

Environment  
Effects Statement

# Technical Report E

## Land use planning





# North East Link Project

## North East Link Environment Effects Statement

### Technical report E - Land use planning

Prepared for North East Link

April 2019

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# Executive summary

This technical report is an attachment to the North East Link Environment Effects Statement (EES). It has been used to inform the EES required for the project and defines the Environmental Performance Requirements (EPRs) necessary to meet the EES objectives

## Overview

North East Link ('the project') is a proposed new freeway-standard 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. North East Link would connect the M80 Ring Road (otherwise known as the Metropolitan Ring Road) to the Eastern Freeway, and include works along the Eastern Freeway from near Hoddle Street to Springvale Road.

The Major Transport Infrastructure Authority (MTIA) is the proponent for North East Link. The MTIA is an administrative office within the Victorian Department of Transport with responsibility for overseeing major transport projects.

North East Link Project (NELP) is an organisation within MTIA that is responsible for developing and delivering North East Link. NELP is responsible for developing the reference project and coordinating development of the technical reports, engaging and informing stakeholders and the wider community, obtaining key planning and environmental approvals and coordinating procurement for construction and operation.

On 2 February 2018, the Minister for Planning declared North East Link to be 'public works' under Section 3(1) of the *Environment Effects Act 1978*, which was published in the *Victorian Government Gazette* on 6 February 2018 (No. S 38 Tuesday 6 February 2018). This declaration triggered the requirement for the preparation of an EES to inform the Minister's assessment of the project and the subsequent determinations of other decision-makers.

The EES was developed in consultation with the community and stakeholders and in parallel with the reference project development. The reference project has been assessed in this EES. The EES allows stakeholders to understand the likely environmental impacts of North East Link and how they are proposed to be managed.

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GHD was commissioned to undertake a land use planning impact assessment for the purpose of the EES.

The EES contains a draft planning scheme amendment to the Banyule, Boroondara, Manningham, Nillumbik, Whitehorse, Whittlesea and Yarra planning schemes under the *Planning and Environment Act 1987*. The planning scheme amendment would insert an Incorporated Document and associated Specific Controls Overlay (SCO) into the affected planning schemes, which have the purpose of providing a project-specific planning control that identifies the extent of the project. The planning scheme amendment would also introduce a Design and Development Overlay (DDO) that would be applied to the tunnels to protect their construction and operation from incompatible development.

## Land use planning context

The scoping requirements for the EES issued by the Minister for Planning set out the specific environmental matters to be investigated and documented in the project's EES, which informs that scope of the EES technical studies. The scoping requirements include a set of evaluation objectives. These objectives identify the desired outcomes to be achieved in managing the potential impacts of constructing and operating the project.

The following evaluation objective is relevant to the land use planning assessment:

- **Social, business, land use and infrastructure** – to manage effects of the project on land use and the social fabric of the community with regard to wellbeing, community cohesion, business functionality and access to services and facilities.

A summary of the key assets, values or uses potentially affected by the project and an assessment of the project's impacts on those assets, values and uses is set out below.

## Existing conditions

For the purposes of this land use planning assessment, the project has been divided into the three precincts:

### M80 Ring Road to northern portal

In the M80 Ring Road to northern portal precinct, the majority of land uses are residential, open space and commercial. Located in the municipalities of Banyule and Nillumbik, residential land uses form a significant component of this precinct, with key activity centres such as the Greensborough Major Activity Centre, Watsonia Neighbourhood Centre and the La Trobe National Employment and Innovation Cluster (NEIC) further afield to the west. Simpson Barracks (located on Commonwealth land) and a range of community facilities are other key land uses intersecting or proximate to the project and study area.

### Northern portal to southern portal

The northern portal to southern portal precinct traverses the municipalities of Banyule and Manningham and comprises significant open space and public conservation areas surrounding the Yarra River, in addition to extensive residential land uses. A locally significant cluster of commercial and industrial land uses are located in the Bulleen Industrial Precinct, and the Heidelberg Major Activity Centre and La Trobe NEIC lie further afield to the west. The precinct also includes Simpson Barracks and community facilities including a number of schools.

### Eastern Freeway

The Eastern Freeway precinct is located in the municipalities of Manningham, Whitehorse, Boroondara and Yarra. The precinct is generally characterised by residential and open space land uses surrounding the Koonung Creek along the Eastern Freeway and surrounding the Yarra River. The Boroondara Tennis Club is located in the centre of the precinct. Key commercial areas are located towards the western end of the study area in the City of Yarra and a number of regionally significant activity centres lie further afield of the precinct to the north and south, such as the Doncaster Hill Major Activity Centre, Box Hill Metropolitan Activity Centre and Nunawading Megamile Major Activity Centre.

## Impact assessment – construction

A detailed assessment of land use planning impacts during the project's construction has been undertaken. This includes long-term impacts from the start of the project's construction, such as acquisition. The following key impacts were assessed.

## Land use change due to permanent acquisition

Residential, commercial, industrial, open space and public conservation land uses would be permanently acquired for the construction and operation of the project, resulting in a change of land use. The acquisition requirements for each project precinct are described in the sections below.

This report presents the acquisition requirements associated with the reference project. This is considered a conservative approach and further design refinements, including discussions with local councils, would be undertaken during the detailed design process, with a view to ensuring an optimal environmental, economic and social outcome, including the potential for a smaller project footprint.

Overall, permanent acquisition would result in a permanent land use impact as land would no longer be available for the existing use. The application of EPRs, including the requirement for the project to minimise its footprint to the extent practicable (EPR LP1) and locating new above-ground services in appropriate locations that minimise impacts to existing residential and recreational facilities (EPR LP2) would reduce this impact as far as practicable.

The project has the potential to result in inconsistencies with relevant planning policies and strategic plans. Generally, this inconsistency would be minimised by the requirement for the project contractor to have regard to strategic land use plans and policies in consultation with land managers and/or agencies responsible for implementation of the relevant policies during the design and construction of the project (EPR LP3). In isolated instances, the project has the potential to result in inconsistencies with relevant local policy, such as the permanent change in industrial land use at the Bulleen Industrial precinct. As outlined at EPR LP1, minimising the footprint of the project where practicable would assist in minimising impacts to land use. It is also noted the Bulleen Industrial Precinct land will remain zoned for industrial purposes, with industrial and commercial uses potentially returning post construction.

Acquisition would be undertaken in pursuant to the *Land Acquisition and Compensation Act 1986* (Vic) and the *Major Transport Projects Facilitation Act 2009* (Vic). Residential property acquisition would be undertaken in accordance with EPR SC1 to reduce disruption to residents as much as practicable.

Impacts to sporting and recreation facilities would be minimised via consultation with relevant local councils and stakeholders. The aim would be to identify local alternative facilities for formal recreational users displaced by the acquisition of existing facilities by the project.

Adequate notification to clubs and recreation facilities would minimise the impact of relocation. Where construction activities would directly impact community infrastructure such as schools, child care centres and aged care centres, consultation with managers, owners and user groups of these facilities would identify any practical measures to avoid or minimise impacts (EPR SC4).

The disruption to businesses from permanent acquisition or temporary occupation of land would be minimised as much as practicable and consultation with affected businesses and land owners would endeavour to reach agreement on the terms for possession of the land (EPR B2). Pre-construction business support would be provided to affected businesses including regular updates of the planning and design progress and the requirement for the project to work with councils to identify alternative location options for displaced businesses (EPR B1). Consultation and engagement with businesses would continue through the Business Liaison Group throughout the construction of North East Link (EPR B6).

By minimising the operational footprint of the project by implementing the above EPRs, the project may leave surplus land. Where surplus land is considered appropriate for a new or pre-existing land use, the relevant planning scheme provisions (including Victorian State and local policies) would apply and may require the need to obtain separate planning approvals. A change in land use due to acquisition may also provide opportunity to improve the local area post-construction. The form of any future land use change (ie enhancements) would require a separate approval process, subsequent to this EES.

### **M80 Ring Road to northern portal**

In the M80 Ring Road to northern portal precinct, the project would require the permanent acquisition of 18 residential properties, six commercial properties and nine other land uses (part of the Simpson Barracks (Commonwealth land), part of the Watsonia Primary School grounds, VicRoads land, government land and common property on residential land).

In this precinct, five areas of open space land uses currently available to the public would be utilised for project structures and would not be accessible to the public during operation. Surface and open cut methods and much of the work would be carried out along and on land surrounding the existing road corridor.

### **Northern portal to southern portal**

The project would permanently acquire 18 residential properties in the northern portal to southern portal precinct.

97 commercial properties would need to be permanently acquired for the project in the northern portal to southern portal precinct. The majority of this impact is due to the new Manningham Road interchange, which is located immediately south of Bridge Street and to the west side of Bulleen Road within the Bulleen Industrial Precinct.

Other land uses would be acquired, including an area of Simpson Barracks (Commonwealth land), Borlase Reserve (VicRoads and council-owned), part of land owned by Melbourne Water part of the Veneto Club, part of Bulleen Park (council-owned land leased to football clubs), part of Carey Grammar sporting facility and the Bulleen Swim Centre.

Construction of the tunnels would require the strata acquisition of 227 residential properties, one private commercial property and nine areas of open space (to the north of Warringal Parklands and to the south of Banksia Park). Strata acquisition refers to acquisition of land below ground surface where tunnel infrastructure would pass beneath properties. In addition to the strata acquisition required for the tunnels, the diversion of the Yarra East Main sewer would require either sub-surface strata acquisition or easements affecting 21 residential properties.

The majority of proposed works would be sub-surface (sections of tunnelling). The proposed project infrastructure above-ground is generally concentrated to the north and south of the precinct and associated with tunnel portal structures. In these sections, much of the work would be carried out on and along land surrounding the existing road corridor.

### **Eastern Freeway**

No residential properties would be acquired for the project in the Eastern Freeway precinct.

In this precinct, 11 areas of open space currently available to the public would be required for project infrastructure. Post-completion, land not required for permanent project infrastructure would be returned to its existing use.

The project would permanently acquire land from the Boroondara Tennis Centre and its tennis court infrastructure and part of the Freeway Public Golf Course. The project would also permanently require land currently used for open space that is designated as road reserve south of Estelle Street.

Construction along this precinct would mainly involve surface works, with much of the work to be carried out along the existing road corridor.

#### **Land use change due to temporary occupation**

Temporary occupation of land would be required to facilitate construction of project infrastructure and other construction purposes (such as construction compounds and ground improvement works). Generally, temporary occupation would likely involve partial occupation of areas of passive and active open space and Commonwealth land, although in some cases all the existing land use may be required for temporary occupation. Overall, a temporary change in land use due to temporary occupation could cause an adverse impact, as the current land use would no longer be possible on a temporary basis. However, this impact would be temporary and implementation of EPR LP1, including minimising the footprint to the extent practicable at design stage would assist in avoiding (to the extent practicable) temporary impacts on affected land uses as would having regard to strategic land use plans and policies during development and operation (EPR LP3).

Furthermore, in some instances where partial temporary occupation would occur, the majority of the remaining land use would remain available, also minimising the scale of impact. Impacts to sporting and recreation facilities would be minimised via consultation with relevant local councils to identify available local alternative facilities for formal recreational users displaced from recreational facilities. Adequate notification to clubs and recreation facilities would minimise the impact of relocation. Where construction or operation activities would directly impact community infrastructure facilities such as schools, child care centres, and aged care centres, consultation with managers, owners and user groups of the facilities would identify any practical measures to avoid or minimise impacts (EPR SC4).

A temporary change in land use also provides opportunity to improve the local area post-construction. The form of any future land use change (ie enhancements) would require a separate approval process, subsequent to this EES.

Consultation with key stakeholders, including local councils regarding temporary occupation requirements (including the location of construction compounds and potential post construction opportunities) is underway.

#### **Impacts to ongoing use of the land due to traffic, noise, air quality, visual and overshadowing impacts during construction**

Key construction activity impacts on the ongoing use of land include traffic, noise, air quality, visual and overshadowing. The ongoing use of sensitive land uses associated with residential, open space, public conservation and community facility purposes has been assessed as part of this impact assessment.

Across all precincts, above-ground construction activities (such as widening of existing roads using surface and open cut methods, cut and cover tunnelling) would result in traffic, noise, air quality, visual and overshadowing impacts. These in turn could impact the ongoing use of residential, open space, public conservation and community facility land adjacent to the project.

However, construction activities related to these impacts are temporary in nature. Minimising the project footprint and designing and developing the project having regard to strategic land use plans and policies would also assist in managing impacts to land uses (EPRs LP1, LP2, LP3). Implementing a Communications and Community Engagement Plan would assist in addressing stakeholder concerns (EPR SC2). Impacts to businesses (such as access and damage to property and infrastructure) would be managed by consulting with relevant business owners and maintaining access (EPR B3 and B4). Landscape and visual impacts would be managed via design and development of the project in general accordance with the project's Urban Design Strategy, temporary landscape features and treatments and lighting measures (EPRs LV1, LV2, LV3). Construction impacts, including traffic, air and noise impacts would be managed in accordance with applicable legislation and guidelines, a Construction Environmental Management Plan (CEMP) and transport, air and noise management plans (EPRs AQ1, EMF2, NV4, NV8, NV9, NV10, NV13, T2).

With the implementation of the identified mitigation measures and project EPRs that address construction traffic, noise, air quality and visual impacts, it is unlikely these impacts would change land use. It is therefore not expected that changes in traffic, noise, air quality and visual considerations due to construction activities would impact ongoing land use.

Notwithstanding the above, locations in the M80 Ring Road to northern portal precinct (generally on the southern side of the M80 Ring Road and isolated locations south of the Greensborough Bypass) and the Eastern Freeway (generally on the southern side of the Eastern Freeway) would be overshadowed by the installation of new noise walls and elevated structures. The overshadowing has the potential to adversely impact private open space and the amenity of existing dwellings and adjacent areas of open space. Furthermore, overshadowing may affect existing solar panels.

The impact of overshadowing would result in, at some locations, an adverse outcome for residents. However, with the implementation of EPR LP4, there are a number of ways the extent of overshadowing could be reduced through the design and construction of the project. This includes changing the location of the structure(s) causing the overshadowing, reducing the height, or selecting materials to allow the penetration of sunlight/solar access to areas of open space and/or solar panels. Implementing these measures must also have regard to other EPRs and standards to be achieved, such as noise attenuation and visual impact.

Potential amenity impacts associated with traffic, noise, air quality and visual considerations are addressed in further detail in the relevant EES technical reports.

### **Impacts to land use character due to acquisition**

Land use character is what makes an area distinctive and which contributes to the purpose of the land use. It is the interaction between land uses and their built form, architectural style, subdivision patterns, land use activities and environmental considerations such as topography, vegetation and waterways.

While character applies to all land uses, it is particularly important to the fabric of more sensitive land uses which typically include residential, open space and public conservation land uses, as character forms a significant part of what makes these land uses distinctive and attractive.

Acquisition requirements of the project therefore have the potential to adversely impact existing open space, public conservation and residential land use character. This is because changing open space, public conservation and residential land use character diminishes the elements that make open space, public conservation and residential land uses distinctive and attractive.

However, the impact would be minimised by implementing the project EPRs, including the requirement to minimise the footprint to the extent practicable (EPR LP1), and locating new above-ground services in a way that minimises impacts to existing residential and recreational facilities (EPR LP2) as well as having regard to strategic land use plans and policies during the project's design and operation (EPR LP3). Potential impacts from a change in residential, open space and public conservation land use character can be managed through design and responding to the project's Urban Design Strategy (EPR LV1). By minimising the operational footprint of the project by implementing the above EPRs, the project may leave areas of surplus land. Where surplus areas of land are considered appropriate for a new or pre-existing land use, the relevant planning scheme provisions (including Victorian State and local policies) would apply and trigger the need to obtain independent planning approvals as required.

Open space and residential land acquired for the project may also provide opportunity to improve the local area post-construction, subject to a separate approval process to this EES. New land bridges constructed for the project also provide opportunity to contribute to open space land use character in the area.

## Impact assessment – operation

### Impacts to ongoing land use due to traffic, noise, air quality and visual impacts during operation

Key contributors to ongoing land use once North East Link are operational include traffic, noise, air quality and visual impacts. The ongoing use of sensitive land uses associated with residential, open space, public conservation and community facility purposes has been considered as part of this impact assessment.

Across all precincts, above-ground operation activities (such as traffic movements and presence of project structures) may generate traffic, noise, air quality and visual impacts. These have the potential to impact the ongoing use of residential, open space, public conservation, community facility land adjacent to the project.

Minimising the project footprint would assist in managing impacts to land uses (EPR LP1) and implementing a Communications and Community Engagement Plan would assist in addressing stakeholder concerns (EPR SC2). Impacts to businesses and landscape and visual considerations would be managed by minimising and managing damage to property and infrastructure, ensuring the design and development of the project has regard to the project's Urban Design Strategy and by implementing lighting measures (EPRs B3, LV1, LV4). Construction impacts including traffic, air and noise impacts would also be managed in accordance with applicable legislation and guidelines, an Operation Environmental Management Plan (OEMP) and transport, air and noise management plans and monitoring programs (EPRs EMF2, AQ2, AQ4, AQ5, NV2, NV6, NV7, T1, T5).

Implementing the identified mitigation measures and project EPRs that address traffic, noise, air quality and visual operation impacts would mean that a change to the current or future (planned) use of the land is not expected.

### Impacts to redevelopment potential

The project's impact on future redevelopment of residential, commercial and industrial land use in the study area has been considered via a review of strategic policy, major development applications and relevant planning scheme amendments.

Future redevelopment has been principally identified as being associated with the La Trobe National Employment and Innovation Cluster (NEIC) which lies further to the west of the study area. Victorian Government strategic policy sees the NEIC as the key location for growth of employment and business in north-east Melbourne. Although the La Trobe NEIC is located outside the study area, the operation of the project would have a positive impact on the redevelopment potential of the La Trobe NEIC by providing a '*transformed transport network that supports the economic growth of the cluster*' (VPA, Latrobe National Employment and Innovation Cluster Draft Framework Plan, 2017).

