



FOR MINISTER FOR PLANNING

DATE: 17/3/2025

# March 2020 (Amended 2025)

# Acknowledgement

The North East Link Project respectfully acknowledges the Traditional Owners of the land and pays respect to their Elders, past, present and emerging.

# Authorised and Published by North East Link Project 13 March 2020 (Amended 2025).

© State of Victoria 2020. This report has been prepared for North East Link Project, a division of the Victorian Infrastructure Delivery Authority, for the purposes of preparing the Environment Effects Statement for the project under the Environment Effects Act 1978, the planning scheme amendment GC98 under the Planning and Environment Act 1987 and EPA works approval application under the Environment Protection Act 1970. It is not intended to be used for, and should not be relied on, for any other purpose.



### Disclaimer:

The names and functions of Government Departments can change from time to time. The Department of Transport (DoT), Public Transport Victoria (PTV) and VicRoads came together as one new Department of Transport on 1 July 2019.

On 1 January 2023:

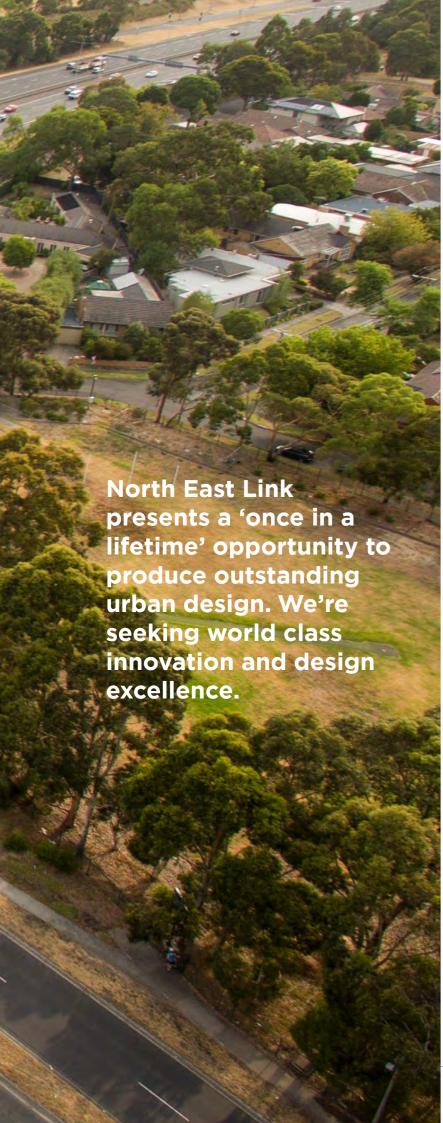
- DoT was renamed the Department of Transport and Planning (DTP); and
- the Department of Environment, Land, Water and Planning (DELWP)
  was renamed DTP and Department of Energy, Environment and Climate
  Action (DEECA).

Any references to previous Government Departments within the body of this strategy should be read accordingly.

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# **Foreword**



Chief Executive Officer North East Link

### Foreword from the CEO

Over the next eight years, the State Government will deliver North East Link. This project will complete the ring road between M80 and Eastern Freeway, increase capacity on Eastern Freeway and provide a dedicated express bus lane from Doncaster to the city. In addition, the project will provide numerous new and upgraded walking and cycling connections.

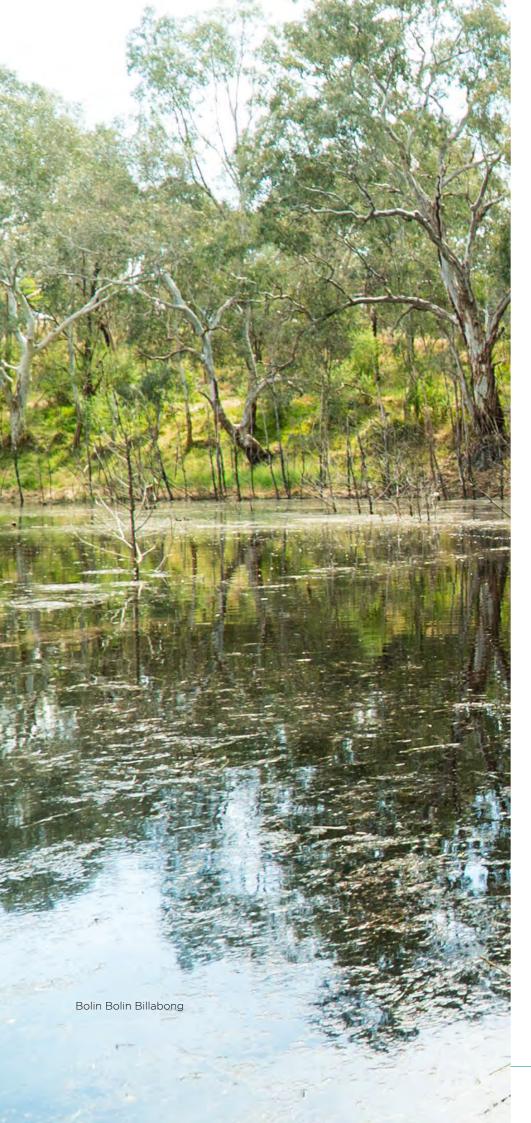
The Urban Design Strategy is an instructive design document that sets the urban design vision and quality expectations for all elements of the project. North East Link presents a 'once in a life time' opportunity to produce outstanding urban design. We're seeking world class innovation and design excellence. This will provide a legacy project that looks beyond the road to improve amenity for all users and opportunities for future transport needs.

A year-long program of stakeholder engagement, urban design advisory, analysis and specialist studies has developed this Urban Design Strategy. Feedback and values-based information from the community have helped shape this document and highlight opportunities.

The project's Urban Design Advisory Panel (UDAP) which includes urban design specialists from the Office of the Victorian Government Architect and the Department of Transport and Planning have provided invaluable guidance and in addition, our engagement with the Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation has initiated a partnership that is a 'Victoria first' for a project of this size and complexity.

Urban design is about more than shaping the visual quality of the places that we live in. It is a process that also shapes amenity, the quality of user experience and the wellbeing of people and communities. Urban design also supports natural systems and cultural and heritage values. Urban design creates places and journeys, and it operates from the macro scale of arranging space to the micro scale of noise walls and bridge design.

This project presents the opportunity to shape a significant part of Melbourne for residents and commuters alike. The process will assemble a collaborative team of the best engineering, urban design, architectural, landscape architectural and horticultural professionals to deliver a world class connection to complete Melbourne's missing link.





Cultural Heritage Aboriginal Corporation

# Foreword from Wurundjeri

North East Link is a large infrastructure development that will stretch over and beneath Wurundjeri Country. As such, it will nilim nugal-nganjinu bik (significantly impact our Country). Beyond the post-European settlement history of the project area, Wurundjeri (Woi wurrung) Ancestors have managed these lands for millennia. The Birrarung (Yarra River) and its surrounding environs form part of our Dreaming and is central to our identity as the First People of Greater Melbourne.

In 2018, for the first time, in recognition of our inherent custodianship of Wurundjeri Country, Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation has been invited to participate directly with the Victorian Government on what will be the largest infrastructure project in Victoria's history and the largest ever undertaken on Wurundjeri Country. Wurundjeri are partnering with North East Link. With a seat at the table during every phase of the design process, Wurundjeri and North East Link believe this will continue to be a positive example of collaboration with Traditional Owners.

Wurundjeri have worked in collaboration with North East Link on the development of this Urban Design Strategy and on the identification of cultural themes to inspire design teams which will be 'brought to life' through the various stages of the project. This represents an exciting opportunity to share precious Wurundjeri knowledge and culture and also to allow shared histories to be told through design.

Structurally embedding recognised Traditional Owners in both the governance and lifecycle of projects supports two-way learning and ultimately delivers richer outcomes for partners and the broader community. This learning journey has been embraced by North East Link. We collectively believe this structural integration is the right way of 'doing business' and should be embraced as the model for all infrastructure and planning projects undertaken on our traditional Country.

Wurundjeri now expect that our cultural values will inform design teams moving forward. We trust that our values, along with post-European settlement history, which include complex Indigenous-European relationships, can be honestly and truthfully realised through this project. This is respect.



# 1.1 Victoria's **Infrastructure Delivery Program**

The Victorian Government's Infrastructure Delivery Program is one of the most significant investments in transport infrastructure in the state's history.

The Infrastructure Delivery Program comprises more than just road or rail projects; they are city-shaping projects to create a lasting legacy for Melbourne.

Incorporating the principles and practices of great urban design and engineering is a priority for the government's investment to deliver a full range of benefits to Victorians.

Melbourne has been consistently rated as one of the world's most liveable cities (by The Economist Intelligence Unit) and is internationally recognised as a leader in the design quality of its urban environment. The Victorian Government is committed to enriching this reputation with high-quality. innovative urban design outcomes in all its infrastructure projects.

# 1.2 Project description

North East Link is a proposed new freewaystandard road connection that would complete the missing link in Melbourne's ring road, giving the city a fully completed orbital connection for the first time. The project would also upgrade and increase the capacity of one of Melbourne's key road corridors, the Eastern Freeway.

North East Link is a priority project identified in the Victorian Government's long-term metropolitan planning strategy, Plan Melbourne 2017-2050.

The new road would provide a safe and efficient transport connection to carry an estimated 125,000 vehicles per day by 2036, take 'long-haul' trucks off local streets and reduce congestion in Melbourne's northeastern suburbs.

The new link would connect the eastern suburbs to the northern and western suburbs, and Melbourne Airport. There would be guick and easy access for freight to move between industrial areas.

North East Link would also include the Doncaster Busway - Melbourne's first dedicated busway. The project would also create opportunities to improve existing and build new shared use path connections throughout Melbourne's north-east.

### LEGEND North East Link project Tolled roads Major road network Waterways Open space Built up areas

# 1.3 North East Link Project

In 2017, the Victorian Government established the North East Link Project (NELP) to plan and deliver the project.

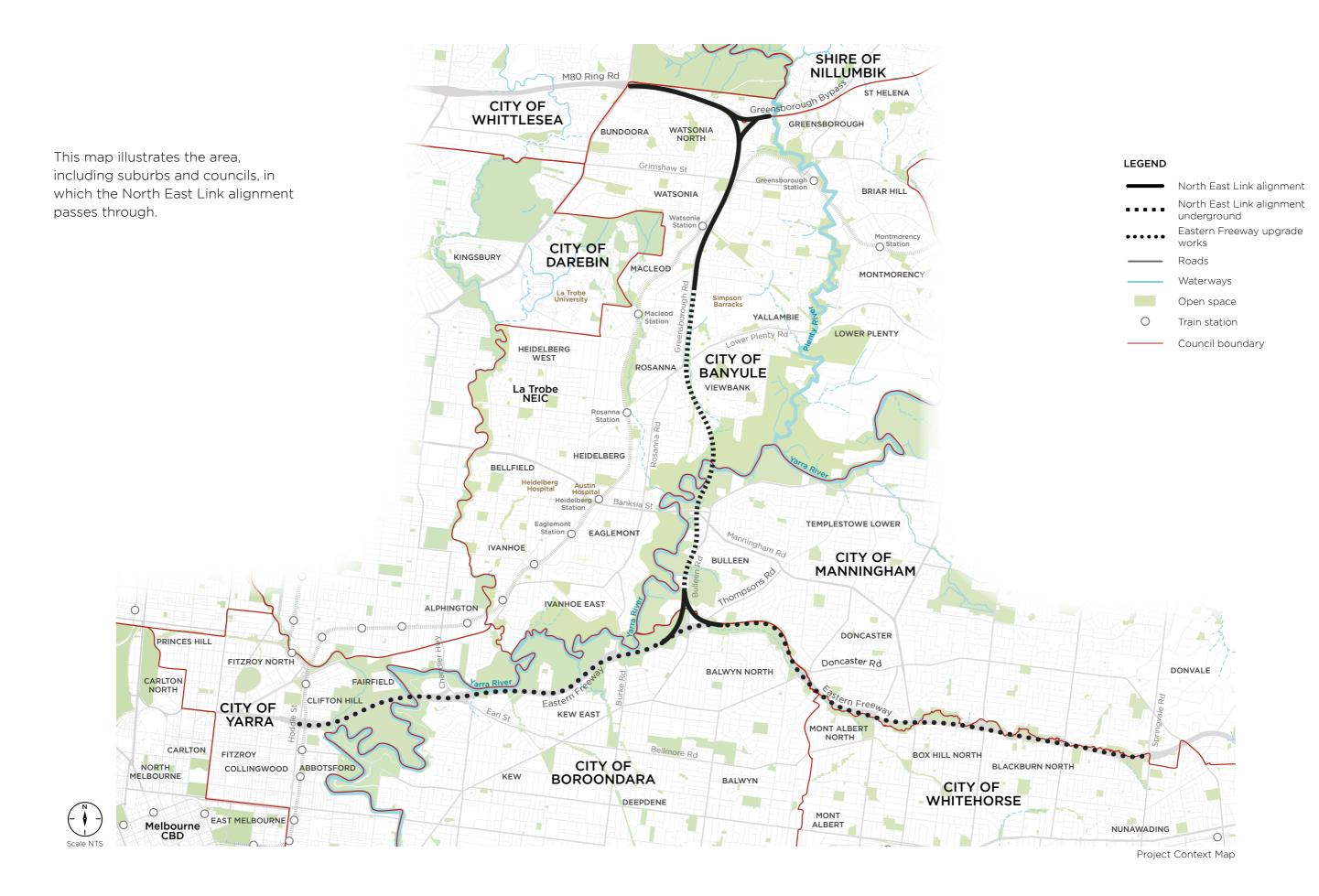
NELP is committed to providing high-quality design outcomes for North East Link as part of a legacy for a better, smarter, more efficient Melbourne and Victoria.

As part this commitment. NELP is collaborating with the Office of the Victorian Government Architect (OVGA) to develop a design approach that includes:

• Preparation of urban design documents to guide the planning, design and evaluation of the project

- Engagement with stakeholders and the community to inform the project's design, including identifying key local considerations and opportunities to involve the community
- Use of expert design advice through the whole of project life-cycle and retention of consistent design expertise from the OVGA, industry and stakeholders at all stages of the project, including development, procurement and delivery
- Use of an Urban Design Advisory Panel (which will include the OVGA) at frequent key milestones throughout the project life-cycle.





# 1.4 Urban design vision

# **Vision**

# A positive legacy for Melbourne

North East Link will provide the missing link in Melbourne's freeway network, increase the capacity of the Eastern Freeway and take trucks off the local road network.

North East Link will provide an enduring positive legacy, connecting Melbourne and the communities of its leafy suburban north-east via a transport corridor integrated with the existing network.

The North East Link alignment will respond to the surrounding landscape, support local ecology and recognise the Yarra River (Birrarung) and its tributaries. The design must improve active transport along the alignment and acknowledge and value the identity of local places.

It must be thoughtfully considered to protect the physical and visual amenity of the local community, and to minimise the project footprint.

### What is urban design?

Urban design is the practice of shaping the built environment to improve the quality and overall liveability of cities and towns. While urban design is often tailored for a specific project, the dynamic and evolving nature of urban environments means that realising urban design outcomes is a long-term process.

Urban design is about more than just the appearance of the built environment. It also relates to the functional, environmental, economic and social outcomes of a project.

Urban design operates on a variety of scales, from the macro scale of urban structures such as city-wide transport networks, to the micro scale considering elements such as lighting and noise walls.

Good urban design employs a multidisciplinary approach to create integrated and considered environments and involves many areas of expertise.

### Why urban design is important

Urban design is important because of its potential to significantly influence:

- The functionality, character and identity of public places for individuals and communities
- Integration and transport systems
- Active and public transport connections and user behaviours
- The levels of comfort, accessibility, safety and inclusiveness of places
- The expression of social and cultural values associated with places
- The socio-economic composition, diversity and economic vibrancy of urban areas
- The sustainability and resilience of urban environments
- Community connectedness, health and wellbeing, and pride of place.

# Urban design in the North East Link project

North East Link is a significant and complex infrastructure project that would alter the urban fabric of Melbourne's north-east. The design of North East Link must continue to support Melbourne as one of the most diverse and liveable places in the world.

Urban design has the single greatest influence on a project of this scale and is essential to positively shape the city. Urban design is integral to achieving the highest standards in design with an iterative and collaborative design process.

Embedding urban design thinking at the outset of the planning and design process for North East Link will ensure the wider social and environmental benefits of the project are achieved.



Eastern Freeway extension, Stage 1
Design: Wood Marsh

# 1.5 Purpose of this document

### **Purpose**

North East Link would be designed and delivered by the private sector following a competitive tender process.

This Urban Design Strategy establishes the expectations of the Victorian Government for what contractors must achieve with their design. The Urban Design Strategy seeks to ensure consistent, high-quality and contextsensitive urban design outcomes for North East Link while encouraging innovation and ideas from industry.

The purpose of this Urban Design Strategy is to:

- 1. Establish and communicate the urban design requirements for the project.
- 2. Ensure proposals are developed with integrated urban design solutions.
- 3. Provide the framework for a performancebased assessment of Urban Design and Landscape Plans.

This Urban Design Strategy will drive:

- Urban design excellence to benefit the wider transport network, its users and the communities and places that North East Link passes through
- Positive outcomes that avoid or minimise negative impacts of the project
- Integration of high-quality urban design with effective technical solutions
- Collaborative, multi-disciplinary, integrated design thinking for all elements of the project with an urban design-led process.

### **Process**

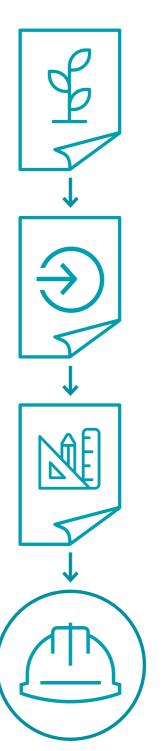
Informed by the Environment Effects Statement (EES) process, this Urban Design Strategy will guide the planning and design of North East Link.

While the Urban Design Strategy sets the strategic direction and overarching urban design requirements for North East Link, it is not intended to communicate design plans or proposals.

As part of the planning approvals (secondary consent requirements), the contractors will develop Urban Design and Landscape Plans that respond to the Urban Design Strategy. These plans will be evaluated against the requirements set in this Urban Design Strategy and will be approved by the Minister for Planning.

The Urban Design Strategy articulates the urban design performance requirements for the project. Design proposals will be assessed against these requirements.

An Urban Design Advisory Panel (UDAP) has been established to provide ongoing expert design guidance and advice, and to advocate for high-quality design outcomes for North East Link. This panel includes members representing the OVGA and will meet regularly during the design and development process to assess the contractors' design against the requirements and benchmarks set by this Urban Design Strategy.



### **Environment Effects Statement**

The Environment Effects Statement (EES) assesses how the project could impact the environment, encompassing the physical, ecological, heritage, cultural, health, social, economic and transport aspects.

### **Urban Design Strategy**

The Urban Design Strategy (UDS) guides the design of North East Link and is used to set requirements for the contractors' design.

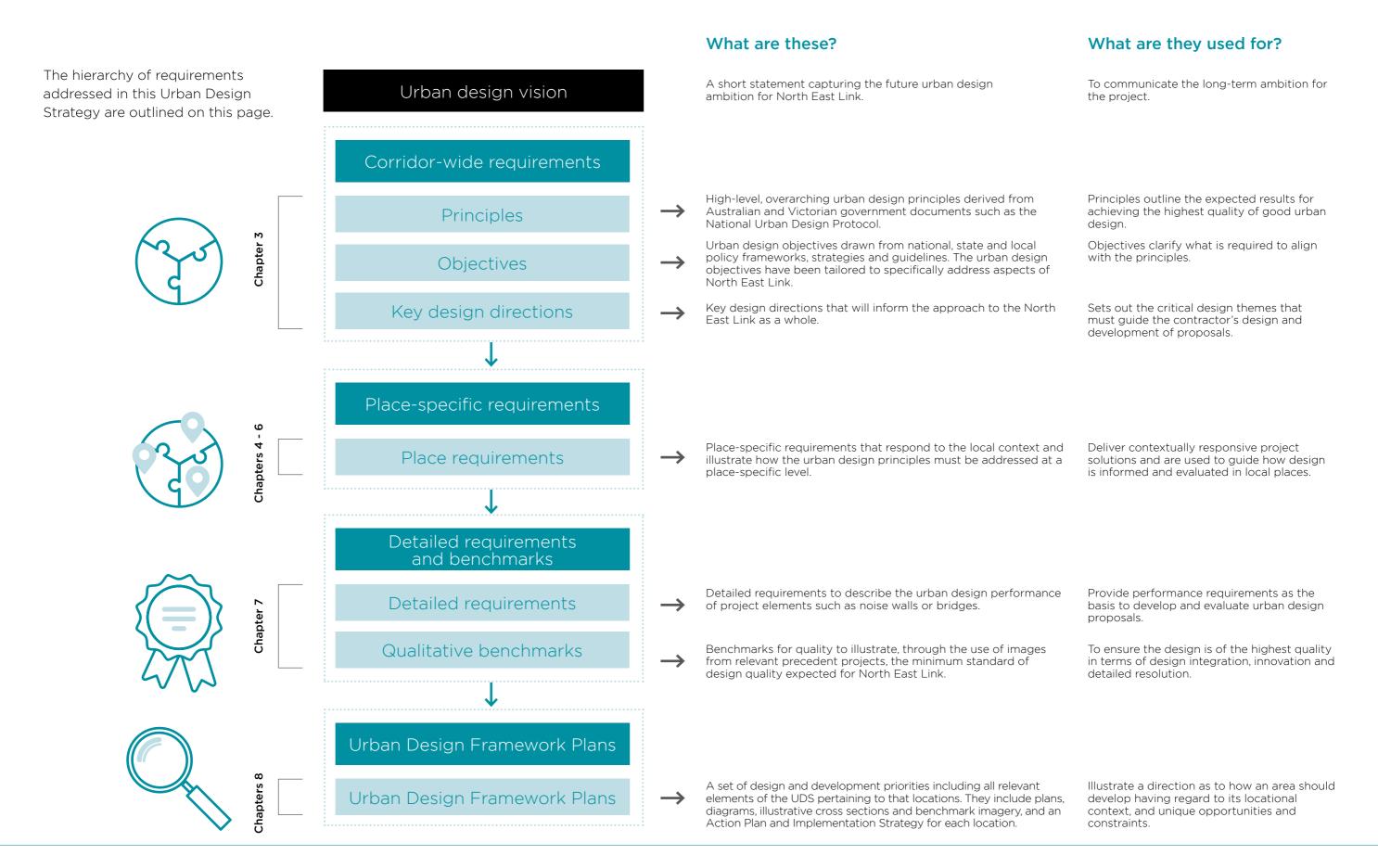
### **Urban Design and Landscape Plans**

Urban Design and Landscape Plans (UDLPs) will demonstrate how the design responds to all requirements as set out in the Urban Design Strategy. The plans will communicate the design vision and concept of all elements.

Construction

### 1. INTRODUCTION

# 1.6 Content & structure





# 2.1 Policy & strategic context

### A number of national, state, regional and local legislation, policies and other guidance documents are relevant to the urban design aspirations and requirements of North East Link.

