened; • Despite a long history of grazing and sometimes horticulture, the remnant forest and woodland vegetation is highly significant because almost all of it belongs to endangered EVCs; • Parts of the site are being used for long-term research into management of degraded Valley Heathy Forest (an endangered EVC).
53	Ardnehue Rd Land, Wantirna (Regenerating native vegetation on swampy public land)	<ul style="list-style-type: none"> • The site is part of the State-significant Dandenong Creek flora and fauna corridor, and it makes a considerable contribution to the richness of flora in the corridor; • Several of the plant species present are regionally rare; • Being on Dandenong Creek, the site is on a major corridor for daily and seasonal movements of birds and insects.



Vegetation Protection Overlay (VPO2)

A number of trees across Precinct 3 are protected by VPO for their exotic and amenity values. These trees are located within properties or road verges. The protected trees are listed (some individually and some in groups) in Schedule 2 to the VPO and are indicated on Map 3.2.

Waterways and Stormwater Management

6.4% of the precinct supports waterbodies, significantly more than all the other precincts. This includes Dandenong Creek, Blind Creek and Corhanwarrabul Creek and their tributaries. Precinct 3 contains large extents of 1 in 100 year ARI flood plains associated with these Creek. These areas are protected by the Land Subject to Inundation Overlay (LSIO) which is indicated on **Map 3.2**.

Dandenong Creek runs along the western boundary of the precinct. Within Knox, the Dandenong Creek extends in a westerly direction from Doongalla Estate Reserve to Wantirna and then turns southwards towards Dandenong. Stormwater runoff from most of municipality (94%) discharges to Dandenong Creek which drains to Port Phillip via Mordialloc Creek.

Blind Creek traverses the precinct – south of High Street Road - and discharges to Dandenong Creek. The upstream section of Blind Creek in Boronia (outside study area) is identified as a “High Value” waterway in Knox as part of the Knox WSUD and Stormwater Management Strategy.

The southern part of the precinct also contains a section of **Corhanwarrabul Creek** and its floodplain wetlands. Corhanwarrabul Creek has a major impact on flows and water quality in Dandenong Creek as it is a significant contributor to the flows in the creek.

Melbourne Water works with KCC to manage these creek systems including ongoing monitoring of water quality and sediment control at Corhanwarrabul Creek and Dandenong Valley treatment wetlands.

Findings of the Wildlife Conservation and Connectivity Report (2017)

Precinct 3 contains many well-connected billabongs, the widest core riparian zones, as well as a relatively consistent spread of remnant vegetation along the length of the precinct. As a connecting corridor, Dandenong Creek forms an important bioregional corridor, connecting the foothills of the Dandenong Ranges to the Port Phillip Bay. In addition to its connectivity role, Dandenong Creek also provides significant habitat for a range of species, including at least 163 species and sub-species of indigenous plants and numerous rare and regionally significant species. Information about wildlife within the Dandenong Creek Corridor is provided in Section 4.2.

Significant investment into the natural assets in this precinct were made by a number of agencies during the construction of the EastLink Tollway, and any development in this precinct has the potential to significantly compromise the returns on that investment unless it is undertaken very carefully.

Poor maintenance of orchards and weed control have the potential to reduce the wildlife connectivity and conservation values of this precinct if they encroach upon areas of native vegetation or other areas of habitat. However, in some cases areas of existing weeds may provide habitat values for wildlife. For example, Southern Brown Bandicoots have been recorded using blackberry bushes along fencelines as they offer protection against predators. Therefore, any actions to remove or reduce weed cover should be undertaken in a staged basis, alongside active planting of native vegetation as replacement habitat.

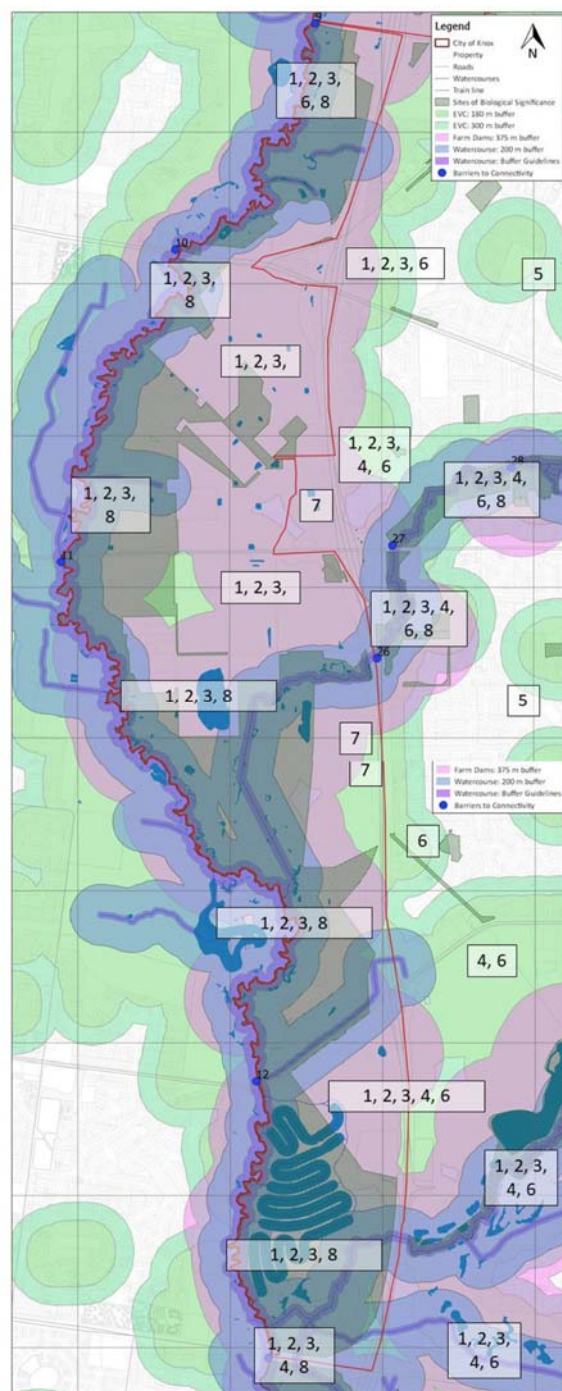
Compatible land uses within this precinct would be for passive and active recreation-based activities (e.g. cycling, walking, bird watching), and associated infrastructure (e.g. small cafes, amenity stations), nature-based education programs, continuance of low intensity farming practices, and enterprises based around native vegetation such as the establishment of commercial seed growing properties, or native plant cut-flowers or nurseries.

5.4.4. Economy and Land Management

This section overviews existing land management overlays (also see Map 3.2) and economic aspects including the findings of the Agricultural Assessment (2016).

Findings of Agricultural Assessment

A range of agricultural land uses are present within the precinct including a vineyard, apple orchards, horse agistment, dryland cattle grazing and cropping. Existing agricultural land has mixed land management practices, including poor maintenance of orchards and weed control detracting from the amenity value of the landscape. Some value-add agricultural based activities include agricultural tourism (Chesterfield Farm), produce store (Big Watermelon Bushy Park) and cafés.



This precinct contains areas of high quality soil along Dandenong Creek riparian zone and medium quality soils elsewhere. The gently undulating to flat topography also provides some agricultural capability. The precinct is highly capable of supporting mixed horticulture and livestock agricultural activities. This assessment is supported by the existing presence of a number of agricultural production systems including a wine vineyard, orchards and grazing land. High environmental and biodiversity values are present at the site. Production within the Dandenong Creek floodplain is to be avoided.

Based on the land capability, predominance of small lot and property sizes and mainly recreational and public land use, it is considered that Precinct 3 is generally not suited to commercial-scale agriculture. There is potential though for agri-based tourism, urban agriculture or cafes building on existing attractions and proximity to the EastLink Trail. Locational area identified on the figure to the right was found the most likely area suitable for these activities.

Future Directions

Based on these findings, future directions for Precinct 3 include:

- Promote agri-tourism, urban agriculture or cafes in proximity to the EastLink Trail and recreational sporting facilities and parks
- Promote agri-tourism initiatives based on existing high recreational values and existing agricultural infrastructure at Chesterfield Farm.

Bushfire Management

There are no BMO areas within Precinct 3. However, the majority of Precinct 3 (apart from parts of the Knox Regional Sports Park and Boral Quarry site) are within the designated Bushfire Prone Area which triggers bushfire assessment at building stage.

Public Acquisition Overlay (PAO2)

Large areas within Precinct 3 are designated for acquisition by Parks Victoria. The existing Parks Victoria publication “Dandenong Valley Parklands Future Directions Plan” suggests that these areas are still intended for acquisition. This position needs confirmation as the document is 12 years old.

5.4.5. Landscape, Heritage and Built Form

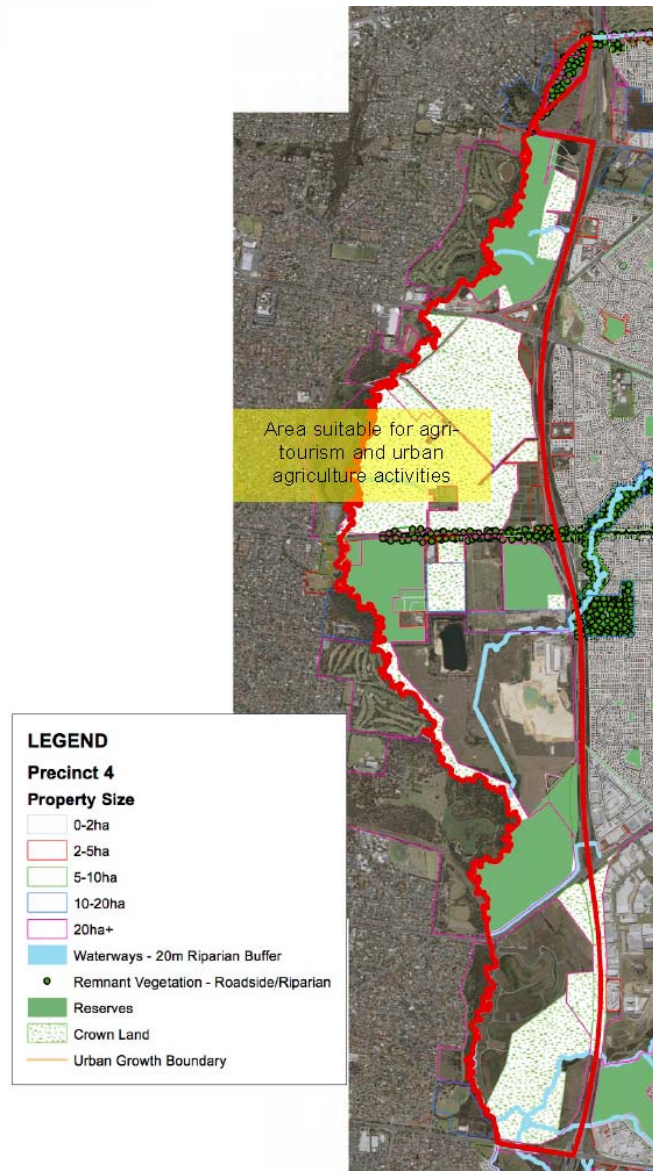
This section is to be read in conjunction with Map 3.3.

MSS Direction

Clause 21.03 Environmental and Landscape Values refers to The Dandenong Valley Parklands as a Significant Landscape and one of the most highly visited and popular parks in Melbourne. It also includes the following relevant strategies:

- Protect and enhance the landscape quality and role of the Dandenong Creek Valley as a wide, green pastoral break separating Knox from the suburban character of the balance of the eastern suburbs of Melbourne.
- Limit development within the Dandenong Foothills, Lysterfield Valley and Dandenong Creek Valley that may compromise their landscape and environmental significance
- Minimise the visual dominance of development along the Dandenong Creek Valley

However, these strategies have not been translated into any overlays. This might be due to the assumption that the current zoning already protects the area from development, or that Parks Victoria is the key landowner/responsible authority.



‘Dandenong Creek Valley Gateways’ are located at entry points along the western and northern boundaries of Knox, where main roads pass through Dandenong Creek Valley's broad corridor of green space separating Knox from adjoining municipalities. These gateways welcome visitors to Knox with a sense of openness and views into the creek valley, promoting the City's green landscape identity. Within ‘Dandenong Creek Valley Gateways’, the aim is to support lower-scale built form that does not dominate landscape character, is well setback and screened with canopy trees to maintain a sense of openness along the gateway corridor.

‘Bush Boulevards’: Boronia Road, Burwood Highway, High Street Road and Ferntree Gully Road are identified as ‘Bush Boulevards’. These arterial roads have wide reservations and are planted with informal avenues of native trees. They also have various environmental benefits such as supporting local biodiversity, providing wildlife corridors, enhancing native remnant bushland values and mitigating the effects of climate change.

Heritage Places

Precinct 3 includes three heritage places listed in the HO and three non-listed places as outlined below:

Table 5. Heritage Places in Precinct 3

Place Name and Description	Heritage Review (2017) Recommendations
HO Places	
HO36 Clow Cottage, Dandenong Valley Parklands	<ul style="list-style-type: none"> Retain heritage overlay. Recommend heritage assessment to inform current listings.
HO10 Chesterfield Farm, Ferntree Gully Road Scoresby	<ul style="list-style-type: none"> Retain heritage and other overlays.
HO50 Boronia Road Wantirna (west of Eastlink)	<ul style="list-style-type: none"> Further investigation required to determine extent Retain heritage and other overlays.
Non-HO Places	
Axford Road Ruin, Axford Road Wantirna	<ul style="list-style-type: none"> Recommend further investigation and heritage assessment.
Bushy Park, 3 Bushy Park Lane Wantirna South	<ul style="list-style-type: none"> Recommended for heritage assessment.
Norton Park and Shepherds Bush, Wantirna South	<ul style="list-style-type: none"> Public land. Co-ordinate with Parks Victoria. Recommend heritage assessment for specific sites within the Park.

5.4.6. Movement and Connectivity

This section is to be read in conjunction with Map 3.4.

Road Network

Precinct 3 is well served by the arterial road network including the Eastlink, Boronia Road, Burwood Highway, High Street Road, Ferntree Gully Road and Wellington Road. Key road access to Precinct 2b is through Wellington Road. A number of local roads, mostly in the form of cul-de-sacs, provide access from these roads to individual properties.

Public Transport

Multiple bus services currently run along Boronia Road, Burwood Highway, High Street Road, Ferntree Gully Road and Wellington Road.

Walking and Cycling

Precinct 3 includes high quality off-road cycling infrastructure including the Dandenong Creek Valley Trail, Ferny Creek Trail. These trails provide strong linkages with surrounding municipalities and other recreational areas. As indicated on Map 3.4, on-road cycle lanes are also proposed on Burwood Highway and the section of Eastlink south of Ferntree Gully Road.

5.5. Precinct 4

5.5.1. Precinct Characteristics

The Healesville Freeway Reservation and Surrounds Precinct (Precinct 4) is the smallest of the four precincts at 127.5ha. Originally reserved for the 'Healesville Freeway' in 1969, the reservation east of Eastlink has been retained for possible future road construction. Much of the Healesville Freeway Reservation has been cleared and is used for a number of uses including horse agistment, livestock properties, sports fields and pedestrian and cycling paths. The area is highly urbanised, surrounded by residential development and industrial estates. The precinct adjoins the south side of Dandenong Creek and KCC's boundary with the City of Maroondah. Land is low lying and prone to flood.

5.5.2. Existing Zones and Land Use

This section discusses the various zones designated under the Scheme, and details the land use characteristics within each zone (also refer to Map 4.1).

1. Road Zone 1 (RDZ1)

This zone covers the existing road reserve for Eastlink Freeway as well as land reserved for future Healesville Freeway extension, and part of Stud Road extension to Canterbury Road.

The land is owned by VicRoads. The Healesville Freeway reservation area accommodates some interim uses (leased by VicRoads) such as plant nursery and horse agistment properties.

2. Rural Living Zone (RLZ)

RLZ covers a strip of land between the PPRZ reservation associated with the Dandenong Creek Riparian Vegetation in Bayswater and the land reserved for road purposes. It comprises land owned by KCC, Maroondah City Council and private owners and currently accommodates uses such as part of a golf driving range (approved 2004) and sporting grounds (JW Manson reserve)

3. General Residential Zone 5 (GRZ5)

Covers the Bateman Street Bushland which is of high biological value. This area is covered by the Public Acquisition Overlay (VicRoads) which reserves it for the future Healesville Freeway extension.

4. Urban Floodway Zone (UFZ)

UFZ covers the stretch of Dandenong Creek which is located within the precinct and some of its floodplains. The UFZ has to be seen in conjunction with the LSIO overlay which covers the flood prone areas (shown on Map 4.2)

The UFZ also contains the Dandenong Creek shared path which is of high recreational and tourism values.

5. Public Conservation and Resource Zone (PCRZ)

PCRZ covers the Dandenong Creek riparian strip which contains significant vegetation and environmentally sensitive areas.