Construction and acquisition requirements for the project (such as those near Watsonia railway station, the interchange at the Bulleen Industrial Precinct, the proposed Bulleen Park and Ride and the proposed upgrade of the Doncaster Park and Ride) could generate opportunities to improve local areas and economies. The form of any future land use change (ie enhancements) would require a separate approval process, subsequent to this EES this and would need to consider the relevant strategic policy (such as the Yarra Strategic Plan and Yarra River – Bulleen Precinct Land Use Framework Plan), Victorian Government and local strategic planning objectives and the views of stakeholders.

There are no known significant redevelopment/renewal sites in or near the project aside from those identified above. For the purposes of the land use planning assessment, a major development is considered to be of significance such that it is captured in the DELWP Urban Development Program. Where major development and conservation is proposed such as for the La Trobe NEIC or in the Yarra Strategic Plan, the project provides potential to benefit by enhancing connectivity.

The planning scheme amendment to facilitate North East Link would insert new Schedules to the Design and Development Overlay (DDO) into the Banyule and Manningham planning schemes. The DDO would protect the construction and operation of the tunnel from incompatible development and control future development in the DDO area.

## Conclusion

The construction and operation of North East Link would be consistent with the relevant EES evaluation objectives that relate to land use planning. Specifically, the design of the tunnels minimises impacts to open space, public conservation, residential land uses and community facilities by reducing the requirements for above-ground infrastructure.

Where land use impacts have been identified, EPRs have been identified to establish the outcomes to be achieved to avoid, minimise or mitigate impacts.

The project also offers land use benefits or opportunities. New transport infrastructure can generate opportunities to enhance open space and community facilities in consultation with stakeholders. This includes new and improved shared use paths and land bridges between Grimshaw Street and Lower Plenty Road.

A change in land use due to the acquisition or temporary occupation of properties may also provide opportunity to improve the local area post-construction. The form of any future land use change (ie enhancements) would require a separate approval process, subsequent to this EES.

# Structure of EES



# Abbreviations

Abbreviation	Definition
<b>CBD</b>	Central Business District
<b>CEMP</b>	Construction Environmental Management Plan
<b>DELWP</b>	Department of Environment, Land, Water and Planning
<b>DDO</b>	Design and Development Overlay
<b>EES</b>	Environment Effects Statement
<b>EPBC Act</b>	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
<b>EPR</b>	Environmental Performance Requirement
<b>LPP</b>	Local Planning Policies
<b>LPPF</b>	Local Planning Policy Framework
<b>MSS</b>	Municipal Strategic Statement
<b>MPS</b>	Municipal Planning Strategy
<b>MTIA</b>	Major Transport Infrastructure Authority
<b>MTPF Act</b>	<i>Major Transport Project Facilitation Act 2009</i>
<b>NEIC</b>	National Employment and Innovation Cluster
<b>NELP</b>	North East Link Project
<b>OEMP</b>	Operations Environmental Management Plan
<b>PE Act</b>	<i>Planning and Environment Act 1987</i>
<b>PPF</b>	Planning Policy Framework
<b>SCO</b>	Specific Controls Overlay
<b>SEPP</b>	State Environment Protection Policy
<b>TMP</b>	Transport Management Plan
<b>VPP</b>	Victoria Planning Provisions

# 1. Introduction

## 1.1 Purpose of this report

North East Link ('the project') is a proposed new freeway-standard 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. North East Link would connect the M80 Ring Road (otherwise known as the Metropolitan Ring Road) to the Eastern Freeway, and include works along the Eastern Freeway from near Hoddle Street to Springvale Road.

The Major Transport Infrastructure Authority (MTIA) is the proponent for North East Link. The MTIA is an administrative office within the Victorian Department of Transport with responsibility for overseeing major transport projects.

North East Link Project (NELP) is an organisation within MTIA that is responsible for developing and delivering North East Link. NELP is responsible for developing the reference project and coordinating development of the technical reports, engaging and informing stakeholders and the wider community, obtaining key planning and environmental approvals and coordinating procurement for construction and operation.

On 2 February 2018, the Minister declared the works proposed for North East Link as Public Works and issued a decision confirming that an Environment Effects Statement (EES) is required for the project due to the potential for significant environmental effects.

Similarly, the project was referred to the Australian Government's Department of the Environment and Energy on 17 January 2018. On 13 April 2018 the project was declared a 'controlled action', requiring assessment and approval under the *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*. Separate to this EES, a Public Environment Report (PER) is required to be prepared to satisfy the EPBC Act requirements, and assess the impacts of the project on Commonwealth land and matters of national environmental significance (MNES).

The purpose of this report is to assess the potential land use planning impacts associated with North East Link and to define the Environmental Performance Requirements (EPRs) necessary to meet the EES objectives.

## 1.2 Why understanding land use planning is important

This report provides an assessment of the existing land use and planning conditions relevant to North East Link and an assessment of potential land use planning impacts from the project. Inter-related matters canvassing business, social, transport, urban design, landscape, air, noise and vibration are addressed in this assessment drawing upon findings of other EES technical reports.

The North East Link alignment and immediate surrounds intersect a range of land uses, including residential, commercial, industrial, open space and community facilities. It is therefore necessary to understand potential land use-related impacts the project may generate.

Due to the location of the project within a mature and largely established land use context, the construction and operation of the project would require permanent land acquisition and temporary occupation. These activities have the potential change current and ongoing land uses and land use character. Development of the project also has the potential to change land use that is potentially inconsistent with strategic planning policy and future redevelopment potential.

## 2. EES scoping requirements

### 2.1 EES evaluation objectives

The scoping requirements for the EES issued by the Minister for Planning set out the specific environmental matters to be investigated and documented in the project's EES, which informs the scope of the EES technical studies. The scoping requirements include a set of evaluation objectives. These objectives identify the desired outcomes to be achieved in managing the potential impacts of constructing and operating the project.

The following evaluation objective is relevant to this land use planning assessment:

- **Social, business, land use and infrastructure** – to manage effects of the project on land use and the social fabric of the community with regard to wellbeing, community cohesion, business functionality and access to services and facilities.

### 2.2 EES scoping requirements

The aspects from the scoping requirements relevant to the land use planning evaluation objective are shown in Table 2-1, as well as the location where these items have been addressed in this report. This includes the scoping requirements relevant to the overshadowing assessment in the *Landscape, visual and recreational values* evaluation objective.

Only those items applicable to land use planning have been listed for each of the scoping requirements. Some items are also inclusive of impacts that are addressed in other EES technical reports. The link between this assessment and other technical reports is discussed in Section 2.3

Table 2-1 Scoping requirements relevant to land use planning (social, land use and infrastructure)

Aspect	Scoping requirement	Section addressed
<b>Key issues</b>	Acquisitions of private property and temporary disruption and displacement of existing land use activities and infrastructure for project purposes.	Impact assessment: Section 8 Public Environment Report (Commonwealth land) Technical report I – Social Technical report F – Business
	The compatibility of the proposal with existing land uses in the vicinity of the project area and the likely opportunities and constraints resulting from the project for future land use, giving consideration to sites that are the subject of current planning permit applications or planning scheme amendments and nearby urban renewal precincts where development proposals are identified in the planning scheme or form part of a seriously entertained planning proposal.	Impact Assessment: Section 8 Public Environment Report (Commonwealth land) Technical report I – Social Technical report F – Business
<b>Priorities for characterising the existing environment</b>	Describe the land that may be required permanently or temporarily for the delivery of the project, including its current uses and sensitivities.	Existing Conditions: Section 6 Impact Assessment: Section 8 Public Environment Report (Commonwealth land) Technical report I – Social Technical report F – Business
	Describe in broad terms current and proposed future land uses or land use objectives for required and nearby land that may be affected temporarily or permanently by project activities.	Legislation, policy and guidelines: Section 4 Impact Assessment: Section 8 Public Environment Report (Commonwealth land) Technical report I – Social
	Describe the relevant social and land use policies, strategies and plans in the vicinity of the project.	Legislation, policy and guidelines: Section 4 Impact Assessment: Section 8 Public Environment Report (Commonwealth land)
<b>Design and mitigation measures</b>	Describe measures to minimise the temporary or permanent acquisition of land and, where access is required, the processes to be applied to gain access to land, including the approach to compensation and managing adverse effects for land owners.	Impact assessment: Section 8 Public Environment Report (Commonwealth land) Technical report I – Social Technical report F – Business
	Describe the approach to provide alternative access to properties or community facilities for which existing access may be disrupted or displaced by the project.	Impact Assessment: Section 8 Public Environment Report (Commonwealth land) Technical report I – Social Technical report F – Business

Aspect	Scoping requirement	Section addressed
<b>Assessment of likely effects</b>	Analyse the effects of temporary and longer-term land use changes resulting from the project.	Impact Assessment: Section 8 Public Environment Report (Commonwealth land) Technical report I – Social Technical report F – Business
	Evaluate the consistency of the project with the policies and provisions of the Yarra, Banyule, Boroondara, Nillumbik, Manningham and Whitehorse planning schemes and other relevant land use planning, environmental, urban or built form strategies.	Impact Assessment: Section 8 Public Environment Report (Commonwealth land) Legislation, policy and guidelines: Section 4 Technical report F – Business
	Assess consistency with strategic plans, including Plan Melbourne (2017–2050).	Impact Assessment: Section 8 Impact Assessment: Section 4 Legislation, policy and guidelines Technical report F – Business
	Describe any benefits for social cohesion, business, land use, or infrastructure from the project.	Impact Assessment: Section 8 Public Environment Report (Commonwealth land) Legislation, policy and guidelines: Section 4 Technical report I – Social Technical report F – Business
<b>Approach to manage performance</b>	Describe the environmental performance requirements to set social, business, land use and infrastructure outcomes that the project must achieve	Environmental Performance Requirements: Section 9 Public Environment Report (Commonwealth land) Technical report I – Social Technical report F – Business
<b>Assessment of likely effects (Landscape, visual and recreational values evaluation objective)</b>	Undertake a shading analysis and assess the extent and nature of residual shading and light spill impacts on residential properties and public realm arising from the permanent project infrastructure with due regard to local planning provisions for shading and light spill.	Impact Assessment: Section 8 An assessment of the light spill impacts is provided in Technical report H – Landscape and visual

## 2.3 Linkages to other reports

This report relies on or informs the technical assessments as indicated in Table 2-2 below.

Table 2-2 Linkages to other technical reports

Specialist report	Relevance to this impact assessment
Technical report A – Traffic and transport	Provides an assessment of the project's impacts on the transport network. Information related to changes to local and regional access and connectivity from the project have informed the policy analysis and impact assessment in this report.
Technical report B – Air quality	Provides an assessment of the project's potential to impact air quality during construction and operation. Findings from the air quality report have informed the assessment of the ongoing use of land and the potential for impact through changes in air quality conditions.
Technical report C – Surface noise and vibration	Provides an assessment of the potential surface noise and vibration impacts during construction and operation. Findings from the noise and vibration report have informed the assessment of the ongoing use of land and the potential for impact through changes in noise and vibration conditions.
Technical report F – Business	Provides an assessment of the potential impacts of the project on businesses from full or partial property acquisition, change in access or amenity-related impacts on businesses. Information from the business report has assisted in the preparation of the existing conditions section of this report, and also informed the impact assessment on commercial and industrial land in particular.
Technical report H – Landscape and visual	Identifies sensitive receptors and provides an assessment of potential visual and landscape impacts of the project. Linkages to land use planning include impacts on built form and strategic policy outcomes, which have informed the policy analysis and built form impact sections of this report.
Technical report I – Social	Provides an assessment of the potential social impacts of the project. Information from the social report has assisted in the preparation of the existing conditions section of this report, and informed the impact assessment on land used for community facilities.
Attachment II – Urban Design Strategy	While not a technical impact assessment, the Urban Design Strategy provides the design guidelines to inform the urban design project requirements and establishes performance outcomes and benchmarks for which the project will be assessed. The approach to urban design can influence built form and land use character.
Attachment V – Planning Scheme Amendment	The development and use of North East Link would be facilitated via a planning scheme amendment to the Banyule, Nillumbik, Manningham, Boroondara, Whitehorse, Whittlesea and Yarra planning schemes. The Strategic Assessment Report is contained in the planning scheme amendment package forming part of the EES and outlines the assessment of the project against strategic planning policy and in accordance with the Ministerial Direction No.11. This has informed the policy analysis section of this report.

### 3. Project description

#### 3.1 Overview

The North East Link alignment and its key elements assessed in the Environment Effects Statement (EES) include:

- **M80 Ring Road to the northern portal** – from the M80 Ring Road at Plenty Road, and the Greensborough Bypass at Plenty River Drive, North East Link would extend to the northern portal near Blamey Road utilising a mixture of above, below and at surface road sections. This would include new road interchanges at the M80 Ring Road and Grimshaw Street.
- **Northern portal to southern portal** – from the northern portal the road would transition into twin tunnels that would connect to Lower Plenty Road via a new interchange, before travelling under residential areas, Banyule Flats and the Yarra River to a new interchange at Manningham Road. The tunnels would then continue to the southern portal located south of the Veneto Club.
- **Eastern Freeway** – from around Hoddle Street in the west through 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. There would also be a new interchange at Bulleen Road to connect North East Link to the Eastern Freeway.
- These elements are illustrated in Figure 3-1.

The project would also improve existing bus services from Doncaster Road to Hoddle Street through the Doncaster Busway as well as pedestrian connections and the bicycle network with connected shared use paths from the M80 Ring Road to the Eastern Freeway.

For a detailed description of the project, refer to EES Chapter 8 – Project description.

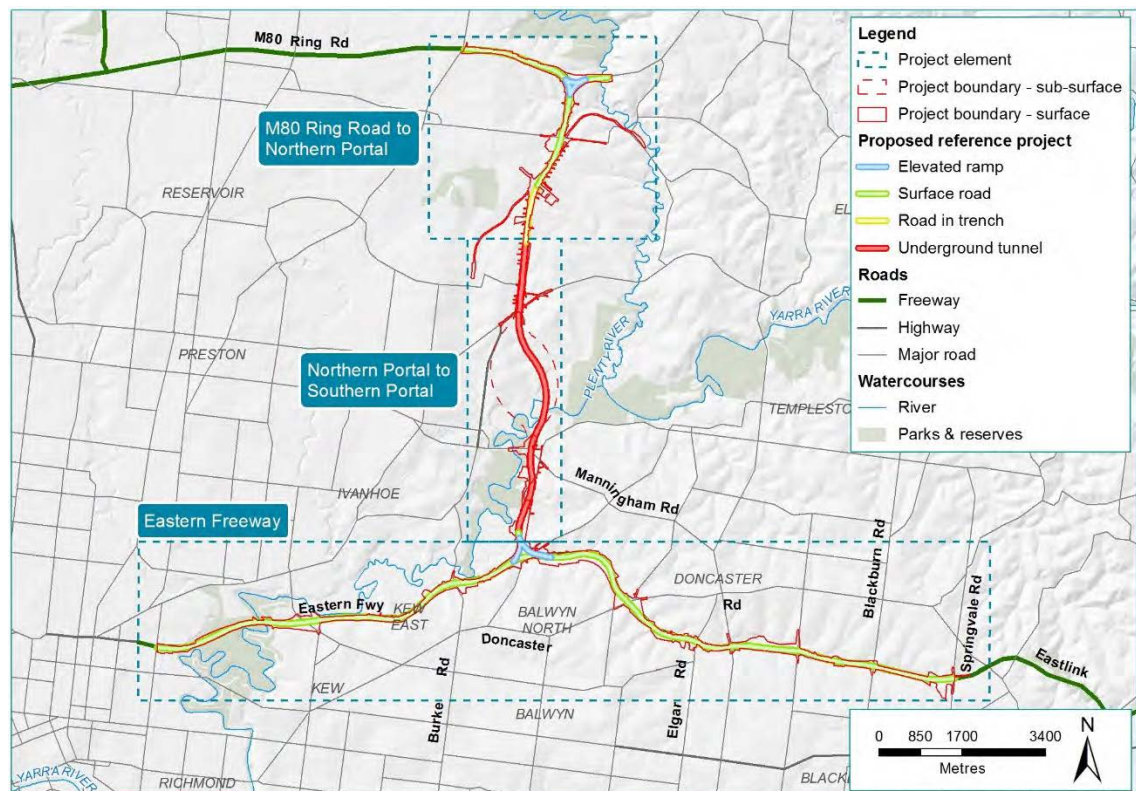


Figure 3-1 Overview of North East Link

### 3.2 Construction

Key construction activities for the North East Link would include:

- General earthworks including topsoil removal, clearing and grubbing vegetation
- Relocation, adjustment or installation of new utility services
- Construction of retaining walls and diaphragm walls including piling
- Ground treatment to stabilise soils
- Tunnel portal and drive shaft construction
- Storage and removal of spoil
- Construction of cross passages, ventilation structures and access shafts
- Installation of drainage and water quality treatment facilities
- Installation of a Freeway Management System
- Tunnel construction using tunnel boring machines (TBMs), mining and cut and cover techniques
- Installation of noise barriers
- Restoration of surface areas.

### 3.3 Operation

Following construction of the North East Link, key operation phase activities would include:

- Operation and maintenance of new road infrastructure
- Operation and maintenance of Freeway Management System
- Operation of North East Link motorway control centre
- Operation and maintenance of the tunnel ventilation system
- Operation and maintenance of water treatment facilities
- Operation and maintenance of the motorways power supply (substations)
- Maintenance of landscaping and Water Sensitive Urban Design (WSUD) features.