### **National**

- Australian Transport Assessment and Planning Guidelines, Australian Government, 2018
- Creating Places for People, an Urban Design Protocol for Australian Cities, Australian Government, 2011
- Our Cities, Our Future, Commonwealth of Australia, 2011

### State

- Biodiversity 2037, Department of Environment, Land, Water and Planning, 2017
- Creative State Victoria's First Creative Industries Strategy 2016-2020, Creative Victoria
- Crime Prevention Through Environmental Design, Victoria Police
- Design principles for multi-deck commuter car parks 2019, Office of the Victorian Government Architect
- Good Design + Transport, Issue 05, guideline 2012, Office of the Victorian Government Architect
- A Guide to Healthy Parks Healthy People, Parks Victoria, 2017
- Healthy Waterways Strategy 2018-2028, Melbourne Water
- Integrated Water Management Framework for Victoria, DEWLP, 2017
- M80 Ring Road Upgrade Urban Design Strategy, VicRoads, 2010
- Movement and Place in Victoria, Department of Transport and VicRoads, 2019
- Plan Melbourne 2017–2050 Metropolitan Planning Strategy, Victorian Government
- Public Transport Guidelines for Land Use Development, Department of Transport, 2008

- Transport Integration Act 2010, Department of Transport
- Trees for Cooler and Greener Streetscapes, DEWLP, September 2019
- Urban Design Charter, Victorian Government, 2009
- Urban Design Guidelines for Victoria, Department of Environment, Land, Water and Planning, 2017
- Victorian Cycling Strategy 2018–28, Transport for Victoria
- Victoria Planning Provisions
- Yarra River Protection (Wilip-gin Birrarung murron) Act 2017

### Regional

 Northern Regional Trails Strategy 2016 (encompasses Banyule, Darebin, Hume, Moreland, Nillumbik and Whittlesea)

### Local

### Wurundieri

• Ancient Spirit and Lore of the Yarra, 2018

### **Banyule City Council**

- Arts and Culture Strategic Plan 2017-2021
- Banyule Council Plan 2017-2021
- Banyule Planet: The Biodiversity Plan 2014–2017
- Banyule Bicycle Strategy 2010-2020
- Banyule Public Open Space Plan 2016– 2031
- Banyule Integrated Transport Plan 2015-2035
- Landscape assessment for significant ridgelines in Banyule, 2012
- Banyule Urban Forest Strategic Plan, 2014
- Greensborough Activity Centre Transport Masterplan, 2017
- Kalparrin Gardens Masterplan, 2016
- Neighbourhood Character Strategy, 2012

- Picture Watsonia: A Vision for Watsonia Village, 2014
- Recreation Plan 2017-2021
- Warringal Parklands and Banyule Flats: Cultural Heritage Assessment, 2014

### Boroondara City Council

- Access and Inclusion Plan 2013-2017
- Biodiversity Asset Management Plan, 2011
- Boroondara Bicycle Strategy, 2008
- Boroondara Community Plan 2017–2027
- Boroondara Council Plan 2017-21
- Boroondara Integrated Transport Strategy, 2006
- Boroondara Open Space Strategy, 2013
- Boroondara Public Health and Wellbeing Plan 2017–2021
- Boroondara Tree Strategy 2017-2027
- Boroondara Shade Policy 2017-2027
- Hays Paddock Master Plan, 2011
- Integrated Water Management Strategy 2014–2024
- Inventory and assessment of indigenous Flora and Fauna in Boroondara, 2006
- Playground Development Strategy, 2005
- Urban Biodiversity Strategy Implementation Plan 2017-2020
- Urban Biodiversity Strategy 2013-2023

### Manningham City Council

- Active for Life Recreation Strategy 2010– 2025
- Bicycle Strategy, 2013
- Healthy City Strategy 2017-2021
- Koonung Creek Linear Park Management Plan, 2011
- Koonung Park Management Plan, 2016
- Manningham City Council Plan 2017-2021
- Manningham Bus Network Review, 2017
- Open Space Strategy, 2014
- Residential Strategy, 2012

- Streetscape Character Study, 2009
- Walk Manningham Plan 2011-2020

### **Nillumbik Shire Council**

- Biodiversity Strategy, 2012
- Nillumbik Council Plan 2017-2021
- Nillumbik Health and Wellbeing Plan 2017–2021
- Nillumbik Trails Strategy, 2011
- Picture Nillumbik, 2013

### Whitehorse City Council

- Elgar Park Masterplan, 2016
- Neighbourhood Character Study, 2014
- Whitehorse Council Plan 2017-2021
- Whitehorse Cycling Strategy, 2016
- Whitehorse Integrated Transport Strategy, 2011
- Whitehorse Open Space Strategy, 2007
- Whitehorse Play Space Strategy, 2011
- Whitehorse Recreation Strategy 2015– 2024

### Yarra City Council

- City of Yarra Bicycle Strategy 2016 Refresh
- City of Yarra Council Plan 2017–2021
- City of Yarra Urban Design Strategy, 2011
- Heritage Strategy 2015–2018
- Local Area Place Making Policy
- Urban Forest Strategy, 2017

This is not an exhaustive list of documents and it is recognised that additional publications may be released before the awarding of the project contract.

A number of other useful design publications have also been prepared by other organisations. These include the NSW Roads and Maritime Services: Beyond the Pavement, Landscape design guideline, Tunnel urban design guideline, Bridge Aesthetics, Contributing to liveable Communities: Roads as Links and Places, Noise wall design guideline and Water sensitive urban design guideline.

# 2.2 Consultation & technical inputs

This Urban Design Strategy has been informed by the following.

- National, state and local government policies, legislation, strategies and guidelines relevant to the affected area (listed in Section 2.1)
- Technical impact assessments undertaken as part of the Environment Effects Statement (EES) for the project, including studies on heritage, land use, social and community, ecology, landscape and visual impact (which in particular identified important view lines, and potential mitigation measures)
- Other key project documents such as EES Attachment I - Sustainability approach
- Additional urban design context and background analysis, and the identification of issues and opportunities to consider sitespecific project impacts and requirements, and to inform potential design outcomes
- Feedback from the community and key stakeholders.

Key Victorian Government stakeholders consulted include the Department of Environment Land Water and Planning (DELWP), Transport for Victoria, VicRoads, Melbourne Water. Parks Victoria and the Office of the Victorian Government Architect (OVGA). Key local government stakeholders consulted included representatives from the municipalities of Banyule, Boroondara, Manningham, Whitehorse, Whittlesea, Yarra and Nillumbik.

Collaboration with Wurundjeri Elders has informed the development of the Urban Design Strategy.

Feedback from residents, business owners and other community members was obtained through small group forums and community drop-in sessions. These sessions have included displays of urban design information and the intent for the project.



Community information session at Greensborough

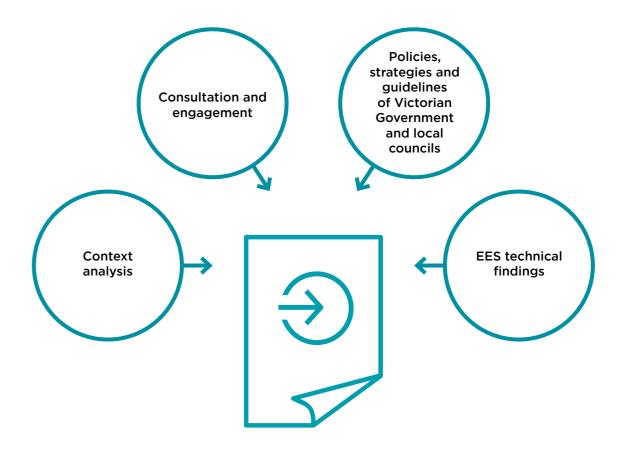
### 2. PROJECT BACKGROUND

Some of the key actions relevant to this Urban Design Strategy included:

- Using urban design examples from around the world to influence the design of the project
- Considering community preferences in the Urban Design Strategy and include these in project requirements for the contractors
- Exploring opportunities to connect cultural areas and places of interest, such as the Heide Museum of Modern Art to create tourism opportunities
- Continuing to develop North East Link as a 'transport corridor' for walking, cycling, public transport, motorists and freight
- Finding opportunities to connect existing paths
- Finding opportunities to create new walking and cycling crossings over waterways
- Developing guidelines for parkland and improve existing public open space
- Supporting the development of the '20-minute neighbourhood' concept where people are within 20 minutes' walk to shops and services
- Ensuring that sustainability is a core part of the Urban Design Strategy
- Identifying the character of the local area by engaging with the community and ensure that local character is reflected in the design of the project.

Community feedback provided an important understanding of local insights and values, and an opportunity to receive ideas on how North East Link may develop and improve local places. Input from Victorian Government stakeholders and relevant local councils provided a further understanding of local issues and aspirations, and how North East Link could support and align with their future plans, strategies, and goals. This feedback was important in developing a location-specific and context-sensitive approach to the Urban Design Strategy, and was instrumental in informing the key directions, place requirements and the design approach outlined in this document.

### Inputs into the Urban Design Strategy





# 3.1 Urban design principles & objectives

The principles, objectives and key directions in this strategy apply across the entire project to varying degrees. They form the basis of good urban design outcomes and respond to the different contextual settings within the project corridor. The principles and objectives regarding an integrated design response, minimisation of the project footprint and reduction of any physical and visual impacts are of prime importance and must be addressed as a high priority.

### Urban design outcome

### **Enhancing**

Principle 1

IDENTITY



A well-defined identity and sense of place add to people's experience and understanding of a place.

### Objective 1.1 Sense of place

Protect, maintain and enhance the identity of local places, and respectfully represent Indigenous and non-indigenous cultural values. This includes appropriate consideration of local community facilities, the natural environment, European and Indigenous history, and cultural places such as the Bolin Bolin Billabong, Yarra Bend Park, and Heide Museum of Modern Art.

### Objective 1.2 Recognise the Yarra River (Birrarung)

Provide a design that respects and promotes the Yarra River (Birrarung) and its environs which encompass its tributaries, wetlands, billabongs, native vegetation and parklands such as Banyule Flats, and seek opportunities to celebrate this iconic Melbourne asset and ceremonial meeting place for the benefit of Traditional Owners and the general public.

### Objective 1.3 Landscape & visual amenity

Sensitively enhance landscape and visual outcomes and reduce physical and visual impacts associated with the project.

### Objective 1.4 Existing landscape character

Provide a high quality design outcome that responds sensitively to the distinctive character of this part of Melbourne, takes advantage of existing landmarks and vegetation, views and significant places, protects landscape and vegetation, and seeks to enhance the way in which people experience and interact with the landscape.

### Objective 1.5 Architectural contribution

Make a positive architectural contribution to infrastructure including bridges, noise walls and other structures.

### Urban design outcome

### Connected

Principle 2

CONNECTIVITY & WAYFINDING



Well connected and legible networks and places contribute to strong economies and healthy, inclusive communities.

### **Objective 2.1 Connectivity**

Improve people's ability to move through the immediate and wider area with ample, efficient and quality links across and along the corridor for all transport modes, including pedestrians and cyclists

### **Objective 2.2 Transport integration**

Maximise the benefits of the project by facilitating seamless access to a variety of public transport, walking and cycling choices as part of a connected intermodal network.

### Objective 2.3 Legibility & wayfinding

Provide a coordinated design that promotes visual connections and wayfinding, reduces reliance on signage and minimises visual clutter and obstructions to key views.

### Urban design outcome

### Diverse

Principle 3

**URBAN INTEGRATION** 



Well integrated infrastructure provides a sound framework for successful cities and places.

### Objective 3.1 Integration with context

Avoid, minimise and mitigate any severance of communities. Provide a well-integrated corridor environment that enhances the street network and takes advantage of opportunities to connect and integrate with the broader commercial, residential and open space functions and environment.

### Objective 3.2 Integration of design

Ensure an integrated engineering, urban design, architectural and landscape architectural approach that sensitively addresses social, cultural, functional and physical aspects of the project.

### Objective 3.3 Strategic alignment

Provide an integrated transport infrastructure and land use solution that responds to strategic transport and land use planning for the broader precinct in consultation with local government and authorities.

### **Objective 3.4 Minimise footprint**

Minimise negative impacts on the community and the environment by minimising the project footprint and visual bulk, particularly where it intrudes on sensitive land uses including open space and existing vegetated areas.

### Urban design outcome

### **Enduring**

Principle 4

RESILIENCE & SUSTAINABILITY



Infrastructure must be sustainable, enduring and resilient to support current and future generations.

### Objective 4.1 Enduring & durable

Provide a design that is enduring and functional for generations to come, is readily maintainable and will age gracefully in concept and detail, ensuring a positive built form legacy.

### Objective 4.2 Resilience & future proofing

Ensure the infrastructure is able to survive, adapt and perform when subjected to acute stresses and shocks such as changes in climate, technology, future fleets, road use and extreme events.

### Objective 4.3 Environmental sustainability

Optimise environmental performance and embed sustainability initiatives into the design response. This includes integrated water management, biodiversity and habitat enhancement and connections, green infrastructure provision and sustainable use of energy and materials.

### Objective 4.4 Whole of life

Ensure the design is appropriate having regard to ongoing maintenance, operations and upkeep; and effective governance arrangements are established to ensure its functionality, design qualities and appearance is able to meet community expectations.

### Urban design outcome

### Comfortable

Principle 5

**AMENITY** 



High quality urban amenity afforded by well-designed infrastructure contributes to successful, equitable and prosperous communities.

### Objective 5.1 Improved amenity

Enhance urban amenity through a highly considered and site-specific response to realise opportunities and address challenges to create better places for people.

### Objective 5.2 Landscape values

Create positive outcomes for the community with a coherent landscape response that embraces natural qualities and values.

### Objective 5.3 High quality

Provide a high quality design outcome that makes a positive contribution to the local built and natural environment and minimises physical and visual impact on the surrounding community.

### Objective 5.4 Experiential

Provide a great journey for motorists, public transport users, pedestrians and cyclists with consideration of the varying speeds and journey types. Prioritise the visual amenity of the community over the road user.

### Urban design outcome

### Vibrant

Principle 6 **VIBRANCY** 



Vibrant communities are places where people want to visit, experience or live.

### Objective 6.1 Putting people first

Provide places that are comfortable, inclusive and pleasant for the local community, support active and healthy lifestyles, and encourage diverse social interaction within public spaces.

### Objective 6.2 Places for people

Improve local neighbourhoods where there are opportunities to create inviting, people-friendly streets and public places.

### Urban design outcome

### Safe

Principle 7 SAFETY



Safe environments are essential for strong, connected and liveable communities.

### Objective 7.1 Safer places

Reduce the opportunity for crime, maximise passive surveillance and support safe, comfortable and enjoyable places that meet Crime Prevention through Environmental Design (CPTED) principles.

### Objective 7.2 Road safety

Prioritise safety for all users including motorists, cyclists, pedestrians and public transport users, and avoid unnecessary distractions.

### Urban design outcome

### Walkable

Principle 8

### **ACCESSIBILITY**



Highly accessible and inclusive environments encourage positive activation and are vital to community wellbeing, inclusion and health.

### Objective 8.1 Universally inclusive

Enhance universal access across the affected and surrounding area for all members of the community.

### Objective 8.2 Twenty-minute neighbourhoods

Support and enhance 20-minute neighbourhoods for convenient and desirable access to everyday services and facilities (within a 20-minute walk from their home, or faster by bicycle or local public transport).

### **Objective 8.3 Active transport**

Encourage walking and cycling for transport and recreation with an integrated active transport infrastructure that meets future growth in demand and connects seamlessly with surrounding networks and with proposed infrastructure being delivered by others.

Urban design principles are derived from Creating Places for People - an Urban

**Design Protocol for Australian Cities** 



# 3.2 Key design directions

Expanding on the general principles and objectives of good urban design detailed previously, this section outlines five corridor-wide key design directions to inform the design approach of North East Link.

## **Key direction 1:**

Develop an integrated design response

### **Key direction 2:**

Support a natural and connected corridor

# **Key direction 3:**

Recognise cultural and historic values

### **Key direction 4:**

Provide a great experience for road users

### **Key direction 5:**

Create a context sensitive design

# **KEY DIRECTION 1: Develop an integrated design response**

# The project must demonstrate the effective integration of engineering and urban design to deliver an innovative and balanced design solution.

North East Link is a significant city-shaping project. Given the scale, complexity and extent of its infrastructure and the diverse land use settings, the design must address a wide range of often competing social, functional, environmental and physical challenges.

This key direction requires proponents to move beyond a business as usual and engineering-centred approach to design and address challenges using a multi-disciplinary, innovative framework of three-dimensional design thinking.

Drawn from Objective 3.2 Integration of design, this key direction highlights the significance of a shared responsibility for good urban design across disciplines for North East Link. This requires the input, collaboration and coordination of many different disciplines including architecture, landscape architecture, urban design, engineering, heritage, sustainability, transport planning, land use planning, environmental, ecological, civil and hydraulic engineering amongst others.

The principles of sustainability must also be embedded into the design approach to maximise environmental, social and economic outcomes. To support this, the project sustainability performance would be evaluated by the Infrastructure Sustainability Council of Australia (ISCA) Infrastructure Sustainability Rating Tool.

The early integration of design with a multidisciplinary team throughout the project lifecycle is fundamental to the success of North East Link and to achieve urban design outcomes that ensure:

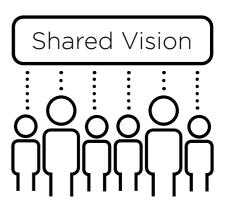
- Design solutions respect and continue the road and bridge infrastructure along the existing Eastern Freeway
- · Design challenges are addressed holistically
- Design solutions and opportunities are identified early in the design process
- The reference design is rigorously challenged to achieve innovative and superior solutions and outcomes
- The design is led by integrated land use and transport thinking
- A meaningful, authentic, and holistic approach to embedding Indigenous values and culture into the project design
- Sustainable infrastructure outcomes.
- The vertical and horizontal road geometry is optimised to sit sensitively in the surroundings

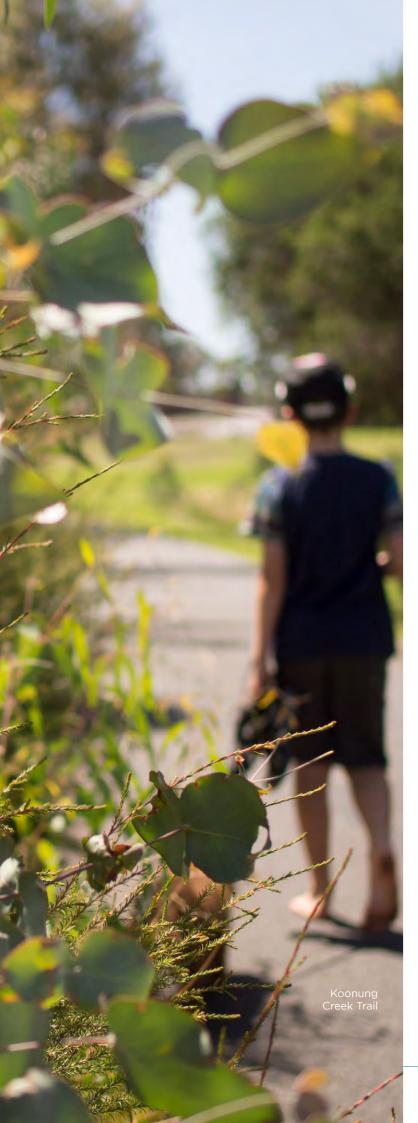
- Good engineering design is achieved that is visually pleasing and not literal in its design interpretation
- The composition of road elements along a corridor is integrated and coordinated
- A sensitive response that avoids superfluous visual statements
- Challenges associated with the constrained road reservation are appropriately addressed in order to maximise the traveller experience
- The design is appropriate for its ongoing maintenance, operations and upkeep
- Future land use change opportunities are identified and supported, and longterm opportunities for the place and community are considered
- Project outcomes are aligned with the plans and strategies being developed and delivered by others
- Negative impacts to the neighbouring community are avoided and minimised
- Infrastructure is sited and designed to minimise visual impacts to sensitive receptors such as residents and open space. Mitigation initiatives must address location, scale, form then materials, in order of priority, to maximise effectiveness.
- Public benefits and long-term returns are maximised.

This approach could result in an interchange, bridge, road or tunnel design that celebrates structural innovation by creating an elegant structure which is timeless in design and does not make superfluous or superficial visual statements.

An integrated design solution will enable the project to move beyond an efficient traffic outcome, towards an architecturally significant design that recognises the connection between people, places and the natural environment, with a positive legacy for Melbourne.

### Multi-disciplinary project team





# **KEY DIRECTION 2: Support a natural & connected corridor**

The project must demonstrate a design that responds to the natural, movement and open space systems and improve connectivity to 'stitch' communities across the project corridor.

Key recurring themes in conversations with the community about North East Link were the concepts of 'natural' and 'connected'. To support a natural and connected corridor, North East Link must find creative ways to better connect communities to facilities and open spaces and support the natural systems that exist within the project corridor.

### Stitching communities together

Reducing severance is a key priority for the project as community consultation has revealed a strong desire to improve walking, cycling and public transport to connect communities and better connect people to jobs and education.

The project design must endeavour to improve current connections and link communities across North East Link and the Eastern Freeway. This includes providing missing links for walking and cycling along the project corridor between the M80 Ring Road and the Eastern Freeway in the north-south direction, and east-west along the Eastern Freeway into Melbourne's inner city areas.

Good access across the project corridor and to key facilities and destinations must be provided. The project design must also avoid or minimise barriers that impact on visual and physical connectivity.

### Supporting natural systems

The north-east of Melbourne has a unique natural beauty, with undulating topography and a green, leafy character. The higher volumes of rainfall and dense canopy of trees create an attractive and unique landscape setting. These natural qualities have historically inspired many Melburnians to move to these suburbs. Supporting the natural values and processes of land, water, ecology and environment while allowing for future change is another key priority for the project.

Opportunities exist to recognise and interpret the natural connections to water, land, nature, seasons and journey. These concepts can be physically and metaphorically interwoven into the design, celebrating the enduring influence of natural systems, seasonal cycles, natural processes, migration patterns, connection and time.

The project design should repair and protect local environmental assets and systems to optimise ecology, aesthetics and experiential opportunities.

### Supporting open space systems

North East Link would pass through connected open space systems that include the Greater Yarra Urban Parklands (encompassing the parklands and open spaces along the Yarra River) and the Koonung Creek linear parklands. These open space networks are highly valued by the community and provide opportunities for people to connect with nature, socialise and be active.

The project design should maintain, link and extend the important functions of the open spaces that exist along and adjacent to the project corridor. Visual connections to green spaces for the surrounding community and the traveller should be reinforced.

To provide a robust design, the project must use an integrated systems approach that reflects the interdependency of interactions between transport, environment and the community. By addressing these systems from a holistic perspective, better outcomes can be achieved to ensure transport and community integration is enhanced while preserving the natural systems within the project corridor.

# KEY DIRECTION 3: Recognise past, contemporary & shared Indigenous & historic cultural values

The project must demonstrate a design philosophy and approach that recognises, protects and promotes Indigenous cultural heritage values, and celebrates and interprets places and objects of historical heritage importance.

The aim of this key direction is to build on Principle 1 Identity and Principle 5 Amenity to:

- Ensure creative, authentic, meaningful and contemporary interpretations of Indigenous and historical cultural heritage are incorporated into the project design while avoiding literal interpretations of elements
- Increase knowledge and understanding of Wurundjeri history as well as their past and present cultural heritage values and traditions
- Ensure the built form for North East Link contributes to the **identity** of Melbourne
- Embed Indigenous and local community knowledge and understandings of place into the project
- Enhance urban amenity, user experience and contribute to a sense of place and local identity.

### A shared history

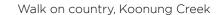
This project presents a unique opportunity for a collaborative approach with stakeholders and the Wurundjeri to embed local knowledge, understandings and shared values, and to choreograph the journey via infrastructure with sculptural interventions.

### **Wurundjeri and Connection to Country**

The North East Link Project has partnered with Traditional Owners through the Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation (WWCHAC) to develop strategies and processes to enable a respectful and sincere process for embedding Indigenous culture and values into the project, and to enable the Wurundjeri to actively and equally participate to ensure their interests as Traditional Owners of the land are represented.

As part of this collaboration, the North East Link Project is committed to a curatorial design process to increase knowledge and understanding of Wurundjeri culture, traditions and histories.

The design for North East Link must seek opportunities to represent Wurundjeri people's knowledge, insights and Connections to Country, via a meaningful, authentic and collaborative process.





### 3. CORRIDOR WIDE

As part of supporting the protection and enhancement of precious Wurundjeri traditional knowledge and values, the WWCHAC has identified a number of project-specific cultural themes that may be 'brought to life' through the project design:

- Art and interpretation
- Artefacts and material culture
- Ceremony (tanderrum)
- Country and natural resources
- Fire
- Indigenous architecture
- Indigenous seasonality
- Language and communication
- The Manna Gum and Witchetty Grub
- Past, contemporary and emerging Indigenous identity
- Resource gathering and harvesting
- Story telling
- Transition and beneath the earth
- Travel and trade
- Water and totem animal species.