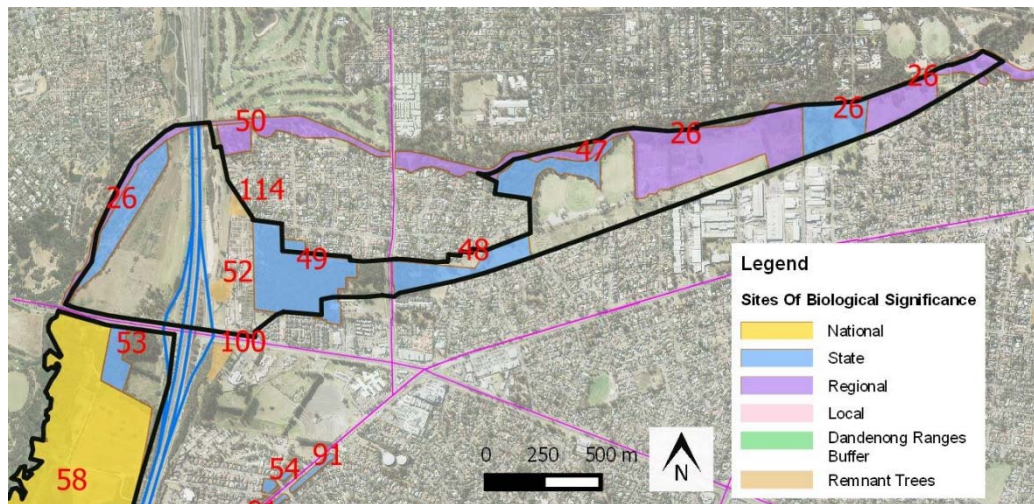
5.5.3. Environmental Characteristics

This section discusses the environmental overlays and the findings of the Wildlife Conservation and Connectivity Report (2017) (also refer to Map 4.2).

Environmental Significance Overlay (ESO2)

Areas within Precinct 4 that are protected by ESO2 consist of a number of Sites of Biological Significance identified by the SBS report. These sites have a combination of "State" and "Regional" significance. There are also two sites that are identified as having Local Significance (Remnant Trees). These sites have not been included in ESO2, but rather have been included in the VPO2 overlay.

The Sites of Biological Significance within Precinct 4 are discussed in the table below.



Site No.	Description	Significance (Sites of Biological Significance in Knox 2009)
26	Dandenong Creek Corridor	<ul style="list-style-type: none"> All the native vegetation in this site belongs to EVCs that are regionally Endangered or Vulnerable, but only a small fraction of it is in fair ecological condition or better; Even open pasture within the site contains substantial areas of indigenous wetland plants in depressions, and these are habitat for frogs and their predators; This is an important corridor for daily and seasonal movements of birds and insects (particularly waterbirds and parrots), as well as for pollen and plant propagules that the fauna may transport; Revegetation is playing an important role in reducing the extensive fragmentation of habitat that has occurred historically.
47	J.W. Manson Reserve, Wantirna	<ul style="list-style-type: none"> Two regionally threatened vegetation types are represented: Floodplain Wetland Complex and Riparian Forest; Locally rare flora and fauna are present, some species of which are abundant; Being on Dandenong Creek, the site is an ecological stepping-stone on a major corridor for daily and seasonal movements of birds and insects (particularly waterbirds, several species of which are threatened);
48	Healesville Freeway Reservation, Wantirna (section between Wantirna Rd and J.W. Manson Reserve)	<ul style="list-style-type: none"> Contains remnants of three regionally endangered EVCs, although only vestiges remain of one of these; Provides a habitat refuge for forest and woodland birds; Provides floodplain and wetland habitat for waterbirds and frogs, even on cleared land; Contributes to a wildlife corridor with other vegetation along the proposed route of the freeway, effectively augmenting the Dandenong Creek wildlife corridor; Grazing and uncontrolled weeds are degrading the significant vegetation.
49	Bateman Street Bush, Wantirna	<ul style="list-style-type: none"> The site is one of the largest and richest areas of fairly intact Valley Heathy Forest in the Melbourne region, if not Victoria. Valley Heathy Forest is an endangered vegetation type; The regionally endangered Swampy Woodland is also present; There are numerous plant species that are threatened at various scales from locally to nationally; The Healesville Freeway is proposed to occupy most of the site when and if it is built.
50	Yarrabing Wetlands Reserve, Wantirna	<ul style="list-style-type: none"> The regionally Endangered vegetation type, Floodplain Wetland Complex, is present, as well as scattered trees that are remnants of two other threatened vegetation types (Riparian Forest and Swampy Woodland); Locally rare flora and fauna have been recorded at the site; Being on Dandenong Creek, the site is on a major corridor for daily and seasonal movements of birds and insects (particularly waterbirds).
52	Winton Farm, Boronia Rd, Wantirna Remnant Mealy Stringybarks (some large) on the former	<ul style="list-style-type: none"> Vestiges of a regionally endangered plant community; Provides an ecological stepping-stone for daily and seasonal east-west movements of birds and insects.

	Winton Farm property	
114	<p>Clarence Rd Treed Paddock, Wantirna</p> <p>A treed paddock at the western end of Clarence Rd, grazed by horses and reserved for possible future use in an interchange between the EastLink and the Healesville Fwy</p>	<ul style="list-style-type: none"> • A good stand of large remnant eucalypts, providing habitat for native birds, possums, insects and probably bats.

Vegetation Protection Overlay (VPO2)

A few groups of trees across Precinct 4 are protected by VPO for their exotic and amenity values. The two groups of trees located to the west of the freeway are also identified in the Sites of Biological Significance report as remnant trees having local-level values. These trees are listed in Schedule 2 to the VPO and are indicated on Map 4.2.

Waterways and Stormwater Management

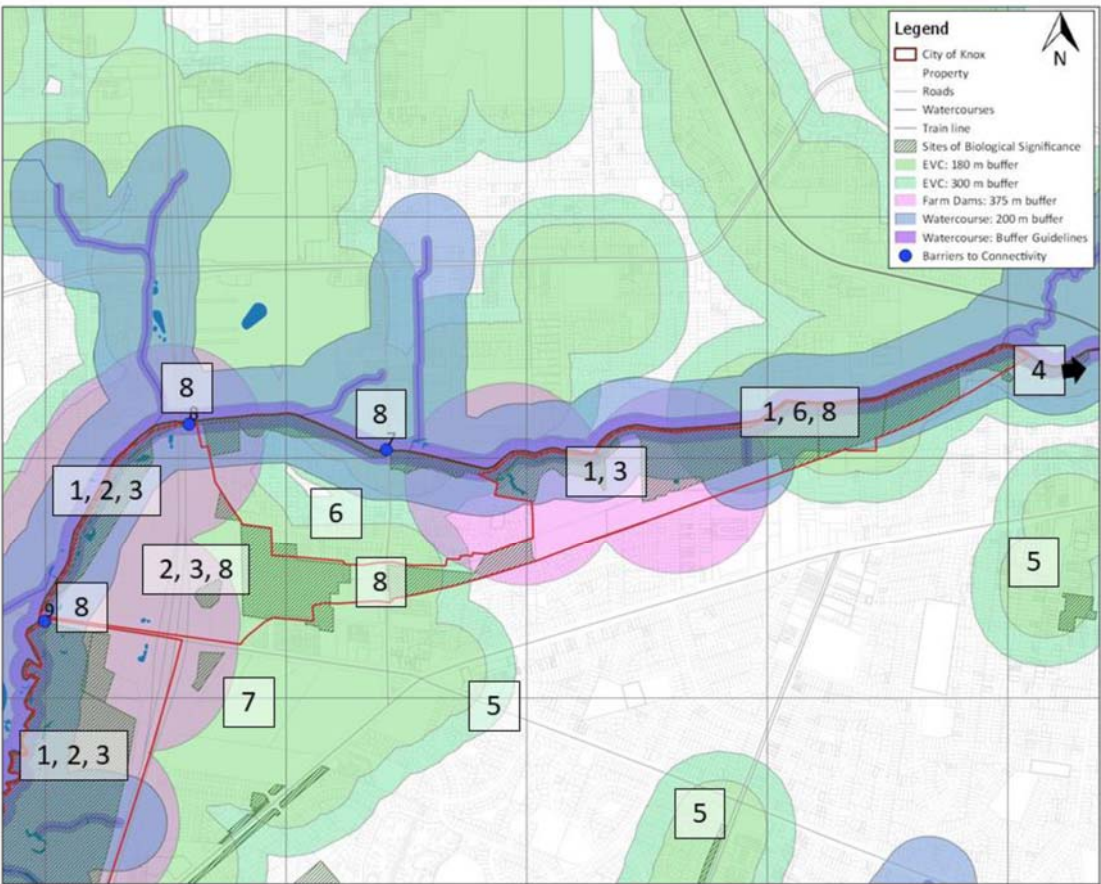
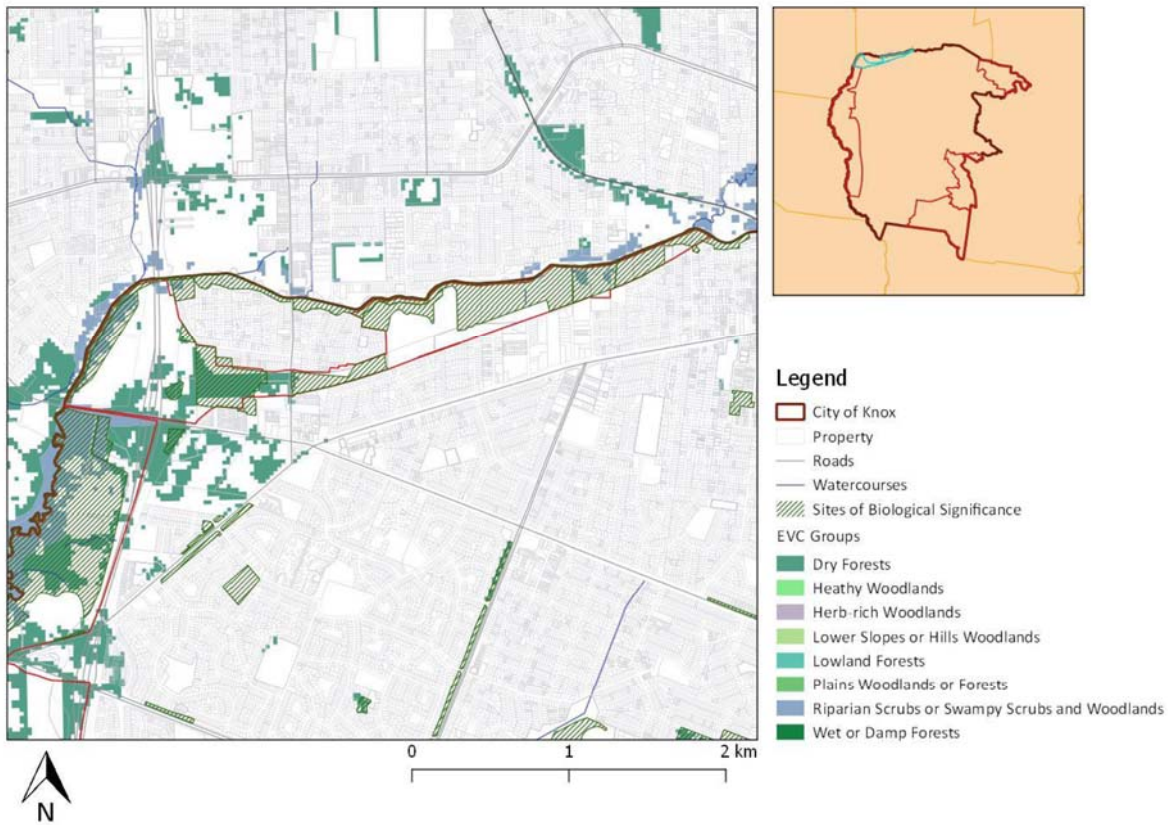
Dandenong Creek runs along the northern boundary of Precinct 4 with its floodplain affecting large areas of land within the precinct. These areas have a key drainage function and support the broader catchment. The areas affected by the 1 in 100 yr ARI flood level of Dandenong Creek area protected through LSIO and are indicated on Map 4.2

Findings of the Wildlife Conservation and Connectivity Report (2017)

Precinct 4 supports 21% native vegetation cover, primarily Dry Forests and a small amount of Riparian Scrubs and Swampy Scrubs and Woodlands patchily distributed along Dandenong Creek.

The eastern and western ends of Precinct 4 contain remnant vegetation, while the central area contains areas with billabongs in close proximity to the Dandenong Creek. The remnant vegetation in the western section forms part of a larger consolidated area of remnant vegetation, some of which will be affected by the Wantirna Health Precinct between Mountain Highway and Boronia Road.

Recent revegetation and restoration efforts by the Knox and Maroondah City Council Bush crews along Dandenong Creek in and around Precinct 4 have greatly added to the wildlife habitat and dispersal opportunities in this precinct. Any future development in this precinct should ensure that the precinct continues to provide adequate habitat and movement opportunities for wildlife as well as protect investments in bushland restoration elsewhere along Dandenong Creek.



5.5.4. Economy and Land Management

This section overviews existing land management overlays (also see Map 4.2) and economic aspects including the findings of the Agricultural Assessment (2016).

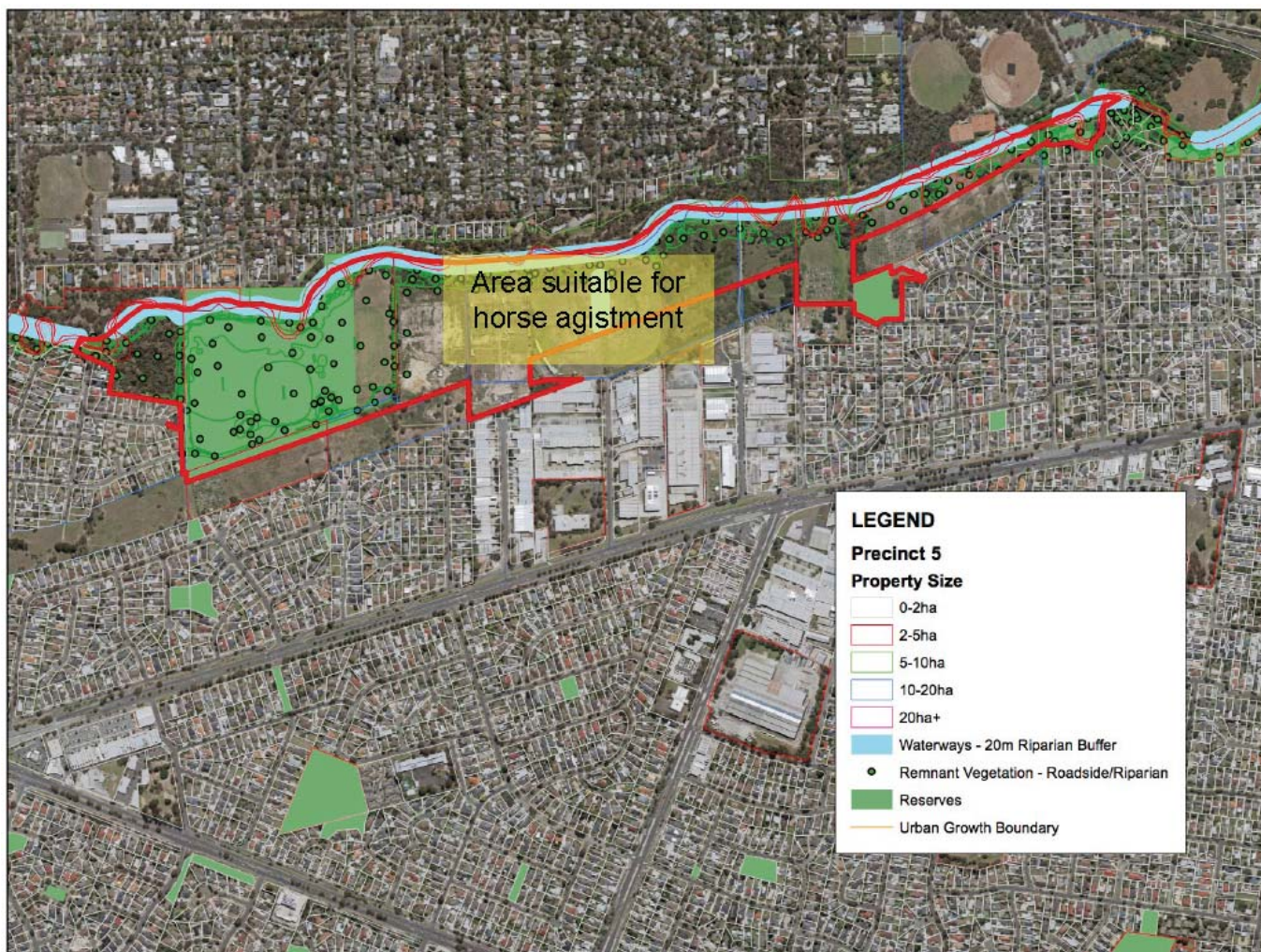
Findings of Agricultural Assessment

The precinct has a number of horse agistment properties, including mix livestock of goats and alpacas. Access to the precinct area is restricted. A high weed density was observed at the site.