### 3.4 Activities and design considerations

Consideration of land use planning and environmental risks have been a key element contributing to the reference project. Key land use and environmental commitments reflected in the design to minimise land use impacts include:

- The tunnel design minimises impacts to existing open space, residential land use and community facilities by reducing the requirement for above-ground infrastructure. This approach would contribute to reduced permanent land acquisition requirements and the temporary occupation of land.
- Design and construction of the project makes use of existing road corridors where possible, minimising the requirement for land acquisition and impacts on land use.

- The project also provides potential land use benefits or opportunities. The transport infrastructure can generate:
  - Opportunities to enhance open space and community facilities in consultation with relevant stakeholders and in accordance with EES Attachment II – Urban Design Strategy. This includes (but is not limited to) new and improved shared use paths and land bridges between Grimshaw Street and Lower Plenty Road.
  - Better connectivity with improved shared use path networks, including improved shared user paths and land bridges between Grimshaw Street and Lower Plenty Road.
  - Opportunities to improve the local area post-construction where land has been permanently acquired and temporarily occupied for the project. The form of any future land use change (ie enhancements) would require a separate approval process, subsequent to this EES.

## 4. Legislation, policy and guidelines

Numerous legislative, policy and guidance documents were found to be relevant to this land use planning impact assessment and are discussed further in this report. The key legislation, policy and guidelines that apply to the land use planning impact assessment for the project are summarised in Table 4-1 and in more detail in Appendix A.

### 4.1 Commonwealth legislation

The principal piece of Australian Government legislation applicable to North East Link is the *Environment Protection and Biodiversity Conservation Act 1999*.

Further information regarding Australian Government legislation is contained in [Appendix A](#) of this report.

### 4.2 State legislation

Victorian Government legislation includes a number of Acts that are relevant to North East Link.

These include the:

- *Aboriginal Heritage Act 2006*
- *Crown Land (Reserves) Act 1978*
- *Environment Effects Act 1978*
- *Environment Protection Act 1970*
- *Heritage Act 2017*
- *Land Act 1958*
- *Land Acquisition and Compensation Act 1986*
- *Major Transport Projects Facilitation Act 2009*
- *Planning and Environment Act 1987*
- *Transport Integration Act 2010*
- *Water Act 1989*
- *Yarra River Protection (Wilip-gin Birrarung murron) Act 2017*

Key legislation relevant to the land use planning impact assessment is listed in Table 4-1.

Further information on Victorian Government legislation is provided in [Appendix A](#) of this report.

Table 4-1 Key State legislation relevant to the land use planning impact assessment

Legislation	Relevance to this impact assessment
<i>Planning and Environment Act 1987</i>	<p>The Planning and Environment Act establishes a framework for planning and managing the use, development and protection of land in Victoria in the present and long-term interest of all Victorians. Planning schemes prepared under the provisions of the Act apply to each municipality in Victoria.</p> <p>The Act governs the process for approval pathways, including the preparation, approval and adoption of planning schemes and planning scheme amendments by planning authorities</p> <p>The construction and operation of North East Link would occur in the municipalities of Banyule, Nillumbik, Manningham, Boroondara, Whitehorse, Whittlesea and Yarra and is subject to a range of planning controls. An amendment is required to each of these planning schemes under the Planning and Environment Act.</p> <p>Further discussion on the requirement to amend the planning schemes under is provided in Section 4.4.</p>
<i>Yarra River Protection (Wilip-gin Birrarung murrn) Act 2017</i>	<p>The Yarra River Protection (Willip-gin Birrarung Murrn) Act provides an overarching policy and planning framework to coordinate and harmonise planning for the use, development and protection of the Yarra River, its parklands and other land in its vicinity. A purpose of the Act is to protect the Yarra River and the surrounding parcels of public land as one living and integrated natural entity. The Act also recognises the importance of the Yarra River, and its parklands and associated public places, to the economic prosperity, vitality and liveability of Melbourne and the Yarra Valley.</p> <p>The Act provides for the preparation of a Yarra Strategic Plan in accordance with Yarra Protection Principles to guide future use and development, and areas for protection in the Yarra corridor. An exemption from the provisions of the Act applies for projects declared under the <i>Major Transport Projects Facilitation Act 2009</i> (Vic) (including the North East Link). However, NELP has considered the long-term community vision within the Yarra Strategic Plan, and has had regard to the Yarra Protection Principles set out in the Act. Further discussion surrounding the potential land use planning implications for the project are outlined in Section 8.1.5 and Section 8.2.2</p>
<i>Major Transport Project Facilitation Act 2009 ('MTPF Act')</i>	<p>Section 10(1) of the MTPF Act provides for the Premier may to declare a transport project a declared project if it is of economic, social or environmental significance to the state or a region of the state.</p> <p>North East Link was declared (gazetted 28 June 2018) by the Premier under s.10 (1)(b) of the MTPF Act for delivery purposes.</p> <p>The Act applies to North East Link with the exception of Part 3 (Assessment and approval of major transport projects) and Part 8 (Assessment Committees). This means that if North East Link is granted the principal environmental and planning approvals, the project authority will be able to use the project delivery and utilities interface powers in Parts 6 and 7 of the Act to deliver the project.</p> <p>The Premier appointed the Minister for Roads and Road Safety as the Project Minister for the declared project known as the North East Link Project (gazetted 28 June 2018).</p>
<i>Land Acquisition and Compensation Act 1986</i>	<p>The main purposes of the Land Acquisition and Compensation Act are</p> <p><i>'(a) to establish a new procedure to acquire interests in land for public purposes</i>  <i>(b) to provide for the determination of the compensation payable in respect of land so acquired.'</i></p> <p>The project authority for the project (the Secretary of the Department of Transport) is obliged to comply with the provisions of the Act as modified by the MTPF Act, to the extent that any interest in land needs to be compulsorily acquired for the project. The provisions of the Act (as modified) may also apply to the extent that any access or temporary occupation of land is required for development of the project.</p> <p>Land use implications due to project acquisition requirements are discussed in Section 8.1.1.</p>

### 4.3 Planning schemes

The *Planning and Environment Act 1987* provides the framework for land use and development in Victoria. Planning schemes are prepared for each municipality under the provisions of the Planning and Environment Act in Victoria.

North East Link would be located in municipalities that are subject to the Banyule, Nillumbik, Manningham, Boroondara, Whitehorse and Yarra planning schemes. Figure 4-1 shows the boundaries of the municipalities. The provisions of each municipal planning scheme govern the use, development, protection and conservation of land in that municipality.

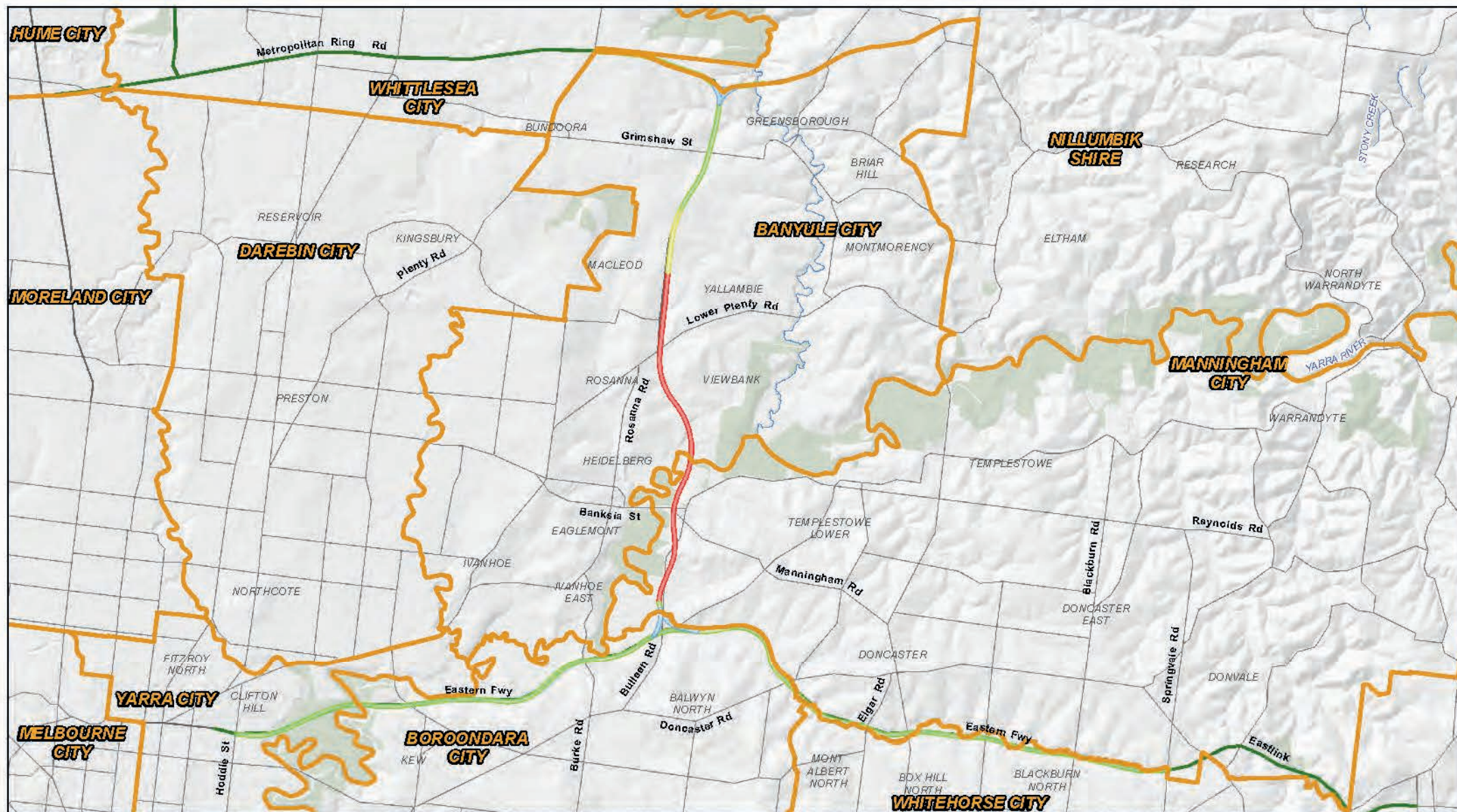
The Victoria Planning Provisions (VPP) are a state-wide document which frame the structure and content of planning schemes and include the following policy guidance and land use controls:

- Planning Policy Framework (PPF), including state-wide and regional policy, and local policy in the Local Planning Policy Framework (LPPF) including:
  - Municipal Strategic Statement (MSS).<sup>1</sup>
  - Local Planning Policy
- Zones
- Overlays
- Particular Provisions
- General Provisions
- Definitions
- Incorporated Documents.

Key elements of the VPP relevant to North East Link are outlined in the following sections.

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<sup>1</sup> Changes introduced through VC148 provide for the introduction of a Municipal Planning Strategy (MPS), but as this has not yet occurred within the relevant planning schemes, the MSS has been considered.



Paper Size A4  
0 550 1,100 2,200  
Metres  
Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 55



#### Legend

- |   |                   |                     |
|---|-------------------|---------------------|
| LGA                                     | Viaduct structure | <b>Watercourses</b> |
| <b>Proposed reference project Roads</b> | Freeway           | River               |
| Open cut                                | Highway           | Parks & reserves    |
| Surface                                 | Major road        |                     |
| Underground                             |                   |                     |



North East Link Project  
Environment Effects Statement (EES)

Job Number | 31-35006  
Revision | 6  
Date | 21/01/2019

Municipalities boundaries overview

Figure 4-1

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180 Lonsdale Street Melbourne VIC 3000 Australia T 61 3 8687 8000 F 61 3 8687 8111 E melm@ghd.com W www.ghd.com

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Data source: CIP Imagery - DEUWP - 2018 | roads, watercourses, parks, rail, localities, planning zones - Vicmap - 2019 | project infrastructure - GHD, AECDM - 2019 Created by: trighetti

#### 4.3.1 Planning policy framework

The PPF outlines state-wide and regional strategic planning issues and is common in content across all Victorian planning schemes. In line with the transitional provisions of Planning Scheme Amendment VC148, policies of local significance are included in the Municipal Strategic Statement (MSS) and Local Planning Policies (LPP) (of the Local Planning Policy Framework (LPPF)), until the future introduction of the Municipal Planning Strategy (MPS) and integration of local content into the PPF.

The PPF seeks to ensure the objectives of planning in Victoria (as set out in section 4 of *the Planning and Environment Act 1987*) are fostered through appropriate land use and development planning policies and practices which integrate relevant environmental, social and economic factors in the interests of net community benefit and sustainable development.

The objectives of planning in Victoria as set out in the Planning and Environment Act are:

- a) *To provide for the fair, orderly, economic and sustainable use and development of land*
- b) *To provide for the protection of natural and man-made resources and the maintenance of ecological processes and genetic diversity*
- c) *To secure a pleasant, efficient and safe working, living and recreational environment for all Victorians and visitors to Victoria*
- d) *To conserve and enhance those buildings, areas or other places which are of scientific, aesthetic, architectural or historical interest, or otherwise of special cultural value*
- e) *To protect public utilities and other assets and enable the orderly provision and coordination of public utilities and other facilities for the benefit of the community*
- f) *To facilitate development in accordance with the objectives set out in paragraphs a), b), c), d) and e)*
- fa) *To facilitate the provision of affordable housing in Victoria*
- g) *To balance the present and future interests of all Victorians.*

#### **State-wide and regional planning policy**

A number of the key state-wide and regional policies that apply to the land use considerations of North East Link include the clauses listed below. A detailed summary of state-wide and regional land use planning policies relevant to the project is provided in Section 8.1.5 and Appendix A. Other relevant EES technical reports provide detail on policies that apply to other considerations of the project.

- Clause 11 *Victoria* – Key strategies of relevance at Clause 11.01-1S ‘*Settlement*’ relate to connecting communities and provision of access to jobs, services, infrastructure and community facilities to promote investment and growth. In particular, the North East Link is recognised as a potential transport project of regional importance in the ‘Melbourne 2050 plan’ at Clause 11.01-1R ‘*Metropolitan Melbourne*’.
- Clause 12 *Environmental and Landscape Values* – The clause acknowledges the importance of protecting the health of ecological systems, biodiversity and conservation areas with identified environmental value. There is specific reference to regional Yarra River Protection under Clause 12.03 – 1R ‘*Yarra River protection*’, which details ways to improve the river with strategies that aim to manage development in the vicinity of the River’s environmental and landscape context.

- Clause 18 *Transport* – The clause seeks to ensure an integrated and sustainable transport system that provides access to social and economic opportunities, facilitates economic prosperity, contributes to environmental sustainability and coordinates reliable movements of people and goods.
  - Clause 18.01-1S *Land use and transport planning* – The clause seeks to create a safe and sustainable transport system by integrating land-use and transport via the development of integrated transport networks to connect people to jobs and services and goods to market and improving transport connections to Melbourne and adjoining regions.
  - Clause 18.01-2S *Transport System* – The PPF details strategies to coordinate development of all transport modes by requiring transport management plans for key transport corridors and the incorporation of public transport and cycling infrastructure in all major new Victorian Government and local government road projects. A relevant strategy is to ‘*locate and design new transport routes and adjoining land uses to minimise disruption of residential communities and their amenity*’.
  - Clause 18.02-2S *Public Transport* – The objective is to facilitate greater use of public transport via improved access to robust and efficient public transport network.
  - Clause 18.02-2R *Principal Public Transport Network* – Relevant strategies seek to connect public transport users to jobs, ensure comprehensive networks of local public transport and planning for local bus services to meet local and wider public transport network connections.
  - Clause 18.02-3S *Road System* – The clause acknowledges the importance of developing an efficient and safe transport network, making the most of existing infrastructure by providing high quality connections and upgrading of freight routes and on road public transport.
  - Clause 18.05-1S *Freight links* – The clause identifies the need to develop key transport gateways and freight links and maintain Victoria’s position as the nation’s premier logistics centre. Key strategies include improving the freight and logistic network to improve freight efficiency while protecting urban amenity.

### **Local planning policy**

The PPF also provides for local policy in the LPPF (in the form of the MSS and LPP), in line with transitional provisions of Amendment VC148.

The MSS is a concise statement of the key strategic planning, land use and development objectives for the municipality and the strategies and actions for achieving the objectives.

Local planning policies are tools used to implement the objectives and strategies of the MSS and include a policy statement of intent or expectation.

Each municipal planning scheme includes land use planning and environmental policies that are relevant to the project to varying degrees. Generally, relevant policies in the planning scheme include issues relating to land use planning, transport, infrastructure provision, environmental considerations and urban/public realm design. The relevant aspects of the MSS, LPPs and supporting strategic documents for each municipal area are briefly identified in the following sections and provide insight into the policies and objectives that guide land use planning.

Section 8.1.5 and Appendix A provide a more detailed summary of relevant policies and objectives. The relevant EES technical reports provide detail on policies relevant to other considerations of the project.

### ***Banyule Planning Scheme***

The City of Banyule MSS recognises Banyule is principally developed for residential purposes with the notable exception of:

- Large areas of public owned land, primarily in the vicinity of the rivers and creeks
- Public and private golf courses
- Commercial centres, including the NEIC (including Heidelberg Major Activity Centre and La Trobe University), Greensborough Major Activity Centre and other activity centres such as the Watsonia Neighbourhood Centre
- Industrial areas such as Heidelberg West, Greensborough/Briar Hill and Bundoora
- Large-scale institutional uses, such as the Austin and Repatriation Medical Centres and the Simpson Army Barracks.

The City of Banyule is located approximately seven kilometres north-east of the CBD between the inner suburbs and outer fringes of Melbourne. The boundaries of the municipality are shown in Figure 4-2.