### Places & influences

North East Link would pass places of importance to Melbourne residents. The project presents an opportunity to celebrate and interpret pre-settlement and historical heritage values and themes of these places.

The **Yarra River** is one of Victoria's most iconic waterways and is integral to the identity of Melbourne. The Yarra River and many of the landscapes located alongside the waterway, which form the Greater Yarra

River Urban Parklands, have high cultural and historic heritage significance. For instance, the Yarra River's billabongs have been significant to Indigenous communities for many thousands of years.

The area of the Yarra River corridor between Bulleen Park and Banyule Flats is recognised as having the potential to become an internationally significant cultural heritage precinct that centres on the arts, nature and Wurundjeri heritage. This precinct includes the Bolin Bolin Billabong and the Heide Museum of Modern Art and is also known for its associations with the Heidelberg School art movement.

The **Bolin Bolin Billabong** is one of many important Indigenous sites in the Yarra River catchment area, and is a highly significant site to the Wurundjeri people. Significant ceremonies (tanderrum) were held here between April and May, to align with the yearly migration of Short finned Eel, with more than 1,000 people attending. Ceremonies lasted for four to five weeks at a time where abundant food sources such as eel were harvested. The Bolin Bolin Billabong was part of a larger network of billabongs offering a plentiful supply of aquatic foods.

The **Heidelberg School** art movement of the 1880s was the first significant postcontact art movement in Australia. This artistic style emerged around Heidelberg and Eaglemont as artists were inspired by the natural beauty of the Yarra River and the bushland landscape in Melbourne's northeast. The artists painted 'en plein air' and sought to realistically capture Australian landscapes including the 'bush' and the

harsh light that typifies the country. A rising nationalistic sentiment encouraged artists to recognise and celebrate the unique qualities of the Australian landscape. Artists included Frederick McCubbin, Arthur Streeton and Tom Roberts. The Heidelberg School Artists Trail in Bulleen allows visitors to experience how artists of the era interpreted this landscape.

The Heide Museum of Modern Art is one of Australia's leading public art museums and has a significant ongoing role in the history of Australian modern art. Heide was the home of art patrons Sunday and John Reed 1934-1981. The Reeds supported and promoted some of Australia's most innovative and avant-garde artists. Many of these artists are now regarded as central figures in the Australian modernist art movement including Sidney Nolan, John Perceval, Albert Tucker and Joy Hester. Today the museum is famous for its post-modern and contemporary art collection, offering visitors a unique cultural experience that includes exhibitions, artworks, a sculpture park and gardens, architecture and history. The proximity of this cultural institution to the project presents an exciting opportunity for potential collaboration, inspiration, innovation and creative thinking in the design of North East Link.

### Interpretation of heritage themes

The project also provides an opportunity to develop an approach to the interpretation of heritage themes that reference Wurundjeri as well as post-European settlement historical heritage, including the places along the alignment.

Interpretation such as signage or traditional Indigenous forms of marking the landscape (such as tree carvings) should be explored along walking and cycling paths, or as part of public open space works associated with the project. Potential themes that may be considered include but are not limited to:

The history of the Yarra Bend area (including institutions in Yarra Bend Park)

- The Yarra River and its environs
- The Banksia Street pipe bridge (including early bridges)
- The Eastern Freeway design
- Orcharding and other agricultural history themes
- Simpson Barracks.



# **KEY DIRECTION 4: Provide a great experience for road users**

The project must demonstrate a design that creates a great journey for road users, with a consistent experience that coherently links to adjacent freeways and provides a design hierarchy that allows for intuitive navigation.

The North East Link journey must create a high quality traveller experience that harmoniously links to the M80 Ring Road, EastLink and the Eastern Freeway. Along the project corridor, the travel experience is to be carefully choreographed to provide a memorable journey for drivers and their passengers, including bus users. Navigational nodes are to be created along the journey to form part of the sequential higher speed travel experience.

While providing landscaping is a priority for the project, it is recognised that one of the project's driving principles is to minimise negative impacts on communities. This has resulted in a spatially constrained road reserve. This will place increased importance

on the design of architectural features such as noise walls, interchanges and bridges to enhance the road user experience.

### **Primary nodes**

At primary nodes, identifiable elements will function as place markers that recognise the regional importance of these locations to broader Melbourne.

The **M80 Ring Road interchange** is designated a primary node due to its importance as a regional intersection. This interchange would connect North East Link to the M80 Ring Road, providing a vital connection for people travelling to Melbourne Airport and acting as the gateway to the city's northern 'green wedge' - the ring of low-density areas around metropolitan Melbourne. At this location, the project should capitalise on key distant views and topographical features, and mark the transition into the M80 Ring Road and gateway of Melbourne's green wedge. The road design should be legible, with well-designed structures and distinctive landscaping that integrate positively with the surrounding context. Project elements must coherently transition into the M80 Ring Road upgrade design.

The **Manningham Road interchange** area is also designated a primary node due to the cultural and heritage significance of the surrounds to broader Melbourne, including the Heide Museum of Modern Art, the Greater Yarra Urban Parklands and its location on the Yarra Scenic Drive. This area provides opportunity to create a highly considered design that sensitively

responds to the surrounding context and place, marking the transition of the road journey into the tunnel and integrating artful infrastructure to contribute to the cultural narrative of Melbourne. The design should also recognise the role of existing landmarks and features such as the 'Helmet' sculpture near the Heide Museum of Modern Art.

### Secondary nodes

Secondary nodes are places where distinctive elements, navigational features or high-quality civic landmarks will assist with awareness and recognition of places.

Grimshaw Street and the Watsonia **Neighbourhood Activity Centre** are designated secondary nodes which will contain easily identifiable features and landmarks with well-designed structures. elements or open cuttings that allow travellers to recognise their location.

The **Lower Plenty interchange** marks the transition from the North East Link tunnels. This location presents an opportunity for an integrated architectural and landscape response that balances freeway infrastructure (such as ventilation structures and buildings) with local amenity and environmental outcomes.

The **Eastern Freeway interchange** is an important node for bus users and includes a busway and the Park and Ride facility in Bulleen. The project is not seeking additional large-scale, feature vertical elements at this location due to the sensitivity of the surrounding context. Nodes at this location should be created by well-designed elegant

structures and the use of landform and landscaping rather than with additional superfluous built elements.

The ventilation structures and associated buildings are significant elements in the landscape that should be sensitively sited, and designed to respond to their surrounding parkland landscape (through architectural form, topography and vegetation), and to integrate with other project elements such flood walls.

The **Doncaster Road interchange** is also an important node for bus users and marks the entry to the Doncaster Park and Ride. The design at the Doncaster Road interchange must appropriately consider the 'Sentinel' sculpture at Doncaster Road.

### Tunnels

The transition from above county to beneath the earth and the journey through the subterranean environment, must enhance the traveller journey and create a comfortable and inviting experience for drivers.

The tunnels provide an opportunity to create a highly considered design that may reflect the above-ground characteristics, interpret identified Indigenous cultural heritage themes, and define the transition between the design character areas described in Key Direction 5.

### 3. CORRIDOR-WIDE



Proposed Navigational Node Hierarchy Map

### 3. CORRIDOR-WIDE

# **KEY DIRECTION 5: Create a context sensitive design**

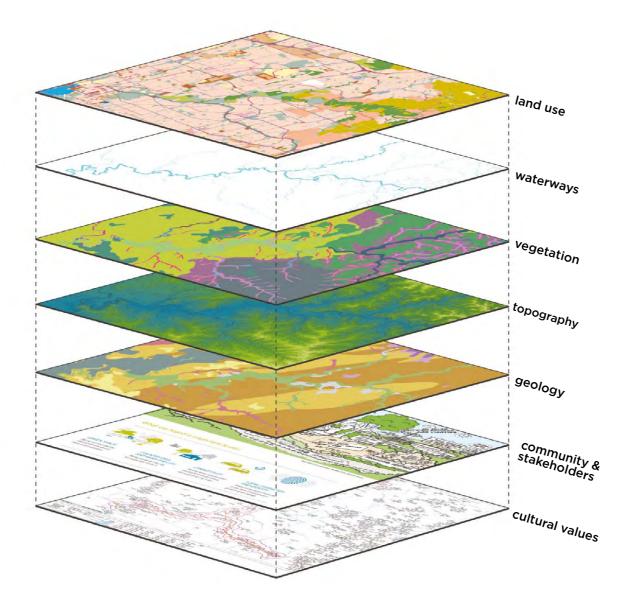
The project must demonstrate a design that protects, maintains and enhances the local context through which the project passes.

The North East Link corridor would pass through three distinct environments defined by topography, geology, vegetation and waterways. The surrounding urban development, land uses and the local movement patterns respond uniquely in each area, affecting the way people interact with and experience these places.

The differing values of each of these places were identified in stories and conversations with the community. This has led to an urban design approach that has divided the project into three distinct 'design character areas':

- Ridgeline
- Yarra River Valley
- Koonung Creek Valley.

The design for North East Link must be sensitive to the places adjacent and affected by project, and the features, uses, significant elements and community values within each design character area.



The three distinct design character areas have been informed by site features, technical assessments and feedback from the community.

This page provides a summary of the three design character areas and their distinctive attributes. The Landscape and Visual Impact Assessment (LVIA) for the project recognises the existing conditions of these three areas and uses them using the term 'landscape character areas'. In close alignment with the LVIA, this Urban Design Strategy uses the term 'design character areas' to inspire and drive the design intent for the project in each area.

Ridgeline

Areas around Greensborough, Watsonia North, Watsonia, Macleod, Yallambie, Viewbank and Rosanna with a distinctive suburban residential character. Some key character attributes include:

- Elevated topography
- Suburban residential
- Schools and aged care
- Long views to and from treed ridgelines
- Silurian siltstone, sandstone geology and residual soils
- Grassy woodland (pre-1750)
- Existing infrastructure the M80 Ring Road, Greensborough Road, electricity transmission towers.



# Yarra River Valley

Areas following the river from Viewbank, the Banyule Flats, Warringal Parklands, the Yarra River Parklands and west through Kew and Fairfield. Landscapes within this design character area have high cultural heritage significance and are open, vegetated and naturalistic landscapes. Some key character attributes include:

- Wide green valley corridor of Yarra River
- Naturalistic and culturally significant landscapes
- Schools, sporting fields and clubs
- Low lying floodplain
- Alluvial soils and sandstone geology
- Floodplain riparian woodland (pre-1750)
- Eastern Freeway parklands setting and bridges.



# **Koonung Creek Valley**

Areas following the Koonung Creek east through Balwyn North, Doncaster, Box Hill North, Nunawading and Blackburn North, characterised by lower density suburban residential. Some key character attributes include:

- Narrow, modified upper valley of Koonung Creek
- Suburban residential
- Linear open space
- Alluvial and colluvial soils and sandstone geology
- Valley grassy forest (pre-1750)
- Bridges and noise walls along Eastern Freeway
- EastLink.

Design Character Area Map

### 3. CORRIDOR-WIDE

Key design requirements that are a particular focus for each design character area are summarised on this page. Further context about each design character area and their key values and priorities are discussed in Chapters 4 to 6.

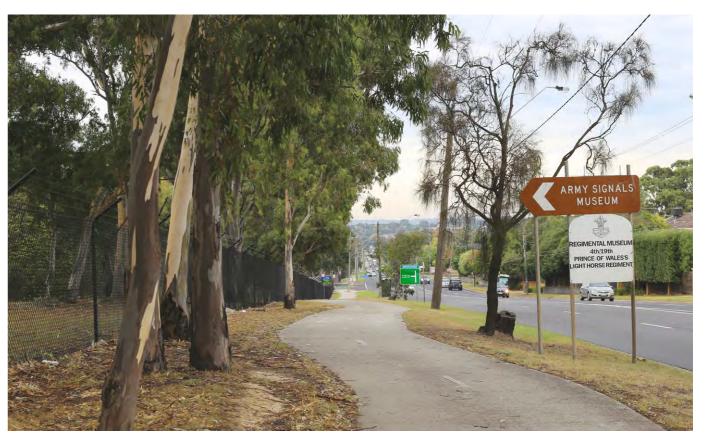


Suburban character of the Ridgeline Design Character Area with elevated topography and distant views



# Ridgeline

- 1.R Support future incremental built form and land use change in the area
- **2.R** Connect neighbourhoods, reduce fragmentation and facilitate the continued integration of the diverse community in this area
- **3.R** Reinforce the distinct and unique treed ridgeline character of Melbourne's north-east
- **4.R** Ensure built form associated with the project responds to the urban setting and seeks innovative ways to integrate infrastructure with adjacent land uses.
- **5.R** Maximise opportunities for land use integration at Watsonia Neighbourhood Centre
- **6.R** Maximise opportunities to repair local environmental assets and systems such as Banyule Creek
- **7.R** Provide an architectural and landscape response that integrates seamlessly with the upgraded M80 Ring Road
- **8.R** Strengthen community connections with the Simpson Barracks
- **9.R** Provide enhanced connections to the La Trobe National Employment and Innovation Cluster (La Trobe NEIC)



Simpson Barracks woodlands set back from Greensborough Road



# **Yarra River Valley**

- 1.Y Protect and promote cultural values for places of significance including the Yarra River, Bolin Bolin Billabong and the Heide Museum of Modern Art
- 2.Y Respect the design qualities of the original section of the Eastern Freeway built in 1977 including mast lights and bridges, rock escarpments and 'borrowed' landscape
- 3.Y Create a great bus user experience along the Eastern Freeway and a well-resolved facility for Bulleen Bus Park and Ride
- 4.Y Maximise opportunities for land use integration at the Manningham Road interchange
- **5.Y** Be sympathetic to the landscape setting of the Greater Yarra Urban Parklands
- **6.Y** Improve the ability for the community to access open space in Bulleen
- 7.Y Provide enhanced and more convenient cycling routes to Melbourne's inner city areas



Eastern Freeway with mast lights



The Yarra River and its surrounding open spaces are a key attribute of the Yarra River Valley design character area

### 3. CORRIDOR-WIDE



# **Koonung Creek Valley**

- **1.K** Optimise the existing open space functions and upgrade the open spaces that run parallel to the Eastern Freeway
- 2.K Respect the original architectural and landscape design of the Eastern Freeway
- **3.K** Maximise opportunities to connect the communities to the north and south of the Eastern Freeway
- **4.K** Improve transport and road connections to key activity centres
- **5.K** Create a great bus user experience and upgrade the existing Doncaster Park and Ride into a well-resolved facility
- **6.K** Support active transport along the Koonung Creek Trail
- **7.K** Reinstate and enhance buffer vegetation to filter views to freeway infrastructure and blend interfaces with surrounding treed neighbourhood character
- **8.K** Celebrate, maximise and reinstate natural vegetation, wetlands and open waterways including Koonung Creek



Eastern Freeway carved through sandstone rock escarpments and valley floor



Koonung Creek and its adjoining linear open spaces along the Eastern Freeway



# 4.1 Contextual narrative

The Ridgeline design character area has a distinctive undulating topography, defined by treed ridgelines and long views. The corridor traverses defined communities in the suburbs of Yallambie, Macleod and Watsonia, and dissects one of the highest areas in Melbourne, the Bundoora-Diamond Village-Army Barracks Ridgeline, which accentuates the elevation of the area. The corridor is also surrounded by parallel ridgelines which present a continuous green silhouette rarely punctuated by built form. In the past, these ridgelines were travelled by Aboriginal people.

The northern-most section of the corridor ends at the M80 Ring Road which is the gateway to the Nillumbik green wedge to the north-east.

The predominantly suburban area is blanketed under a canopy of mature native trees. The colours of the ridgeline area are defined by golden sandstone rock, natural greens of native vegetation, and layered greens and blues of distant horizons. Houses are mostly low in scale with low pitched roofs and are generally constructed with bricks in a range of cream, red and brown tones.

Simpson Barracks is an important part of the local community. Set back from Greensborough Road, this large Australian Army facility has strong community associations, with many families of army personnel working and living in the surrounding area.

The Ridgeline design character area is Within the Ridgeline design character also a modified landscape with existing area, the project alignment would extend infrastructure dissecting neighbourhoods from the M80 Ring Road at Plenty Road and the Greensborough Bypass at Plenty - including the Hurstbridge rail line, a River Drive to a northern tunnel portal and procession of transmission towers and roadways such as the M80 Ring Road and ventilation structure. There would be new road interchanges at the M80 Ring Road, Greensborough Road. **Grimshaw Street and Lower Plenty Road** As you move through the project corridor, intersections. From the northern portal, the new landscapes unfold to reveal new road would move underground into twin horizons, creating a sequential journey tunnels. through the land. On the ascent, the long views are fleetingly glimpsed in the rearvision mirrors of vehicles. At the highest crest there are views of the ranges to Melbourne's east. On the descent moving north there are expansive and impressive views towards Kinglake National Park and the Great Dividing Ranges. This unique relationship of the road, topography and distant horizons provides opportunities for interpretation and enhancement through urban design.

# 4.2 Values & priorities

The relatively undeveloped suburban feel of the Ridgeline design character area is likely to undergo incremental change from the current detached dwellings that surround the project corridor.

Future redevelopment will principally be associated with the La Trobe National Employment and Innovation Cluster (NEIC) which is a regionally significant planned employment and commercial centre. North East Link would have a positive impact on the La Trobe NEIC, providing connections to support its growth and development including with efficient and safe bus priority along Grimshaw Street.

Watsonia Neighbourhood Centre is a place identified to undergo change in future (Picture Watsonia - A Vision for Watsonia Village, Banyule City Council). The redevelopment of the Watsonia railway station car park would be part of North East Link works and presents a significant opportunity to improve urban integration and support the future vision for the precinct.

The neighbourhoods in the Ridgeline area are somewhat fragmented and disconnected by steep topography and large infrastructure. North East Link should avoid or minimise further fragmentation and also connect and 'knit' communities and land uses together where opportunities exist. In particular, walking and cycling connections must support the '20-minute neighbourhoods' of Watsonia and Macleod (and the La Trobe NEIC beyond).

The built form of North East Link should be well integrated and respond to the ridgeline design character area (including the urban setting, topography, geology, views and landform) and minimise the project's visual impacts.

The community in the Ridgeline design character area is diverse, with a prevalence of aged care facilities and schools. It is important the North East Link design allows for the continued integration of the community.

Local gathering places are essential for providing places that promote familiarity and exchange among neighbourhood residents. North East Link would be in close proximity to facilities that service vulnerable people such as children and the elderly. Shade and other facilities that support walking and outdoor socialising are particularly important to these more vulnerable community members.

Simpson Barracks and the immediately surrounding area provides opportunities for the project to acknowledge, respect and commemorate those who have served, and to more strongly connect the local community to the army facility.

The project should take cues and be inspired by local natural assets, including the treed ridgelines, Plenty River Gorge, Gresswell Nature Forest, Banyule Creek and the vegetation within Simpson Barracks.

The M80 Ring Road to the northern project boundary is being progressively upgraded. North East Link must integrate seamlessly with any new or proposed works to the M80 Ring Road to provide a coherent journey.



Low-rise suburban residential houses with distant views to ridgelines

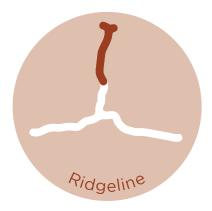


Watsonia Library



Gresswell Forest in Macleod

# 4.3 Place-specific requirements



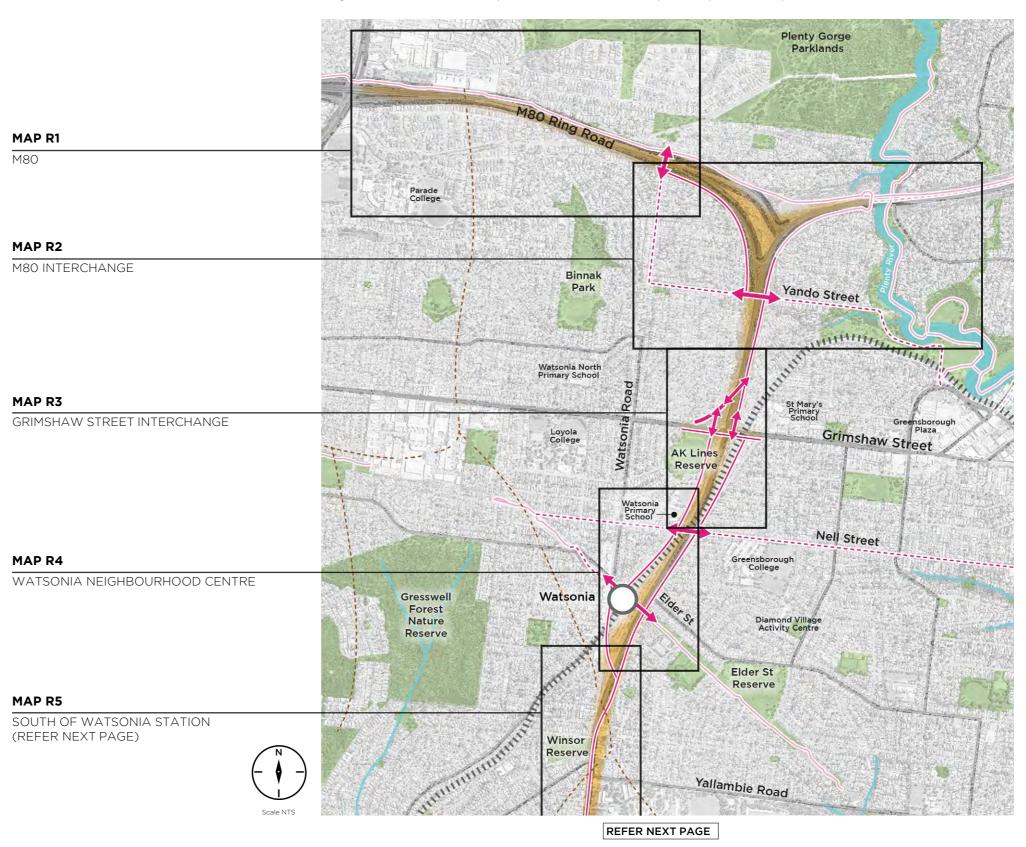
Place-specific requirements that must be met and addressed at locations within the Ridgeline design character area are outlined in this section. These requirements have been prepared in close collaboration with key stakeholders so the community's expectations and local level issues are considered as the design develops.

The requirements for the individual maps have been categorised under the most relevant principle, acknowledging the requirements may relate to multiple principles.