The site has medium to good quality soil and relatively flat topography. However, the predominance of small lot sizes, surrounding commercial and urban development and mainly recreational and public land uses, it is considered that Precinct 4 is generally not suited to commercial-scale agriculture.

Future Directions

- Provide for recreational uses, horse agistment and related services.
- Maintain and enhance environmental values, in particular riparian vegetation protection and enhancement to promote habitat corridors and ecological connectivity.



Bushfire Management

The are no BMO areas within Precinct 3. However, the entirety of Precinct 4 are within the designated Bushfire Prone Area which triggers bushfire assessment at building stage.

Public Acquisition Overlay (PAO1)

These properties that are within the Healesville Freeway extension corridor but are not owned by VicRoads are covered by PAO1 (VicRoads).

5.5.5. Landscape, Heritage and Built Form

This section is to be read in conjunction with Map 4.3.

Landscape Character

The precinct includes several properties within and adjacent to the Healesville Freeway Reservation and surrounds. The area is highly urbanised, surrounded by residential development and industrial estate. The properties adjoin the south side of Dandenong Creek, the City’s border with the City of Maroondah. Land is low lying and prone to bogging. In addition to a golf driving range, the precinct has a number of horse agistment properties, including mix livestock of goats and alpacas. Access to the precinct area is restricted. A high weed density was observed at the site.

There is limited guidance in the existing framework regarding landscape and built form in Precinct 4, apart from one heritage place which covers a few trees along Boronia Road

Table 6. Heritage Places in Precinct 4

Place Name and Description	Heritage Review (2017) Recommendations
HO Places	
HO50 Boronia Road Wantirna (west of Eastlink)	<ul style="list-style-type: none"> • Further investigation required to determine extent • Retain heritage and other overlays.

5.5.6. Movement and Connectivity

This section is to be read in conjunction with Map 4.4.

Road Network

Precinct 4 is serviced by Wantirna Road and a number of local roads. A key aspect of this precinct is the presence of Healesville Freeway reservation. Consultation with VicRoads will be required to identify future plans/scenarios.

Public Transport

Bus services currently run along Wantirna Road and Mountain Highway.

Walking and Cycling

Precinct 4 includes a section of the Dandenong Creek Valley Trail which provides strong linkages with surrounding recreational areas. As indicated on Map 4.4, off-road cycle lanes are also proposed along the potential future Healesville Freeway.

KEY ACTIONS FOR FUTURE STAGES

High level Strategic Framework:

- Stage 3 Visioning needs to align with key strategic documents including Plan Melbourne and Knox CCP.
 - Analyse the study area against Plan Melbourne’s principles, and identify those principles.
 - Where relevant, align the project vision with Plan Melbourne Principles and Outcomes
 - Where relevant, align strategies with Plan Melbourne Directions and Policies
 - Analyse the role of the Study Area in terms of Plan Melbourne’s 20-minute neighbourhood principle, taking into consideration the surrounding residential areas
- The vision and objectives of the project need to align with those of Resilient Melbourne.
- Monitor the status of draft Metropolitan Urban Forest Strategy and identify any implications/opportunities for the Study area.

Planning Scheme:

- Consider the implications of the new Planning Policy Framework including any restrictions or opportunities arising from the new framework.
- Identify gaps/changes required to the Planning Policy Framework
- Undertake detailed analysis of existing planning controls focusing on those controls that Council has powers to influence/modify, such as schedules to zones and overlays.
- Examples from other LGs such as Rural Strategies, recent Scheme amendments, GWMPs including the Shire of Yarra Ranges Green Wedge Management Plan and Yarra Ranges Amendment C148







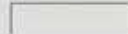


Other Analysis:

- There are information gaps in terms of landscape and character, in particular for Precincts 3 and 4
- Potentials for tourism and other non-agriculture economy need to be explored further
- Review of recent planning permits
- Analysis of how many/which lots in each precinct have further subdivision potential.
- Analysis of whether the existing minimum subdivision sizes are desirable
- Analysis of Section 2 uses for each zone, and whether we need to provide further strategic direction to inform decision making.
- Analysis of surrounding land uses and planned changes including plans by adjoining Councils
- Implications of the landfill site buffer in Precinct 3
- Compare the Scheme between KCC’s zones along the boundaries and adjoining land within neighbouring municipalities, to control consistency and landscape continuity.
- Non-indigenous vegetation – are Scheme controls strong enough to protect canopy?
- Investigate opportunities to improve cycling infrastructure and connectivity to recreational opportunities
- Wildlife corridors – identify how we can translate this into a planning strategy/policy; improving the mapping may be required.
- Further information required regarding the Boral Quarry site in Lysterfield - current status of operations and any future plans.

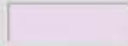
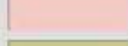
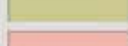
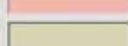
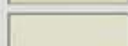





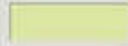
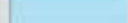
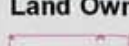

Map 1.1 Existing Zones & Uses

GARS Precinct 1


Legend

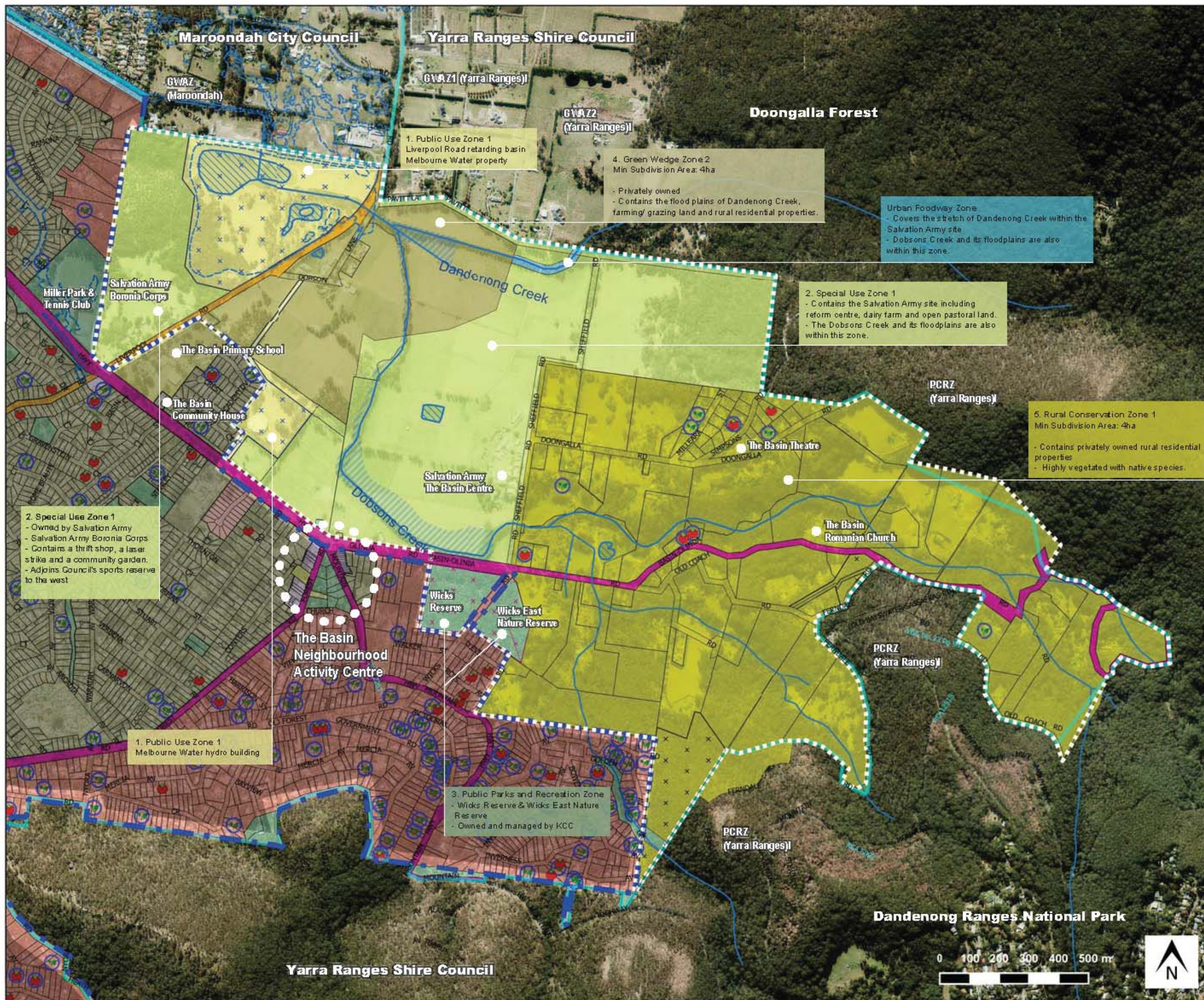
-  Precinct Boundary
-  LGA Boundaries
-  Urban Growth Boundary
-  Creeks and Lakes Areas
-  Underground Drain
-  Natural Drain
-  Cadastre
-  Gardens for Harvest
-  Gardens for Wildlife

Zones - Knox Planning Scheme

-  C1Z
-  GRZ2
-  GWZ2
-  LDRZ
-  NRZ1
-  NRZ2
-  PCRZ
-  PPRZ
-  PUZ1
-  RCZ1
-  RDZ1
-  RDZ2
-  SUZ1
-  UFZ

Land Ownership (non-private)

-  Knox City Council
-  Service Authority
-  State Government



1. Public Use Zone 1
Melbourne Water hydro building

2. Special Use Zone 1
- Owned by Salvation Army
- Salvation Army Boronia Corps
- Contains a thrift shop, a laser strike and a community garden.
- Adjoins Council's sports reserve to the west

3. Public Parks and Recreation Zone
- Wicks Reserve & Wicks East Nature Reserve
- Owned and managed by KCC

1. Public Use Zone 1
Liverpool Road retarding basin
Melbourne Water property

4. Green Wedge Zone 2
Min Subdivision Area: 4ha

- Privately owned
- Contains the flood plains of Dandenong Creek, farming/ grazing land and rural residential properties.

2. Special Use Zone 1
- Contains the Salvation Army site including reform centre, dairy farm and open pastoral land.
- The Dobsons Creek and its floodplains are also within this zone.

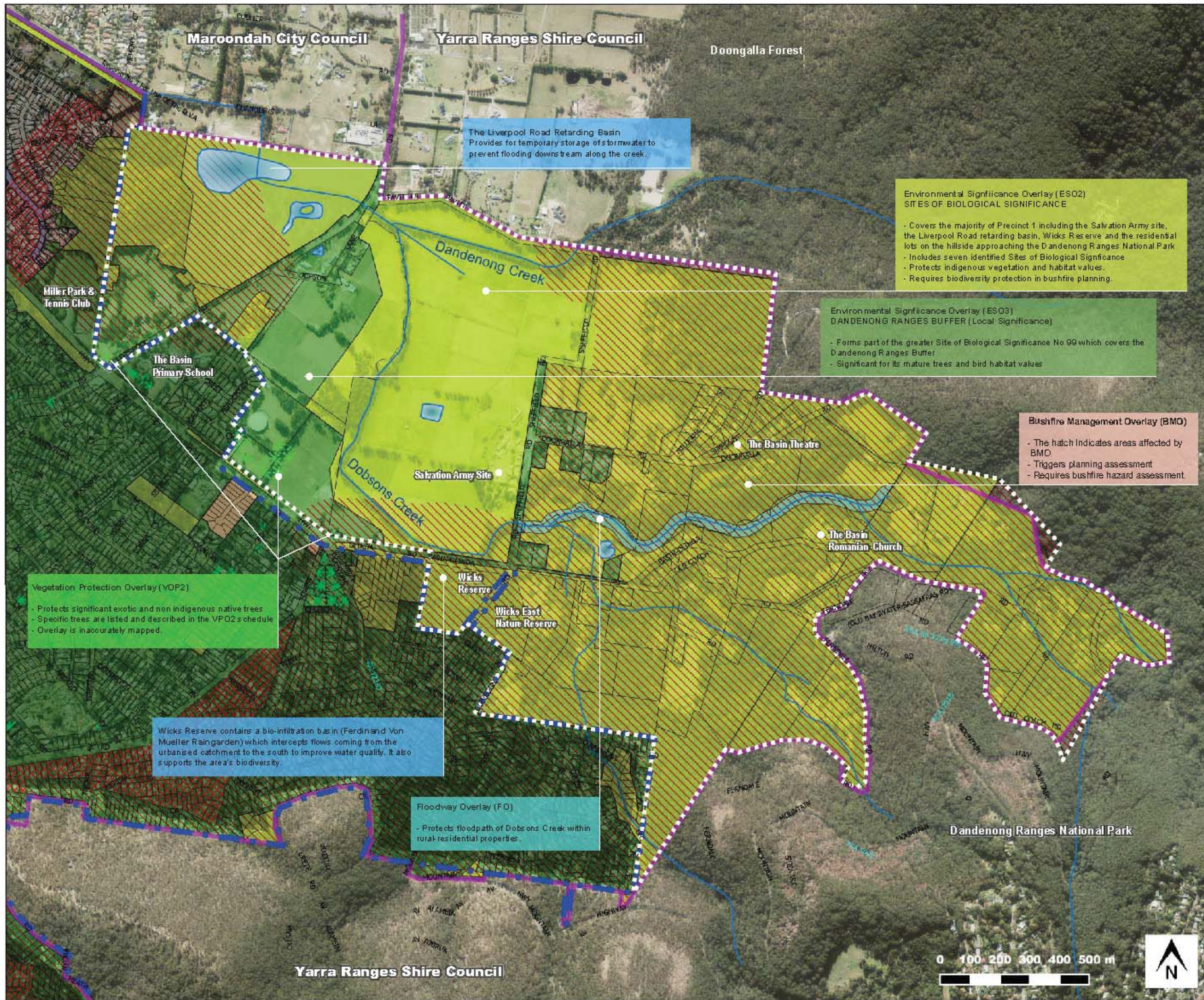
Urban Foodway Zone
- Covers the stretch of Dandenong Creek within the Salvation Army site
- Dobsons Creek and its floodplains are also within this zone.

5. Rural Conservation Zone 1
Min Subdivision Area: 4ha

- Contains privately owned rural residential properties
- Highly vegetated with native species.

Map 1.2 Environmental & Land Management Overlays

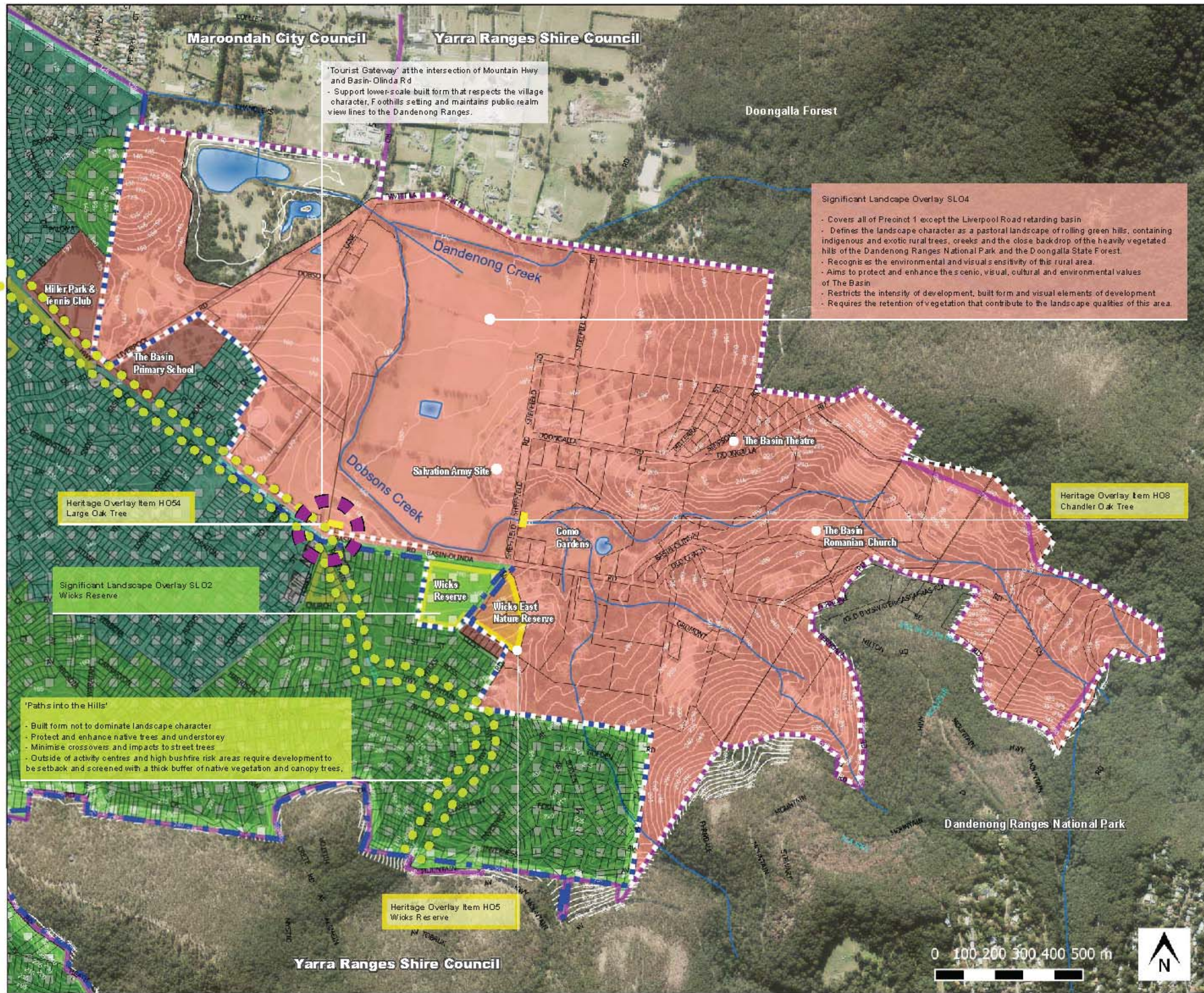
GARS Precinct 1



Legend

-  Precinct Boundary
 -  LGA Boundaries
 -  Urban Growth Boundary
 -  Creeks and Lakes Areas
 -  Cadastre
- Scheme Overlays**
-  Environmental Significance Overlay 2 (ESO2)
 -  Environmental Significance Overlay 3 (ESO3)
 -  Vegetation Protection Overlay 2 (VPO2)
 -  Floodway Overlay (FO)
 -  Bushfire Management Overlay (BMO)

Map 1.3 Landscape, Heritage & Built Form GARS Precinct 1



'Tourist Gateway' at the intersection of Mountain Hwy and Basin-Clinda Rd
 - Support lower-scale built form that respects the village character, Foothills setting and maintains public realm view lines to the Dandenong Ranges.