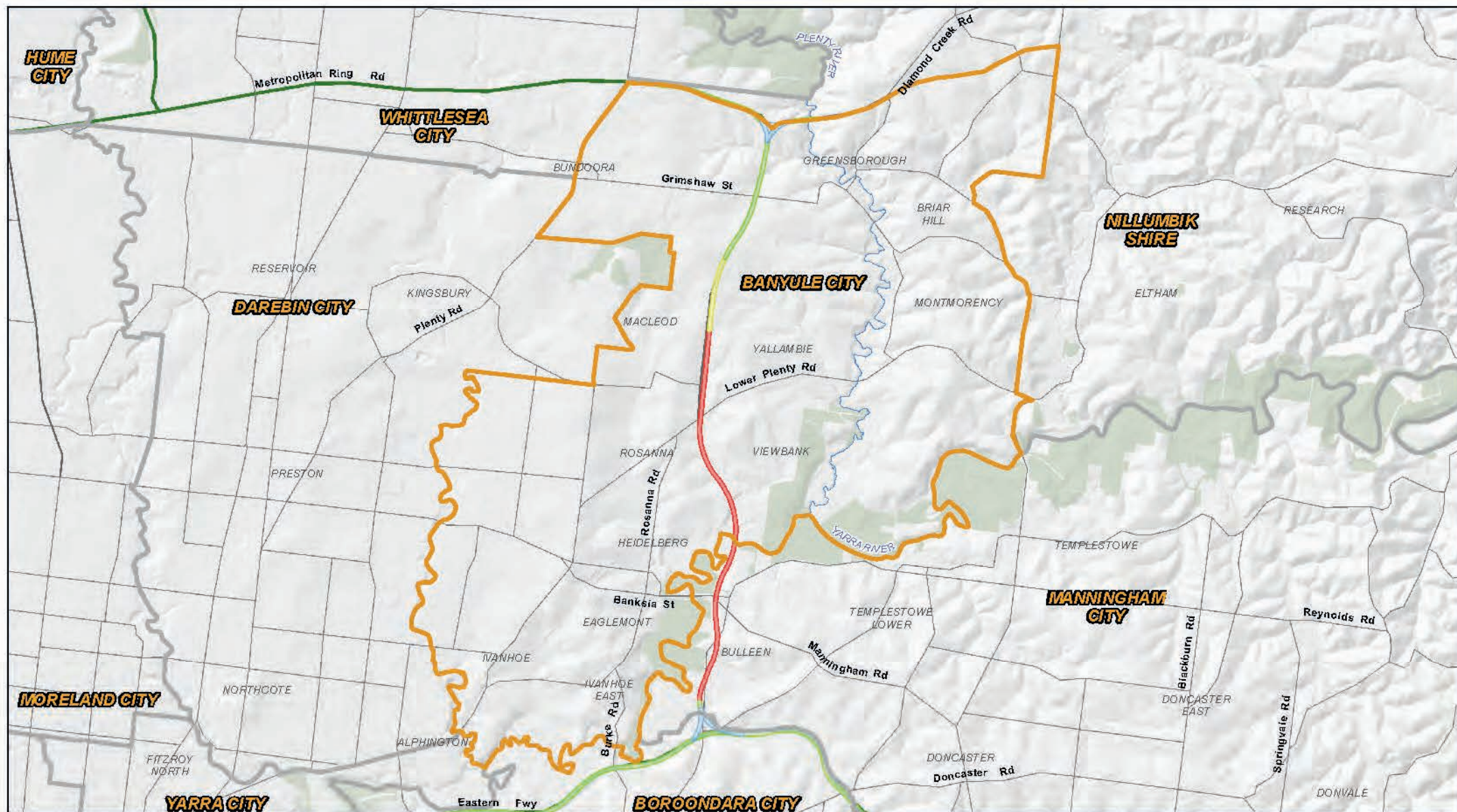
The MSS recognises the municipality has a generally well connected transport system with many of its regional arterial roads providing access to the western suburbs and Melbourne Airport. These roads also link nearby residential areas in the northern growth corridor (Victorian Planning Authority, Growth Area Authority North Growth Corridor Plan) area and other inner suburban places of employment and industrial areas of south-east Melbourne. As outlined in *Clause 21.08 Transport*, congestion is as a key issue affecting the municipality's arterial roads, and North East Link is identified as an orbital connection between the Ring Road and Eastlink in the *Banyule Integrated Transport Plan 2015–2035* and a key transport infrastructure improvement for the municipality.

Other local policy as identified in the MSS aims to promote economic development that protects the environment, while enhancing the connectivity and quality of life of City of Banyule residents. It is acknowledged there is a need to promote medium density housing developments around Activity Centres while protecting existing lower density suburban areas.

The MSS as supported by the *Banyule Public Open Space Plan (2016–2031)* also identifies Banyule's vegetation and landscape character as notable, including the open space surrounding the Yarra and Plenty River, which includes several sites of state, regional and local botanical, zoological and habitat significance.

The Banyule MSS and local planning policy is supported by numerous strategic planning and policy documents which address a variety of issues including connectivity of the transport network, economic development, open space and biodiversity considerations and residential character. A number of these documents are considered relevant to the North East Link. Some provide detail regarding key employment and innovation centres as identified in the *La Trobe NEIC Draft Framework Plan 2017*, *Greensborough Activity Centre Structure Plan*, *Picture Watsonia – A Vision for Watsonia Village 2014* and *Heidelberg Structure Plan 2010*. Others support the residential objectives of local planning policy, such as the *Banyule City Council Neighbourhood Character Strategy 2012*, which highlights the council's objective to preserve the character of existing residential land uses in the municipality. It is noted that Banyule City Council has commenced development of a concept plan for Watsonia Neighbourhood Centre, in collaboration with NELP.

Development of the project has also considered the land use objectives in Amendment GC48, where land use planning objectives relating to development would influence the use of land for public open space and access including maintaining linear open space and access to the Yarra River.



## ***Boroondara Planning Scheme***

The City of Boroondara forms part of the inner eastern region around the Melbourne CBD. The boundaries of the municipality are shown in Figure 4-3. The Boroondara MSS considers the protection of neighbourhood amenity and heritage as a key priority. Similarly, local policy in the Boroondara Planning Scheme aims to promote the development of 20-minute neighbourhoods around its major activity centres in addition to the preservation and enhancement of Boroondara's open space network and neighbourhood amenity.

The MSS identifies Boroondara as an attractive and highly sought after residential environment. This character is considered one of the key features of the municipality, with the low density 'Garden Suburb' form of development as a prime example. Residential character is further addressed in Clause 21.04 *Built Environment and Heritage*, Clause 22.05 *Neighbourhood Character Policy* and the *Boroondara Neighbourhood Character Precinct Statements (2013)*, which guide development to retain and enhance the key character attributes that contribute to the preferred character.

Clause 21.05 *Housing* supported by the *Boroondara Housing Strategy (2015)* refers to the council's vision for residential development and maintaining neighbourhood character in the municipality, with areas immediately south of the project along the Eastern Freeway identified as areas to support minimal change.

The MSS also identifies the importance of community facilities for the municipality, including equitable access and consideration of these facilities in residential areas.

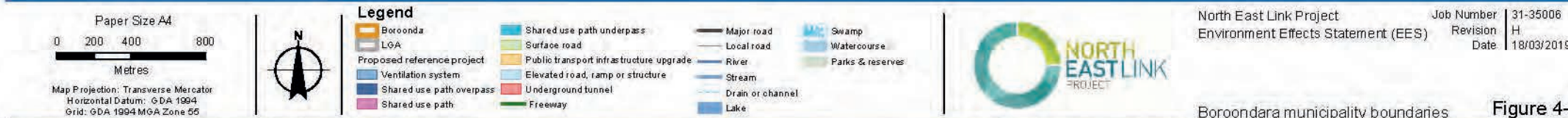
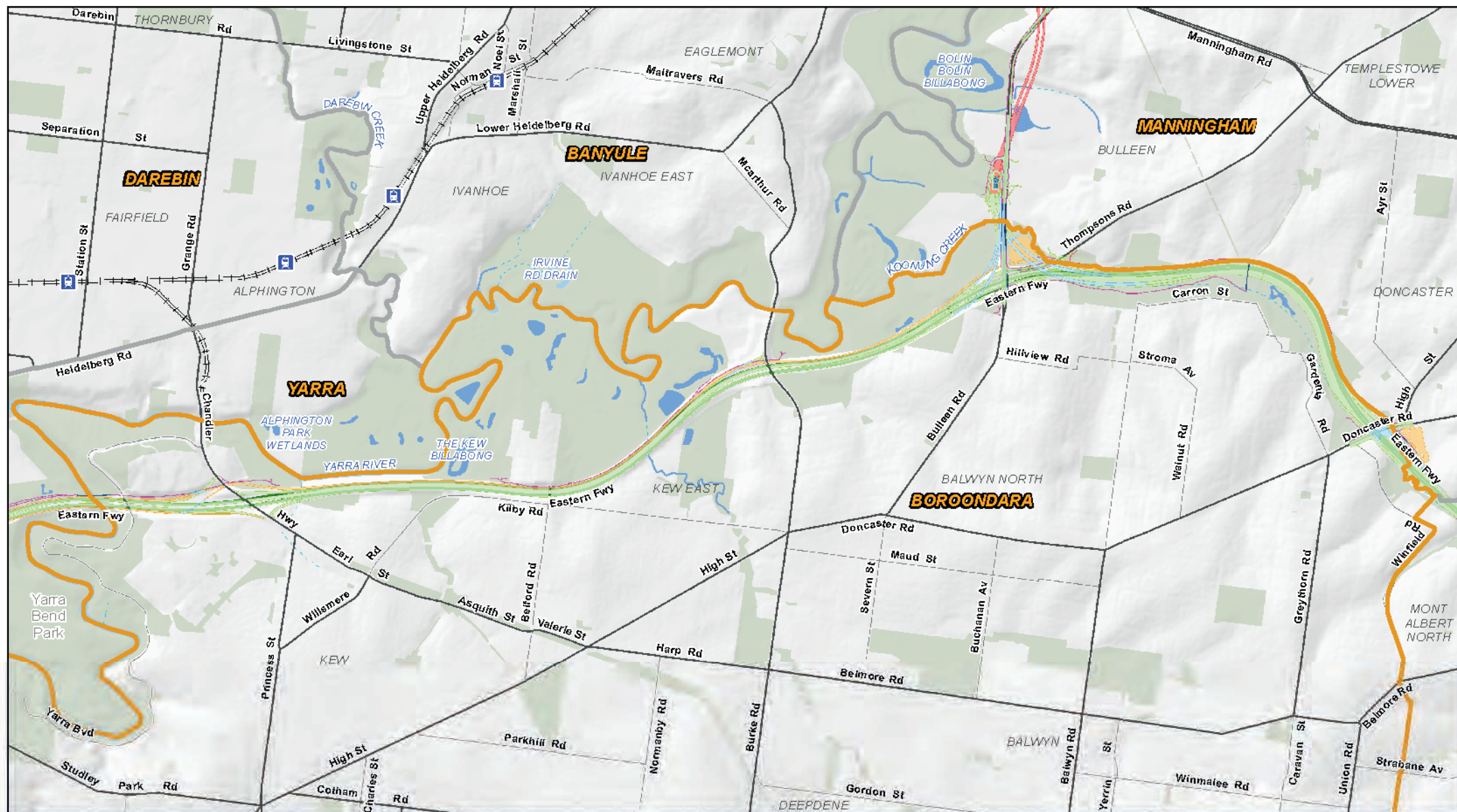
The City of Boroondara has a large network of activity centres, with three major activity centres at Camberwell Junction, Kew Junction and Glenferrie Road, identified in the MSS as key to supporting a wide range of goods and services.

The Yarra River and environs forms part of the northern and western border of the municipality and contains some of Boroondara's regional open space while providing a significant landscape feature in the municipality. The Yarra River, Koonung Creek and Gardiners Creek support important riverine ecosystems and environments.

The *Boroondara Open Space Strategy 2013* includes reference to open spaces in or adjacent to the project, such as Koonung Creek Reserve, Yarra Flats Reserve, Hays Paddock and Columbia Street Reserve. The Open Space Strategy is principally concerned with the management and enhancement of Boroondara's open space over a 15-year timeframe with key actions involving upgrades to informal recreational facilities and ongoing improvement of environmental values.

Environment and open space objectives of the MSS, including in Clause 21.03 *Environment and Open Space* refer to the importance of the municipality's open space assets and identifies the need to provide for distribution of open space in the municipality with an emphasis on filling gaps in the provision of open space, as identified in the MSS and the Open Space Strategy.

The MSS identifies the municipality's road network is a grid bordered by the Eastern Freeway to the north and the Monash Freeway to the south-west. The MSS also notes that the Yarra River creates pinch points, with east-west traffic movements funnelled into several river crossings. The *Boroondara Integrated Transport Strategy 2006* identifies a number of actions that seek to improve the efficiency of the existing road, public transport, and bicycle lane network relevant to the project, including prioritising bus services and associated park and ride facilities as well as improvements to regional bicycle routes and improving identified freight routes on key arterial roads.



Boroondara municipality boundaries **Figure 4-3**

## ***Manningham Planning Scheme***

The City of Manningham begins at the confluence of the Yarra River and Koonung Creek which form the natural boundaries of the municipality, with the Yarra River to the north and the Koonung Creek to the south. It is divided by the Mullum Creek into two distinct topographic and land-use areas. The municipality's boundaries are shown in Figure 4-4. Land to the west is highly urbanised while land to the east is primarily semi-rural.

Manningham has one of the largest networks of parks and open spaces in metropolitan Melbourne which provide recreation opportunities and include areas of significant biological significance. It is also the location of the culturally important Heide Museum of Modern Art.

The *Manningham Open Space Strategy 2014* supports local policy by outlining the council's vision and implementation strategies for key open space in the municipality. These include future landscaping and community infrastructure improvements at Koonung Reserve and Bulleen Park within and adjacent to the study area.

Local policy associated with the Koonung Creek are supported by specific objectives outlined in the *Koonung Park Management Plan 2016* and *Koonung Creek Linear Park Management Plan 2011* which advocate for improvements to user amenity via strategies such as provision of recreational infrastructure, linkages with Bulleen Park, Mullum Mullum Creek Linear Park, Doncaster and surrounding open space and activity centres.

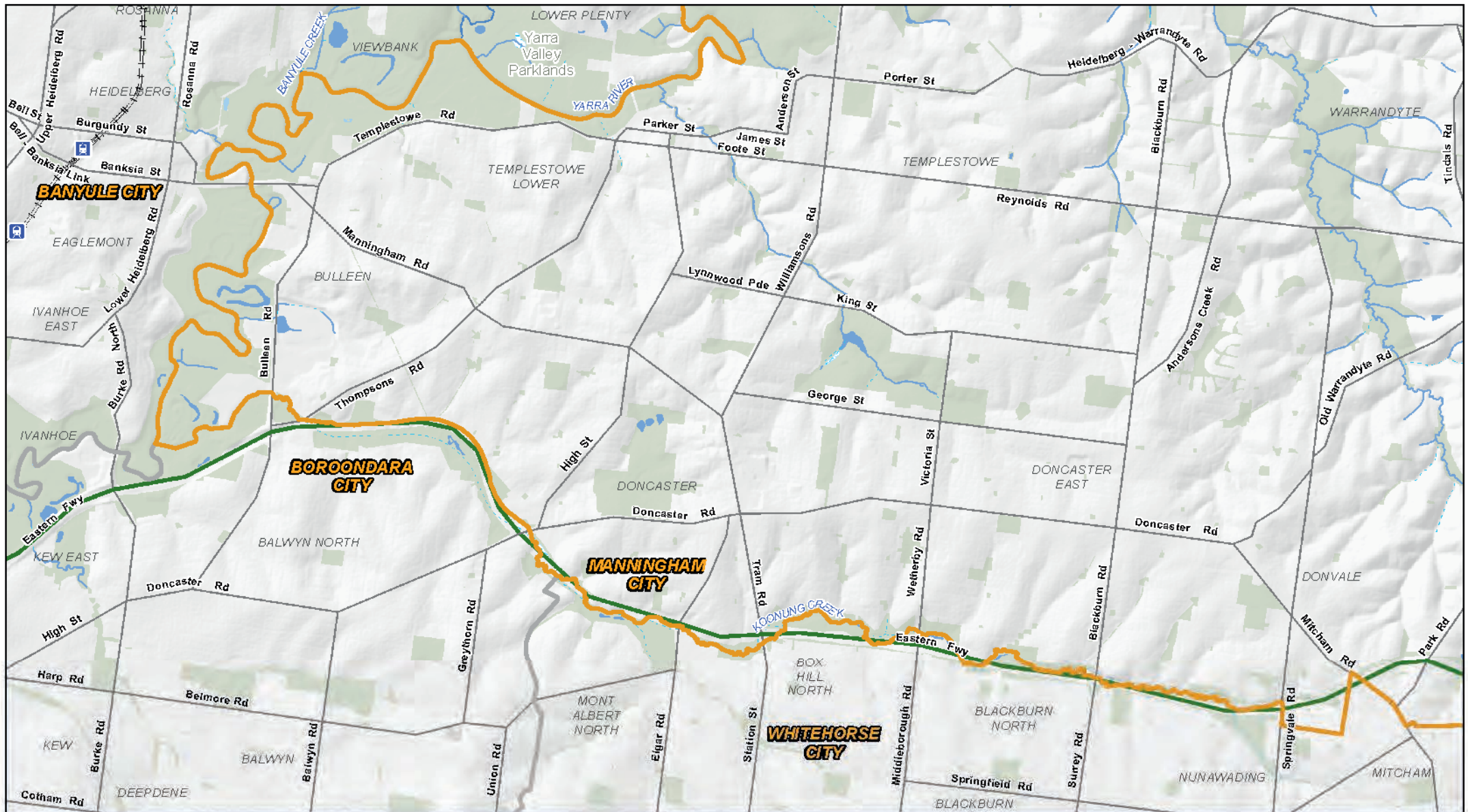
Improving road based movement is supported in the MSS. The lack of rail based public transport in the municipality places high importance on the road network. Accordingly, local policy notes that significant importance is placed on improving and upgrading the road network, bike paths and pedestrian networks and the on-road public transport system, including buses.