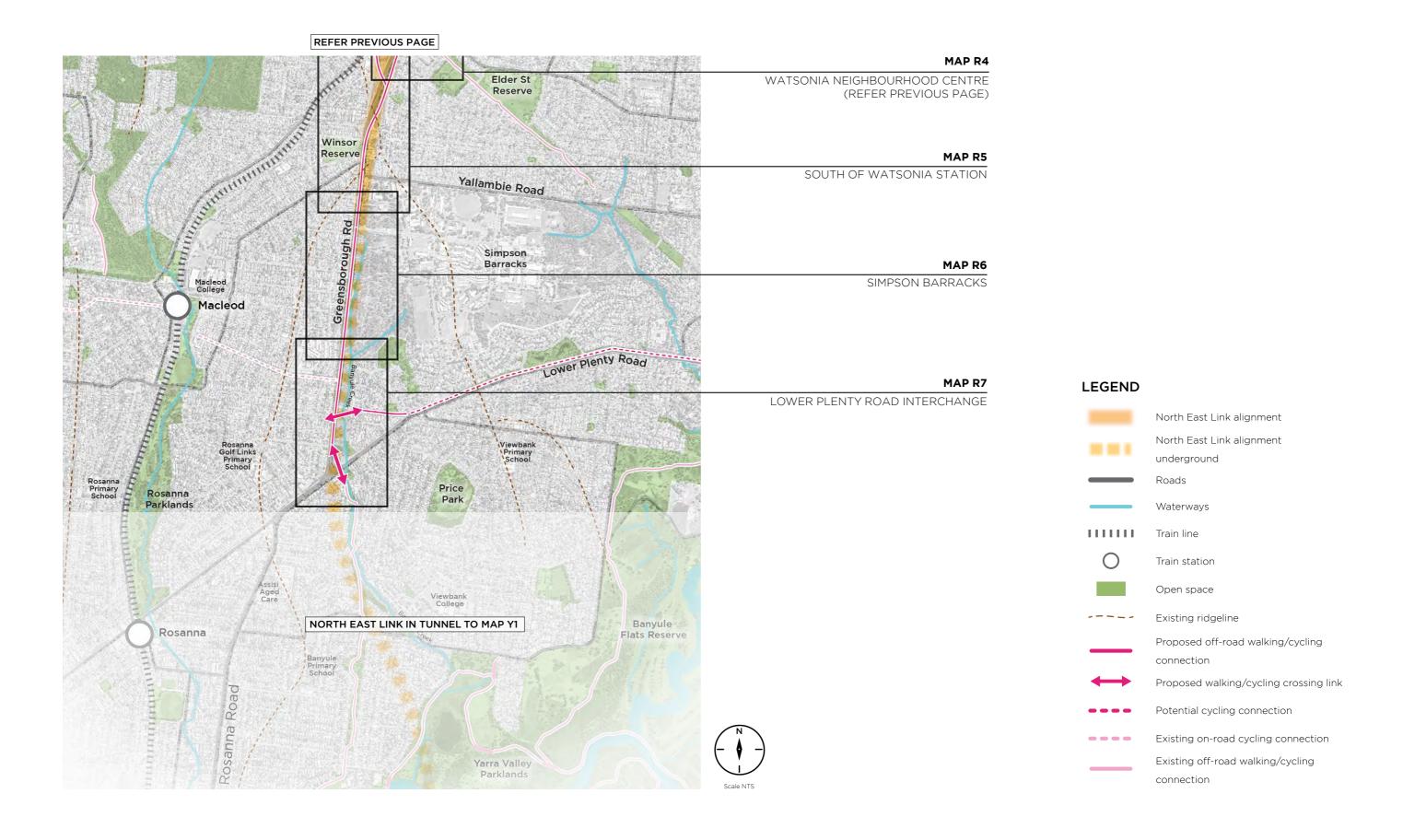
It is to be noted that cycle and pedestrian paths are shown as a functional layout and it is possible that an equivalent and acceptable level of connectivity could be achieved in an alternative manner.

### **KEY PLAN**

This key plan shows the Ridgeline design character area and the proposed North East Link alignment. Individual maps are used to outline place-specific requirements.



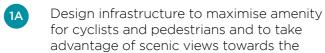
#### 4. RIDGELINE AREA



# MAP R1: M80









# Connectivity, Wayfinding & Accessibility





Provide a new walking and cycling connection north-south across the corridor near Macorna Street that links to the proposed off road cycle route along the south of the M80 Ring Road.

Dandenong Ranges at the M80 crossing.



# **Amenity, Vibrancy & Safety**

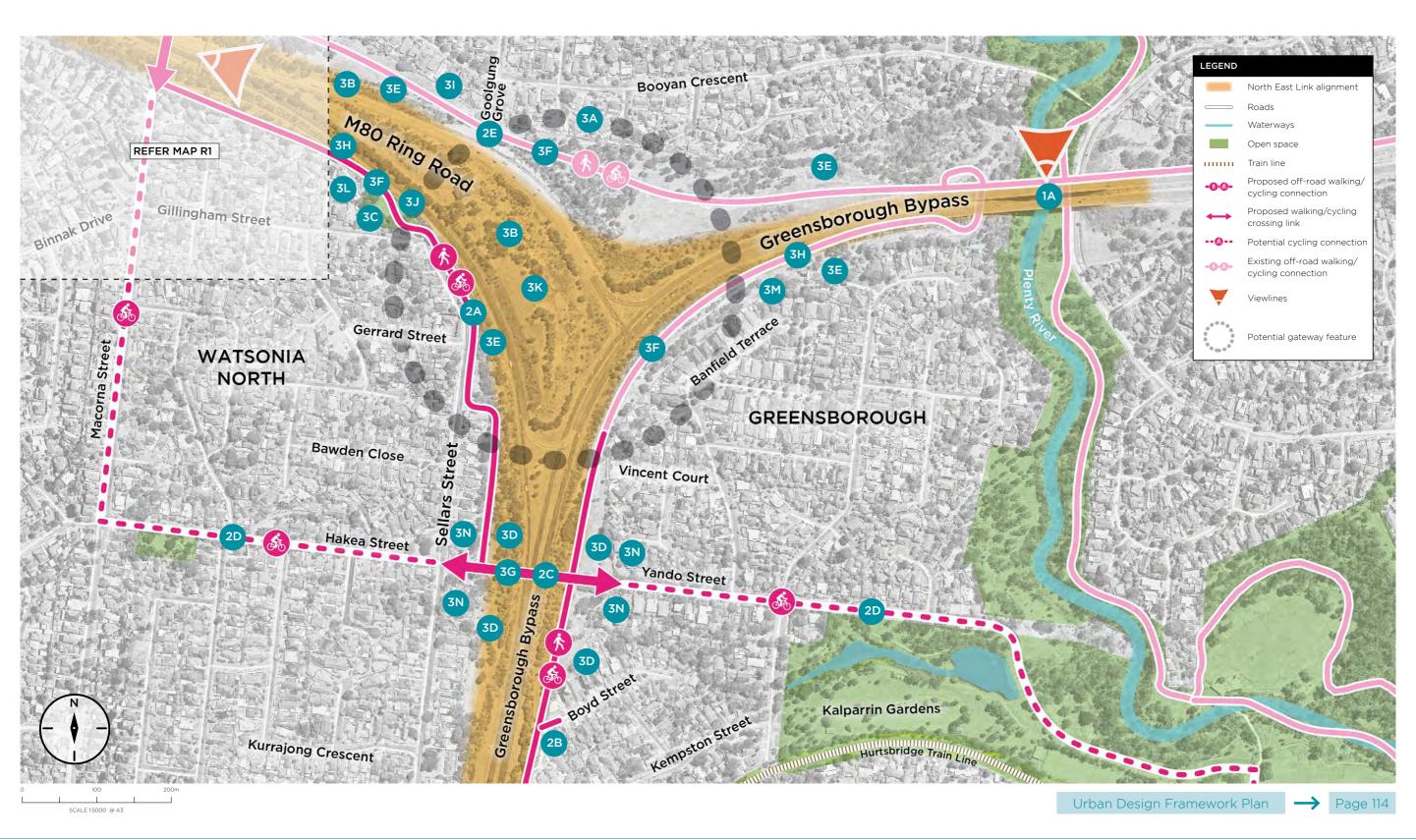
Minimise overlooking and overshadowing to residential properties adjacent to M80 Ring Road interchange in the south-west, including Gillingham Street.



- Reinstate native tree and understory planting within the road landscape (of the M80 Ring Road and the proposed road corridor) to reinforce the green roadside character.
- Carefully integrate and transition noise walls and other infrastructure (planned or constructed) as part of the M80 Ring Road upgrade.
- Replace existing timber noise walls located along M80 Ring Road and Greensborough Bypass with new high quality noise walls that maximise solar access (particularly on the southern side).
- Noise walls to the north of the M80 Ring Road are to take advantage of views towards surrounding vegetation and promote new vistas for travellers.
- Reinstate tree and shrub planting adjacent to the M80 (north and south) between residential areas and the road interface to filter and screen views towards roadway and built infrastructure. Use native and indigenous planting to reinforce the existing native character.
- Minimise overshadowing to residential properties to the south of the M80 Ring Road.



MAP R2: M80 INTERCHANGE







Design infrastructure to maximise amenity for cyclists and pedestrians and to take advantage of scenic views towards Plenty Gorge and Plenty River at the Greensborough Bypass crossing (over the Plenty River).



# Connectivity, Wayfinding & Accessibility



Provide a new off-road walking and cycling path connecting the M80 Ring Road trail to Yando/Hakea Street crossing and Sellars Street.



Provide a path connection from Boyd Street to the Yando Street walking and cycling path.



Maintain and enhance an east-west walking and cycling connection across the corridor between Yando and Hakea Streets. Any new east-west cycle crossing must connect with the Greensborough Bypass Trail.



east-west cycling connection (to be delivered by others) from M80 Ring Road to increase accessibility to Greensborough Activity Centre further to the east. Provide a safe walking and cycling connection



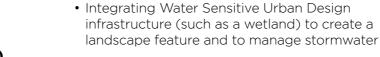
to Booyan Crescent via Goolgung Grove from the M80 Ring Road Path subject to planning approvals for works outside the project boundary.



# Amenity, Vibrancy & Safety



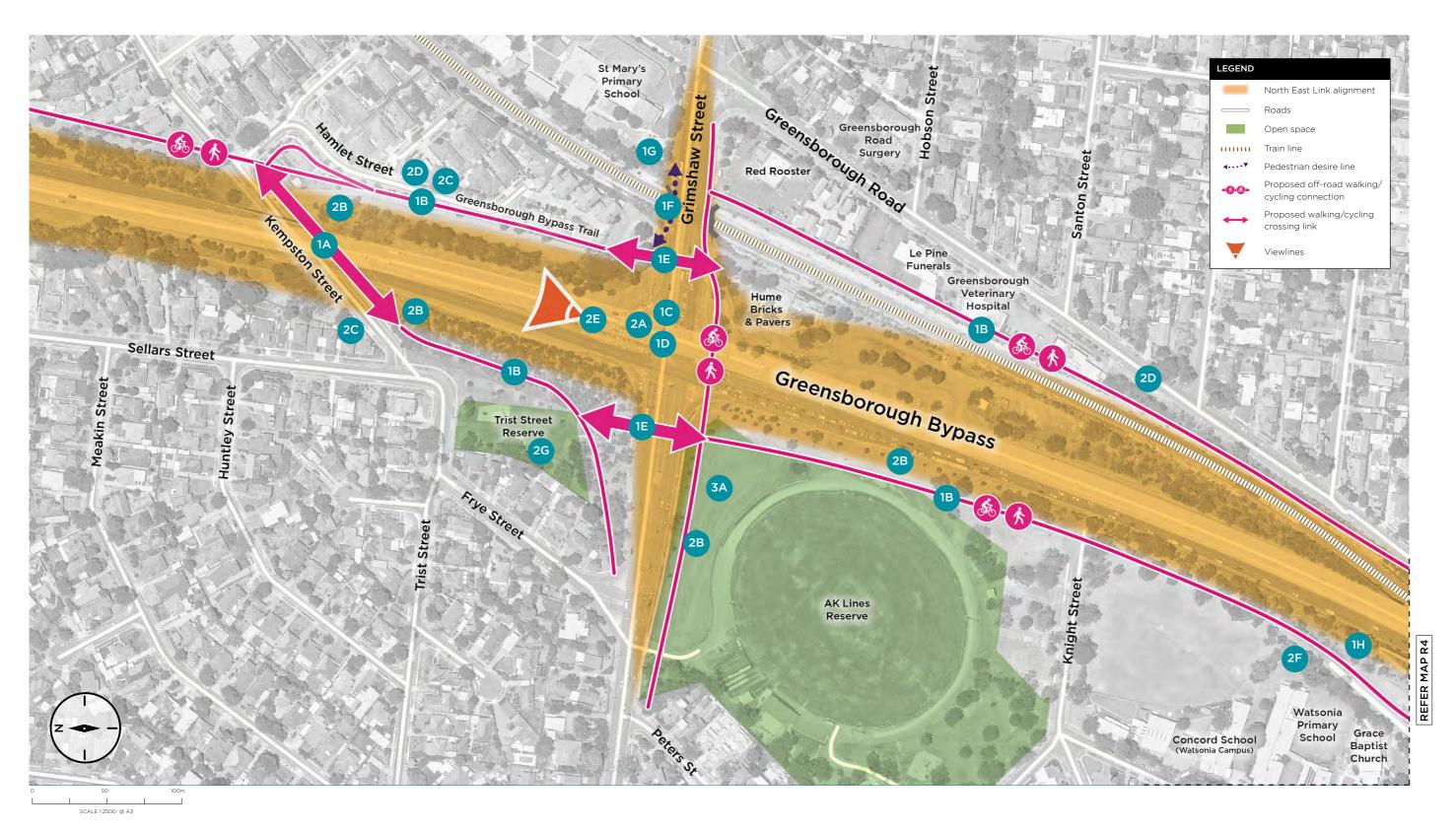
Create a high quality navigational feature at the M80 Ring Road interchange to address the road environment while reducing the visible impact towards adjoining residential areas. Use distinctive elements to provide features and landmarks for navigation including:



- Landscaping which takes inspiration from surrounding natural assets such as the Plenty River
- Using indigenous planting to support biodiversity and habitat
- Built form for the interchange should be well integrated and responsive to the Ridgeline design character area (including the urban setting, topography, geology, views and landform), and visual impacts should be minimised from the adjacent residential areas.
- Reinstate native tree and understory planting within the road landscape (of M80 Ring Road, Greensborough Bypass and the proposed road corridor) to reinforce the green roadside character.
- Maintain the amenity and function of the open space east of Gillingham Street including tree planting and screening to improve the interface with the M80 Ring
- Maximise planting on both sides of the Greensborough Bypass and the proposed road corridor to maintain a treed outlook and the local character around Watsonia North and Greensborough.
- Reinstate tree and shrub planting adjacent to the M80 Ring Road (north and south) between residential areas and the road interface to filter and screen views towards roadway and built infrastructure. Use native and indigenous planting to reinforce the existing native character.

- Re-establish vegetation on the embankment and between paths around the M80 Ring Road interchange to filter and screen views towards road infrastructure from residential areas and walking/ cycling paths.
- Reinstate tree and shrub planting adjacent to residential areas in Watsonia North and Greensborough so that impacts to views and solar access are avoided and minimised.
- Replace existing timber noise walls located along M80 Ring Road and Greensborough Bypass with new high quality noise walls that maximise solar access (particularly on the southern side).
- Noise walls to the north of the M80 Ring Road interchange are to provide visual amenity on both the road and residential interfaces and seek to frame views towards surrounding vegetation and promote new vistas for travellers.
- Carefully integrate and transition noise walls and other infrastructure (planned or constructed) as part of the M80 Ring Road upgrade.
- Locate any screens and barriers between viaducts at the M80 Ring Road interchange and existing dwellings so that impacts on views and solar access are avoided or minimised.
- Minimise overlooking and overshadowing to residential properties adjacent to M80 Ring Road interchange in the south-west, including at Gillingham
- Minimise overshadowing to residential properties to the south of the Greensborough Bypass.
- Minimise overlooking and overshadowing to residential properties to the east and west of Yando Street shared use overpass.

MAP R3: GRIMSHAW STREET INTERCHANGE





# Connectivity, Wayfinding & Accessibility



- Improve pedestrian environment at Kempston Street (such as lighting) and provide a new walking and cycling connection along Kempston Street to improve eastwest connectivity between Watsonia and Greensborough.
- Provide new walking and cycling paths from Kempston Street to Grimshaw Street (on the east and west side of Greensborough Bypass) which link to the new grade separated crossings under Grimshaw Street and continue
- Enhance the walking and cycling environment along Grimshaw Street to improve connections to St. Marys Catholic Primary School and neighbourhood integration between communities to the east and west of Greensborough Road.
- Maintain, improve or provide new at-grade pedestrian crossings and footpaths across Grimshaw Street.
- Provide grade separated north-south walking and cycling links across Grimshaw Street to allow seamless movements.
- Provide a direct pedestrian connection from the new walking and cycling path on the north east side of Grimshaw Street interchange to St Mary's Catholic Primary School to strengthen connectivity to the school and surrounding neighbourhood.
- Ensure that the design has regard to the setting and operational requirements of St Marys Primary School.
- Ensure the design has regard to the setting and operational requirements of Watsonia Primary School



# Amenity, Vibrancy & Safety





- Utilise the existing viewlines to create a feature landscape and/or built treatment at the Grimshaw Street intersection. The feature treatment should provide a wider context to navigate drivers, pedestrians and cyclists and acknowledge the role of Grimshaw Street as a threshold to Greensborough shopping centre. Use landscaping to reduce the apparent scale and expanse of hard paving at the road intersection.
- Provide buffer planting between the road interface to filter views towards road infrastructure from surrounding open space and adjacent reserves (including AK Lines Reserve and Trist Street Reserve). Use native and indigenous planting to reinforce the existing native character.
- Ensure new noise walls on ground level on either side of the Greensborough Bypass and the proposed road corridor address visual amenity on both the road and residential interfaces, and deter graffiti at lower levels while maximising light penetration to enhance solar access for surrounding community.
- Maximise vegetation (such as street tree planting) along Greensborough Road and Hamlet Street to improve streetscape amenity.
- Take advantage of long views to Kinglake and the Great Dividing Ranges from the Greensborough Bypass.
- Collaborate with Watsonia Primary School and Concord School to reinstate planting and canopy shade trees between the school and the walking and cycling path.
- Replace planting in Trist Reserve where upgrades are being undertaken by the project and do not preclude future opportunities for the land owner to provide additional park infrastructure.

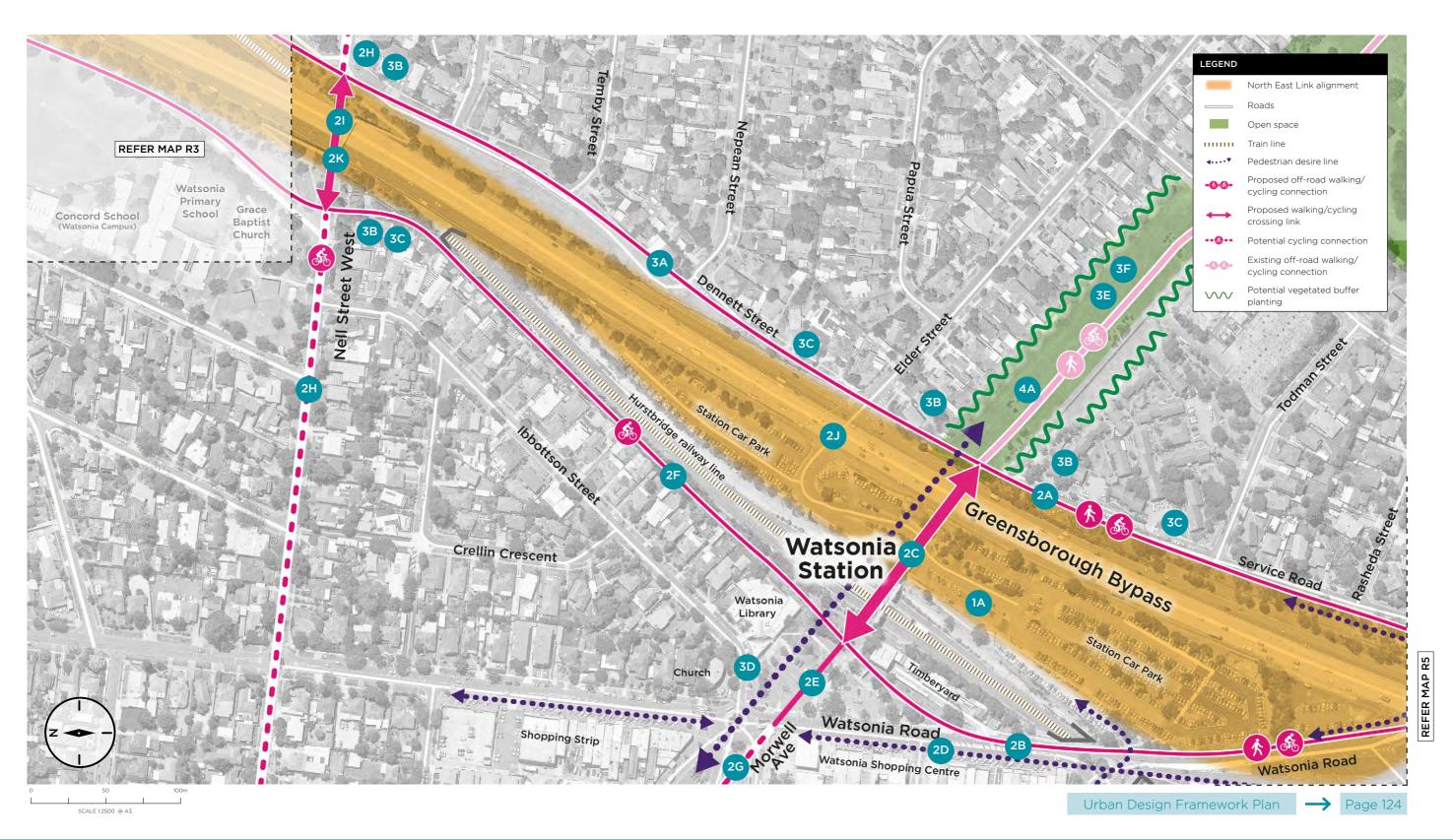


## **Resilience & Sustainability**



Collaborate with relevant authorities to consider the storage and reuse of rainwater at AK Lines Reserve.

MAP R4: WATSONIA NEIGHBOURHOOD CENTRE





## **Urban Integration**

**Watsonia Station Precinct** 

- Maximise opportunities for land use and transport integration and ensure the project design has regard to relevant State and local government strategic land use plans.
- The project design seeks opportunities to consolidate land parcels and minimise the fragmentation of land parcels.
- Built form should be well integrated, provide for passive surveillance and respond to the urban setting.
- Design the road network to accommodate vehicle and pedestrian access to residual land parcels.
- Ensure the road configuration accessing Watsonia Station car park and bus interchange is in accordance with relevant Victorian Government transport agency requirements.
- Ensure no net loss of vehicle parking at Watsonia Station.



# Connectivity, Wayfinding & Accessibility



Provide a new north-south walking and cycling route to the eastern side of the corridor, connecting to the existing Greensborough Bypass Trail to the north, and the Banyule Trail to the south.



Provide a new north-south off-road walking and cycling path to the western side of the corridor which links Watsonia Shopping Centre and Watsonia Station to the southern end of the station carpark.



Ensure there are pedestrian connections to Watsonia Station platforms that addresses key desire lines, enhance sightlines, wayfinding and legibility for walking and link to the walking and cycling paths/bridge.

- Enhance pedestrian and cycling connections to Watsonia Station and the Watsonia Neighbourhood Centre from residential areas to the east and south-east; to increase accessibility to an activity centre which can service everyday needs (consistent with Plan Melbourne's 20 Minute Neighbourhood strategy).
- Provide new off-road walking and cycling path in east-west direction to link from Watsonia Road to Watsonia Station.
- Provide a new cycling connection between Nell Street West linking to Watsonia Shopping Centre.
- Ensure new infrastructure supports the new off-road cycling connection parallel to Morwell Avenue (to be delivered others) which will link the existing East-West Power Easement Trail to the west with the Watsonia Neighbourhood Centre.
- Ensure new infrastructure supports a new eastwest cycling connection (to be delivered by others) along Nell Street and Nell Street West.
- Replace existing Nell Street pedestrian bridge with new high quality, wider, walking and cycling crossing that connects the east and west side of the corridor. Crossing is to link into the surrounding path networks and to Watsonia Primary School.
- Provide a direct vehicle connection from Elder Street to Watsonia Station car park which could facilitate an at-grade walking and cycling crossing.
- Ensure the design of the Nell Street pedestrian bridge has regard to the setting and operational requirements of Watsonia Primary School.



# Amenity, Vibrancy & Safety



Provide additional tree planting along pathways, streets and in carparks within the project corridor wherever possible to reinforce Watsonia's leafy character, contribute to the urban forest, enhance amenity and provide shade.



Minimise overlooking to residential properties from proposed walking and cycling bridges at Nell Street and Watsonia Station.



- Provide a planted interface with Greensborough Road to filter views of road infrastructure from adjacent residential areas.
- Enhance the quality of public open space in Watsonia where walking and cycling upgrades are being undertaken by the project.

Do not preclude the future delivery (by others) of enhancements to public open space for the shopping strip and improvements to create a high quality entrance to the station focused around Watsonia Library.



Should project works directly impact the transmission easement between Greensborough Road and Frensham Road, improve the amenity and the quality of open space by:

- Providing additional planting / buffer planting to residential fencing subject to the approval of the relevant Utility Service Providers.
- Upgrading the existing East-West Power Easement Trail



\*Consider improvements to the amenity and quality of the open space along the transmission easement between Greensborough Road and Frensham Road by implementing Water Sensitive Urban Design infrastructure (such as vegetated swales or raingardens) to manage stormwater.