Significant Landscape Overlay SLO4
 - Covers all of Precinct 1 except the Liverpool Road retarding basin
 - Defines the landscape character as a pastoral landscape of rolling green hills, containing indigenous and exotic rural trees, creeks and the close backdrop of the heavily vegetated hills of the Dandenong Ranges National Park and the Doongalla State Forest.
 - Recognises the environmental and visual sensitivity of this rural area.
 - Aims to protect and enhance the scenic, visual, cultural and environmental values of The Basin
 - Restricts the intensity of development, built form and visual elements of development
 - Requires the retention of vegetation that contribute to the landscape qualities of this area.

Heritage Overlay Item H054
 Large Oak Tree







Heritage Overlay Item H08
 Chandler Oak Tree

Significant Landscape Overlay SLO2
 Wicks Reserve

'Paths into the Hills'
 - Built form not to dominate landscape character
 - Protect and enhance native trees and understorey
 - Minimise crossovers and impacts to street trees
 - Outside of activity centres and high bushfire risk areas require development to be setback and screened with a thick buffer of native vegetation and canopy trees.




Heritage Overlay Item H05
 Wicks Reserve

Legend


-  Precinct Boundary
-  LGA Boundaries
-  Contours 5m
-  Urban Growth Boundary
-  Creeks and Lakes Areas
-  Cadastre

Scheme Overlays


Significant Landscape Overlay (SLO)

-  SLO2
-  SLO3
-  SLO4


Heritage Overlay (HO)

-  Heritage Overlay (HO)


Design and Development Overlay (DDO)

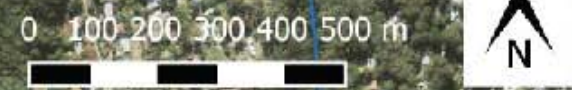
-  Design and Development Overlay (DDO)

Tourist Gateways

-  Tourist Gateways

Paths into the Hills

-  Paths into the Hills



Map 1.4 Movement and Connectivity

GARS Precinct 1

Legend

-  Precinct Boundary
-  LGA Boundaries
- Shared Paths - All**
-  Shared Path - Knox
- Principal Bicycle Network**
-  Existing On Road
-  Proposed On Road
-  Existing Off Road
-  Proposed Off Road
-  Bus Routes
- Roads**
-  Local Streets/Roads
-  Main Roads




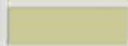

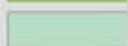


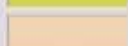


Map 2a.1 Existing Zones & Uses

GARS Precinct 2a

Legend

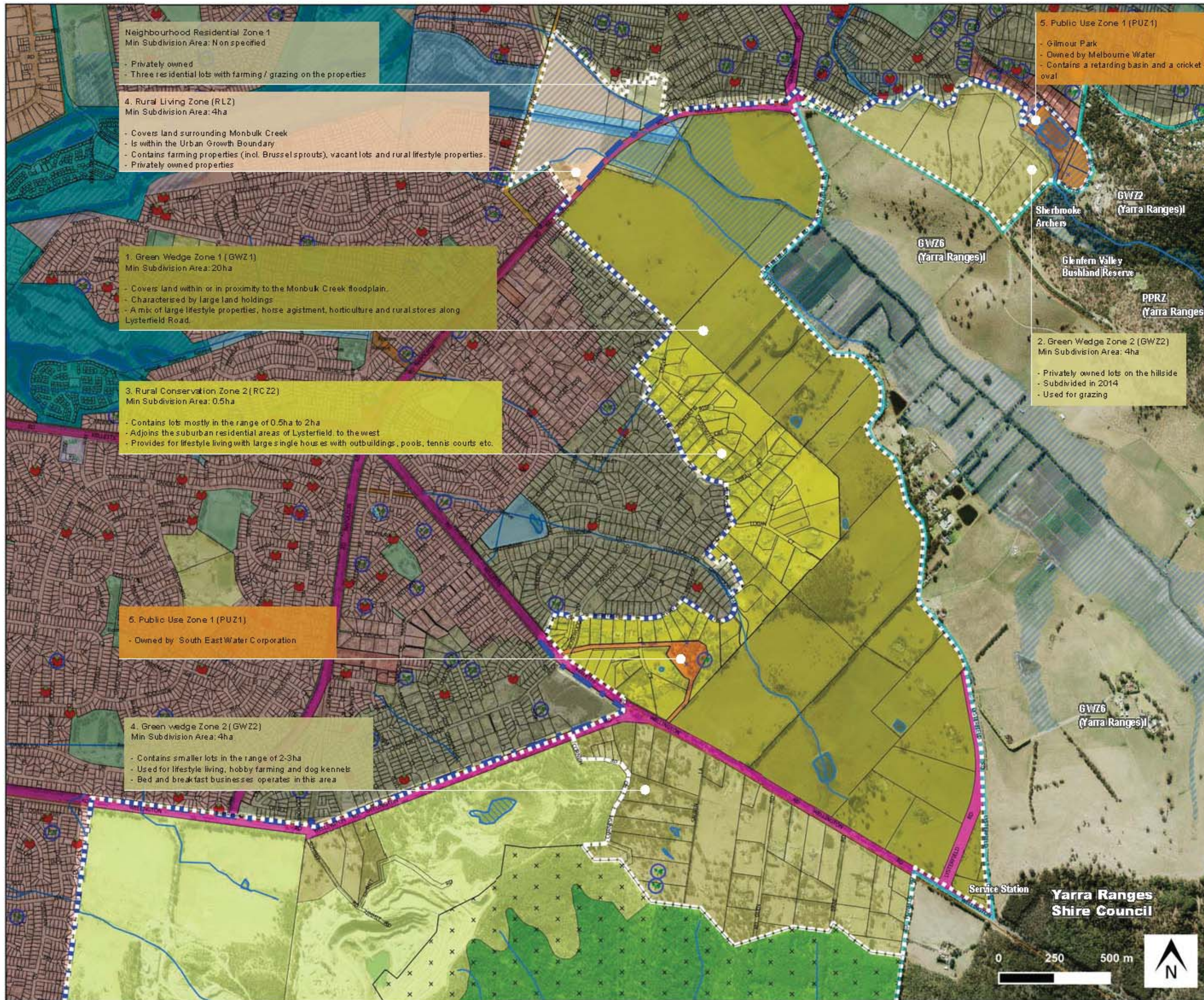
-  Precinct Boundary
-  LGA Boundaries
-  Urban Growth Boundary
-  Creeks and Lakes Areas
-  Underground Drain
-  Natural Drain
-  Cadastre
-  Gardens for Harvest
-  Gardens for Wildlife

Zones - Knox Planning Scheme

-  GWZ1
-  GWZ2
-  PCRZ
-  PPRZ
-  PUZ1
-  RCZ2
-  RLZ
-  SUZ2
-  UFZ

Land Ownership (non-private)

-  Service Authority
-  State Government



Neighbourhood Residential Zone 1
Min Subdivision Area: Non specified

- Privately owned
- Three residential lots with farming / grazing on the properties

4. Rural Living Zone (RLZ)
Min Subdivision Area: 4ha

- Covers land surrounding Monbulk Creek
- Is within the Urban Growth Boundary
- Contains farming properties (incl. Brussel sprouts), vacant lots and rural lifestyle properties.
- Privately owned properties

1. Green Wedge Zone 1 (GWZ1)
Min Subdivision Area: 20ha

- Covers land within or in proximity to the Monbuk Creek floodplain.
- Characterised by large land holdings
- A mix of large lifestyle properties, horse agistment, horticulture and rural stores along Lysterfield Road.

3. Rural Conservation Zone 2 (RCZ2)
Min Subdivision Area: 0.5ha

- Contains lots mostly in the range of 0.5ha to 2ha
- Adjoins the suburban residential areas of Lysterfield, to the west
- Provides for lifestyle living with large single houses with outbuildings, pools, tennis courts etc.

5. Public Use Zone 1 (PUZ1)

- Owned by South East Water Corporation

4. Green wedge Zone 2 (GWZ2)
Min Subdivision Area: 4ha

- Contains smaller lots in the range of 2-3ha
- Used for lifestyle living, hobby farming and dog kennels
- Bed and breakfast businesses operates in this area

5. Public Use Zone 1 (PUZ1)

- Gilmour Park
- Owned by Melbourne Water
- Contains a retarding basin and a cricket oval

2. Green Wedge Zone 2 (GWZ2)
Min Subdivision Area: 4ha

- Privately owned lots on the hillside
- Subdivided in 2014
- Used for grazing

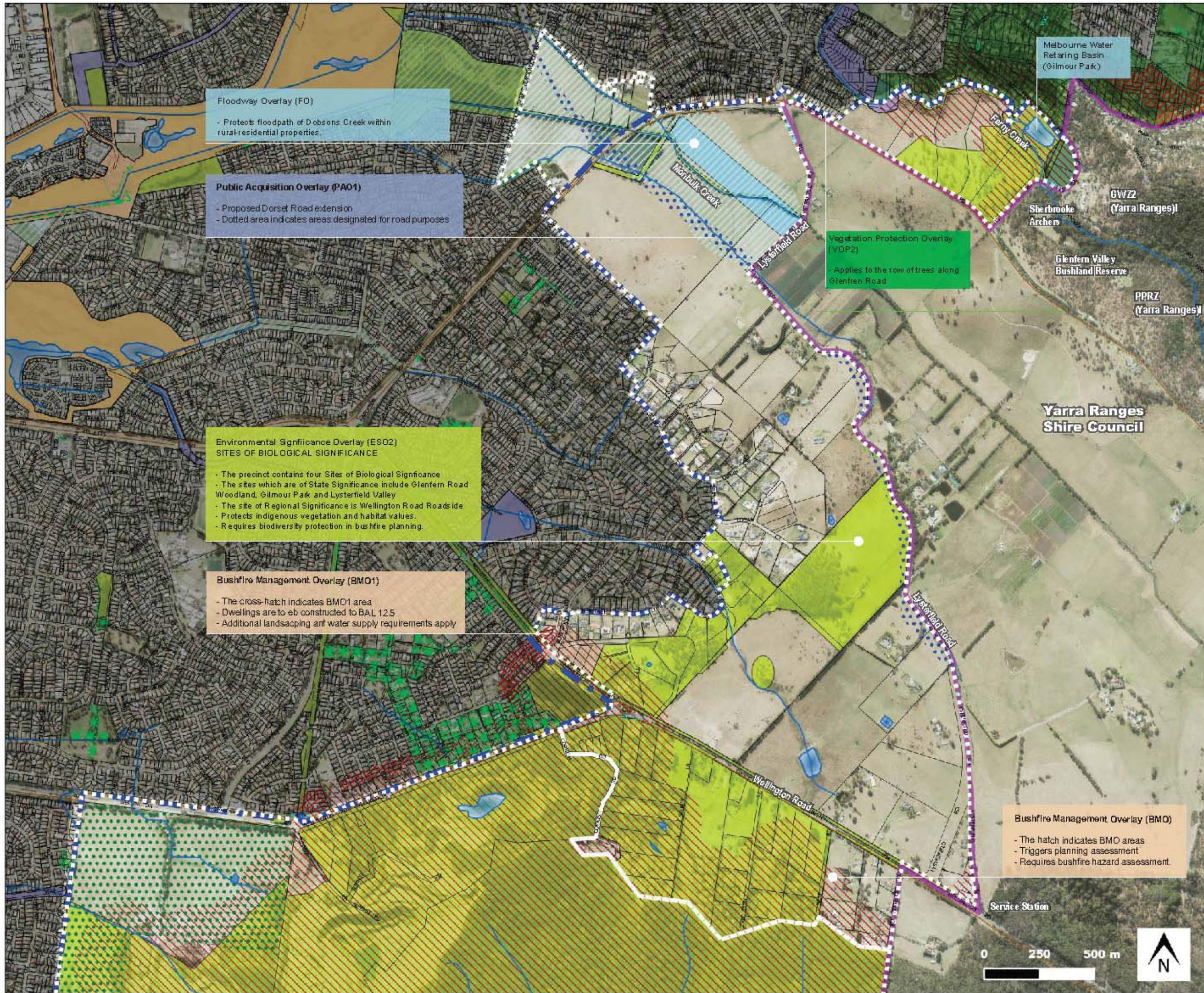
GWZ6 (Yarra Ranges)

Yarra Ranges Shire Council



Map 2a.2 Environmental & Land Management Overlays

GARS Precinct 2a



Floodway Overlay (FO)

- Protects floodpath of Dobsons Creek within rural-residential properties.

Public Acquisition Overlay (PA01)

- Proposed Dorset Road extension
- Dotted area indicates areas designated for road purposes

Environmental Significance Overlay (ESO2)
SITES OF BIOLOGICAL SIGNIFICANCE

- The precinct contains four Sites of Biological Significance
- The sites which are of State Significance include Glenfern Road Woodland, Gilmour Park and Lysterfield Valley
- The site of Regional Significance is Wellington Road Roads ide
- Protects indigenous vegetation and habitat values.
- Requires biodiversity protection in bushfire planning.