Industrial land uses across the municipality are considered in Clause 21.08 *Industrial*. The Bulleen Industrial Precinct is one of three identified in the City of Manningham. The local policy seeks to consolidate the role of the existing industrial areas of Bulleen and Templestowe. This would be achieved by discouraging the establishment of non-industrial uses in the industrial precinct and minimising the need to rezone additional land for industrial purposes.

Clause 22.10: *Bulleen Gateway Policy* aims to retain the commercial area as a 'neighbourhood' level centre, encouraging high standards of development and built form. Bulleen is subject to a number of development pressures from industrial, commercial and retail development and transport-based impacts, including road development. Bulleen is a major gateway to the City of Manningham and adjoins the regionally significant Yarra Valley Parklands and the Yarra River. The Municipal Strategic Statement encourages the improvement and enhancement of the function of the Bulleen Gateway area.

Clause 22.16 *Industrial Areas Policy* relates to the industrial centres of Bulleen and Templestowe. The policy notes that Clause 21.08 *Industrial* recognises there are no further opportunities to develop new industrial centres in the municipality. The policy indicates it is important to discourage the establishment of non-industrial uses in the Bulleen and Templestowe industrial precincts and to consolidate the industrial role of these centres. The policy also indicates that use and development in the industrial precincts should not have a detrimental impact on the existing industrial land uses or nearby land uses such as residential.

Local residential policy seeks to provide for a range of residential areas, with varying degrees of development and change. Those areas nominated for substantial change include areas near activity centres and along main roads and transport routes, as well as key redevelopment sites such as the former Eastern Golf Course site (now known as Tullamore).



### ***Nillumbik Planning Scheme***

The Shire of Nillumbik forms part of a metropolitan 'green wedge' and features regionally significant open space, Plenty Gorge Park and Yarra River, which have high environmental value. The municipality's boundaries are shown in Figure 4-5.

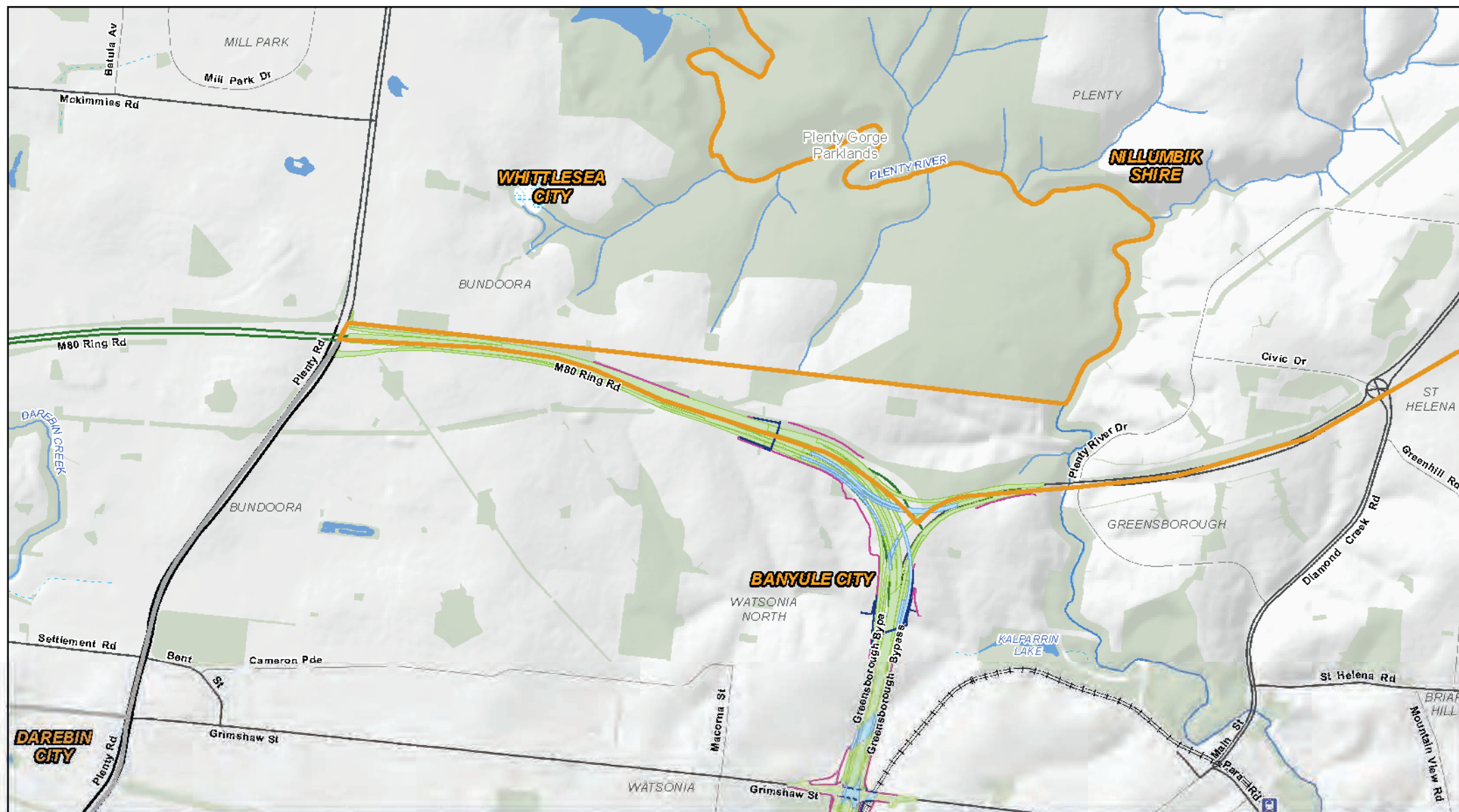
Local policy in the Nillumbik Planning Scheme identifies the need to preserve the network of strategic habitat links north-south along the waterways (from Kinglake National Park to Yarra River).

The Nillumbik MSS and local planning policy is supported by strategic planning and policy documents which address issues relevant to the project, such as the *Nillumbik Biodiversity Strategy*, *Nillumbik Trails Strategy* and *Northern Region Trails Strategy*. They seek to protect and enhance the municipality's environmental and recreational assets such as the Plenty River and trail network located adjacent to the project on the M80 and Greensborough Bypass.

The MSS recognises the municipality contains good road linkages to the north and west of Melbourne but arterial routes in the Shire are experiencing pressure for improvements to the road network to allow for better access to and from non-urban and urban areas.

Local planning policy, supported by strategic policy such as the *Nillumbik Green Wedge Management Plan 2010–2025* and the *Nillumbik Housing Strategy 2001* also recognises the need to diversify housing stock, provide for a range of commercial uses at Major Activity Centres while maintaining existing open space, agricultural and low density residential land uses and rural landscapes – particularly the green wedge.

The need to focus development in already urbanised areas of the municipality is also reflected in activity centre policy, such as the *Diamond Creek Major Activity Centre Structure Plan and Leisure Facilities Plan 2006* which aim to encourage development in these areas.



## Whitehorse Planning Scheme

Whitehorse comprises residential, commercial, open space, educational and industrial land uses across the municipality. The municipality's boundaries are shown in Figure 4-6. The Whitehorse MSS identifies the municipality as the second largest provider of office space outside St Kilda Road and the CBD.

Numerous activity centres are present in the municipality, providing a range of commercial and industrial functions. These are complimented by neighbourhood activity centres that form a more localised focus for commercial and retail activities. The MSS also identifies that the range of land uses in the municipality are supported by extensive public transport and freeway linkages, providing strong connection to the wider metropolitan region.

Local planning policy identifies key activity centres as being the Box Hill employment precinct (which is also listed as a Metropolitan Activity Centre in *Plan Melbourne 2017–2050*), providing key health and education facilities and the Nunawading 'MegaMile' as well as industrial businesses that represent important contributors to the local economy. The council's vision for these areas are supported by the *Box Hill Structure Plan 2007*, *Nunawading Megamile Major Activity Centre and Mitcham Neighbourhood Activity Centre Structure Plan 2008* and *Megamile (west) & Blackburn Activity Centres Urban Design Framework 2010*. Relevant objectives to the project include the need to improve existing transport infrastructure and bus routing and services to enhance overall connectivity and accessibility to these centres.

Local policy in the Whitehorse Planning Scheme identifies key themes of environment, housing, economic development and infrastructure. The planning scheme aims to protect and enhance its open spaces including the Koonung Creek and surrounding parkland.

Whitehorse City Council also supports the concept of '20-minute neighbourhoods' by ensuring they are the centre of local economic activity and the community's focus, while respecting the neighbourhood character that ranges from 'Limited Change' to 'Substantial Change', as defined in Clause 21.06 *Housing*. Significantly, the council wants to ensure that adequate road capacity and public transport infrastructure is provided to meet the future needs of the municipality, with local policy recognising the need to maximise the existing arterial network to minimise non-residential traffic on residential streets.

Supporting the Whitehorse MSS and local planning policy are a number of strategic planning and policy documents which address a variety of issues including economic development, open space and housing considerations. These documents include the *Elgar Park Masterplan 2016* and the *Whitehorse Open Space Strategy 2007* which seek to improve existing recreational facilities of the Elgar Park and Koonung Creek and Eastern Freeway linear recreational open spaces adjacent to the Eastern Freeway. The *Whitehorse Industrial Strategy 2011* acknowledges the importance that '*freight transport and logistics have access to, and are able to operate on, a sustainable and efficient freight network*' to enable timely and cost effective access to goods and services.

North East Link has the potential to enhance connectivity and access of the key industrial areas in the City of Whitehorse, such as the Joseph Street Estate located adjacent to the Eastern Freeway.

The *Whitehorse Housing Strategy 2014* outlines the council's vision for housing development in the municipality, in line with preferred neighbourhood character objectives in residential areas, including areas adjacent to the project south of the Eastern Freeway.



## Yarra Planning Scheme

The City of Yarra comprises a large residential population located amongst mixed use developments featuring retail, commercial, light industrial areas. Yarra has five Major Activity Centres with a regional retail, commercial focus located along elongated main and feeder roads.

The municipality's boundaries are shown in Figure 4-7. Given the City of Yarra's close proximity to the Melbourne CBD, the municipality is undergoing substantial residential and retail growth. A significant portion of the municipality is included in heritage precincts and covered by extensive local heritage controls.

Local policy aims to increase residential density around Major Activity Centres and along transport corridors while preserving existing Yarra's historic heritage and open space.

Reduced car dependence by promoting walking, cycling and public transport is a key council objective. Protecting important landmarks and icons which contribute to the identity of the municipality and the maintenance of view lines to key landmark sites are other key objectives of local policy, along with protecting remnant vegetation along the Yarra River and northern waterways.

The Yarra MSS and local planning policy is supported by numerous strategic planning and policy documents which address public and active transport, residential, economic development and open space and biodiversity considerations.

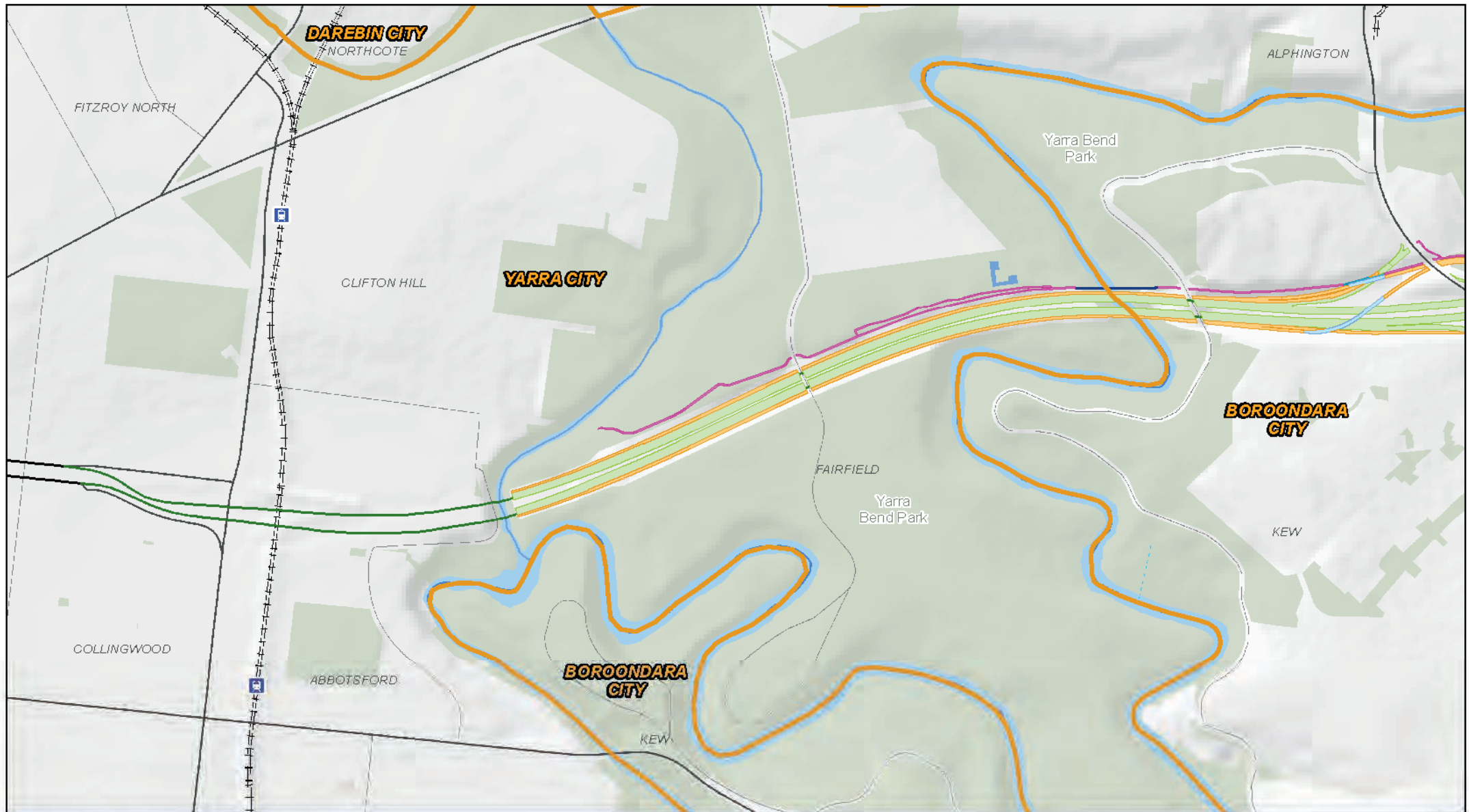
The *Johnston Street Local Area Plan 2015* (adopted by Council) includes the Johnston Street activity centre located south of the project boundary on the Eastern Freeway. The plan provides directions for change such as increasing pedestrian activity at street level in the area, and concentrating development close to Victoria Park railway station as part of a broader urban renewal of the area. Amendment C220 (currently before a planning panel) seeks to implement the built form and land use recommendations of the *Johnston Street Local Area Plan, 2015* by rezoning land to commercial uses and introducing built form controls to land along Johnston Street.

Another example of large-scale residential development in proximity to the project is the *Alphington Paper Mill Development Plan 2016*, which refers to the Alphington Paper Mill site in Alphington. The plan refers to a 16.5 hectare parcel of land located further afield of the study area on the corner of Heidelberg road and the Chandler Highway and extending down to the Yarra River.

The *Yarra Open Space Strategy 2006* guides the future provision, planning, design and management of public land reserved for recreation and nature conservation purposes, including the parklands surrounding the Yarra River. The strategy is currently undergoing an update aimed at guiding how open space will be managed over the next 10–15 years.

The *Yarra Business and Industrial Land Strategy 2012* explores the demand and supply side contexts for business and industrial land in the City of Yarra. The strategy identifies industrial land adjacent to the study area on Hoddle Street, Trenerry Crescent and Alexander Parade East with potential to be converted into mixed use land uses and which could accommodate alternative employment through commercial office conversions and new residential dwellings, all serviced by an efficient transport network.

Local planning policy seeking to boost sustainable transport usage, and the liveability of the City of Yarra is supported by the *City of Yarra Strategic Transport Statement 2018* with key objectives being the need to advocate for increased performance of public transport across Melbourne, ensure that any new road construction is not in conflict with encouraging more sustainable transport use and to enhance bicycle infrastructure.



Paper Size A4  
0 85 170 340  
Metres  
Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 56



**Legend**

- Yarra LGA
- Roads
  - Freeway
  - Highway
  - Major road
  - Local road
- Waterbodies
  - Lake
  - Watercourse
  - Parks & reserves
- Proposed reference project
  - Shared use path overpass
  - Shared use path
  - Shared use path underpass
- Public transport infrastructure upgrade
  - Elevated ramp
  - Surface road
- Other features:
  - Train station
  - Railway
  - Watercourses
  - River
  - Stream
  - Drain or channel



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Revision H  
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Yarra municipality boundaries **Figure 4-7**

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180 Lonsdale Street Melbourne VIC 3000 Australia T 61 3 8687 8000 F 61 3 8687 8111 E melmail@ghd.com W www.ghd.com

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Data source: CIP Imagery - DEWLP - 2018 | roads, watercourses, parks, rail, localities, planning zones - Vicmap - 2019 | project infrastructure - GHD, AECOM - 2019 Created by: Cjauniau

#### 4.3.2 Zone and overlay controls

Clause 30 (Zones) of the VPP outlines the zone controls that govern the use and development of land. Zone controls cover land use classifications including residential, commercial, industrial, open space, public use and special uses.

Clause 40 (Overlays) builds upon zone requirements and seek to guide matters including built form, environment, landscape, heritage and land management outcomes.

Due to the significant length of the North East Link alignment, it is subject to a wide range of zone and overlay controls as these sit in the affected municipal planning schemes.