## **Resilience & Sustainability**



New planting in the transmission easement must be indigenous to strengthen local biodiversity and habitat within the 'Powerline Link' biodiversity corridor.

\*Opportunities which are outside the scope but may be delivered by others and/or would be beneficial for the contractor to implement.

MAP R5: SOUTH OF WATSONIA STATION





## **Urban Integration**



Provide open space and planting opportunities above the road alignment via land bridges (or similar) that are aligned to other adjacent open spaces and potential Greensborough Road crossing points. Ensure that there is useable open space at ground level in order to extend the sense of integration between either side of the road corridor. Paths are to be provided across any land bridges to create exercise and recreational opportunities.



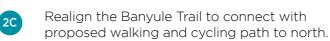
# Connectivity, Wayfinding & Accessibility

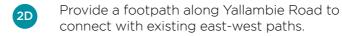


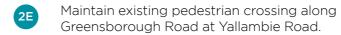
Provide pedestrian path links to Wittman Reserve, Service Road and Watson Street.



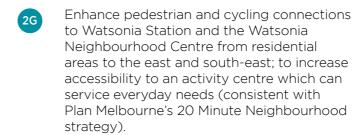
Provide a new walking and cycling path parallel to Greensborough Road between Watsonia Road and Yallambie Road to complete the missing link between the Greensborough Road path and Watsonia.















## Amenity, Vibrancy & Safety



Use screen planting where appropriate to mitigate views to barriers and road infrastructure.

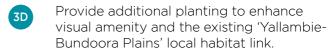


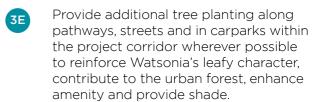


Provide vegetated buffer planting to residential interfaces to improve appearance.



Improve the landscaping along Greensborough Road by creating an avenue of indigenous shade trees with seating opportunities while maintaining safety for all road users.







Provide a planted interface with Greensborough Road to filter views of road infrastructure from adjacent residential areas.



MAP R6: SIMPSON BARRACKS







Retain the memorial at Simpson Barracks Should relocation be required, this is to be undertaken in close consultation with relevant stakeholders.

Consider providing a design response that acknowledges, respects, commemorates and more strongly connects the Simpson Barracks with the community (subject to approval from Department of Defence and Simpson Barracks) by:

- Exploring the use of design to interpret cultural and historic aspects of the Barracks
- Creating space/s for community gathering and reflection
- Integrating memorial elements and/or commemorative planting.



# Connectivity, Wayfinding & Accessibility



- Upgrade the Banyule Trail (north of Lower Plenty Road) to be a high quality, suitably wide and functional connection that creates a pleasant and attractive journey for users.
- Provide an additional pedestrian crossing on Greensborough Road at Strathallan Road to improve walkability to facilities and bus stops.
- Provide a new walking and cycling path east of the proposed road alignment to connect with the pedestrian crossing at Strathallan Road (to the north) and the Drysdale-Moorwatha eastwest corridor (to the south).
- Realign the Banyule Trail to connect with proposed walking and cycling path to north.
- Provide wayfinding and access to Banyule Creek from the Banyule Shared Trail (such as signage or granitic sand tracks).



## Amenity, Vibrancy & Safety



Provide additional buffer planting to filter views from residential areas to walls and road infrastructure.

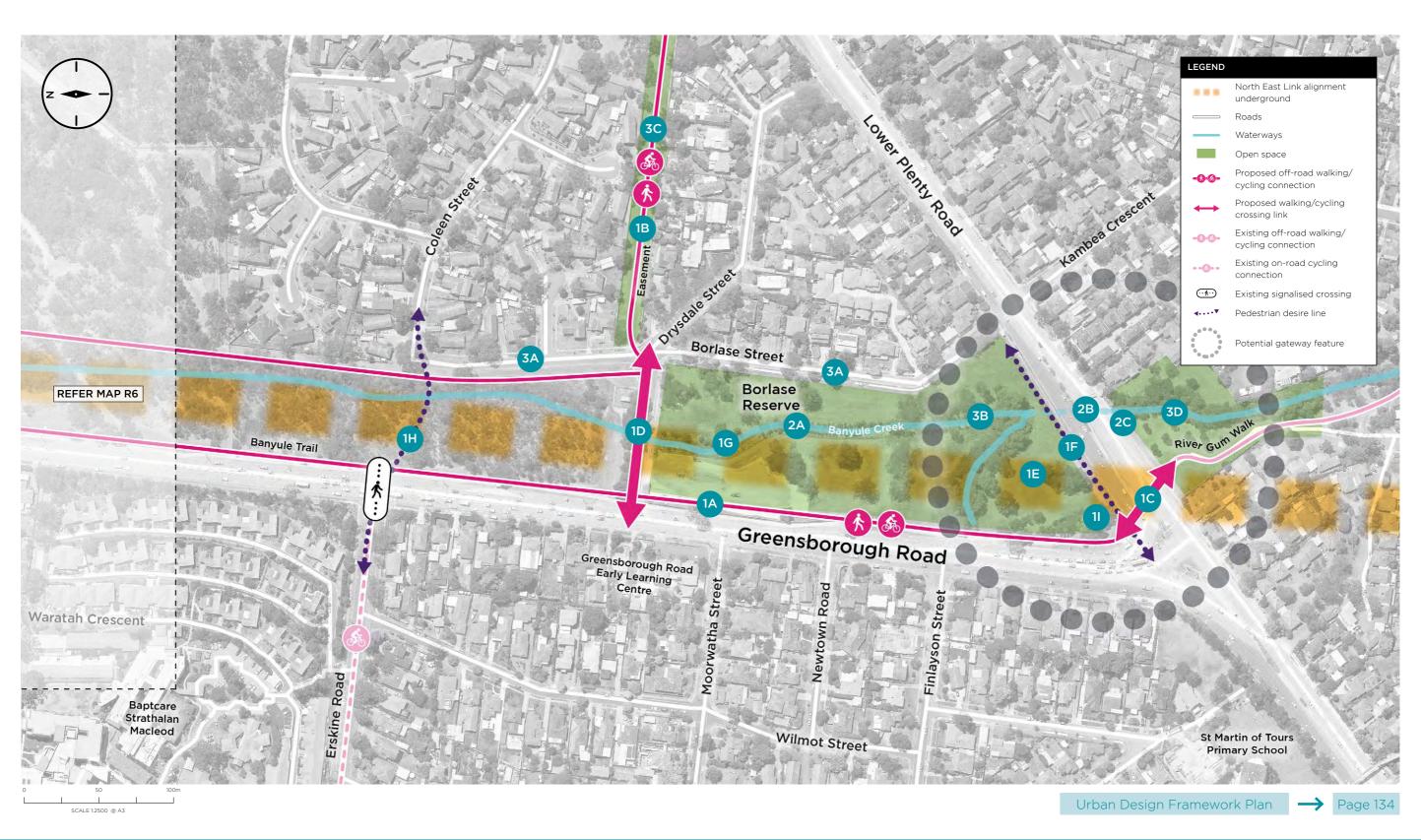


- Minimise impacts to Banyule Creek from road infrastructure and enhance and extend the natural values of Banyule Creek to improve appearance, biodiversity, habitat and recreational values.
- Maintain and reinforce views from residential areas towards trees where possible. Prioritise the retention and enhancement of local views to the Simpson Barracks woodland.
- Improve the landscaping along Greensborough Road by creating an avenue of indigenous shade trees with seating opportunities while maintaining safety for all road users.
- Use screen planting where appropriate to mitigate views to barriers and road infrastructure.



Mount Cooper Lookout towards ridgelines

MAP R7: LOWER PLENTY ROAD INTERCHANGE





# Connectivity, Wayfinding & Accessibility

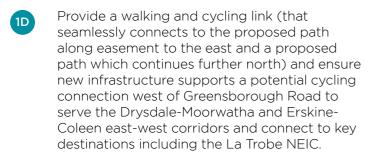


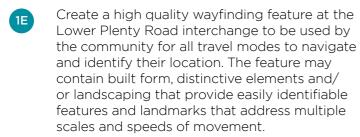
Upgrade the Banyule Trail (north of Lower Plenty Road) to be a high quality, suitably wide and functional connection that creates a pleasant and attractive journey for users.



Provide a new east-west walking and cycling path along the easement connecting to Lower Plenty Road to the east and continuing towards the Plenty River trail.







- Enhance access to local primary schools such as Rosanna Golf Links and St Martin of Tours through improved and safe walking links across the Lower Plenty Road interchange and connecting to River Gum Walk.
- Provide wavfinding and access to Banvule Creek from the Banyule Shared Trail (such as signage or granitic sand tracks).
- Provide a secondary connection (such as a gravel path) from Coleen Street to Erskine Road.
- Ensure that the design has regard to the setting and operational requirements of Rosanna Golf Links and St Martin of Tours.

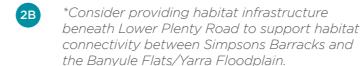


## **Resilience & Sustainability**



Provide landscaping to improve appearance and use indigenous planting to support biodiversity and habitat.

Through the design of Water Sensitive Urban Design infrastructure, consider management of stormwater and opportunities to reflect the 'naturalistic' values of Banyule Creek.







## Amenity, Vibrancy & Safety



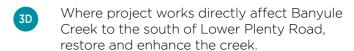
Provide additional buffer planting to filter views from residential areas to walls and road infrastructure.



Minimise impacts to Banyule Creek from road infrastructure and enhance and extend the natural values of Banyule Creek to improve appearance, biodiversity, habitat and recreational values.



Through the design process, consider enhancing landscaping along the grassed easement to improve user amenity for walkers and cyclists, subject to approval of the land owner/manager.



<sup>\*</sup>Opportunities which are outside the scope but may be delivered by others and/or would be beneficial for the contractor to implement.

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## **5.1 Contextual narrative**

The Yarra River Valley design character area has many unique qualities. Situated within a floodplain, the area is part of an integrated natural system of low-lying wetlands, swamps, flats, billabongs and riparian woodland, centred around the meandering and ancient Yarra River. Connecting to the Yarra River are a network of tributaries that include Merri Creek, Darebin Creek and Koonung Creek.

The Yarra River's lands and waterways have spiritual and cultural significance for Aboriginal communities. To the Wurundjeri people, the Yarra River is known as Birrarung and is a life source and important meeting place.

The parklands, open spaces and continuous vegetated landscapes along the river provide much valued places for Melbournians and visitors for relaxation, recreation and socialisation. Open spaces downstream of Bulleen are the locations for a number of sports fields, golf courses and smaller parkland areas. The Yarra River is also an important biodiversity and wildlife corridor. The area also has vegetation that has heritage value and which contributes to the local landscape character.

The Main Yarra Trail provides a popular commuter bicycle link along the banks of the Yarra River between the natural landscapes of the floodplain to the heart of the busy urban metropolis.

Where the river valley intersects with the oldest section of the Eastern Freeway (stage 1, 1971-1977), the roadway design is naturalistic and sophisticated. The Eastern Freeway was the first in Victoria to bring aesthetic and landscape considerations to the forefront of the design. Characteristics include natural rock escarpments, elegant concrete bridges, high mast lights, wide embankments, mature adjacent canopies of trees, restrained colours and material palette, and a clutter-free appearance.

The Eastern Freeway provides a calm driver experience and an 'experiential gateway' between the city and countryside. The Yarra River Valley design character area also has defining points of reference including the mast road lighting and bridges, and views towards Melbourne city.

The suburban residential areas between the Yarra River parklands are mostly hidden from the view of road users. The houses and dwellings are often behind vegetation, faded timber noise walls, and grassed earth and rock cuttings.

Key cultural places include the Yarra River (Birrarung), Bolin Bolin Billabong, Eaglemont Estate (designed by Walter Burley Griffin and Marion Mahony Griffin) and the Heide Museum of Modern Art. Other places include locally and regionally significant open spaces, conservation areas, recreation facilities, golf courses and sports facilities.

In the late 19th century, the picturesque landscapes of the Yarra River inspired the Heidelberg School (also known as the Australian Impressionists). Today you can follow the Heidelberg School Artists Trail and explore where some of Australia's most important artists painted or lived.

Within the Yarra River Valley design character area, North East Link would be in twin tunnels beneath the Yarra River and Banyule Flats, travelling south underground to a new interchange at Manningham Road. The tunnels would continue to the southern portals. A ventilation structure would be located close to the southern portal. A new interchange would connect North East Link to the Eastern Freeway at Bulleen Road. Modifications to the Eastern Freeway from Bulleen Road to Hoddle Street would include widening to accommodate future traffic volumes and new dedicated bus lanes for the Doncaster Busway.

# 5.2 Values & priorities

In the Yarra River Valley design character area the project corridor would mostly follow the Yarra River valley in line with Bulleen Road, before following the river valley along the Eastern Freeway into Melbourne's inner city areas. Significant residential and retail growth is expected closer to Melbourne's CBD. This includes urban renewal at the Johnston Street Activity Centre and a large-scale residential development at the Alphington Paper Mill. The southern extent of the La Trobe National Employment and Innovation Cluster (NEIC) to the west of the Yarra River and Banksia Street features a growing number of multi-storey residential apartments and townhouses located around the Heidelberg railway station within the Heidelberg Activity Centre. As the project corridor moves further from the city the current low-rise residential character is expected to be retained except in identified areas such as activity centres.

The Yarra River and the landscape it passes through would continue to play a key role in the identity of Melbourne, providing environmental, aesthetic, cultural, recreational and tourism benefits. The Yarra River and its surrounding parklands are of high importance to Victoria, and the public parklands and open spaces along the river are collectively declared as the Greater Yarra Urban Parklands. North East Link should integrate and respond to the distinctive setting as well as the future context of the area. The project must enhance the social and environmental values of the Greater Yarra Urban Parklands.

This UDS aligns with and supports the relevant principles under the Yarra River Protection (Willip-gin Birrarung Murron) Act 2017, see 8.1.

The upgrades to the Eastern Freeway in the Yarra River Valley design character area would mainly occur within the existing road corridor. The project design should retain and conserve the fabric and aesthetic qualities of the Eastern Freeway (stage 1) design.

The Eastern Freeway interchange at Bulleen Road, and the southern ventilation structure and building are significant elements which should be sensitively designed with regard to siting and form. The Doncaster Busway along the Eastern Freeway, and the redevelopment of the Boroondara Tennis Centre into a new Park and Ride facility, present major project opportunities for land use and transport integration, and would create a great public transport user experience with well-integrated services that enhance the commuter journey. The Bulleen Industrial Park would be impacted by the new Manningham Road interchange. This site presents opportunities for urban renewal, localised enhancements and improved interfaces with the Yarra River.

Bulleen Road and the Eastern Freeway are currently barriers for the community to access the open spaces along the Yarra River. It is a priority to provide enhanced crossings and connections to natural assets, facilities, open spaces and cultural places in Bulleen, and to maximise cycle and pedestrian access and connections across the Eastern Freeway.

The project provides opportunities to improve and create new cycling routes into Melbourne's inner city areas along the Eastern Freeway alignment, and to Heidelberg railway station.



Eastern Freeway viewing to Melbourne city skyline



Heide Museum of Modern Art Sculpture Park



Yarra River

# 5.3 Place-specific requirements



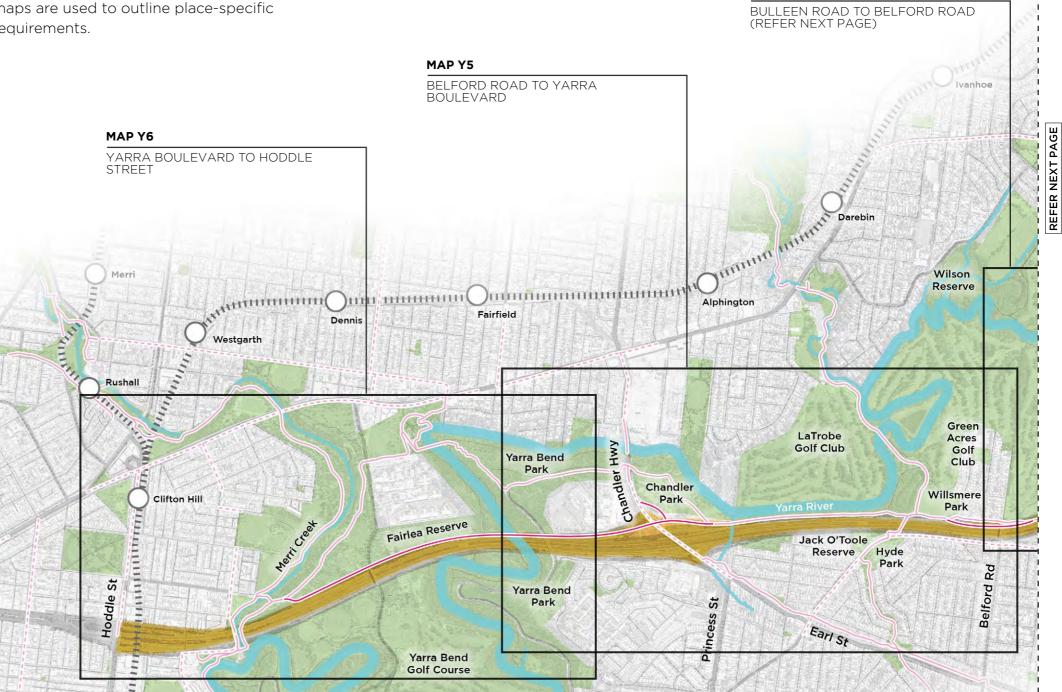
Place-specific requirements that must be met and addressed at specific locations within the Yarra River Valley design character area are outlined in this section. These requirements have been prepared in close collaboration with key stakeholders so the community's expectations and local level issues are considered as the design develops.

The requirements for the individual maps have been categorised under the most relevant principle, acknowledging that the requirements may relate to multiple principles.

It is to be noted that cycle and pedestrian paths are shown as a functional layout and it is possible that an equivalent and acceptable level of connectivity could be achieved in an alternative manner.

#### **KEY PLAN**

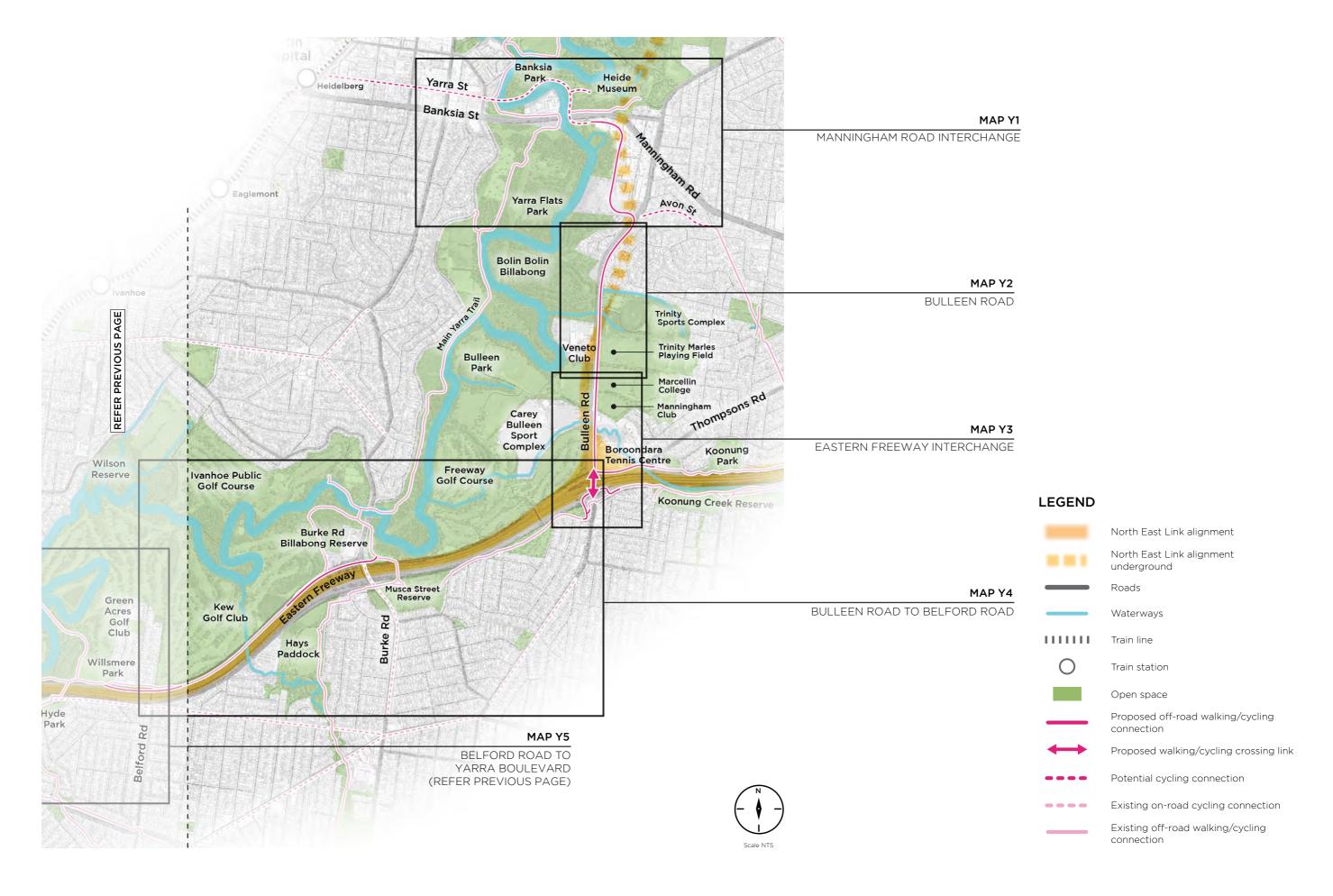
This key plan shows the Yarra River Valley design character area and the proposed North East Link alignment. Individual maps are used to outline place-specific requirements.



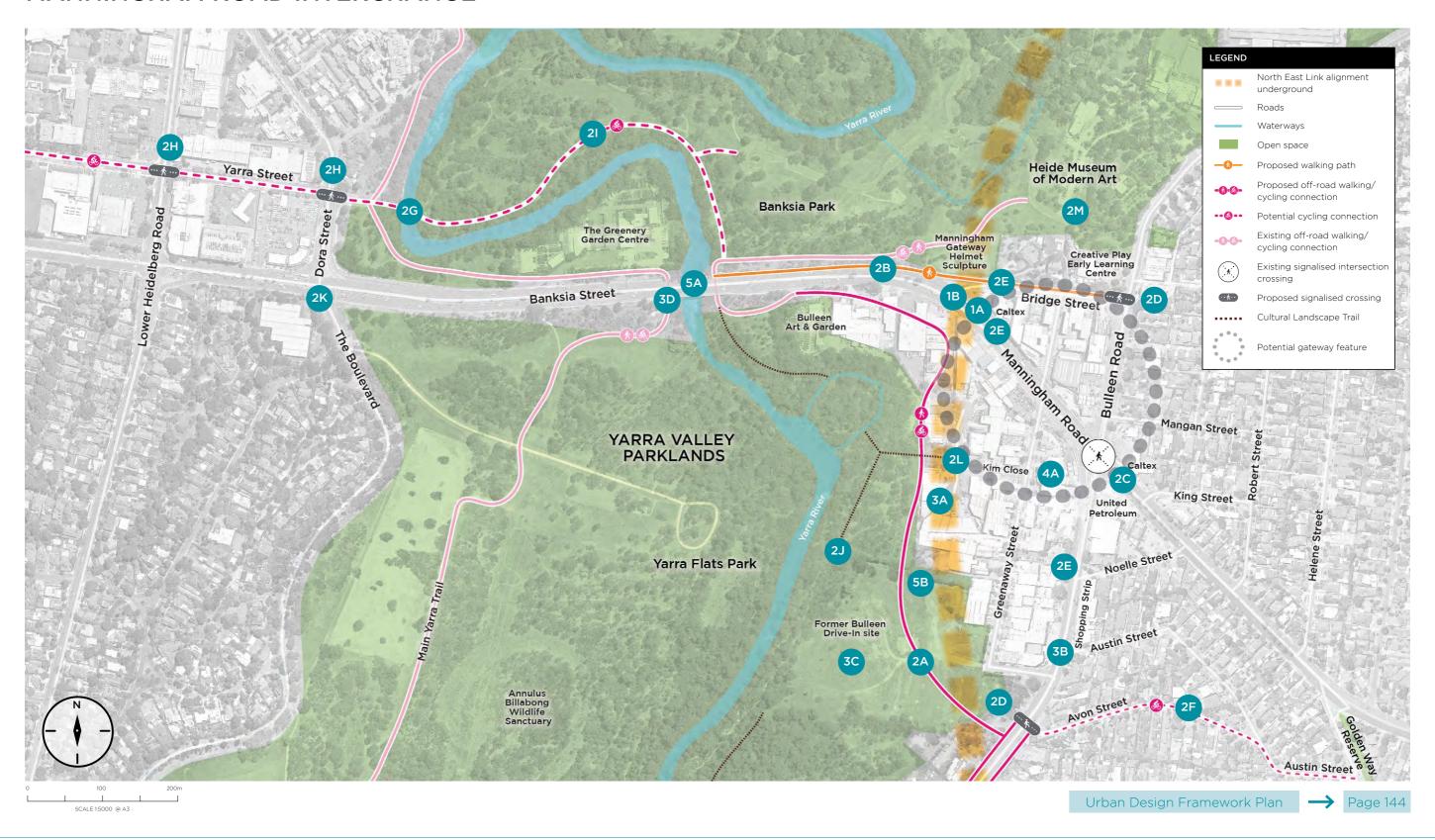
MAP Y4



#### 5. YARRA RIVER VALLEY AREA



MAP Y1: MANNINGHAM ROAD INTERCHANGE





- Create a high quality navigational feature at the Manningham Road interchange that complements and respects the role of the existing Manningham Gateway 'Helmet' sculpture in Banksia Park, and signifies the entry into this important cultural and heritage precinct which includes the Heide Museum of Modern Art and the Yarra River Parklands.
- All practical design alternatives to retain the existing significant River Red Gum should be explored. If removal cannot be avoided, provide legacy actions in consultation with key stakeholders.