Bushfire Management Overlay (BMO1)

- The cross-hatch indicates BMO1 area
- Dwellings are to be constructed to BAL 12.5
- Additional landscaping and water supply requirements apply















Vegetation Protection Overlay (VPO2)

- Applies to the row of trees along Glenfern Road

Bushfire Management Overlay (BMO)

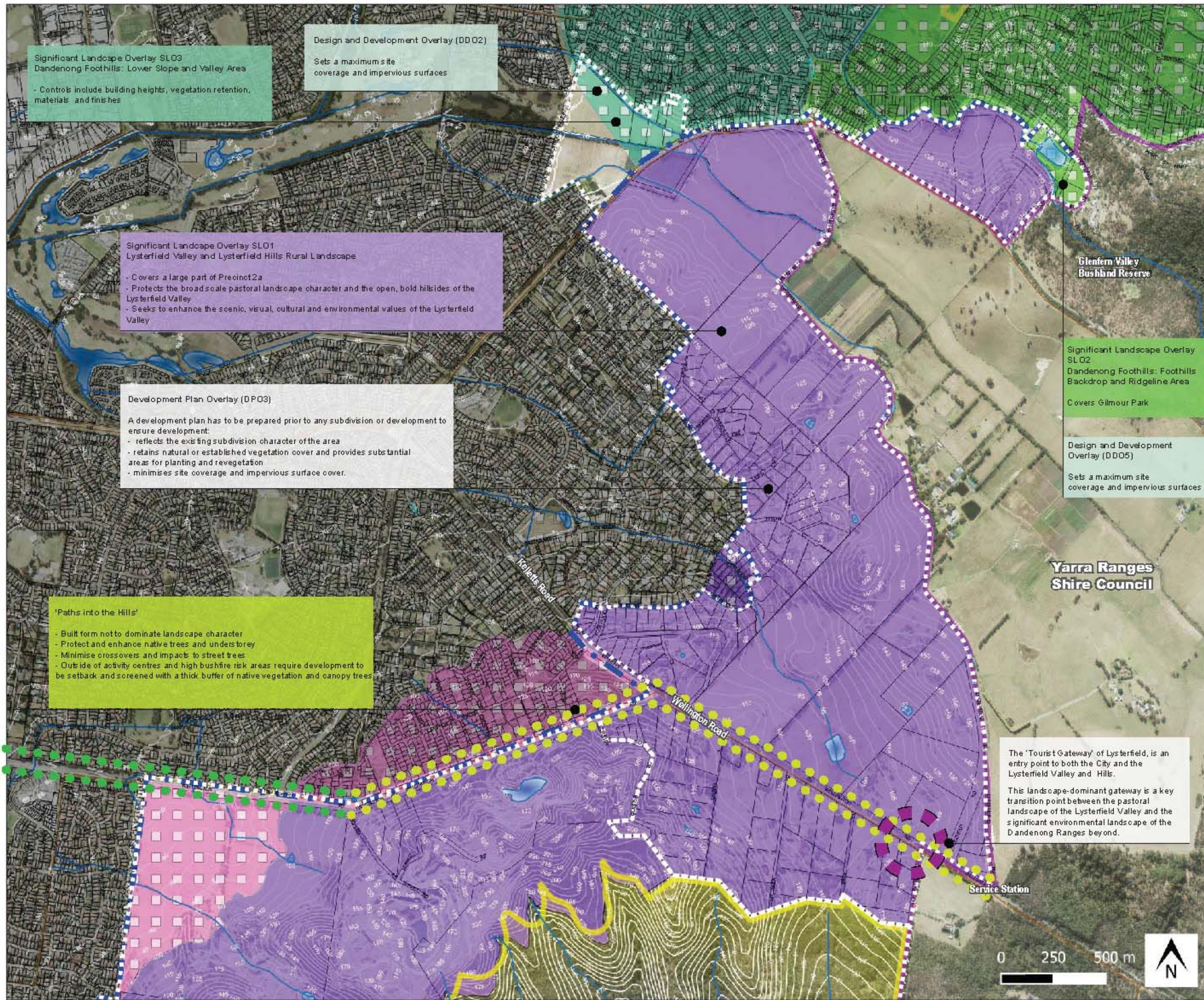
- The hatch indicates BMO areas
- Triggers planning assessment
- Requires bushfire hazard assessment.

Legend

-  Precinct Boundary
 -  LCA Boundaries
 -  Urban Growth Boundary
 -  Creeks and Lakes Areas
 -  Cadastre
- #### Scheme Overlays
-  Environmental Significance Overlay 2 (ESO2)
 -  Environmental Significance Overlay 3 (ESO3)
 -  Vegetation Protection Overlay 2 (VPO2)
 -  Floodway Overlay (FO)
 -  Land Subject to Inundation Overlay (LSIO)
 -  Bushfire Management Overlay (BMO)
 -  BMO1 & 2
 -  PA01
 -  PA02

Map 2a.3 Landscape, Heritage & Built Form

GARS Precinct 2a



Significant Landscape Overlay SLO3
Dandenong Foothills: Lower Slope and Valley Area

- Controls include building heights, vegetation retention, materials and finishes

Design and Development Overlay (DDO2)

Sets a maximum site coverage and impervious surfaces

Significant Landscape Overlay SLO1
Lysterfield Valley and Lysterfield Hills Rural Landscape

- Covers a large part of Precinct 2a
- Protects the broadscale pastoral landscape character and the open, bold hillsides of the Lysterfield Valley
- Seeks to enhance the scenic, visual, cultural and environmental values of the Lysterfield Valley

Development Plan Overlay (DPO3)

A development plan has to be prepared prior to any subdivision or development to ensure development:

- reflects the existing subdivision character of the area
- retains natural or established vegetation cover and provides substantial areas for planting and revegetation
- minimises site coverage and impervious surface cover.

'Paths into the Hills'

- Built form not to dominate landscape character
- Protect and enhance native trees and understorey
- Minimise crossovers and impacts to street trees
- Outside of activity centres and high bushfire risk areas require development to be setback and screened with a thick buffer of native vegetation and canopy trees

Significant Landscape Overlay SLO2
Dandenong Foothills: Foothills Backdrop and Ridgeline Area

Covers Gilmour Park

Design and Development Overlay (DDO5)

Sets a maximum site coverage and impervious surfaces

The 'Tourist Gateway' of Lysterfield, is an entry point to both the City and the Lysterfield Valley and Hills.

This landscape-dominant gateway is a key transition point between the pastoral landscape of the Lysterfield Valley and the significant environmental landscape of the Dandenong Ranges beyond.

Legend

- Precinct Boundary
- LGA Boundaries
- Contours 5m
- Urban Growth Boundary
- Creeks and Lakes Areas
- Cadastre

Scheme Overlays

Significant Landscape Overlay (SLO)

- SLO1
- SLO2
- SLO3
- SLO5









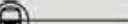


- Heritage Overlay (HO)
- Design and Development Overlay (DDO)
- Development Plan Overlay (DPO)

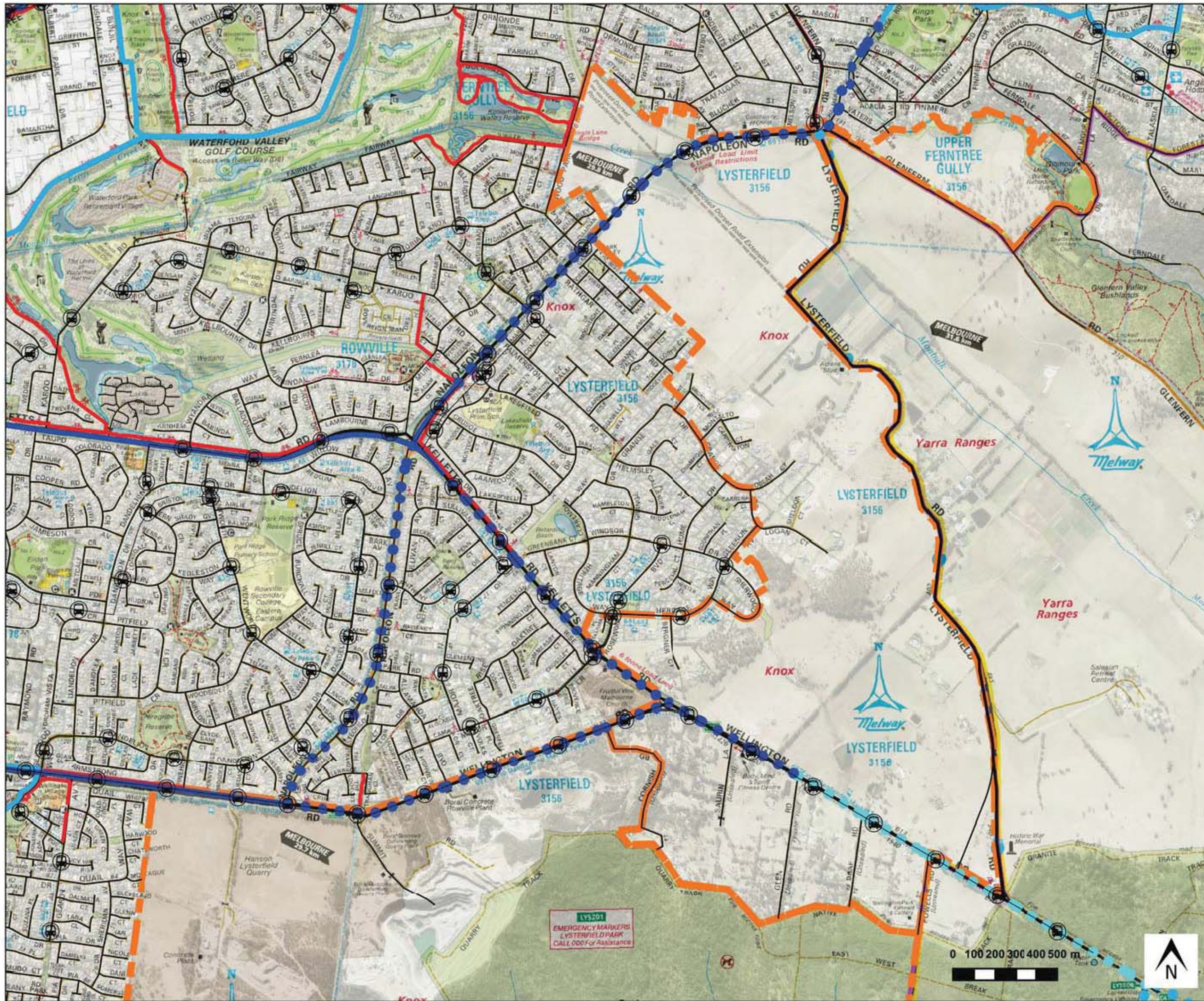
- Tourist Gateways
- Paths into the Hills
- Bush Boulevards

Map 2a.4 Movement and Connectivity

GARS Precinct 2a

Legend

-  Precinct Boundary
-  LGA Boundaries
- Shared Paths - All**
-  Shared Path - Knox
- Principal Bicycle Network**
-  Existing On Road
-  Existing Off Road
-  Proposed On Road
-  Proposed Off Road
-  Proposed Not Designated
-  Bus Routes Lines - Carto
- Roads**
-  Local Streets/Roads
-  Main Road



Map 2b.1 Existing Zones & Uses

GARS Precinct 2b

Legend

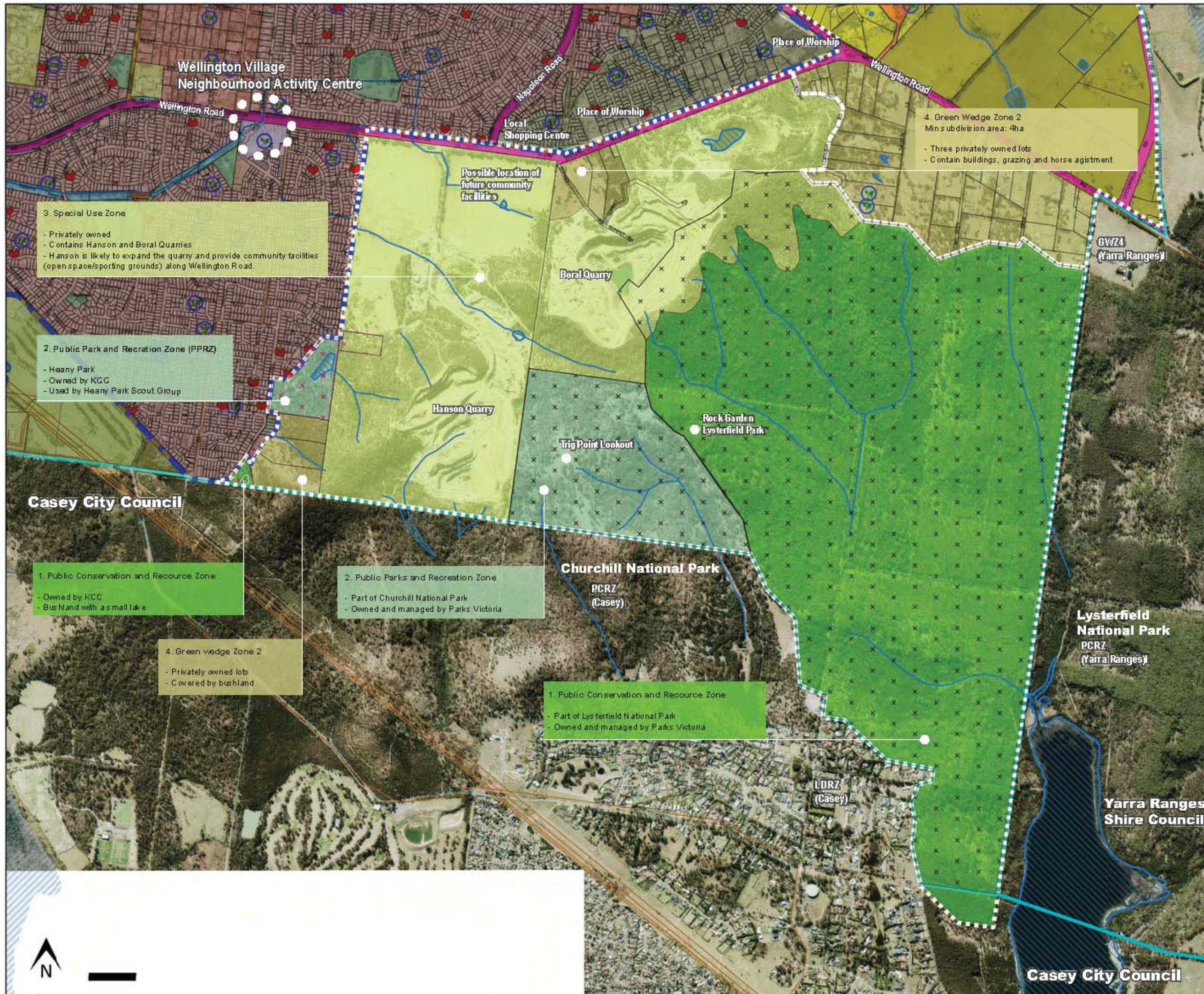
-  Precinct Boundary
-  LGA Boundaries
-  Urban Growth Boundary
-  Creeks and Lakes Areas
-  Natural Drain
-  Cadastre
-  Gardens for Harvest
-  Gardens for Wildlife

Zones - Knox Planning Scheme

-  GWZ1
-  GWZ2
-  PCRZ
-  PPRZ
-  PUZ1
-  RCZ2
-  SUZ2

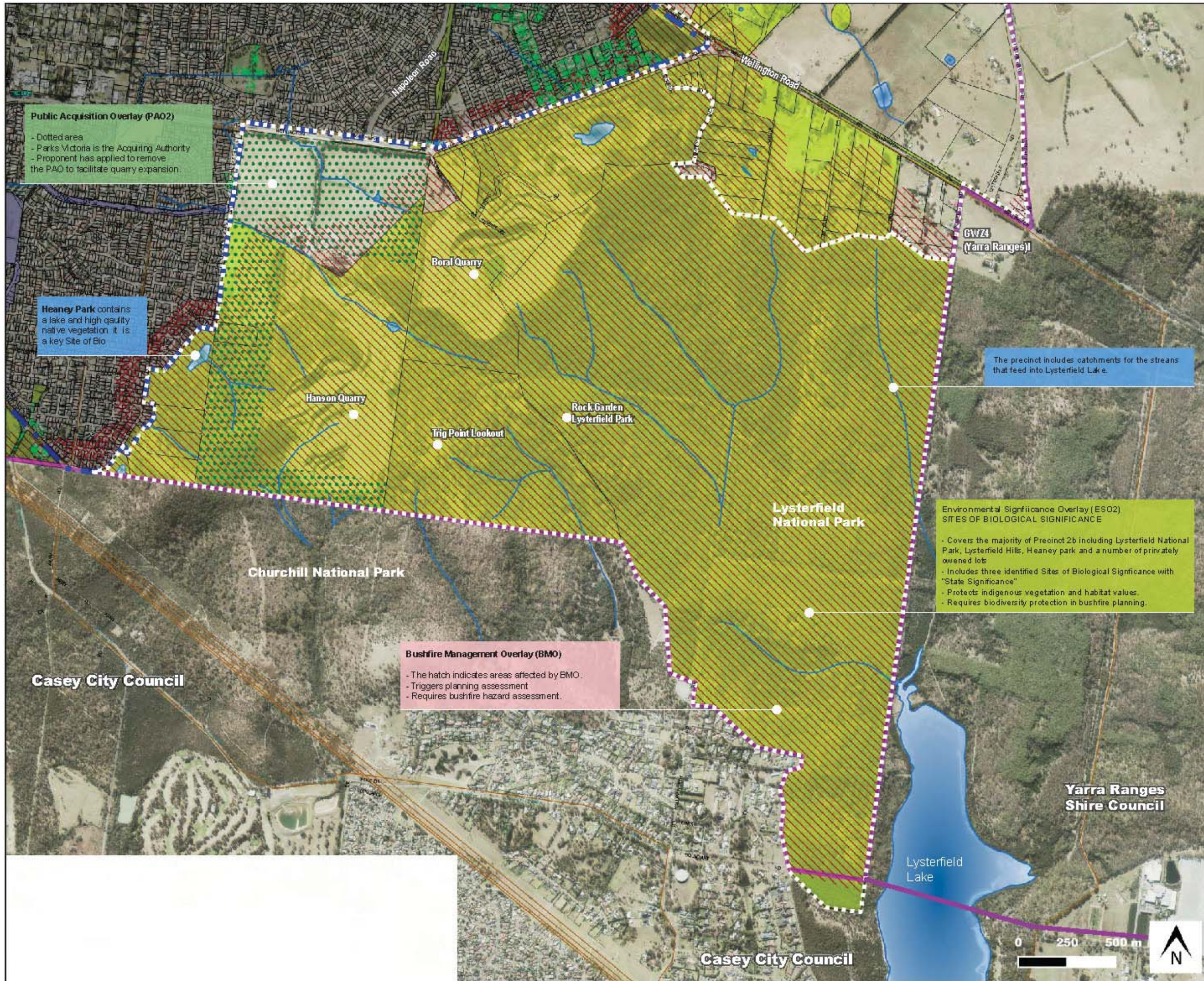
Land Ownership (non-private)

-  Knox City Council
-  Service Authority
-  State Government



Map 2b.2 Environmental & Land Management Overlays

GARS Precinct 2b



Public Acquisition Overlay (PAO2)

- Dotted area
- Parks Victoria is the Acquiring Authority
- Proponent has applied to remove the PAO to facilitate quarry expansion.