A summary of applicable zones and overlays as these affect the project is provided in the zone and overlay mapping in Appendix A. An overview of planning permit triggers associated with the project is included as part of the Planning Scheme Amendment at Attachment V of the EES.

#### 4.3.3 Particular Provisions

Clause 50 of the VPP relates to 'Particular Provisions' which apply to a range of matters in addition to zone and overlay requirements. Their purpose is to provide an additional level of guidance to land use and development outcomes. Particular Provisions considered relevant to North East Link include:

- Clause 52.02 (Easements, Restrictions and Reserves)
- Clause 52.06 (Car Parking)
- Clause 52.17 (Native Vegetation)
- Clause 52.19 (Telecommunications Facility)
- Clause 52.29 (Land Adjacent to a Road Zone Category 1, or a Public Acquisition Overlay for a Category 1 Road)
- Clause 52.34 (Bicycle Facilities).

The Planning Scheme Amendment documentation in EES Attachment V expands upon those provisions. Clause 18.01 – 2S – Transport system of the VPP includes the objective 'to coordinate development of all transport modes to provide a comprehensive transport system'. A relevant strategy is to *'locate and design new transport routes and adjoining land uses to minimise disruption of residential communities and their amenity'*.

While sections of the Particular Provisions make specific reference to overshadowing through prescriptive standards and objectives in Clause 54 and Clause 55 of planning schemes, it is noted these requirements do not strictly apply to North East Link. However, the preparation of this report has considered the relevant objectives in these provisions to assess and consider the extent of impact on adjacent land use. In accordance with the project's scoping requirements, this assessment has due regard to the relevant provisions. Further discussion is provided in Section 8.1.5.

#### 4.3.4 General Provisions

General Provisions are found at Clause 60 of the VPP and relate to the administration of planning schemes, existing uses, decision guidelines and the referral requirements for planning applications amongst other matters.

General Provisions relevant to North East Link include:

- Clause 62.01 (Uses Not Requiring a Permit)
- Clause 62.02-1 (Buildings and works not requiring a permit)

- Clause 62.02-2 (Building and works not requiring a permit unless specifically required by the planning scheme)
- Clause 66 (Referral and Notice Provisions).

The Planning Scheme Amendment documentation in EES Attachment V expands on those provisions.

#### 4.4 Planning approval pathway

A range of approvals are required for North East Link, which are discussed in EES Chapter 3 – Legislative framework and the relevant EES technical reports.

This section refers to the approval pathway pursuant to the provisions of the *Planning and Environment Act 1987* (Vic) that could be used to facilitate the use and development of North East Link.

Based on the strategic significance of the project, a planning scheme amendment is considered to be the most appropriate approval mechanism to facilitate a coordinated development approach for the approval of the use and development of land for North East Link.

In preparing a planning scheme amendment a planning authority:

- Must have regard to the Minister's directions
- Must have regard to the Victoria Planning Provisions
- In the case of an amendment, must have regard to any municipal strategic statement, strategic plan, policy statement, code or guideline which forms part of the scheme
- Must take into account any significant effects which it considers the scheme or amendment might have on the environment or which it considers the environment might have on any use or development envisaged in the scheme or amendment
- Must take into account its social effects and economic effects.

The preferred planning mechanism to enable the use and development of North East Link would be a 'GC' planning scheme amendment to the Banyule, Nillumbik, Manningham, Boroondara, Whitehorse, Whittlesea and Yarra planning schemes facilitated by the Minister for Planning.

The planning scheme amendment would insert an Incorporated Document and associated Specific Controls Overlay (SCO) into the affected planning schemes, which have the purpose of providing a project-specific planning control that identifies the extent of the project. The planning scheme amendment would also introduce a Design and Development Overlay (DDO) that would be applied to the tunnel alignment to protect the construction and operation of the asset from incompatible development.

Preparation of the planning scheme amendment must have regard to Ministerial Direction No 11 (Strategic Assessment of Amendments), which provides direction on the strategic evaluation of a planning scheme amendment and the outcomes it produces.

The appointment of a joint Inquiry and Advisory Committee (IAC) by the Minister for Planning would review the planning scheme amendment and public submissions in its investigation and consideration of the environmental effects of the project.

Further detail on planning approval considerations for the project is provided in EES Attachment V – Planning Scheme Amendment.

## 5. Methodology

### 5.1 Overview of methodology

This section describes the method that was used to assess the potential impacts of the North East Link. A risk-based approach was applied to prioritise the key issues for assessment and inform measures to avoid, minimise and offset potential effects. Figure 5-1 shows an overview of the assessment method.

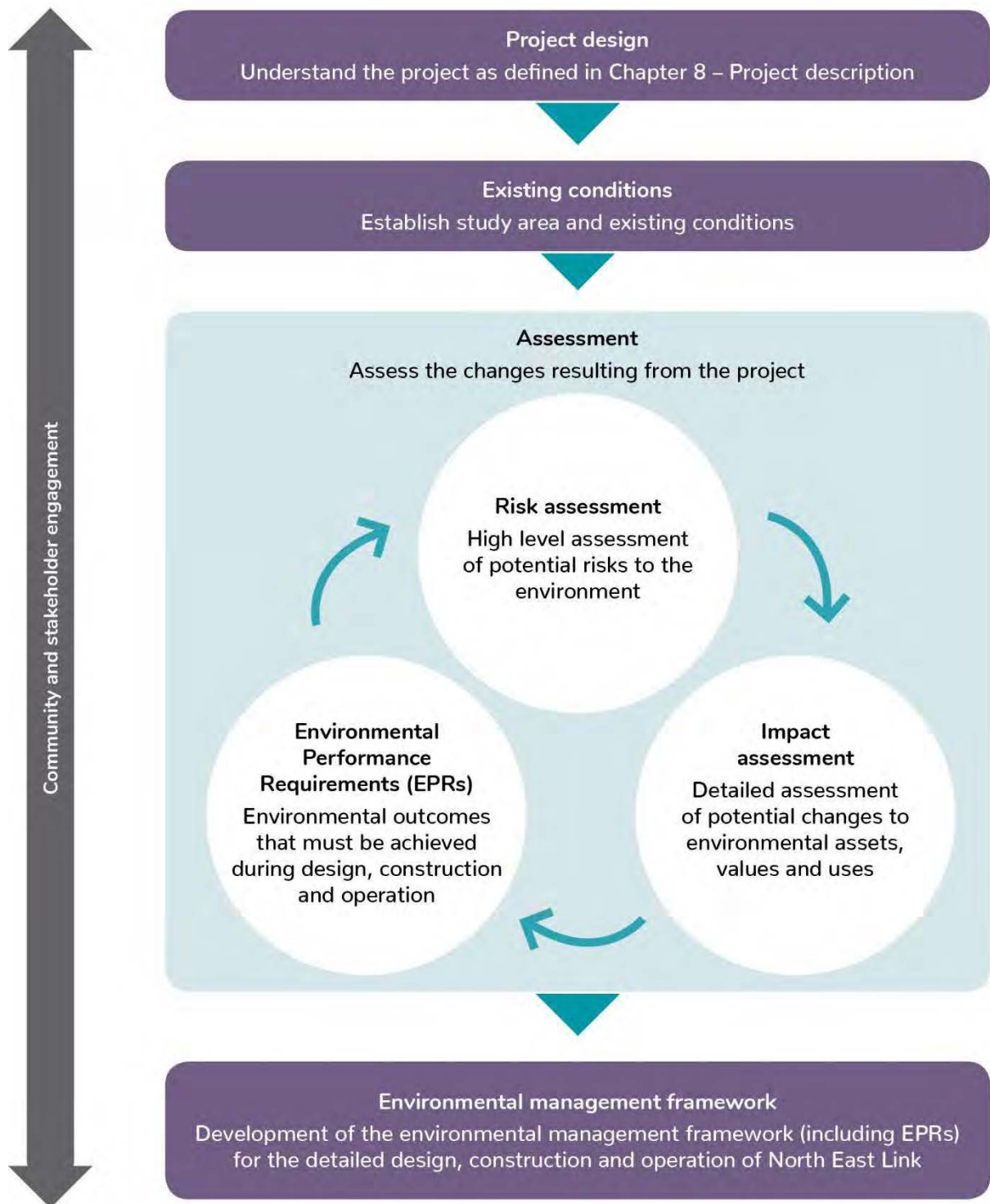


Figure 5-1 Overview of the risk and impact assessment process

The following sections outline the methodology adopted for the land use planning impact assessment.

## 5.2 Study area

A study area has been defined for this land use planning impact assessment.

The study area relates to land generally within a 300-metre buffer of the mid-point of the reference project.

A 300-metre buffer was nominated as this captures key land uses in the vicinity of the project that need to be first understood, before project impacts are identified and addressed. Project land use impacts include those that are direct and indirect, including acquisition and temporary occupation of land, changes to current and ongoing land use, implications for strategic policy and land use character. Noise walls and elevated structures were also considered to determine potential impacts to the ongoing use of land due to overshadowing.

While the study area sets the parameters for understanding the existing conditions in the immediate surrounds, broader consideration was given to significant land uses, known significant redevelopments and planning scheme amendments outside the study area which have the potential to influence the project and vice versa.

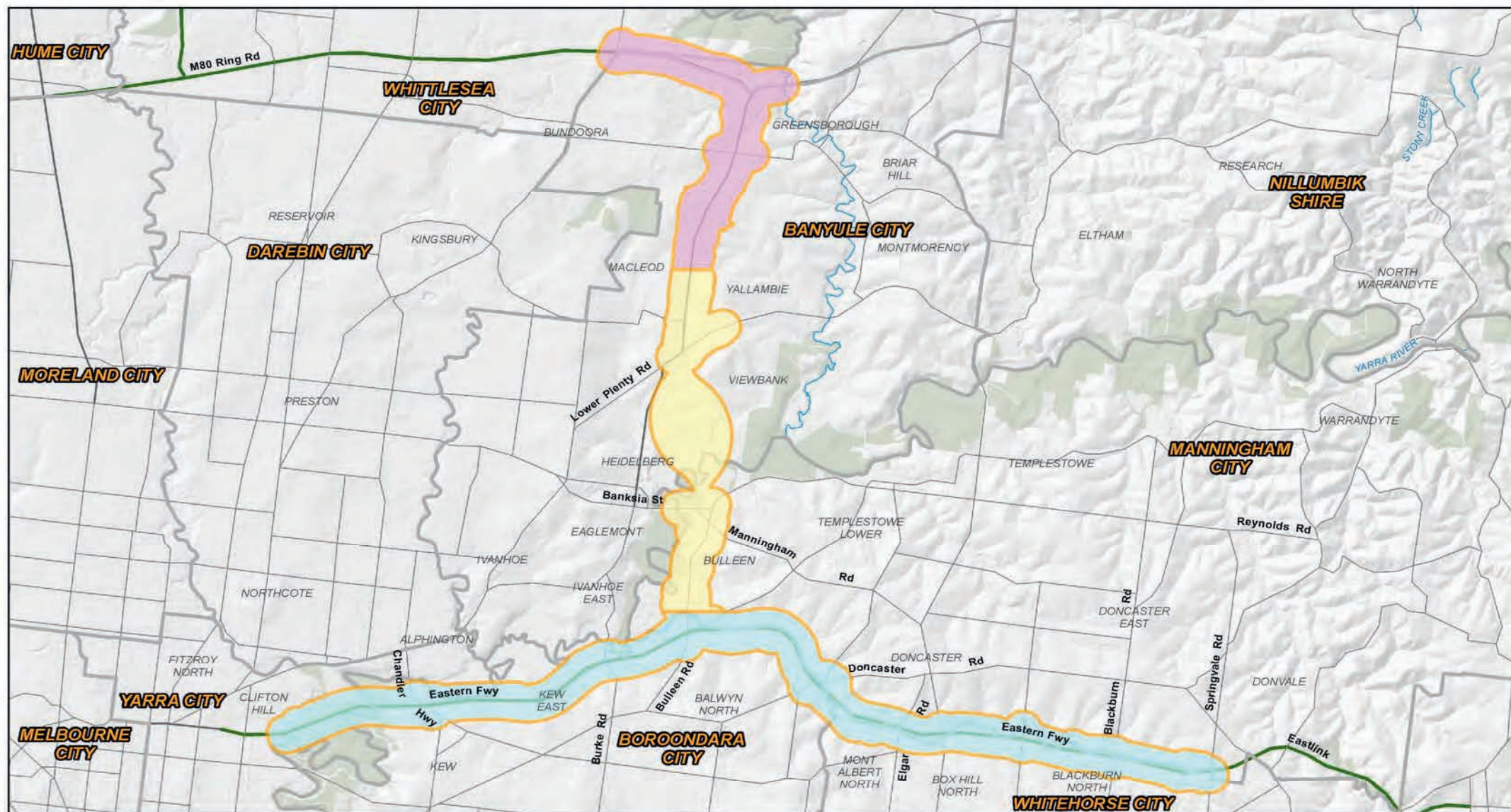
For this assessment, the project has been considered according to three land use planning precincts that align with the three project elements:

- M80 Ring Road to northern portal
- Northern portal to southern portal
- Eastern Freeway.

The precincts have been defined with regards to:

- Location of project components
- Required construction works
- Municipal boundaries
- Potential impacts on local areas
- Character of surrounding communities.

An overview of the land use planning study area and precincts is shown in Figure 5-2.



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Metres

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1984  
Grid: GDA 1994 MGA Zone 55



#### Legend

— LGA

Land Use Planning Precinct

M80 to Northern Portal

Northern Portal to Southern Portal

Eastern Freeway

Roads

Freeway

Highway

Major road

Watercourses

River

Parks & reserves



North East Link Project  
Environment Effects Statement (EES)

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Revision H  
Date 28/03/2019

Land use planning  
study area overview

Figure 5-2

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Data source: CIP Imagery - DELWP - 2018 | roads, watercourses, parks, rail, localities, planning zones - Vicmap - 2019 | project infrastructure - GHD, AECOM - 2019 Created by: trighetti

## Existing conditions

As part of this assessment, the existing conditions have been identified to provide an understanding of baseline land use planning conditions in the study area.

To inform an understanding of existing conditions, a desktop assessment and baseline data review was undertaken, in addition to a site visit across the study area. Key tasks are summarised in the following sections with notable findings for each precinct outlined in Section 6 of this report.

### 5.2.1 Desktop assessment and baseline data review

A desktop assessment was undertaken drawing upon a range of background reports, land use planning databases, mapping and strategic documents to understand the existing conditions in the study area. The following baseline data was reviewed as part of the desktop assessment:

- Publicly accessible aerial imagery and ground level photography, including aerial photography overlaid with the reference project.
- Land use planning databases, zoning and overlay mapping and publicly accessible strategic planning documentation.
- The legislative context which applies to the reference project and land within the broader precinct. This included a review of the metropolitan strategy *Plan Melbourne 2017–2050* and affected planning schemes including for Banyule, Nillumbik, Manningham, Boroondara, Whitehorse and Yarra.
- Planning scheme amendments and planning permit applications since the date of the project's announcement (24 November 2017).
- Consultation with local government officers to understand any likely future land use planning changes within or close by the study area.
- Modelling to establish the existing and proposed overshadowing caused by installation of permanent project infrastructure (noise walls, shared use overpasses and other elevated structures) at the spring equinox (22 September) between 9 am and 3 pm (which is the date and timeframe adopted for recent major transport projects in Victoria).

### 5.2.2 Site visits

A site visit was conducted on 18 April 2018 to observe and photograph the study area and surrounds. The site visit was conducted on foot and by car.

The outcome of the site visit further informed the assessment of existing conditions and understanding of potential land use impacts across the study area.

## 5.3 Risk assessment

An environmental risk assessment has been completed to identify environmental risks associated with construction and operation of North East Link. The risk-based approach is integral to the EES as required by section 3.1 of the Scoping Requirements and the *Ministerial guidelines for assessment of the environmental effects under the Environment Effects Act 1978*.

Specifically the EES risk assessment aimed to:

- Systematically identify the interactions between project elements and activities and assets, values and uses
- Focus the impact assessment and enable differentiation of significant and high risks and impacts from lower risks and impacts

- Inform development of the reference project to avoid, mitigate and manage environmental impacts
- Inform development of EPRs that set the minimum outcomes necessary to avoid, mitigate or manage environmental impacts and reduce environmental risks during delivery of the project.

This section presents an overview of the EES risk assessment process. EES Attachment III Environmental risk report describes each step in the risk assessment process in more detail and contains a consolidated risk register.

This technical report describes the risks associated with the project on land use planning. Wherever risks relating to this study are referred to, the terminology 'risk LU01' is used. Wherever EPRs relating to this study are referred to, the terminology 'EPR LP01' is used. The risk assessment completed for this study is provided in Appendix C.

### 5.3.1 Risk assessment process

The risk assessment process adopted for North East Link is consistent with AS/NZS ISO 31000:2009 Risk Management Process. The following tasks were undertaken to identify, analyse and evaluate risks:

- Use existing conditions and identify applicable legislation and policy to establish the context for the risk assessment
- Develop likelihood and consequence criteria and a risk matrix
- Consider construction and operational activities in the context of existing conditions to determine risk pathways
- Identify standard controls and requirements (Environmental Performance Requirements (EPRs) to mitigate identified risks
- Assign likelihood and consequence ratings for each risk to determine risk ratings considering design, proposed activities and standard EPRs.

While there are clear steps in the risk process, it does not follow a linear progression and requires multiple iterations of risk ratings, pathways and EPRs as the technical assessments progress. Demonstrating this evolution, a set of initial and residual risk ratings and EPRs are produced for all technical reports. Figure 5-3 shows this process.