# Connectivity, Wayfinding & Accessibility

- Provide off-road walking and cycling paths through Yarra Flats Park and to the east of Bulleen Road to improve connectivity from Banksia Street down towards Koonung Creek Trail further to the south.
- Provide a pedestrian path on the northern side of Bridge Street to connect Bulleen Road residents to the Heidelberg Activity Centre.
- Maintain a signalised crossing across Bulleen Road at Manningham Road.
- Provide new signalised crossings across Bulleen Road at both Bridge Street and Avon
- Upgrade footpaths along Manningham Road. west of Bulleen Road and south of Bridge Street.
- Ensure new infrastructure supports a new onroad cycling connection (to be delivered by others) along Avon Street to provide a link to Golden Way Reserve.
- Ensure new infrastructure supports a new walking and cycling crossing over the Yarra River (to be delivered by others) linking to a potential on-road east-west cycling route along Yarra Street (further to the west) to improve links to Heidelberg railway station.

- Ensure new infrastructure supports new signalised crossings (to be delivered by others) along Yarra Street at the intersections with both Dora Street and Lower Heidelberg Road.
- Ensure new infrastructure supports upgrading existing path through Banksia Park to a high quality, suitably wide and functional walking and cycling path (to be delivered by others) linking the potential Yarra River crossing and Banksia Street, with a path connection to the Heide Museum of Modern Art.
- \*Consider reinstating and extending the informal path as part of the Cultural Landscape
- \*Consider a trail connection across Banksia Street in the north-south direction to the entrance of Yarra Flats Park as an alternative to the existing underpass.
- Provide appropriate walking and cycling path connections at the Manningham interchange that are convenient and link to key destinations and desire lines.
- Through the design process, consult with Heide Museum of Modern Art to understand future options for vehicle and pedestrian access, how they relate to the project and could be addressed.



## Amenity, Vibrancy & Safety





- Provide roadside planting with large canopy trees along Bulleen Road to enhance the area's 'green' character and role as a gateway to Melbourne's north-east.
- Maintain and enhance public access to the Yarra Valley Parklands including water access locations along the Yarra River.
- \*Consider enhancing the existing underpass (across the Yarra River under Banksia Street) to have clear sightlines, good lighting and be attractive to use.



# **Urban Integration**



Ensure the project design has regard to relevant State and local government strategic land use plans.

Consider enabling future land use opportunities by:

- Seeking opportunities to consolidate land parcels and minimise the fragmentation of land parcels
- Designing the road network to accommodate vehicle and pedestrian access to residual land parcels.

New built form must provide sensitive interfaces with the adjoining Yarra Valley Parklands. Built form should be integrated into the landscape to avoid or minimise visual impact of flood mitigation and other structures.



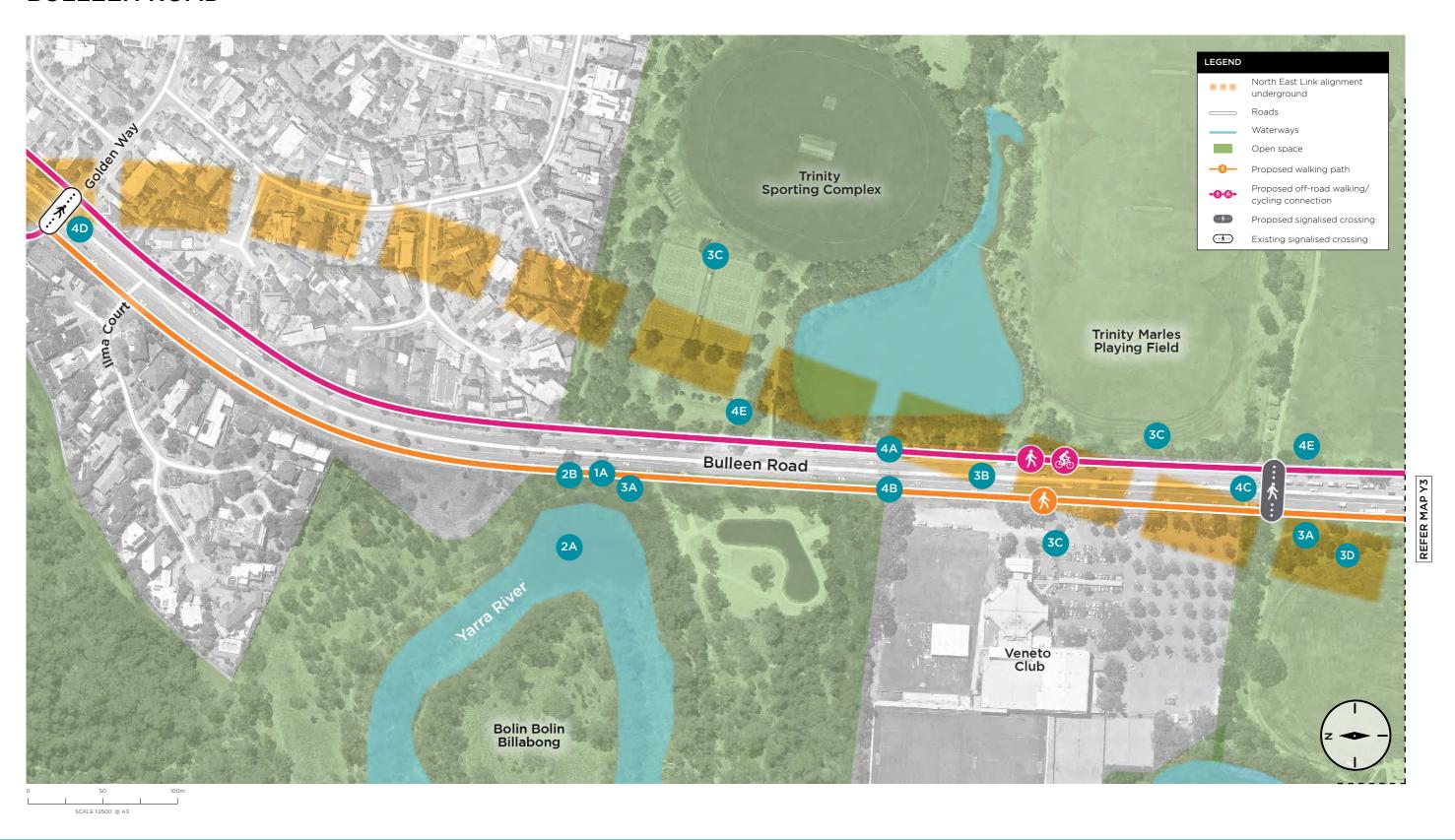
## **Resilience & Sustainability**

Should project works occur beneath the Manningham Road bridge, provide additional habitat beneath the bridge to support habitat connectivity along the Yarra River corridor.

Within the WSUD strategy consider opportunities to implement naturalistic Water Sensitive Urban Design elements (such as wetlands) around the Yarra Valley Parklands to treat stormwater. Seek opportunities to return treated flows to improve the waterway system associated with the Yarra River.

> \*Opportunities which are outside the scope but may be delivered by others and/or would be beneficial for the contractor to implement.

MAP Y2: BULLEEN ROAD





Revegetate the area around the new footpath at the interface with the Bolin Bolin Billabong (excluding the No-Go Zone area) in consultation with Wurundjeri Woi wurrung and relevant land owners/managers.





Enhance biodiversity and habitat links along the Yarra River corridor.

\*Consider the implementation of 'naturalistic' Water Sensitive Urban Design elements (such as wetlands) to treat stormwater and to return flows to the Yarra River and surrounding billabongs to support river health.



## Amenity, Vibrancy & Safety

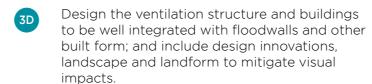
Minimise the visibility of road infrastructure from the Yarra River and the Bolin Bolin Billabong. Plant indigenous trees and vegetation to filter views.



Provide roadside planting with large canopy trees along Bulleen Road to enhance the area's 'green' character and role as a gateway to Melbourne's north-east.



Use screen planting where appropriate to mitigate views to barriers and road infrastructure from Trinity Grammar School and the Veneto Club.





# Connectivity, Wayfinding & Accessibility



Provide an off-road walking and cycling path on the east side of Bulleen Road to improve north-south connections.



Provide a footpath along the west side of Bulleen Road to improve north-south and eastwest connections.

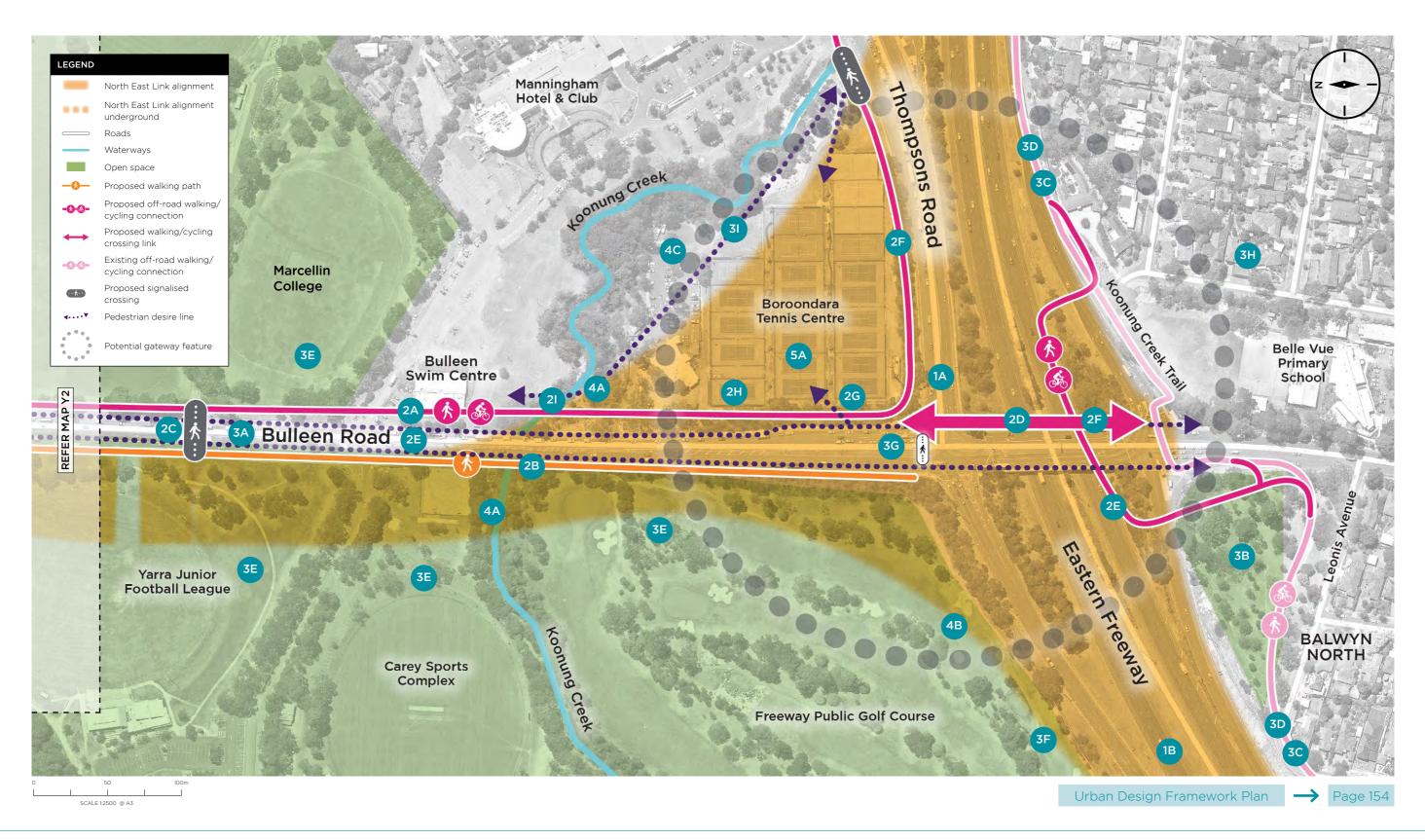


the east.

- Maintain a signalised crossing across Bulleen Road at Golden Way.
- Ensure direct access to Trinity Grammar School and Marcellin College from Bulleen Road.

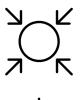


MAP Y3: EASTERN FREEWAY INTERCHANGE





- Design the Eastern Freeway interchange to be a navigational node by using distinctive elements to provide features and landmarks for navigation for all modes of transports. Landscaping is to take inspiration from surrounding natural assets such as the Yarra River and will maximise indigenous planting to support biodiversity and habitat.
- Where the existing mast lights along the Eastern Freeway cannot be retained, consider relocation. Where the existing mast lights cannot be relocated provide a design strategy for reuse.



# Connectivity, Wayfinding & Accessibility

- Provide an off-road walking and cycling path along the eastern side of Bulleen Road to encourage active transport to local educational, cultural and recreational places.
- Provide a footpath along the western side of Bulleen Road to support pedestrian access north-south between Ilma Court and the Eastern Freeway. The footpath should seek to minimise impact to sensitive areas.
- Provide signalised crossings across Bulleen Road to improve pedestrian safety, encourage active transport to the recreational and community facilities, and improve access to public open space from residential areas to the east.
- Provide a walking and cycling crossing of the Eastern Freeway linking the new walking and cycling path to the Koonung Creek Trail.
- Provide an alternative grade-separated crossing of Bulleen Road for pedestrians and cyclists travelling along the Koonung Creek Trail.
- Provide a high quality walking and cycling path to connect from Bulleen Road and alongside Thompsons Road (located further east) to the Koonung Creek Trail on the northern side of the Eastern Freeway.
- Provide a pedestrian connection from Bulleen Road into the Bulleen Park and Ride facility.

- Improve landscape amenity along Bulleen Road and adjacent to Bulleen Park and Ride
- Through the design process, consider improvement to connectivity to nearby schools by creating a crossing over the Koonung Creek north of the new Bulleen Park and Ride facility.
- Ensure that the design has regard to the setting and operational requirements of Marcellin College, Trinity Grammar and Carey
- Ensure that the design (including of the walking and cycling crossing of the Eastern Freeway) has regard to the setting and operational requirements of Belle Vue Primary.

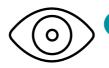


## Amenity, Vibrancy & Safety

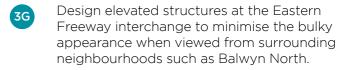
Provide roadside planting with large canopy trees along Bulleen Road to enhance the area's 'green' character and role as a gateway to Melbourne's north-east.



Reinstate and enhance buffer planting along the Eastern Freeway interface at Leonis Avenue Reserve.



- Ensure noise walls to the south of the Eastern Freeway:
- Maximise solar access to the Koonung Creek Trail and to residential properties
- Minimise overshadowing to residential properties
- Have treatments to both sides of the wall
- Use landscaping to filter views towards noise
- Respond sensitively to existing retained noise
- Ensure narrower areas along the Koonung Creek Trail have good lighting, open sightlines and are attractive to users.
- Minimise the visibility of road infrastructure from the open spaces, Carey and Marcellin College. Plant indigenous trees and vegetation to filter views.
- Reinstate and enhance buffer planting along the Eastern Freeway interface.





Enhance access and create a pleasant environment for pedestrians and cyclists along the Koonung Creek corridor at the interface with the proposed Bulleen Park and Ride facility.



## **Resilience & Sustainability**

Provide planting to enhance visual amenity, biodiversity and habitat links along the Koonung Creek corridor.

Reinstate and enhance buffer planting along the Freeway Public Golf Course interface.

> Through the design process, consider Water Sensitive Urban Design infrastructure to capture and treat stormwater run off from the project.

Where project works directly affect the Koonung Creek interface (between Bulleen Road and Thompsons Road), provide additional vegetation in the area around the creek to enhance the appearance and environmental values.

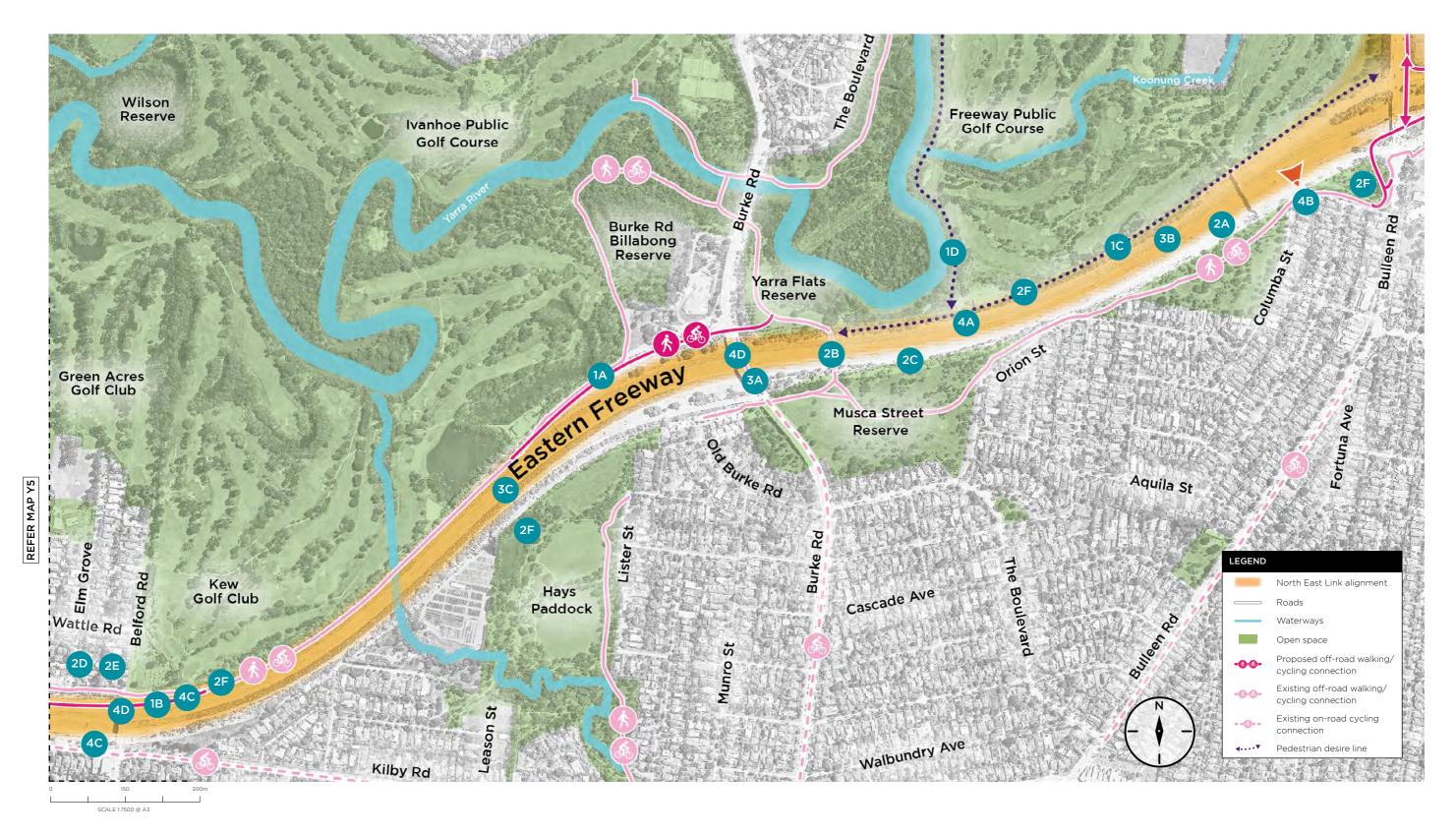


## **Urban Integration**

Create a new Park and Ride facility in Bulleen that considers:

- Connectivity to surrounding walking and cycling network
- Provision of convenient bicycle parking
- Sensitivity of interfaces with new built form and being at a pedestrian scale with the adioining Koonung Creek corridor
- Seamless transition and connection to the Eastern Freeway design (within the Yarra River Valley design character area) with the design for the Eastern Freeway interchange and to the east of Bulleen Road (within the Koonung Creek design character area).

MAP Y4: BULLEEN ROAD TO BELFORD ROAD

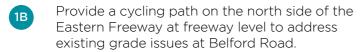




## Connectivity, Wayfinding & Accessibility



Provide a more direct cycling path parallel with the Eastern Freeway from Burke Road, connecting to the existing Koonung Creek Trail east of Burke Road.





\*Consider providing a path connection along the east side of the Yarra River in the Freeway Golf Course to improve access on either side of the Eastern freeway.



## Amenity, Vibrancy & Safety



Reinstate and enhance buffer planting along the Eastern Freeway interface at Columba Street Reserve.



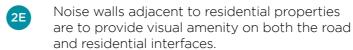
\*Consider opportunities to improve neighbourhood/local unstructured and informal recreational facilities in consultation with Boroondara City Council.



Improve lighting and consider other enhancements to wall treatments, sightlines, and wayfinding at the existing underpass beneath the Eastern Freeway connecting Musca Reserve and Yarra Flats Reserve.







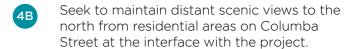


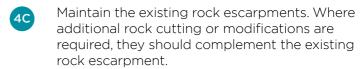


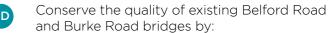
## Identity



Through the design process, consider the relocation of the existing mast lights where the lights cannot be retained in their current location.





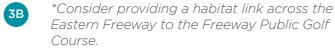


- Avoiding the retrofitting of elements to the bridges. Should the retrofitting of elements be required, they are to be bespoke to complement the existing bridge designs
- Not locating signage on the bridges
- Ensuring any new structures and/or elements located near the existing bridges are designed to minimise visual impact and to respond to the design of the existing bridges.