Heaney Park contains a lake and high quality native vegetation it is a key Site of Bio

The precinct includes catchments for the streams that feed into Lysterfield Lake.

Environmental Significance Overlay (ESO2) SITES OF BIOLOGICAL SIGNIFICANCE

- Covers the majority of Precinct 2b including Lysterfield National Park, Lysterfield Hills, Heaney park and a number of privately owned lots
- Includes three identified Sites of Biological Significance with "State Significance"
- Protects indigenous vegetation and habitat values.
- Requires biodiversity protection in bushfire planning.

Bushfire Management Overlay (BMO)

- The hatch indicates areas affected by BMO.
- Triggers planning assessment
- Requires bushfire hazard assessment.

Legend

- Precinct Boundary
- LGA Boundaries
- Urban Growth Boundary
- Creeks and Lakes Areas
- Cadastre

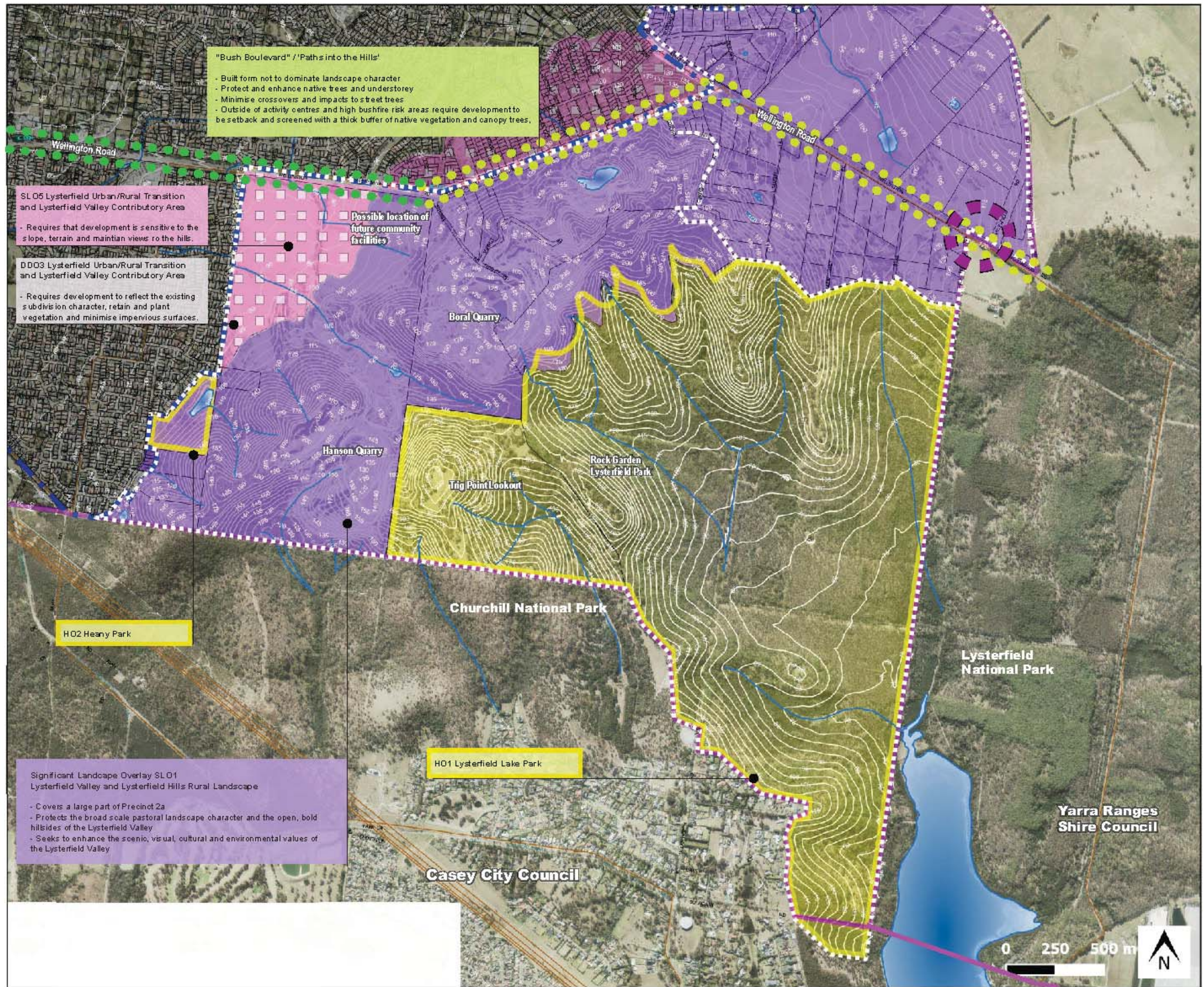
Scheme Overlays

- Environmental Significance Overlay 2 (ESO2)
- Vegetation Protection Overlay 2 (VPO2)
- Bushfire Management Overlay (BMO)
- BMO1
- Public Acquisition Overlay (PAO1)
- Public Acquisition Overlay (PAO2)



Map 2b.3 Landscape, Heritage & Built Form

GARS Precinct 2b



"Bush Boulevard" / "Paths into the Hills"

- Built form not to dominate landscape character
- Protect and enhance native trees and understorey
- Minimise crossovers and impacts to street trees
- Outside of activity centres and high bushfire risk areas require development to be setback and screened with a thick buffer of native vegetation and canopy trees.

SLO5 Lysterfield Urban/Rural Transition and Lysterfield Valley Contributory Area

- Requires that development is sensitive to the slope, terrain and maintain views to the hills.

DD03 Lysterfield Urban/Rural Transition and Lysterfield Valley Contributory Area

- Requires development to reflect the existing subdivision character, retain and plant vegetation and minimise impervious surfaces.

**Significant Landscape Overlay SLO1
Lysterfield Valley and Lysterfield Hills Rural Landscape**

- Covers a large part of Precinct 2a
- Protects the broad scale pastoral landscape character and the open, bold hillsides of the Lysterfield Valley
- Seeks to enhance the scenic, visual, cultural and environmental values of the Lysterfield Valley




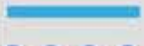



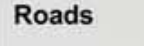
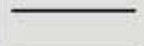

- Legend**
- Precinct Boundary
 - LGA Boundaries
 - Urban Growth Boundary
 - Creeks and Lakes Areas
 - Cadastre
 - Contours 5m
- Scheme Overlays**
- Significant Landscape Overlay (SLO)**
- SLO1
 - SLO5
- Heritage Overlay (HO)**
- HO2 Heany Park
 - HO1 Lysterfield Lake Park
- Design and Development Overlay (DDO)**
- DD03
- Development Plan Overlay (DPO)**
- DPO1
- Paths into the Hills**
- Paths into the Hills
 - Bush Boulevards

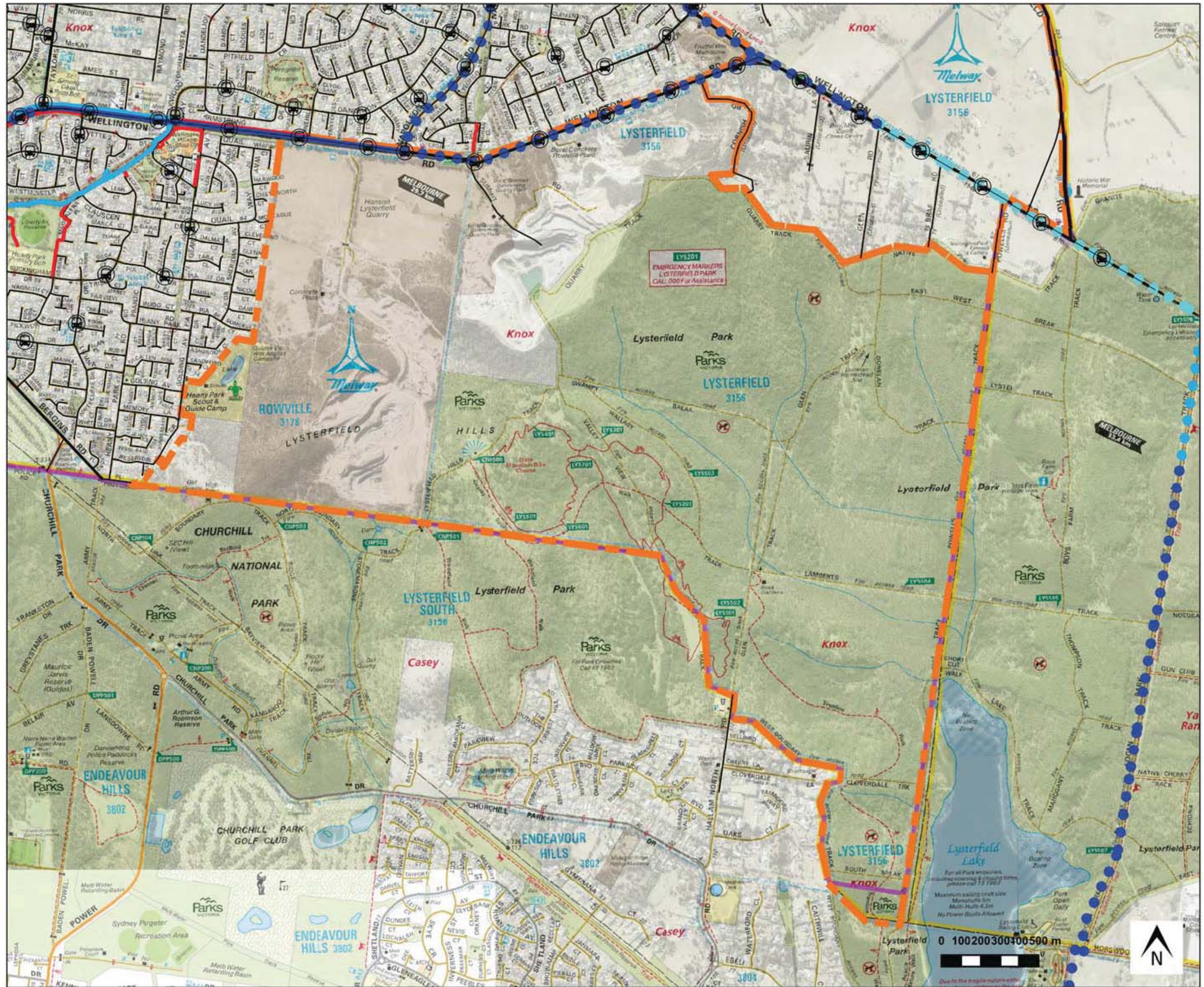


Map 2b.4 Movement and Connectivity

GARS Precinct 2b

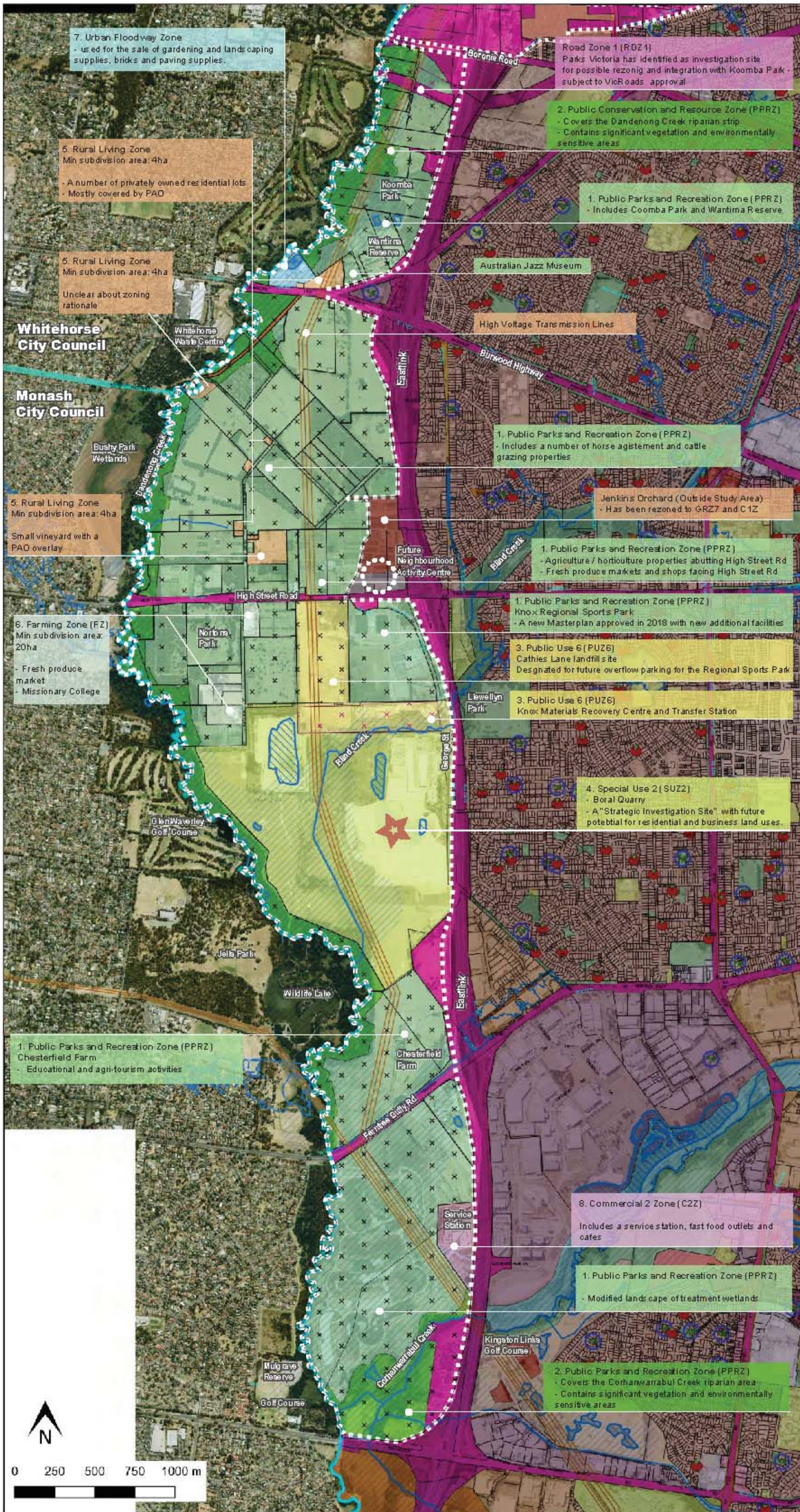
Legend

-  Precinct Boundary
-  LGA Bouncaries
- Shared Paths**
-  Shared Path - Knox
- Principal Bicycle Network**
-  Existing On Road
-  Existing Off Road
-  Proposed On Road
-  Proposed Off Road
-  Proposed Not Designated
-  Bus Routes Lines
- Roads**
-  Local Streets/Roads
-  Main Roads



**Map 3.1
Existing Zones & Uses**

GARS Precinct 3



Legend

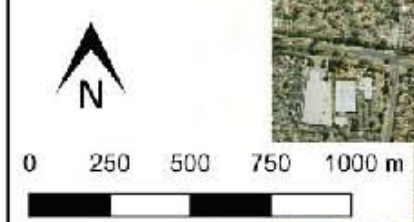
-  Precinct 3 Boundary
-  LGA Boundaries
-  Creeks and Lakes Areas
-  Underground Drain
-  Natural Drain
-  Cadastre
-  HV Transmission Lines