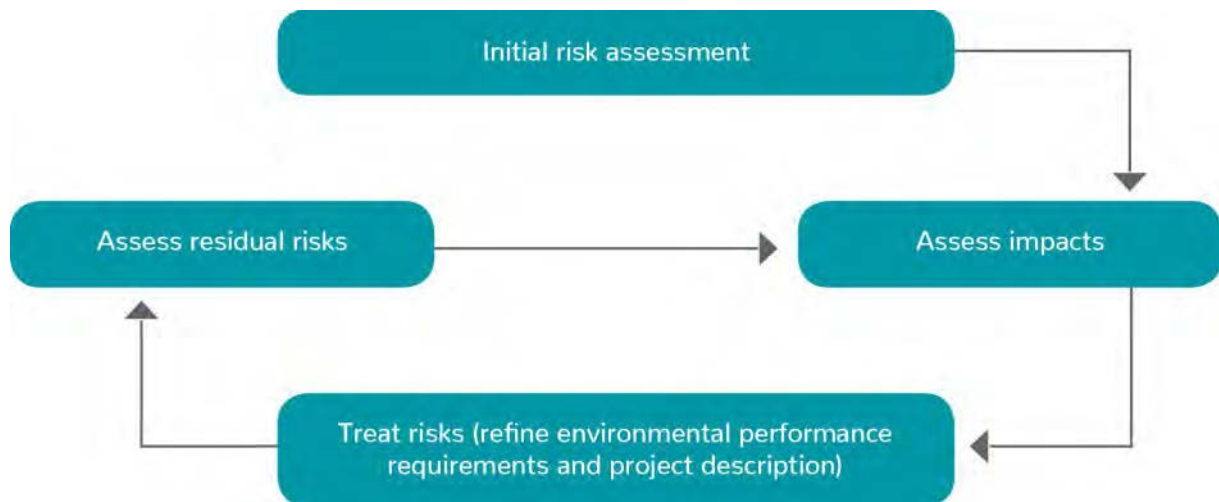


Figure 5-3 Risk-analysis approach

### ***Rating risk***

Risk ratings were assessed by considering the consequence and likelihood of an event occurring. In assessing the consequence, the extent, severity and duration of the risks were considered. These are discussed below:

### ***Assigning the consequences of risks***

'Consequence' refers to the maximum credible outcome of an event affecting an asset, value or use. Consequence criteria as presented in Chapter 4 – EES assessment framework, were developed for the North East Link EES to enable a consistent assessment of consequence across the range of potential environmental effects. Consequence criteria were assigned based on the maximum credible consequence of the risk pathway occurring. Where there was uncertainty or incomplete information, a conservative assessment was made on the basis of the maximum credible consequence.

Consequence criteria have been developed to consider the following characteristics:

- Extent of impact
- Severity of impact
- Duration of threat.

Severity has been assigned a greater weighting than extent and duration as this is considered the most important characteristic.

Each risk pathway was assigned a value for each of the three characteristics, which were added together to provide an overall consequence rating.

Further detail on the consequence criteria are provided Chapter 4 – EES assessment framework.

### ***Assigning the likelihood of risk***

'Likelihood' refers to the chance of an event happening and the maximum credible consequence occurring from that event. The likelihood criteria are presented in Table 5-1.

Table 5-1 Likelihood of an event occurring

<b>Planned</b>	The event is certain to occur
<b>Almost certain</b>	The event is almost certain to occur one or more times a year
<b>Likely</b>	The event is likely to occur several times within a five-year timeframe
<b>Possible</b>	The event may occur once within a five-year timeframe
<b>Unlikely</b>	The event may occur under unusual circumstances but is not expected (ie once within a 20-year timeframe)
<b>Rare</b>	The event is very unlikely to occur but may occur in exceptional circumstances (ie once within a 100-year timeframe)

### **Risk matrix and risk rating**

Risk levels were assessed using the matrix presented in Table 5-2.

Table 5-2 Risk matrix

<b>Likelihood</b>	<b>Consequence</b>				
	Negligible	Minor	Moderate	Major	Severe
Rare	Very low	Very low	Low	Medium	Medium
Unlikely	Very low	Low	Low	Medium	High
Possible	Low	Low	Medium	High	High
Likely	Low	Medium	Medium	High	Very high
Almost certain	Low	Medium	High	Very high	Very high
Planned	Planned (negligible consequence)	Planned (minor consequence)	Planned (moderate consequence)	Planned (major consequence)	Planned (severe consequence)

### **Planned events**

North East Link would result in some planned events, being events with outcomes that are certain to occur (ie planned impacts such as land acquisition), as distinct from risk events where the chance of the event occurring and its consequence is uncertain. Although planned events are not risks, these were still documented in the risk register as part of Attachment III – Risk report for completeness and assigned a consequence level in order to enable issues requiring further assessment or treatment to be prioritised.

These planned events were assessed further through the impact assessment process.

### **Risk evaluation and treatment**

The risk assessment process was used as a screening tool to prioritise potential impacts and the subsequent level of assessment undertaken as part of the impact assessment.

For example, an issue that was given a risk level of medium or above, or was identified as a planned event with a consequence of minor or above, would go through a more thorough impact assessment process than a low risk.

Where initial risk ratings were found to be ‘medium’ or higher, or were planned events with a consequence of ‘minor’ or higher, options for additional or modified EPRs or design changes were considered where practicable. It should be noted that the consequence ratings presented in the risk register are solely based on the consequence criteria presented in Attachment III – Risk report. Further analysis and evaluation of the impacts potentially arising from both risks and planned events and information on how these would be managed is provided in Section 8.

### **Prioritisation of risk**

An initial risk assessment was undertaken to assess potential risks to the environment arising from the project. Risk levels were categorised as very low, low, medium, high or very high. When an impact is a known consequence of the project, and no longer a risk, the rating is indicated as 'planned'. The results of the initial risk assessment were used as a screening tool to prioritise the key issues for assessment and inform measures to avoid, minimise and offset potential effects.

For risks rated as medium or above and planned events with a consequence rating of minor or above, further control was explored through the provision of new or revised EPRs or amendments to the design. Risks were re-assessed to determine the residual risk based on updated EPRs

The risk approach is iterative. Throughout the assessment process, the project design is updated and EPRs are altered to reduce risks, and in turn, the risk level and impact assessment are continuously revised. This report presents the impact assessment associated with the residual risk level.

Further information regarding the evolution from initial risk levels to residual risk levels, and a more detailed description of each step in the risk assessment process is detailed in EES Attachment III – risk report.

## **5.4 Impact assessment**

The study has assessed the planned (known) and potential land use planning impacts that the project may have on land use, land use character, built form and strategic policy directives within each of the three defined precincts across the project.

The impact assessment included the following tasks:

- Review of the reference project
- Identifying potential land use planning related impacts during the project's construction and operation, including:
  - Permanent and temporary change in land use due to acquisition and occupation. Impacts to land use due to acquisition and occupation for the project's construction have been assessed as the point in time when these would occur.
  - Permanent and temporary changes to the ongoing use of land adjacent to the project during construction and operation
  - Property acquisition required for the project eroding established land use character
  - Potential for inconsistencies with planning policies and strategic plans due to land use changes for the project's construction and operation, including the potential for future redevelopment of residential, commercial and industrial land use in the study area.
- Identifying EPRs to define the performance outcomes to be achieved to avoid, minimise or mitigate land use planning-related impacts.

During the preparation of this impact assessment other technical specialists were consulted as outlined at Section 2.3 where inter-relationships and linkages have been identified. The tasks outlined at Section 5.2.1 above forming part of the existing conditions assessment have further contributed to the understanding of project impacts and resultant discussion.

## 5.5 Rationale

The land use planning assessment has been undertaken in accordance with the scoping requirements and is focused on identifying potential impacts brought by North East Link upon the study area.

As described in Section 5.2 above, the study area methodology was based on land uses within a 300-metre buffer of the mid-point of the reference project. This buffer was selected as it provided a reasonable representation of the range of land uses across the project alignment.

The three precincts nominated by the project team has assisted in focusing discussion of impacts to geographic location.

Similarly, previous experience and a robust methodology adopted by other major infrastructure projects informed a desktop assessment, data review and site visit as a comprehensive method for assessing the baseline conditions, ultimately informing potential project impacts within the study area.

## 5.6 Limitations, uncertainties and assumptions

This land use planning assessment has involved a combination of desktop investigation, local government stakeholder liaison and a site visit.

The findings of this report are subject to the following limitations, uncertainties and assumptions:

- This report presents the acquisition requirements associated with the reference project. This is considered a conservative approach and further design refinements would be undertaken during the detailed design process, with a view to ensuring an optimal environmental, economic and social outcome, including the potential for a smaller project footprint.
- Consultation with key stakeholders, including the council's regarding temporary occupation requirements (including the location of construction compounds and potential post construction opportunities) is underway and ongoing.
- Consideration of planning schemes, planning scheme amendments and development applications has been undertaken using publicly accessible sources of information and information provided by local councils and DELWP. The availability of planning scheme amendments and planning permit applications data was limited to:
  - Planning scheme amendments and planning permit applications that were exhibited/on notice from 24 November 2017 (date of project announcement) and listed on council websites, DELWP's website and/or from consultation with councils and DELWP. In some cases, planning permit applications or planning scheme amendments that were exhibited/on notice before this date were considered, based on project significance and relevance to the project.
  - Planning permit applications 50 metres from the project boundary, as development that could be impacted from a land use perspective by the project or vice versa.
- Planning permit applications and planning scheme amendments have only been reviewed and assessed where it was determined that they may have material impact on the project (that is, a major development). For the purposes of the land use planning assessment, a major development is considered to be of significance such that it is captured in the DELWP issued Urban Development Program.

- Modelling undertaken for the overshadowing assessment have assumed the structure (noise wall, elevated structure including shared use overpasses) to be constructed of solid/non translucent material to provide a conservative assessment of likely impacts. This impact assessment should be read in association with other impact assessments where linkages have been identified and outlined in Section 2.3.

## 5.7 Stakeholder engagement

Stakeholders and the community were consulted to support the preparation of the North East Link EES and to inform the development of the project and understanding of potential impacts.

Feedback received during community consultation sessions is summarised in Section 5.8.

For the preparation of this land use impact assessment, the following councils were consulted:

- Banyule
- Boroondara
- Nillumbik
- Manningham
- Whitehorse
- Yarra.

Direct and indirect discussions (that is, raised by other specialists) sought to gain an understanding of local land use planning-related matters, including

- Significant policy and strategy considerations
- Planning scheme amendment requests that may not have reached public exhibition stage
- Major development applications.

## 5.8 Community feedback

In addition to consultation undertaken with specific stakeholders, consultation has been ongoing with the community throughout the design development and the EES process. Feedback relevant to the land use planning assessment is summarised in Table 5-3, along with where and how we have addressed those topics in this report.

**Table 5-3** Community consultation feedback addressed by land use planning

Issues raised during community consultation	How it's been addressed
Concerns that a road further out would better support future population growth and land use planning.	Communities and stakeholders raised and explored these issues during extensive corridor assessment studies and development of a business case for the project.  Chapter 4 – Project development explains the Project Objectives and Guiding Principles developed to guide project planning and assess the different corridor options.

Issues raised during community consultation	How it's been addressed
Requests for more car parking at Watsonia Station and shops, including the potential for a multi-storey development.	<p>The reference project provides an additional 60 car parking spaces at Watsonia Station to address the predicted loss of parking at Greensborough railway station due to upgrade works along the Hurstbridge Rail Line. Further information is included in Technical Report A – Traffic and transport.</p> <p>As discussed in Section 8.1.1, the reference project includes a new park and ride facility at Bulleen with car parking for around 300–400 for bus commuters.</p> <p>Chapter 8 – Project Description, provides further details of these park and ride facilities.</p>
Requests for more car parking at Doncaster Park and Ride, including the potential for a multi-storey development.	<p>There would be no net loss of parking at Doncaster Park and Ride. The works proposed at the Doncaster Park and Ride facility to accommodate the new busway would occupy some of the area that is currently used for car parking. A multilevel car park would be constructed to maintain the current parking capacity. Further information is included in Technical Report A – Traffic and transport.</p> <p>Construction and acquisition requirements of the project at the Doncaster Park and Ride could result in the opportunity post construction to implement localised enhancements. The form of any future land use change (ie enhancements) would require a separate approval process, subsequent to this EES.</p>
Concerns that loss of open space and trees, decreases in air quality and increases in noise, will reduce use and enjoyment of Koonung Creek parklands.	<p>The upgrades to the Eastern Freeway are proposed to stay within the existing road reserve where possible. Where works would extend outside the road reserve, potential impacts on Koonung Creek Linear Park, Koonung Creek Reserve and Koonung Reserve have been considered in this report (refer Section 8.1.1) and also from a social perspective in Technical report I – Social.</p> <p>Minimising impacts on open space areas has been a key focus of developing the reference project. The contractors would be required to further minimise the design footprint to avoid, to the extent practicable, any temporary and permanent impacts on parks and reserves (EPR LP1).</p>
Concerns that permanent loss of community facilities at Bulleen Park will impact on the overall value, enjoyment and use of the area.	<p>Land use impacts as a result of acquisition of facilities at Bulleen Park as discussed in Section 8.1.1.</p> <p>The contractors would be required to minimise impacts on sporting, recreation and other facilities (EPR SC4). This includes working with local Councils and relevant State authorities to identify relocation opportunities for displaced facilities, with the objective of accommodating displaced facilities and maintaining the continuity of those recreational activities, where practicable.</p>

Issues raised during community consultation	How it's been addressed
<p>Concerns about changed access to Watsonia station and shops and negative impacts on use of the area as a shopping and public transport hub.</p>	<p>Connectivity for all modes of transport would be considered as part of the design.</p> <p>EPR T1 requires the design of the project to be optimised to maintain, and where practicable, enhance pedestrian movements, bicycle connectivity, and shared use paths.</p> <p>The Urban Design Strategy includes a guideline to consider a direct connection from Elder Street to Watsonia Station.</p> <p>Furthermore, as discussed in Station 8.1.5, there are opportunities within this area to improve connectivity and NELP is working with Transport for Victoria, Banyule council, traders and other stakeholders to identify these improvements.</p>
<p>Requests for more information about potential land use at the Manningham Road interchange.</p>	<p>The future use of land at the existing Bulleen Industrial precinct is not yet known, however the project contractor would be required to minimise impact in this area (EPR LP3).</p> <p>As discussed in Section 8.2.2 there may be an opportunity post construction to implement localised enhancements. The form of any future land use change (ie enhancements) would require a separate approval process, subsequent to this EES. In these instances, it would also be necessary to have regard to policy and strategy documents in accordance with EPR LP3</p>
<p>Requests for the State Government to purchase the old drive in site at Bulleen and return it to Yarra River parklands.</p>	<p>The future use of land at the former Bulleen Drive-in site is not yet known and will depend on the acquisition requirements of the project at detailed design.</p> <p>There may be an opportunity post construction to implement localised enhancements, but these would be subject to a separate approvals process to this EES.</p>
<p>Concerns that using space for public transport along the Eastern Freeway for a busway will prevent the potential for a future rail line along the Eastern Freeway.</p>	<p>Infrastructure Victoria's 30 Year Plan for Melbourne looked at the feasibility of rail along the Eastern Freeway. The Plan recommended upgrading the existing Doncaster Area Rapid Transport bus system to support increased demand and improve the reliability of services – this is the approach taken by NELP. This detailed in Chapter 4- Project development.</p> <p>The feasibility of a rail line along the Eastern Freeway is not included in the scope of the EES.</p>
<p>Requests to create more open space through the use of more, or longer land bridges at Watsonia.</p>	<p>As discussed in Section 8.1.4, the project provides the opportunity to contribute to the open space land use via the provision of a series of land bridges for open space purposes</p> <p>The location of the land bridges would be determined during detailed design and the Urban Design Strategy would provide guidance in terms of outcomes to be achieved, such as establishing green links that physically and visually connect open space and vegetation elements.</p>

## 6. Existing conditions

The study area described in Section 5.2 above has been used to frame the existing conditions assessment to provide a baseline for the land use planning impact assessment.

As outlined at Section 5.2, the existing conditions assessment also considered noise walls and elevated structures (including shared use overpasses) as related to overshadowing and potential impacts to ongoing use of land. Broader consideration was also given to significant land uses, known significant redevelopments and planning scheme amendments outside the study area which have the potential to influence the project and vice versa. For example, the La Trobe NEIC (including the Heidelberg Major Activity centre) and the Greensborough Major Activity Centre.