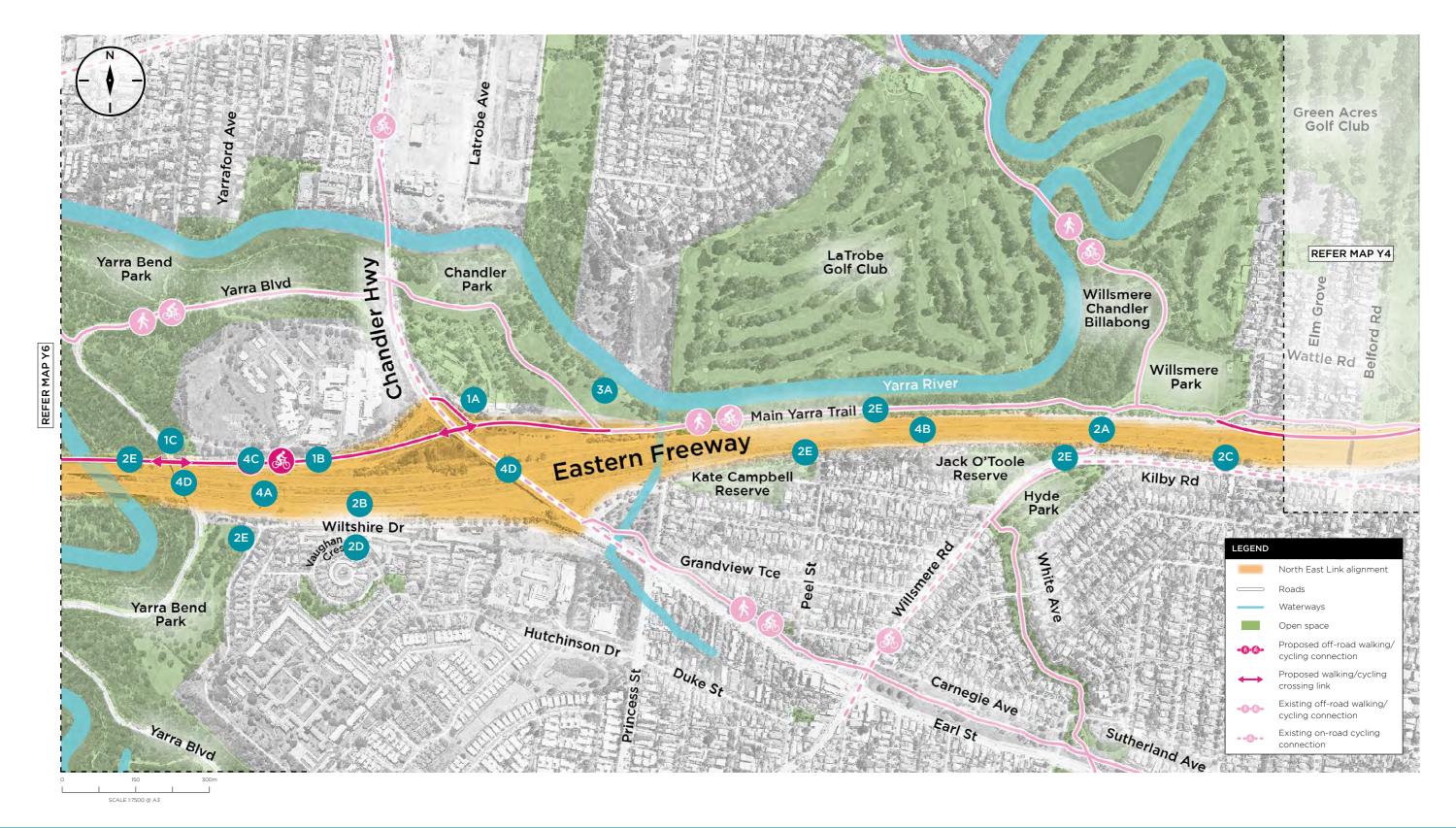
\*Consider providing habitat infrastructure beneath Burke Road bridge to support habitat connectivity to and from the Yarra River.



\*Consider providing a habitat link across the Eastern Freeway from Hays Paddock to Kew Golf Club.

<sup>\*</sup>Opportunities which are outside the scope but may be delivered by others and/or would be beneficial for the contractor to implement.

MAP Y5: BELFORD ROAD TO YARRA BOULEVARD





# Connectivity, Wayfinding & Accessibility



Provide a new walking and cycling connection to link Chandler Highway to the proposed Eastern Bicycle Corridor.







# Amenity, Vibrancy & Safety



Improve lighting and consider other improvements such as wall treatments and wayfinding at the existing underpass beneath the Eastern Freeway near Willsmere Park.



Minimise visual impacts of proposed elevated busway to residential properties to the south along Wiltshire Drive.



Maintain the pedestrian environment and established landscape along Kilby Road.



Provide additional buffer planting to noise walls to filter views from residential areas and from Vaughan Crescent.



Maximise views towards borrowed landscapes from the Eastern Freeway.



## Identity



Retain the mast lights to the west of Chandler Highway as existing navigational landmarks that contribute to the aesthetic qualities and original design of this section of road.



Through the design process, consider the relocation of the existing Eastern Freeway mast lights where they cannot be retained in their current location



Maintain the existing rock escarpments. Where additional rock cutting or modifications are required, they should complement the existing rock escarpment.



Conserve the quality of existing Yarra Boulevard and Chandler Highway bridges by:

- Avoiding the retrofitting of elements to the bridges. Should the retrofitting of elements be required, they are to be bespoke to complement the existing bridge designs
- Not locating signage on the bridges
- Ensuring any new structures and/or elements located near the existing bridges are designed to minimise visual impact and to respond to the design of the existing bridges.

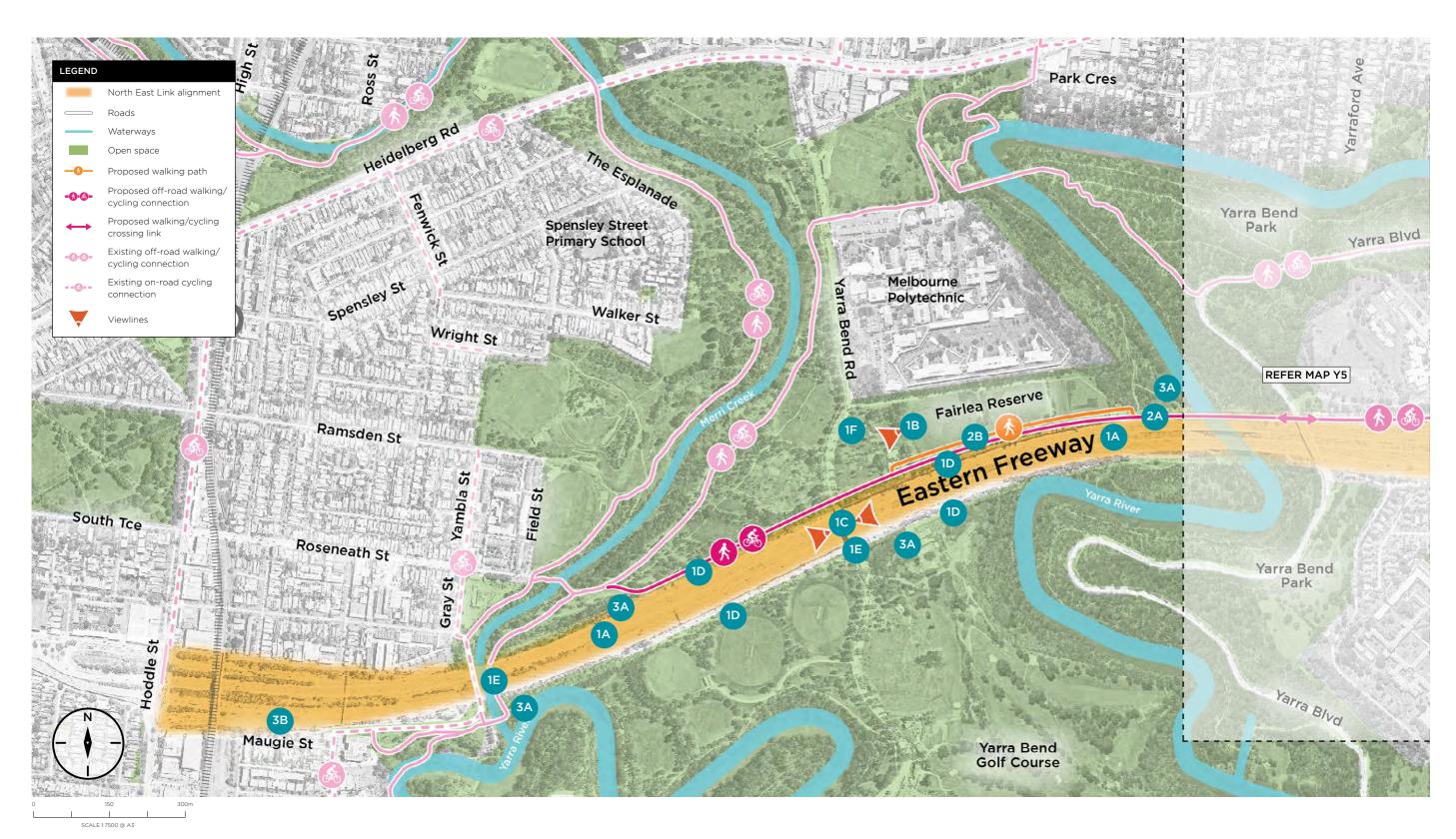


## **Resilience & Sustainability**



Do not preclude a wetland at Chandler Park (to be delivered by others) to receive and treat stormwater from the Eastern Freeway and surrounding residential areas.

MAP Y6: YARRA BOULEVARD TO HODDLE STREET





- Retain the mast lights to the west of Chandler Highway as existing navigational landmarks that contribute to the aesthetic qualities and original design of this section of road.
- Maintain prominent views to the city from Fairlea Reserve.
- Retain motorist views towards rock escarpments.
- Maintain the existing rock escarpments. Where additional rock cutting or modifications are required, they should complement the existing rock escarpment.
- Conserve the quality of existing Yarra Bend Road and Merri Creek bridges by:
  - Avoiding the retrofitting of elements to the bridges. Should the retrofitting of elements be required, they are to be bespoke to complement the existing bridge designs
  - Not locating signage on the bridges
  - Ensuring any new structures and/or elements located near the existing bridges are designed to minimise visual impact and to respond to the design of the existing bridges.
- Consider opportunities along the shared use path between the Yarra River and the Main Yarra Trail to interpret the cultural heritage values of the former Yarra Bend Asylum and Yarra Bend Park (such as signage).



# Connectivity, Wayfinding & Accessibility



Provide a new cycling connection to the north of Eastern Freeway as part of the Eastern Bicycle Corridor. This new bicycle corridor alignment should avoid removing existing trees where possible.

Upgrade the existing River Circuit Trail at Fairlea Reserve to provide a footpath for walkers separated from the new Eastern Bicycle Corridor.



# **Amenity, Vibrancy & Safety**



Maximise views towards borrowed landscapes from the Eastern Freeway.



3B

Provide tree planting along Maugie Street open space reserve to filter views of the Eastern Freeway.





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## **6.1 Contextual narrative**

The Koonung Creek is a small and highly modified tributary of the Yarra River. It runs through a narrow rocky upper valley down to the alluvial floodplains of the Yarra River. Koonung Creek, its culverts, the shared paths, open spaces and the natural systems all weave around the Eastern Freeway, each with their own flow, activity and connection. These interconnected networks link the community from an urban and natural perspective.

The Koonung Creek Valley design character area includes the Eastern Freeway corridor, the creek channel, parallel linear parklands, adjacent wetlands, and lower density residential interfaces. The Eastern Freeway is carved through sandstone rock and valley floor, dividing the communities to the north and south. Drivers' views along the freeway are generally enclosed and channelled along the roadway towards distant views.

Travelling in and out of exposed rock escarpments, the journey is framed by vegetated mounds, adjacent tree canopies, and interconnected architecturally designed noise walls. The 'ribbon-like' noise walls and landscape appears to undulate as the road travellers move along the freeway at speed. The sweeping walls create pockets of widened landscaping along the freeway or along its residential interfaces. The proximity of the surrounding suburban area also changes along the freeway edge. At times the freeway creeps close to the suburban interface, while at other times it is separated by varying widths of green parklands.

Another characteristic of the driver experience is the balance between the 'green' of the roadside planting and vegetation beyond, and the 'grey' of the roadway.

The parklands flanking the freeway form green ribbons of mature native woodland and linear open space that buffer the surrounding lower density residential suburbs from the Eastern Freeway. Housing is typically characterised by one and two-storey detached residences within established garden settings.

Views towards the freeway infrastructure from the parklands and residential areas are generally well concealed behind planting and sculpted earth walls, except for some narrower sections.

The linear green open spaces along the Eastern Freeway are highly valued by the community for recreation, socialising, fitness and to provide opportunities to reflect and connect with nature. These green spaces provide a variety of opportunities for recreation, ranging from dog walking and informal kick-around spaces to more formal organised sports.

While the waterways of Koonung Creek have been substantially altered by development, the corridor is culturally sensitive to Aboriginal people. The significant alteration of Koonung Creek for construction of the Eastern Freeway in the 1990s resulted in the creek being realigned and piped underground in some places. The daylighted (above ground and restored) sections of

the creek and the naturalistic constructed wetlands are a focal point for the local community. Over time, the biodiversity across the landscape corridor is being improved and ecological habitats restored.

The neighbourhoods on either side of the Eastern Freeway are linked by a series of distinctive bridges that create identifiable landmarks for navigation. The Koonung Creek Trail is a popular recreational and commuter route that runs east-west, passing through the green open spaces and bridging over the freeway to connect the communities to the north and south.

Within the Koonung Creek Valley design character area, the project alignment travels from the Bulleen Road interchange east to Springvale Road in the east.

Modifications to the Eastern Freeway would include widening to accommodate future traffic volumes and new dedicated bus lanes for the Doncaster Busway.



# 6.2 Values & priorities

Minimal change is expected to the low rise residential neighbourhoods that align the Eastern Freeway in the Koonung Creek design character areas.

The Eastern Freeway design (as part of the 1994 and 1997 extensions) is an award-winning design well regarded by the community. Changes to the freeway should respect and take design inspiration from key elements from this design such as the native planting, exposed rock, architectural walls, elegant bridges, restrained colour palette and the classic use of materials that age gracefully. New interfaces should blend seamlessly with the retained elements.

The upgrades to the Eastern Freeway as part of the project would encroach into open space to widen the existing road corridor, moving transport infrastructure closer to housing and impacting the existing roadside landscape. Opportunities to connect the communities to the facilities to the north and south of the freeway must be maximised. It is a priority to provide enhanced crossings to connect people to facilities, and to maximise cycle and pedestrian access and connections across the freeway.

The project would continue to support active transport along the Koonung Creek Trail and across the Eastern Freeway by maintaining and/ or improving connections.

A number of regionally significant activity centres lie further afield to the north and south, such as the Doncaster Hill, Nunawading Megamile and the Box Hill Metropolitan Activity Centre. North East Link would strengthen connectivity and accessibility to these centres to support their role as hubs for services, employment and social interaction.

The redevelopment of the Doncaster Park and Ride presents a major project opportunity for land use and transport integration, and to create a high quality public transport user experience.

The Koonung Creek open space system that runs along the freeway would continue to play an important role into the future by providing environmental features and a diverse range of sport and recreation activities for the local community. There is the opportunity to reimagine the open spaces to the north and south of the Eastern Freeway as the 'centre' of a connected space and 'green/blue' system, rather than as the boundary or 'edge' between the municipalities. North East Link should avoid or minimise negative impacts on open space functions, and upgrades to the Eastern Freeway should create consistent, high quality and multi-functional spaces.

The project should restore and continue the progressive revegetation and improvements to the biodiversity and environmental features along the corridor. It is also important to maintain wetlands and waterways as focal points for the community and as places for reflection in a naturalistic setting.

The community that lives along the Eastern Freeway has indicated strongly that they don't want to 'see' or 'hear' traffic noise from the freeway. Their preference is to have views towards vegetation rather than road infrastructure. It is therefore a priority to reestablish landscaped buffers and plant trees to filter views and blend the interfaces into the surrounding treed neighbourhood character.



Eastern Freeway



Doncaster Park and Ride



Walking paths along the Koonung Creek open space system

# 6.3 Place-specific requirements



Place-specific requirements that must be met and resolved at specific locations within the Koonung Creek Valley design character area are outlined in this section. These requirements have been prepared in close collaboration with key stakeholders so the community's expectations and local level issues are considered as the design develops.

The requirements for the individual maps have been categorised under the most relevant principle, acknowledging the requirements may relate to multiple principles.

It is to be noted that cycle and pedestrian paths are shown as a functional layout and it is possible that an equivalent and acceptable level of connectivity could be achieved in an alternative manner.





MAP K1: BULLEEN ROAD TO DONCASTER ROAD





#### Identity



Ensure the Thompsons Road intersection supports a safe pedestrian environment and caters for public transport such as for the Bulleen Park and Ride facility.



### **Urban Integration**



Seamlessly transition and connect the Eastern Freeway design (within the Koonung Creek Valley design character area) with the design for the Bulleen Road interchange and to the west of Bulleen Road (within the Yarra River Valley design character area).



# Connectivity, Wayfinding & Accessibility



Reinstate or realign the Koonung Creek Trail where required to a suitably wide and functional standard.



Replace existing pedestrian bridge at Estelle Street with a walking and cycling bridge over the Eastern Freeway linking Estelle Street with the Koonung Creek Trail (north and south of the freeway) and Koonung Creek Reserve.

Bridges within the Koonung Creek design character area must seek to retain existing elegant qualities and should read as a family while being individually identifiable to provide landmarks for navigation.

Provide an enhanced entry and link at Estelle Street to the new walking and cycling bridge which has clear sightlines and wayfinding signage to the Koonung Creek Trail.



Where project works directly affect existing secondary paths in Koonung Creek Reserve, provide replacement walking paths in high use areas where safe and practicable to reduce the potential for conflict between walkers and cyclists along the Koonung Creek Trail and provide additional amenity for the community.



#### **Resilience & Sustainability**

Support the biodiversity corridor in Koonung Creek Reserve with indigenous revegetation.



# Amenity, Vibrancy & Safety



Support Manningham City Council's planned improvements to Koonung Park which include:



Additional planting, improving sightlines and creating a more consistent landscaping theme

\*Consider upgrades to the playground and providing a shelter and barbecue nearby.



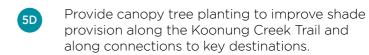
\*Consider a path link from the Koonung Creek Trail to the playground and exercise area.

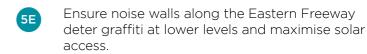


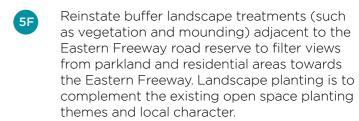
Ensure narrow areas along the Koonung Creek Trail have good lighting, open sightlines and are attractive to users.

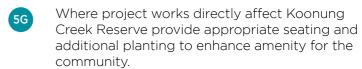


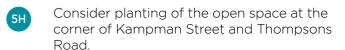
Maintain wetlands as a focal point for the community in the Koonung Creek Reserve. Retain the natural values of the wetlands. Retain and/or enhance community infrastructure (such as seating, boardwalks, interpretation, informal paths, shade) to support the enjoyment of the wetlands.

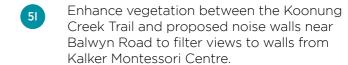




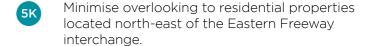








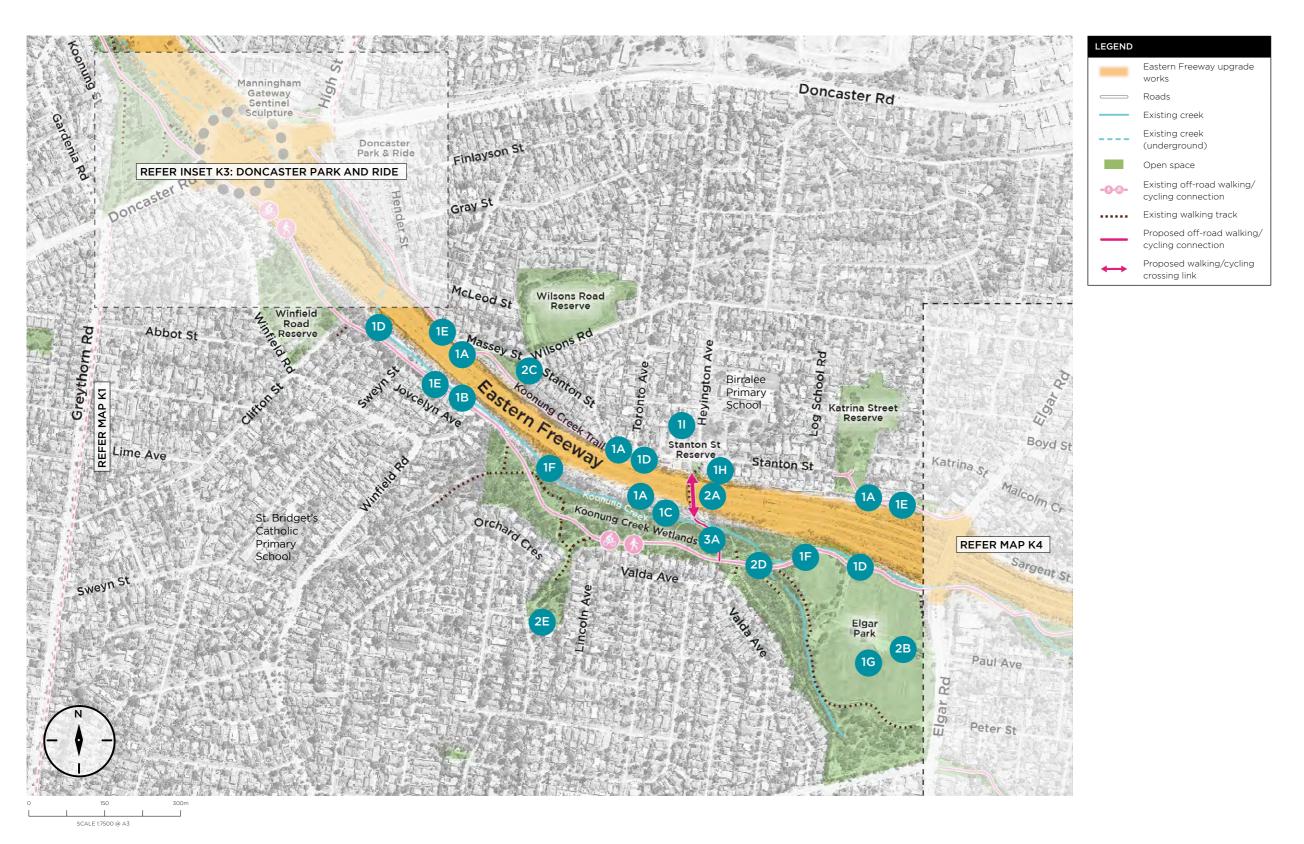






<sup>\*</sup>Opportunities which are outside the scope but may be delivered by others and/or would be beneficial for the contractor to implement.

MAP K2: **DONCASTER ROAD TO ELGAR ROAD** 





## Amenity, Vibrancy & Safety



Ensure noise walls along north of the Eastern Freeway deter graffiti at lower levels and maximise solar access. Use buffer planting to filter views to noise walls.



Design noise walls to the south of the Eastern Freeway to maximise solar access to residential properties and the Koonung Creek Trail, deter graffiti at lower levels and to have treatments both sides of the wall. Use landscaping to filter views to walls from surrounding dwellings.



- Retain wetlands as a focal point for the community in the Koonung Creek Reserve. Retain the natural values of the wetlands. Retain and/or enhance community infrastructure (such as seating, boardwalks, interpretation, informal paths, shade) to support the enjoyment of the wetlands.
- Reinstate buffer landscape treatments (such as vegetation and mounding) adjacent to the Eastern Freeway road reserve to filter views from parkland and residential areas towards the freeway. Landscaping and planting is to complement the existing open space planting themes and local character.
- Seek to reinstate a planted buffer between the Eastern Freeway and the Koonung Creek Trail to improve amenity for walkers and cyclists.
- Where project works directly affect the Koonung Creek Trail, consider opportunities to provide exercise equipment or fitness stations or bicycle maintenance stations at strategic locations.