Zones - Knox Planning Scheme

-  C1Z
-  C2Z
-  FZ
-  GRZ7
-  IN1Z
-  MUZ
-  PCRZ
-  PPRZ
-  PUZ1
-  PUZ6
-  RDZ1
-  RDZ2
-  RLZ
-  SUZ2
-  UFZ

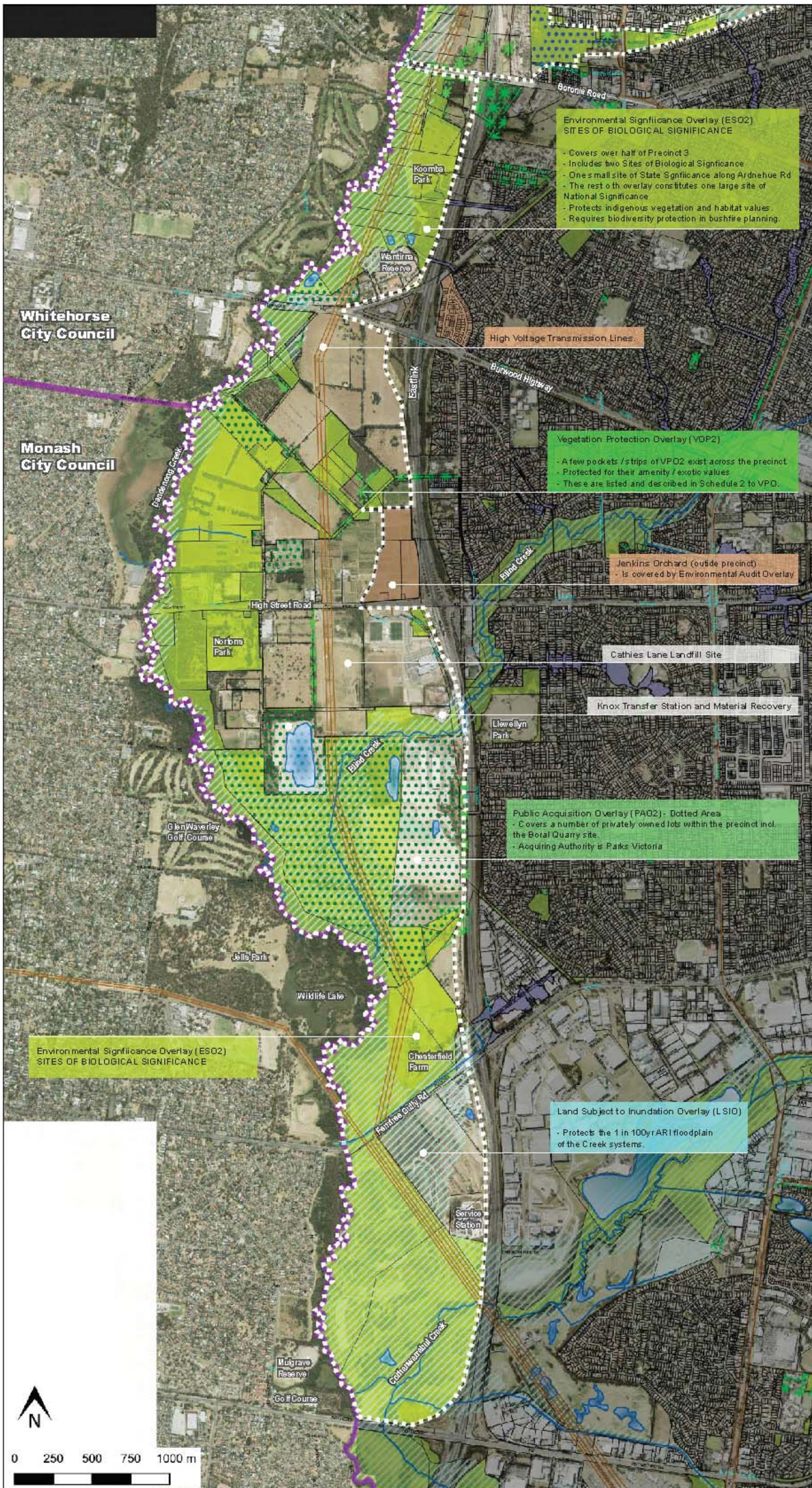
Land Ownership (non-private)

-  Knox City Council
-  Crown/State Government
-  Strategic Investigation Site



**Map 3.2
Environmental &
Land Management
Overlays**

GARS Precinct 3



**Environmental Significance Overlay (ESO2)
SITES OF BIOLOGICAL SIGNIFICANCE**

- Covers over half of Precinct 3
- Includes two Sites of Biological Significance
- One small site of State Significance along Ardnehue Rd
- The rest of the overlay constitutes one large site of National Significance
- Protects indigenous vegetation and habitat values
- Requires biodiversity protection in bushfire planning.

Vegetation Protection Overlay (VPO2)

- A few pockets / strips of VPO2 exist across the precinct
- Protected for their amenity / exotic values
- These are listed and described in Schedule 2 to VPO.

Jenkins Orchard (outside precinct)

- Is covered by Environmental Audit Overlay

Public Acquisition Overlay (PAO2) - Dotted Area

- Covers a number of privately owned lots within the precinct in the Boral Quarry site
- Acquiring Authority is Parks Victoria

Land Subject to Inundation Overlay (LSIO)

- Protects the 1 in 100yr AR1 floodplain of the Creek systems.

Legend

- Precinct 3 new
- LGA Boundaries
- Creeks and Lakes Areas
- Cadastre
- HV Transmission Lines

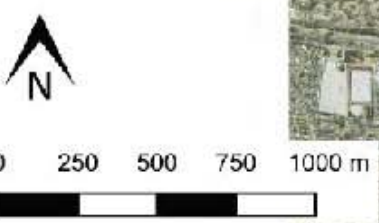
Scheme Overlays

- Environmental Significance Overlay 2 (ESO2)
- Land Subject to Inundation Overlay (LSIO)
- Vegetation Protection Overlay 2 (VPO2)
- Public Acquisition Overlay PAO1
- Public Acquisition Overlay PAO2

**Whitehorse
City Council**

**Monash
City Council**

**Environmental Significance Overlay (ESO2)
SITES OF BIOLOGICAL SIGNIFICANCE**

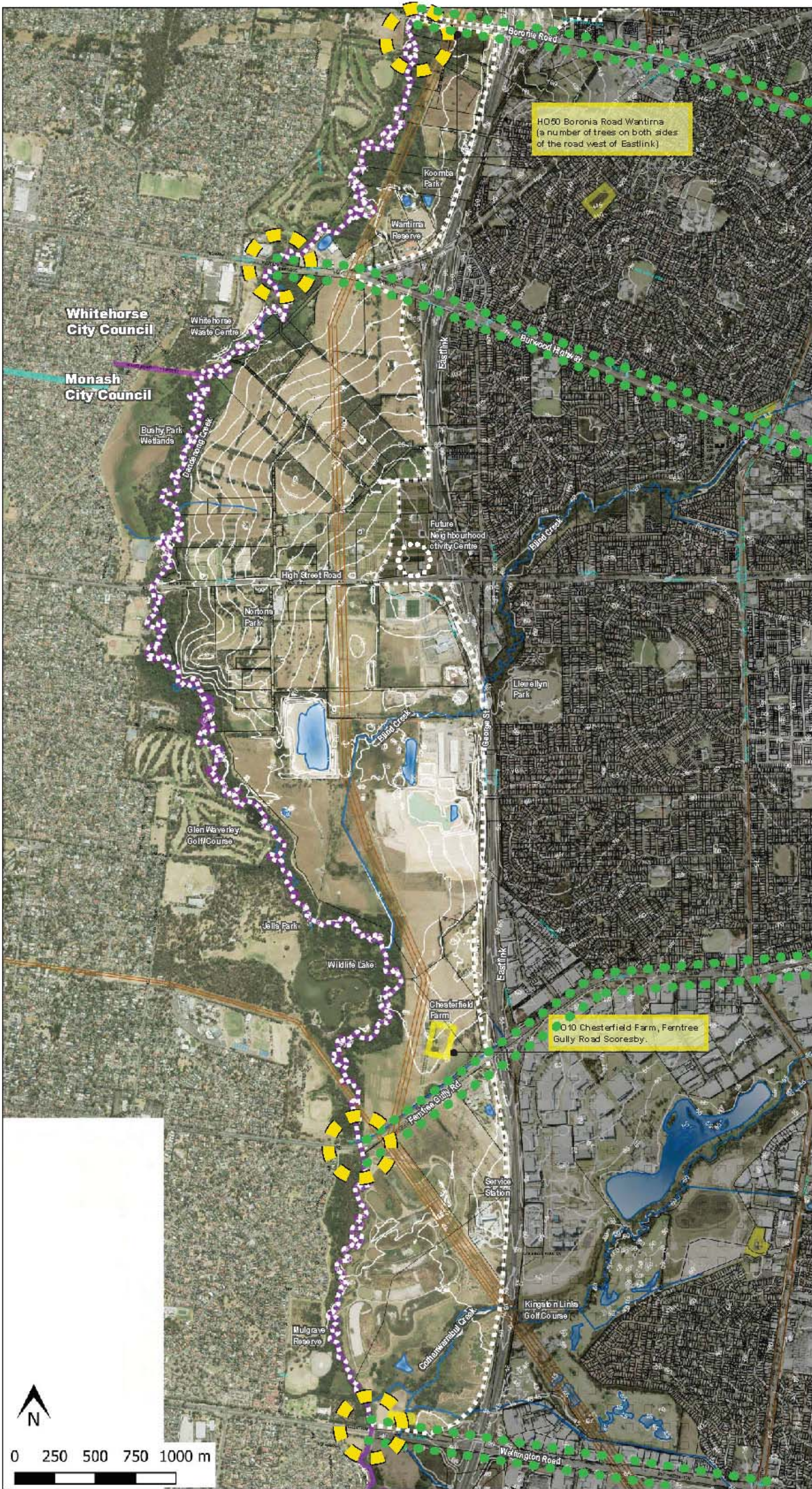


**Map 3.3
Landscape, Heritage
&
Built Form**

GARS Precinct 3

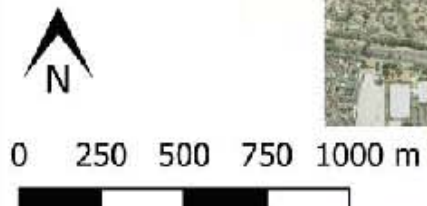
Legend

-  Precinct Boundary
-  LGA Boundaries
-  Contours 5m
-  Creeks and Lakes Areas
-  Cadastre
-  HV Transmission Lines
-  Heritage Overlay (HO)
-  Development Plan Overlay (DPO)
-  Dendenong Creek Valley Gateways
-  Bush Boulevards



H050 Boronia Road Wantirna
(a number of trees on both sides
of the road west of Eastlink)










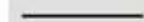

O10 Chesterfield Farm, Fenntree
Gully Road Scoresby.

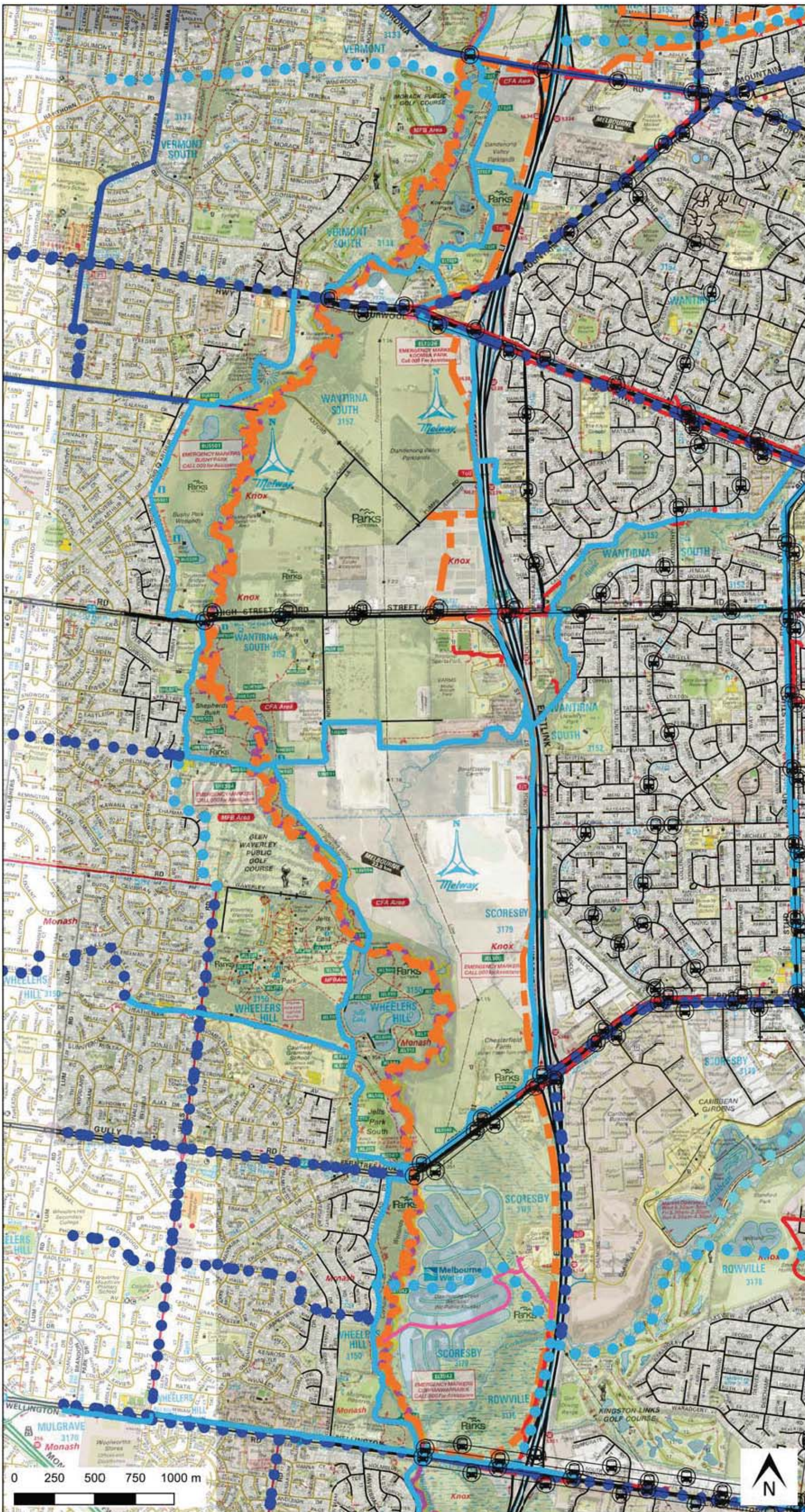


**Map 3.4
Movement and
Connectivity**

GARS Precinct 3

Legend

-  LGA Boundaries
- Shared Paths - All**
-  Shared Path - Knox
-  Shared Path - other
- Principal Bicycle Network**
-  Existing On Road
-  Existing Off Road
-  Proposed On Road
-  Proposed Off Road
-  Proposed Not Designated
-  Bus Routes Lines - Carto
- Roads**
-  Local Streets/Roads
-  Main Roads/Highways



Map 4.1 Existing Zones & Uses

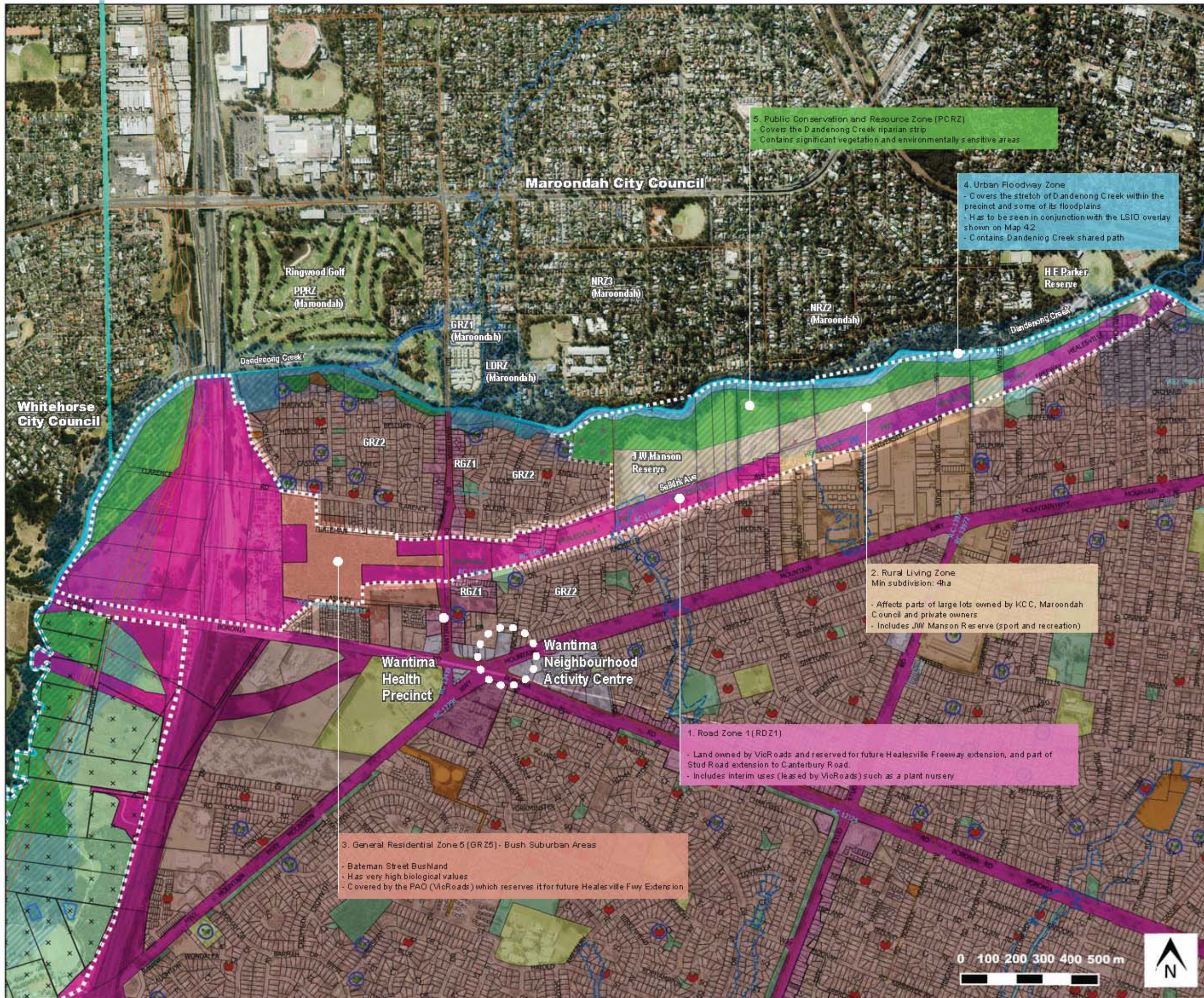
GARS Precinct 4

Legend

-  Precinct Boundary
-  LGA Boundaries
-  Creeks and Lakes Areas
-  Underground Drain
-  Natural Drain
-  Cadastre
-  Gardens for Harvest
-  Gardens for Wildlife