\*Consider Whitehorse City Council's planned improvements to Elgar Park which include:

- Upgrading the Koonung Creek Trail including increasing path width, path realignment to improve sightlines and wayfinding signage
- Improving connectivity through Elgar Park and between the Koonung Creek Trail and Bushy Creek Trail
- Providing amenity nodes and pause points along the Koonung Creek Trail including seating, drinking fountains and fitness equipment
- Retaining and enhancing the bushland backdrop to Elgar Park, specifically along the northern vegetation which acts as a buffer to the Eastern Freeway
- Incorporating Water Sensitive Urban Design initiatives to capture and store stormwater for use in irrigating sports fields
- Improving the bushland vegetation along the Koonung Creek to improve its ecological value.
- Retain the memorial currently located at the north entrance to the Stanton Street pedestrian bridge. Should relocation be required, this is to be undertaken in close consultation with relevant stakeholders.
- Minimise overlooking to residential properties located north of the Stanton Street pedestrian bridge.



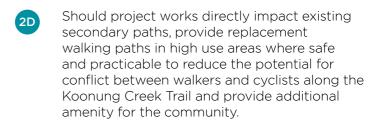
# Connectivity, Wayfinding & Accessibility



Replace existing bridge at Heyington Avenue with a walking and cycling bridge over the Eastern Freeway that connects between Stanton Street and Birralee Primary School to the north and the Koonung Creek Trail. Entries to bridge are to be clear, legible and are to include wayfinding to the entry points.









\*Consider providing low stress cycling routes to key local destinations and facilities (refer to Whitehorse City Council's proposed Easy Ride Routes).

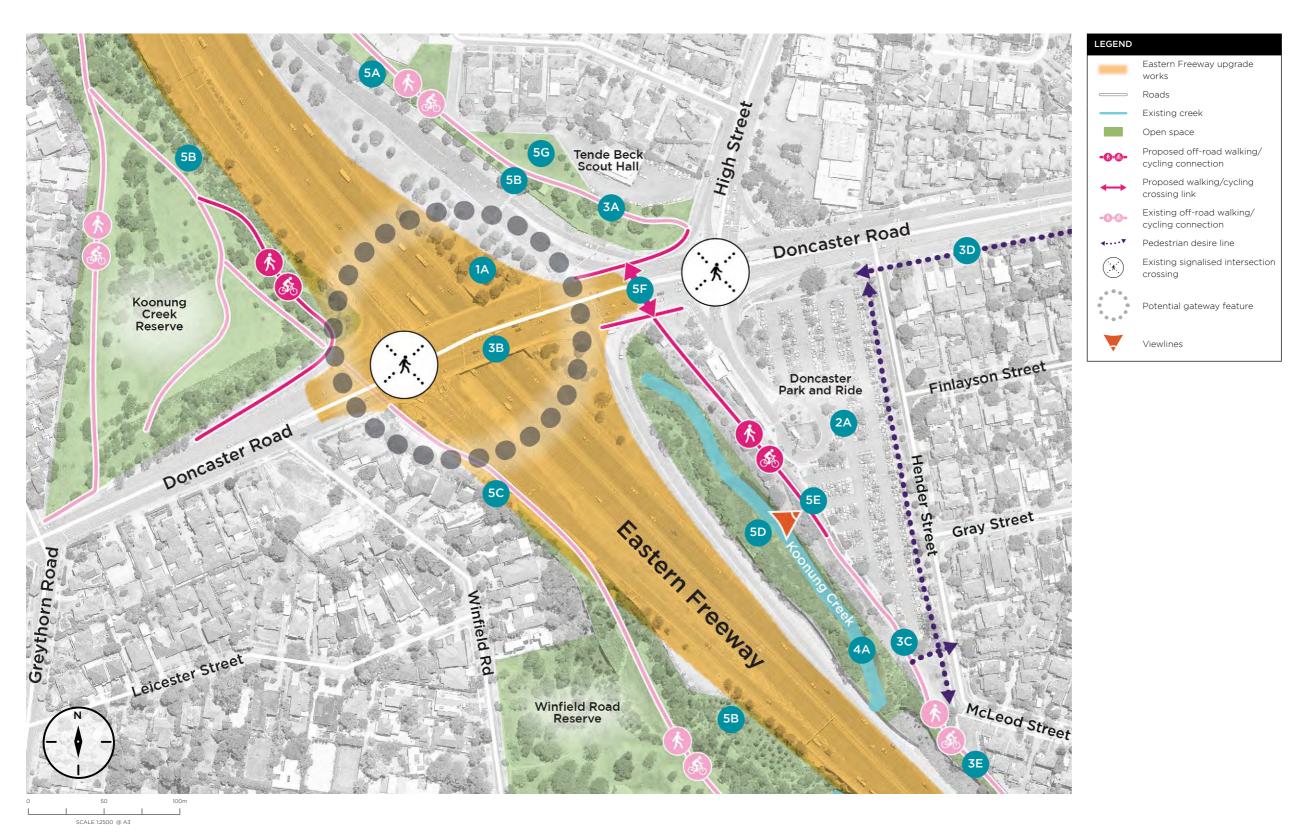


## **Resilience & Sustainability**

Support the biodiversity corridor in the Koonung Creek Reserve by increasing indigenous revegetation at wetlands and throughout the reserve.

\*Opportunities which are outside the scope but may be delivered by others and/or would be beneficial for the contractor to implement.

INSET K3: DONCASTER PARK AND RIDE





## Identity



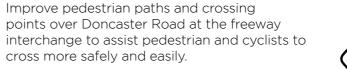
Create a landscape feature at Doncaster Road which integrates with the Manningham Gateway Sculpture, 'Sentinel' by Inge King. Should relocation of the sculpture be required this is to be undertaken in close consultation with relevant stakeholders.



# Connectivity, Wayfinding & Accessibility



Integrate new path links with the surrounding network, and consider future improvements to pedestrian connections from the Koonung Trail to Doncaster Road.



Provide a walking and cycling connection from



- the Koonung Creek Trail to Hender Street. Maintain and enhance the local east west pedestrian connection along Doncaster Road

adjacent to the Doncaster Park and Ride.

Should project works directly impact on existing shared use paths, consider upgrades to existing paths between the Doncaster Park and Ride and Massey Street within the project boundary to improve the function and appearance.



# **Urban Integration**



- Increasing the number of bicycle parking
- Maintaining or increasing the number of car parking spaces
- Improving the surrounding landscape, to enhance the gateway role of the Doncaster Park and Ride
- Potential development opportunities fronting Doncaster Road
- · Connectivity to surrounding walking and cycling network
- New built form providing sensitive interfaces and be at a pedestrian scale with the adjoining Koonung Creek corridor
- Creating a landscaped feature with a walking and cycling connection and canopy trees along the western side of Hender Street to provide amenity for pedestrians and a sensitive interface to adjacent residential uses.



## **Resilience & Sustainability**

Retain and enhance the amenity and preserve the natural and ecological values of Koonung Creek adjacent to the west of Doncaster Park and Ride.



## Amenity, Vibrancy & Safety



Ensure noise walls to the north of the Eastern Freeway deter graffiti at lower levels. Use buffer planting to screen and filter views to noise walls.



Reinstate buffer landscape treatments (such as vegetation and mounding) adjacent to the Eastern Freeway road reserve to filter views from parkland and residential areas towards the Eastern freeway. Landscaping and planting is to complement the existing open space planting themes and local character.



Ensure new noise walls to the south of the Eastern Freeway address visual amenity on the road and residential interfaces, and deter graffiti at lower levels while maximising light penetration to enhance solar access to residential properties and the Koonung Creek

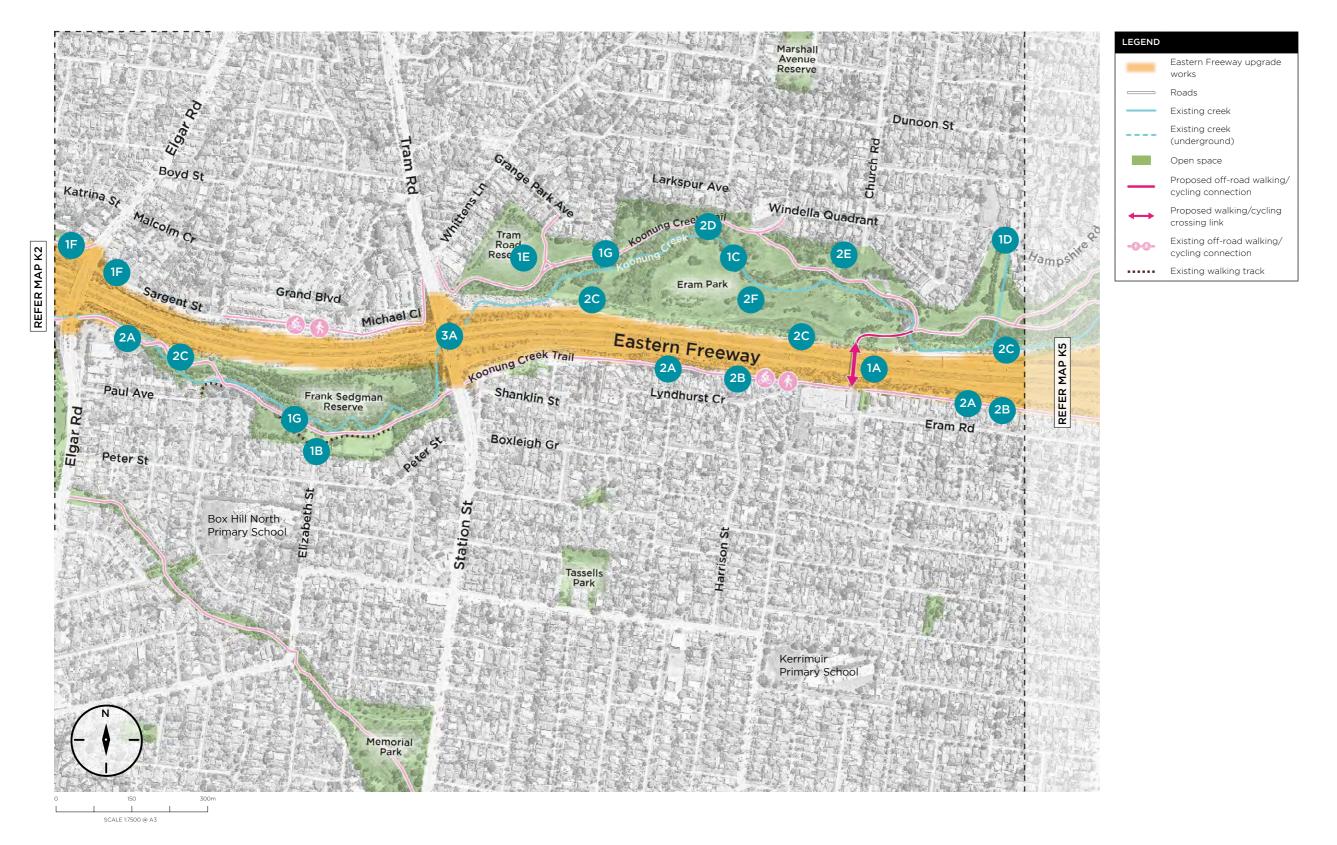
Use landscaping to filter views to walls from surrounding dwellings and from the Koonung Creek Trail.

- Ensure visual permeability and solar access from the Doncaster Park and Ride to Koonung Creek to enhance visual amenity.
- Maintain viewlines across the Koonung Creek corridor from the walking and cycling path to promote passive surveillance and a comfortable journey.
- Provide a grade-separated walking and cycling crossing of Doncaster Road.



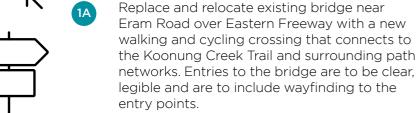
\*Consider improving the landscape appearance of the area in front of the Tende Beck Scout Hall (refer to Manningham City Council's Koonung Creek Linear Trail Future Works Program).

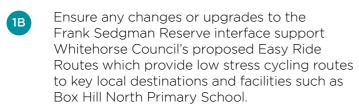
MAP K4: ELGAR ROAD TO MIDDLEBOROUGH ROAD





# Connectivity, Wayfinding & Accessibility





- \*Consider improving the ability for pedestrians to cross Koonung Creek to access underutilised open space within Eram Park.
- Do not preclude provision of a new path to link the Koonung Creek Trail to Colston Close and Hampshire Road play space by others (refer to Manningham City Council's Koonung Creek Linear Park Management Plan 2011).
- Should project works directly impact existing secondary paths at the Koonung Creek Trail on the north side of the Eastern Freeway, provide replacement walking paths in high use areas where safe and practicable to reduce the potential for conflict between walkers and cyclists along the Trail and provide additional amenity for the community.
- Should project works directly impact on existing shared use paths, consider opportunities for upgrades to walking and cycling paths along the Koonung Creek Trail (to the east and west of Elgar Road).
- Should project works directly impact existing secondary paths in Frank Sedgeman Reserve, provide replacement walking paths in high use areas where safe and practicable to reduce the potential for conflict between walkers and cyclists along the Koonung Creek Trail and provide additional amenity for the community.

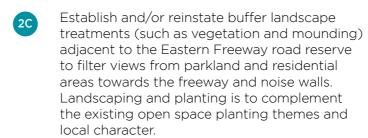


## Amenity, Vibrancy & Safety

Ensure narrow areas along the Koonung Creek Trail have good lighting, open sightlines and are attractive to users.



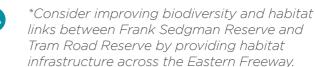
Maintain the existing alignment of noise walls south of the Eastern Freeway between Station Street and Middleborough Road where possible to minimise impacts along this narrower section of the Koonung Creek Trail. Ensure any new noise walls maximise solar access (particularly on the southern side) and minimise overshadowing to residential properties.



- \*Consider enhancements to the Tram Road Reserve by providing shade planting around the existing playground and planting vegetation. Consider other open space improvements in consultation with Manningham City Council.
- \*Consider enhancements to the landscaping, plant on hillside and realign path around the north-east side of the Koonung Creek Linear Park (refer to Manningham City Council's Koonung Creek Linear Park Management Plan
- Do not preclude the opportunity for enhancements to Eram Park to support dog recreation activities (to be provided by others).

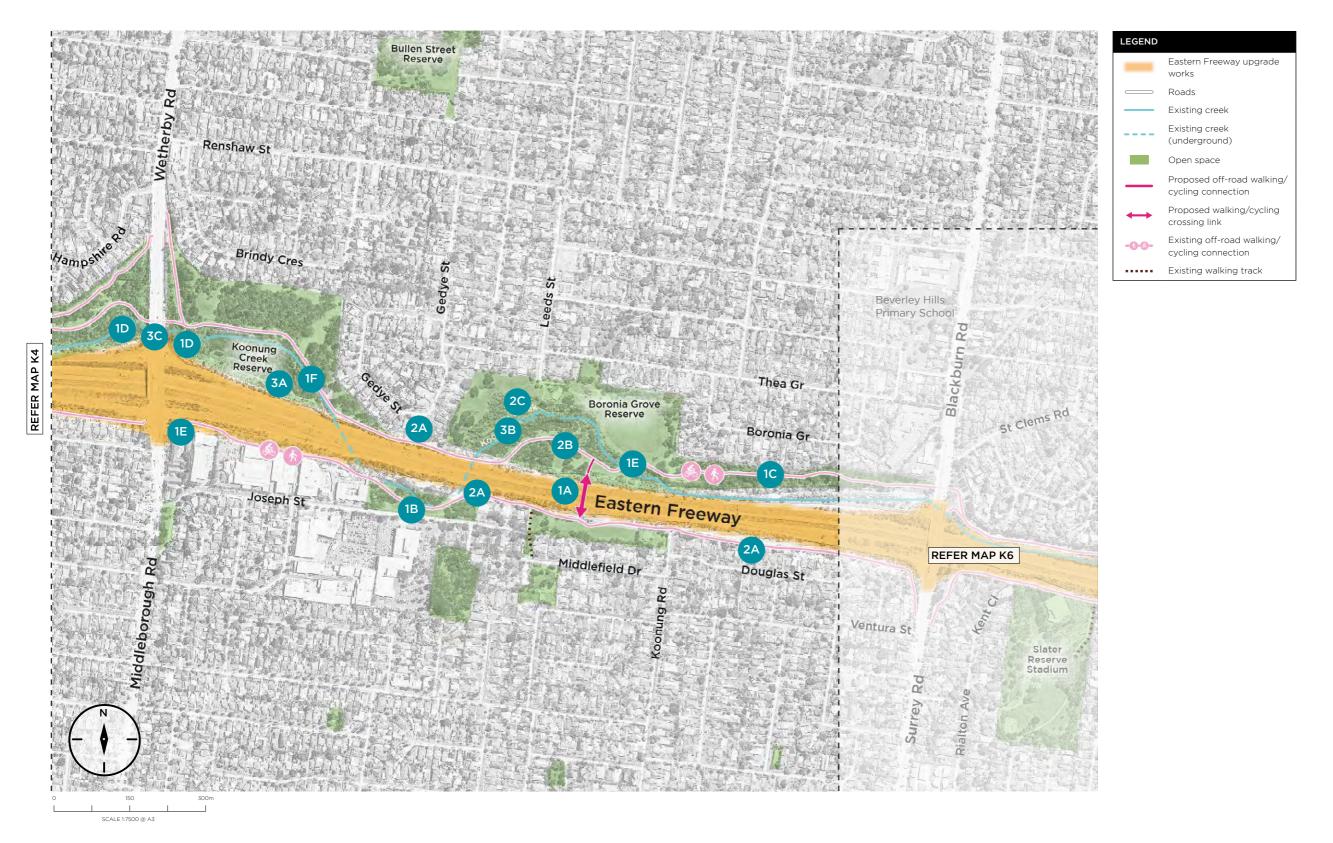


## **Resilience & Sustainability**



<sup>\*</sup>Opportunities which are outside the scope but may be delivered by others and/or would be beneficial for the contractor to implement.

MAP K5: MIDDLEBOROUGH ROAD TO BLACKBURN ROAD





# Connectivity, Wayfinding & Accessibility



Upgrade existing bridge over the Eastern Freeway near Koonung Road to provide for walking and cycling crossing that connects to the Koonung Creek trail and surrounding path networks. Entries to bridge are to be clear, legible and are to include wayfinding to the entry points.



- \*Consider upgrades to the poor quality sections of paths along the Koonung Creek Trail (west of Blackburn Road around Boronia Grove) to be high quality, suitably wide and functional.
- \*Consider formalising the unmade paths at the open spaces on either side of Wetherby Road into walking and cycling paths.
- \*Consider improving the connectivity of the Koonung Creek Trail on the east side of Middleborough Road in Blackburn North.
- Should project works directly impact existing secondary paths in Koonung Creek Reserve, provide replacement walking paths in high use areas where safe and practicable to reduce the potential for conflict between walkers and cyclists along the Koonung Creek Trail and provide additional amenity for the community.



# Amenity, Vibrancy & Safety



Ensure narrow areas along the Koonung Creek Trail have good lighting, open sightlines and are attractive to users.





Where project works directly affect the Koonung Creek Trail, consider opportunities to provide exercise equipment or fitness stations or bicycle maintenance stations at strategic locations.



Do not preclude enhancements to Boronia Grove Reserve by others (refer to Manningham City Council's Koonung Creek Linear Trail Future Works Program 2011).



## **Resilience & Sustainability**



Maintain and consider enhancements to the wetlands in Koonung Creek Reserve northeast of the Wetherby Road interchange.



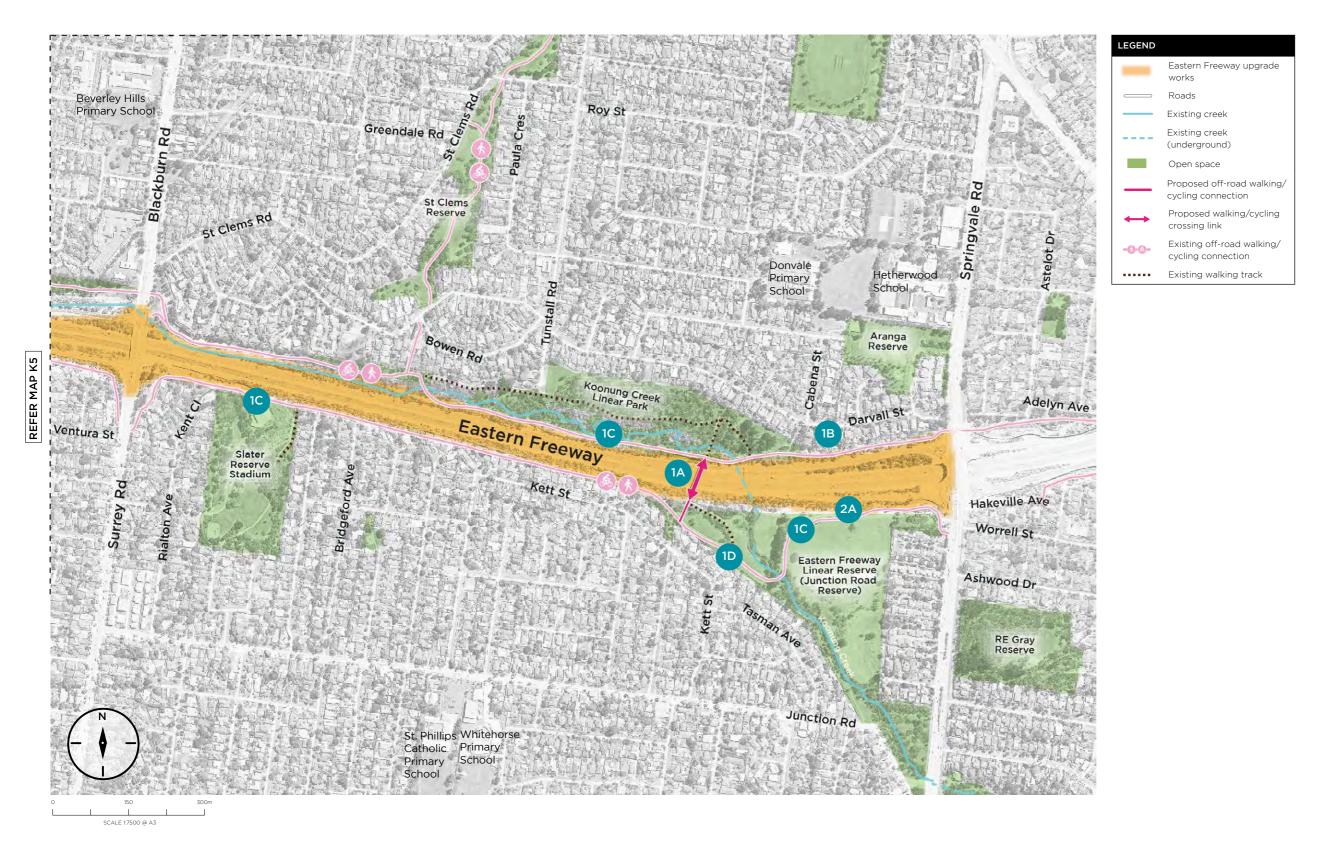
Maintain and consider enhancements to the wetlands in Boronia Grove Reserve



Consider improving biodiversity and habitat links under Wetherby Road bridge at Koonung Creek Reserve by providing additional habitat where appropriate, subject to approval of the land owner/manager and relevant authorities.

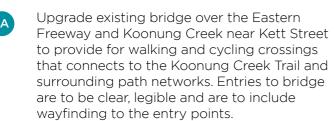
<sup>\*</sup>Opportunities which are outside the scope but may be delivered by others and/or would be beneficial for the contractor to implement.

MAP K6: BLACKBURN ROAD TO SPRINGVALE ROAD





# Connectivity, Wayfinding & Accessibility





- Should project works directly impact existing secondary paths, provide replacement walking paths in high use areas where safe and practicable to reduce the potential for conflict between walkers and cyclists along the Koonung Creek Trail and provide additional amenity for the community.
- Where project works directly affect the Koonyung Creek Trail, upgrade the connection from the Trail (to the north of Kett Street) to the walking and cycling bridge over the Eastern Freeway.



# Amenity, Vibrancy & Safety



Establish and/or reinstate buffer landscape treatments (such as vegetation and mounding) adjacent to the Eastern Freeway Linear Reserve to screen and filter views towards the Eastern Freeway and any associated walls and infrastructure.





<sup>\*</sup>Opportunities which are outside the scope but may be delivered by others and/or would be beneficial for the contractor to implement.