Zones - Knox Planning Scheme

-  GRZ2
-  GRZ5
-  PCRZ
-  PPRZ
-  RDZ1
-  RGZ1
-  RLZ
-  UFZ



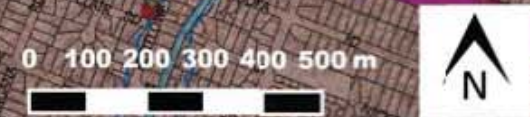
5. Public Conservation and Resource Zone (PCRZ)
 - Covers the Dandenong Creek riparian strip
 - Contains significant vegetation and environmentally sensitive areas

4. Urban Floodway Zone
 - Covers the stretch of Dandenong Creek within the precinct and some of its floodplains
 - Has to be seen in conjunction with the LSIO overlay shown on Map 4.2
 - Contains Dandenong Creek shared path

2. Rural Living Zone
 Min subdivision: 4ha
 - Affects parts of large lots owned by KCC, Maroondah Council and private owners
 - Includes J W Manson Reserve (sport and recreation)

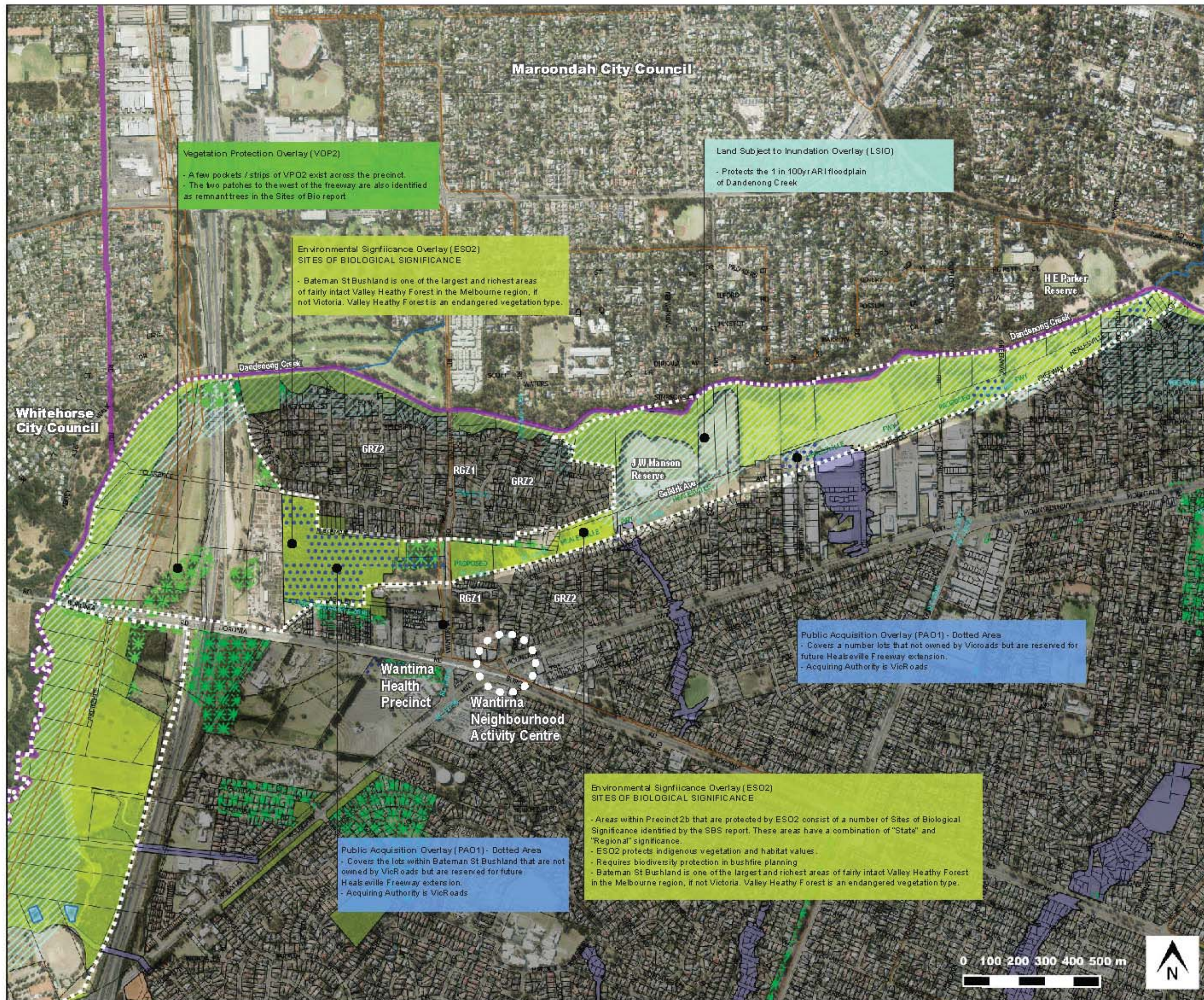
1. Road Zone 1 (RDZ1)
 - Land owned by VicRoads and reserved for future Healesville Freeway extension, and part of Stud Road extension to Canterbury Road
 - Includes interim uses (leased by VicRoads) such as a plant nursery

3. General Residential Zone 5 (GRZ5) - Bush Suburban Areas
 - Bateman Street Bushland
 - Has very high biological values
 - Covered by the PAD (VicRoads) which reserves it for future Healesville Fwy Extension



Map 4.2 Environmental & Land Management Overlays

GARS Precinct 4



Vegetation Protection Overlay (VPO2)

- A few pockets / strips of VPO2 exist across the precinct.
- The two patches to the west of the freeway are also identified as remnant trees in the Sites of Bio report

Land Subject to Inundation Overlay (LSIO)

- Protects the 1 in 100yr ARI floodplain of Dandenong Creek

**Environmental Significance Overlay (ESO2)
SITES OF BIOLOGICAL SIGNIFICANCE**

- Bateman St Bushland is one of the largest and richest areas of fairly intact Valley Heathy Forest in the Melbourne region, if not Victoria. Valley Heathy Forest is an endangered vegetation type.

Public Acquisition Overlay (PAO1) - Dotted Area

- Covers a number lots that not owned by Vicroads but are reserved for future Healsville Freeway extension.
- Acquiring Authority is VicRoads



Public Acquisition Overlay (PAO1) - Dotted Area

- Covers the lots within Bateman St Bushland that are not owned by VicRoads but are reserved for future Healsville Freeway extension.
- Acquiring Authority is VicRoads




**Environmental Significance Overlay (ESO2)
SITES OF BIOLOGICAL SIGNIFICANCE**

- Areas within Precinct2b that are protected by ESO2 consist of a number of Sites of Biological Significance identified by the SBS report. These areas have a combination of "State" and "Regional" significance.
- ESO2 protects indigenous vegetation and habitat values.
- Requires biodiversity protection in bushfire planning
- Bateman St Bushland is one of the largest and richest areas of fairly intact Valley Heathy Forest in the Melbourne region, if not Victoria. Valley Heathy Forest is an endangered vegetation type.

Legend

-  Precinct Boundary
-  LGA Boundaries
-  Creeks and Lakes Areas
-  Cadastre

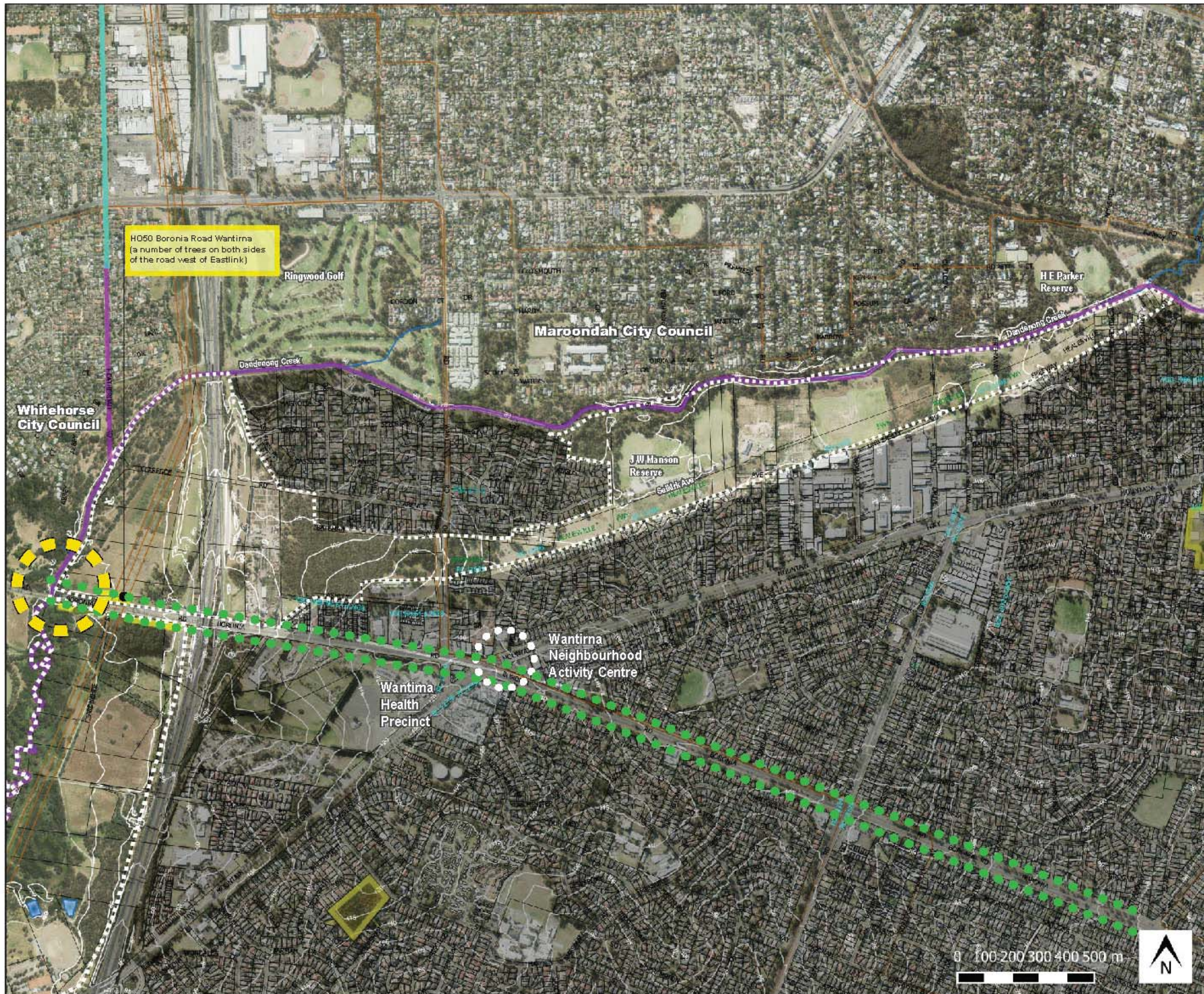
Scheme Overlays

-  Environmental Significance Overlay 2 (ESO2)
-  Special Building Overlay (SBO)
-  Land Subject to Inundation Overlay (LSIO)
-  Vegetation Protection Overlay 2 (VPO2)
-  Public Acquisition Overlay PAO1



Map 4.3 Landscape, Heritage & Built Form

GARS Precinct 4

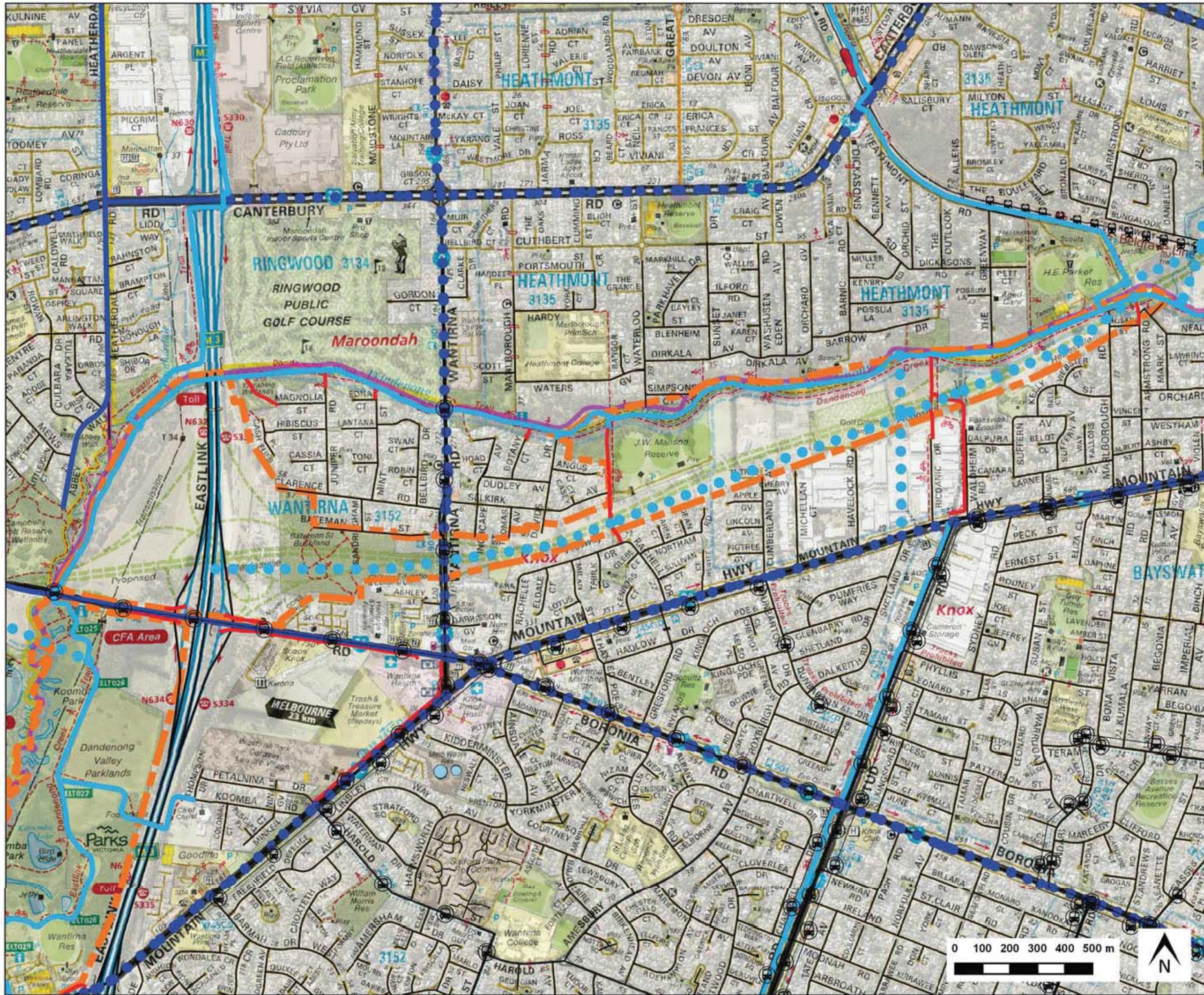


Legend

- Precinct Boundary
- LGA Boundaries
- Contours 5m
- Creeks and Lakes Areas
- Cadastre
- Heritage Overlay (HO)
- Design and Development Overlay (DDO)
- Development Plan Overlay (DPO)
- Bush Boulevards
- Dandenong Creek Valley Gateways

Map 4.4 Movement and Connectivity

GARS Precinct 4



Legend

-  LGA Boundaries
- Shared Paths - All**
 -  Shared Path - Knox
 -  Shared Path - other
- Principal Bicycle Network**
 -  Existing On Road
 -  Existing Off Road
 -  Proposed On Road
 -  Proposed Off Road
-  Bus Routes Lines - Carto
- Roads**
 -  Local Streets/Roads
 -  Main Roads