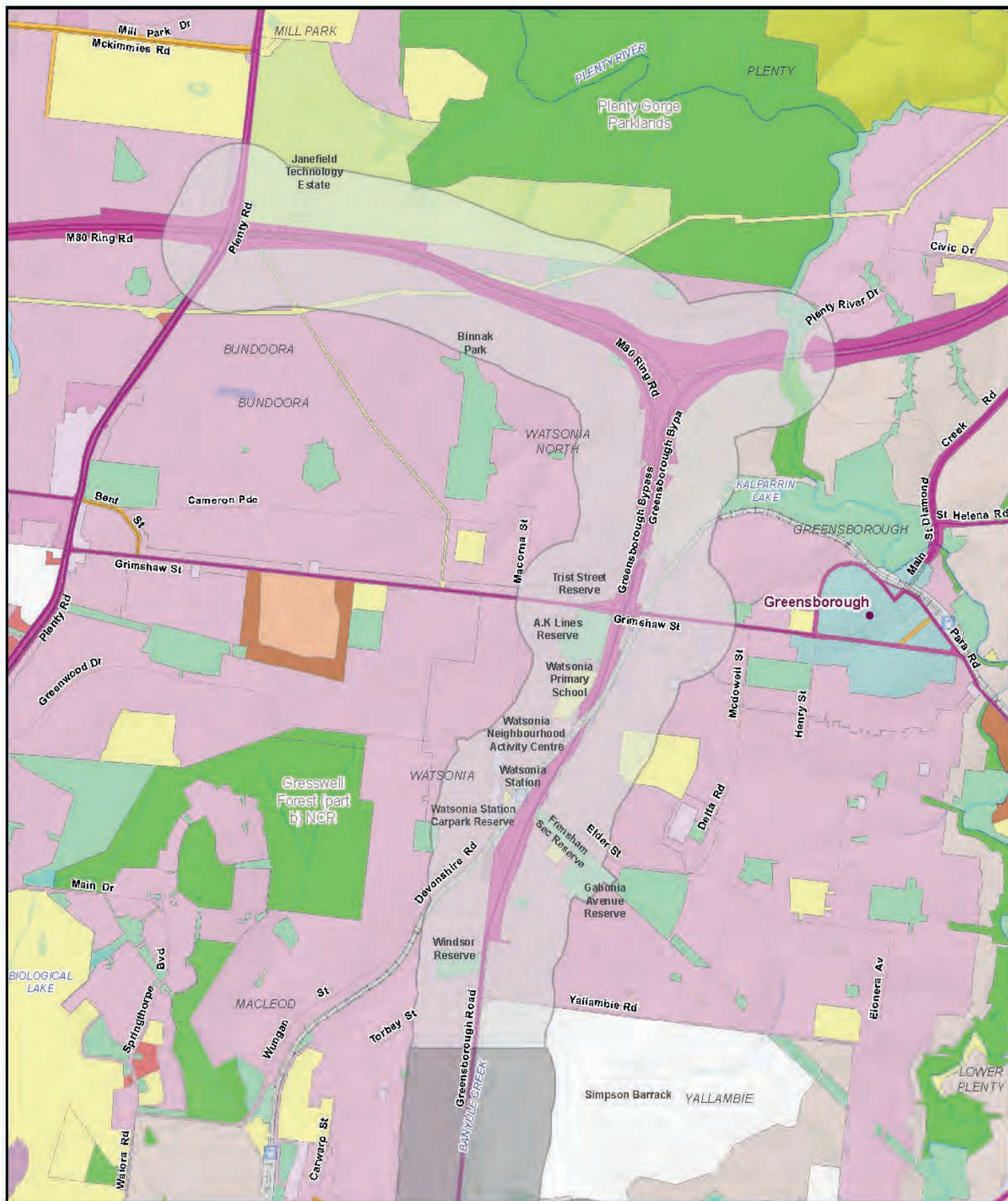
The following section describes each precinct and follows with an overview of land uses identified in Figure 6-1, Figure 6-2 and Figure 6-3.

### 6.1 M80 Ring Road to northern portal

The precinct is principally characterised by commercial, open space, and residential land uses located adjacent to the project corridor in the municipalities of Banyule and Nillumbik.

The Simpson Barracks on Commonwealth land and community facilities are other key land uses in proximity to the project. Land uses are summarised in the sections below and shown in Figure 6-1.

It is noted the City of Whittlesea is located directly north of the reference project, on the northern side of the M80 Ring Road. While no project components are located in Whittlesea, given the proximity of the project, the land uses that occur here and interface with the reference project have been documented.



#### Legend

##### Land Use Planning Precinct

- M80 to Northern Portal
- Northern Portal to Southern Portal
- Activity Centre

##### Planning zone

- Commercial 1
- Commercial 2
- Commonwealth Land
- General Residential
- Industrial 1
- Industrial 3
- Mixed Use
- Neighbourhood Residential
- Public Conservation & Resource
- Public Park and Recreation
- Public Use
- Public use - Transport

##### Rural Conservation

- Road - Category 1
- Road - Category 2
- Residential Growth
- Special Use
- Urban Flood

##### Proposed reference project

- Freeway
- Highway
- Major road
- Local road

##### Railway

- Train station

##### Watercourses

- River
- Stream

##### Drain or channel

- Lake
- Swamp
- Watercourse
- Parks & reserves

Paper Size A4



Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 55



North East Link Project

Environment Effects Statement (EES)

Job Number 31-35006

Revision H

Date 27/02/2019

M80 Ring Road to  
Northern portal land uses

Figure 6-1

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180 Lonsdale Street Melbourne VIC 3000 Australia T 61 3 9687 8000 F 61 3 9687 8111 E mel@mail@ghd.com W www.ghd.com

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### 6.1.1 Residential

The M80 Ring Road and Greensborough Road interchange is principally surrounded by residential land use to the north (Shire of Nillumbik) and south (City of Banyule) of the project boundary.

The Nillumbik Neighbourhood Character local planning policy states the residential built form of the precinct falls within the defined '*Garden Court*' precinct, which predominantly features two-storey 1970s to 1980s dwellings with mostly low hipped or split gable roof forms. The dwellings are located on curvilinear street layouts, which feature a significant maturing canopy of native and exotic vegetation.

The '*Garden Court*' character is the predominant built form in Watsonia North, as identified in Banyule's Neighbourhood Character planning policy (Clause 22.02 of the Banyule Planning Scheme). This type of built form is characterised by low-scale dwellings often set in informal garden settings with mature vegetation being a key characteristic. The residential style of Watsonia and Rosanna is defined as '*Garden Suburban*', which is '*a spacious leafy character in generally formal garden settings*', with '*space around and between*' the 1950s and 1960s dwellings.

Overall, medium to high density residential development in this precinct is reflective of *Clause 21.06 Built Environment* of the Banyule Planning Scheme, where areas identified as '*Incremental*' are typically located further away from Activity Centres and the '*Limited Incremental Area*' is characterised by tall trees located east of the Plenty River. Generally, both areas are envisaged to provide for single dwellings and limited opportunities for high density development (as in the case of the '*Incremental Area*'). '*Accessible Areas*' within walking distance of the Principal Public Transport Network and activity centres (such as Watsonia and Greensborough activity centres), generally seek to encourage high density housing and urban consolidation.

### 6.1.2 Open space

A number of linear active and passive recreation open space areas exist in the study area of this precinct. The City of Banyule is characterised by its high concentration of open space, including AK Lines Reserve, Gabonia Avenue Reserve, Winsor Reserve and Trist Street Reserve located in close proximity to the reference project. Other large active open spaces such as Binnark Park and Garvey Oval are located beyond the residential dwellings in the study area.

Large tracts of passive open space are located beyond residential land use north of the M80 Ring Road along the Plenty River (Plenty Gorge Parklands, Maroondah Aqueduct Reserve) in the City of Whittlesea and Shire of Nillumbik. These passive open spaces are predominately-native bushland wildlife corridors and feature walking paths and other passive recreational facilities.

Banyule's MSS sees the extensive high quality network of open spaces in the municipality as playing a key role in the provision of active and passive recreation and protection of the natural environment and high quality vegetation. The Nillumbik MSS also sees the municipality's significant open space as having high environmental value for the community.

### 6.1.3 Commercial

A number of commercial land uses are located in this precinct. The Watsonia Neighbourhood Centre is adjacent to the reference project and has a large concentration of commercial land uses. Commercial land use in Watsonia Village includes a mixture of retail, food and small independent local stores clustered near the Watsonia railway station. The recently upgraded Watsonia Village streetscape has a one to two-storey built form character with an abundance of on street car parking along the high street. Residential areas as typified in the residential discussion above lie adjacent to the activity centre.

Outside the study area lies the La Trobe NEIC to the west, the Greensborough Major Activity Centre to the east in the City of Banyule and Diamond Creek Activity Centre in the Shire of Nillumbik. As a key location for growth of employment and business in the north-eastern part of Melbourne, the NEIC includes La Trobe University, the Heidelberg Major Activity Centre and the Northland and Heidelberg West employment areas. The Greensborough Major Activity Centre is characterised by a mix of retail and commercial space, including an enclosed shopping centre, Greensborough Plaza, a medical precinct, emerging higher density residential opportunities, with some medium density residential properties south of Grimshaw Street, and the railway station. The activity centre is identified in Victorian Government and local planning policy as a major commercial and employment centre serving the north-east.

### 6.1.4 Industrial

There is limited industrial land use in the precinct. A number of industrial land uses are located in the City of Whittlesea that are north of the metropolitan Ring Road. The industrial land uses operate in a Special Use Zone – Schedule 3 (SUZ3) Janefield Technology Estate.

### 6.1.5 Community facilities

Community land use facilities in the study area are summarised in Table 6-1.

A number of community facilities located in the study area of this precinct are clustered around Grimshaw Street towards Watsonia railway station and include Watsonia Primary School, Concord School and St Mary's Parish School.

**Table 6-1** Community infrastructure – M80 Ring Road to northern portal

Facility type	Facility name
<b>Child care</b>	Greensborough Preschool
	Abacus Child Care Centre
	Watsonia Occasional Child Care Centre
	Macleod Recreation and Fitness Centre Child Care Centre
	Macleod Preschool
<b>Aged care</b>	Regis Macleod
<b>Health</b>	Greensborough Road Surgery
	Diaverum Diamond Valley Dialysis Clinic
<b>Library and cultural spaces</b>	St Mary's Church
	Watsonia Library
	Holy Spirit Anglican Church
	Grace Baptist Church
	Watsonia Uniting Church

Facility type	Facility name
<b>Education</b>	St Mary's Parish School
	Greensborough Secondary College
	Greensborough Primary School
	Concord School
	Watsonia Primary School
<b>Community centre and spaces</b>	Banyule City Council Greensborough Service Centre
	Greensborough RSL
	Watsonia Scout Hall
	Watsonia RSL
	Macleod YMCA Recreation and Fitness Centre (includes children's centre)
	Nets Stadium Banyule
	Macleod Organic Community Garden
<b>Emergency services</b>	Greensborough Police Station
	Greensborough MFB Fire Station

Further discussion on community facilities within and adjacent to the study area is provided in Technical report I – Social.

#### 6.1.6 Commonwealth land

The defence site Simpson Barracks is a 55-acre land parcel located on Commonwealth land adjacent to the reference project and is used for military training including signalling activity and cadets. The Public Environment Report for this project provides further detail on Commonwealth land matters.

#### 6.1.7 Noise walls and elevated structures

Existing noise walls are located along various road sections, including on both sides of the M80 and the Greensborough Bypass, and generally in areas where existing dwellings and rear fences are near the existing surface road. These existing structures cause overshadowing which is generally limited to the road reserve or shared use paths.

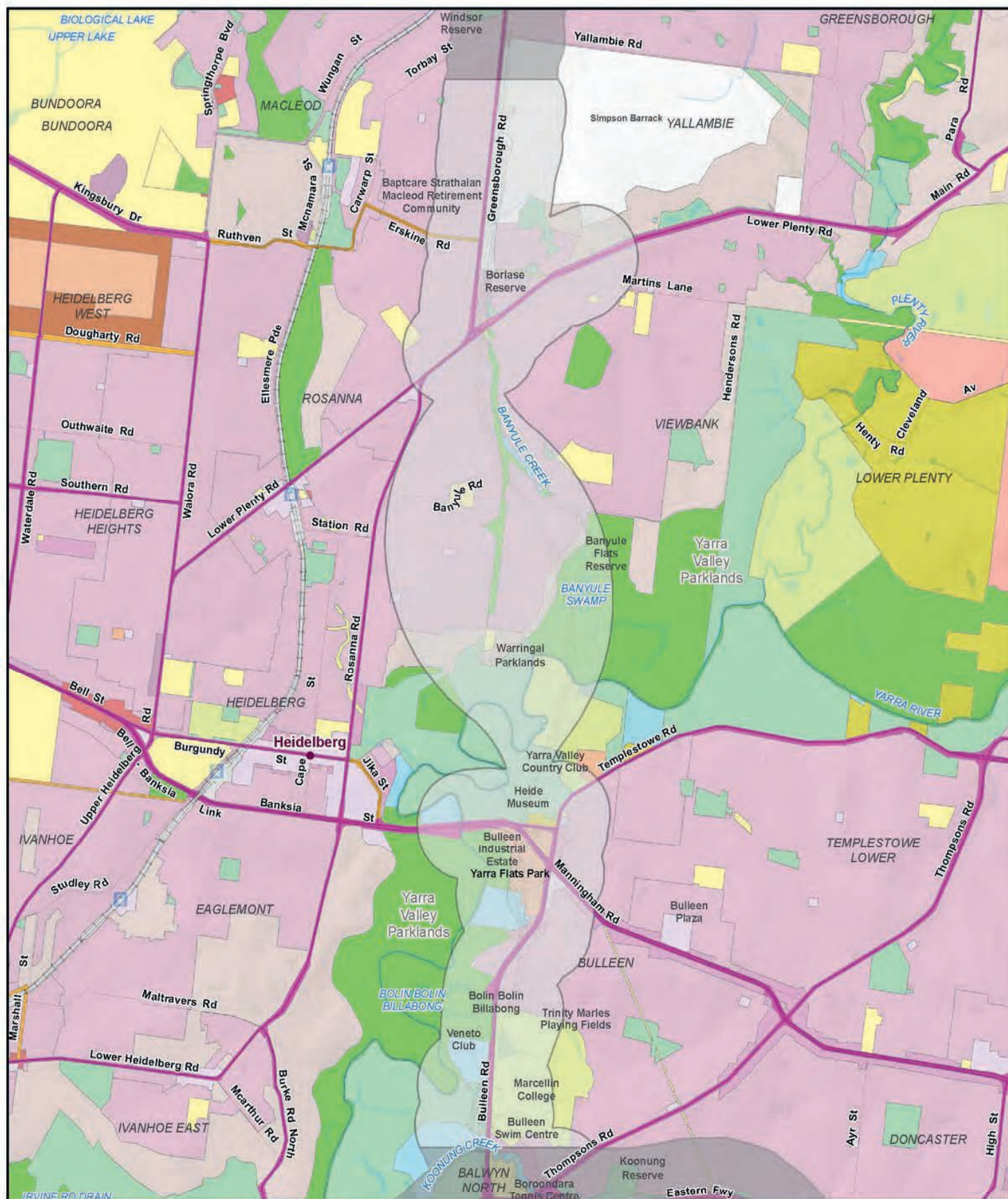
Noise walls are generally not present at commercial properties or where rear fences of dwellings and dwellings houses are some distance from the existing surface road.

The noise wall construction in this precinct is predominantly slatted timber ranging in height depending on the natural ground level and proximity of dwellings.

## 6.2 Northern portal to southern portal

The precinct traverses through the municipalities of Banyule and Manningham and principally through open space and residential land uses. Simpson Barracks on Commonwealth land is another key land use in this precinct. Other key land uses in the precinct include community facilities such as schools and a locally significant cluster of commercial and industrial land uses in the Bulleen Industrial Precinct in the City of Manningham.

Further detail on land use characteristics in the precinct are summarised below and their locations shown in Figure 6-2.



#### Legend

<ul style="list-style-type: none"> <li>Major Activity Centre</li> <li>Land Use Planning Precinct</li> <li>M80 to Northern Portal</li> <li>Northern Portal to Southern Portal</li> <li>Eastern Freeway</li> </ul>	<ul style="list-style-type: none"> <li>Commercial 1</li> <li>Commercial 2</li> <li>Commonwealth Land</li> <li>General Residential</li> <li>Industrial 1</li> </ul>	<ul style="list-style-type: none"> <li>Industrial 3</li> <li>Low Density Residential</li> <li>Mixed Use</li> <li>Neighbourhood Residential</li> <li>Public Conservation &amp; Resource</li> <li>Public Park and Recreation</li> </ul>	<ul style="list-style-type: none"> <li>Public Use</li> <li>Public use - Transport</li> <li>Rural Conservation</li> <li>Road - Category 1</li> <li>Road - Category 2</li> <li>Residential Growth</li> </ul>	<ul style="list-style-type: none"> <li>Special Use</li> <li>Urban Flood</li> <li>Proposed reference project</li> <li>Roads</li> <li>Freeway</li> <li>Highway</li> </ul>	<ul style="list-style-type: none"> <li>Major road</li> <li>Local road</li> <li>Railway</li> <li>Train station</li> <li>Watercourses</li> <li>River</li> <li>Stream</li> <li>Drain or channel</li> <li>Waterbodies</li> <li>Lake</li> </ul>	<ul style="list-style-type: none"> <li>Swamp</li> <li>Watercourse</li> <li>Parks &amp; reserves</li> </ul>
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Map Projection: Transverse Mercator  
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Grid: GDA 1994 MGA Zone 55



North East Link Project  
Environment Effects Statement (EES)

Job Number 31-35006  
Revision 1  
Date 28/03/2019

Northern portal to  
Southern portal land uses

Figure 6-2

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Data source: CIP Imagery - DELWP - 2018 | roads, watercourses, parks, rail, localities, planning zones - Vicmap - 2019 | project infrastructure - GHD, AECOM - 2019 Created by: trighetti

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### 6.2.1 Residential

Residential land uses form a key characteristic of this precinct in the municipalities of Banyule and Manningham. Generally, the precinct is characterised by lower density, detached dwellings either adjacent to or surrounding the reference project. The size of the residential blocks increase closer to Banyule Flats Reserve and Warringal Parklands in the suburbs of Heidelberg and Viewbank. Similar to the M80 Ring Road to northern portal precinct, *Clause 21.05 Residential* of the Manningham Planning Scheme and *Clause 21.06 Built Environment* of the Banyule Planning Scheme both seek to limit development that deviates from the current residential character, except in identified areas surrounding activity centres, along main roads or key redevelopment sites. For example, Manningham and Banyule local planning policy identifies areas for increased residential density, such as along Templestowe Road and Manningham Road, towards Bulleen Plaza Neighbourhood Centre and in the vicinity of the Heidelberg Activity Centre. This is reflected by the higher density residential built form adjacent to or near the project boundary in these areas.

The *Manningham Residential Character Guidelines (2012)* states the built form of residential land uses in the municipality is mostly detached dwellings developed from the 1950s to 1960s, with some development occurring around the 1970s. Little redevelopment has occurred where the original house has been demolished and replaced with a unit development. The built form of residential land use located in Banyule is characterised in the Banyule Neighbourhood Character planning policy (Clause 22.02 of the Banyule Planning Scheme) as '*Garden Suburban*', which is characterised by detached dwellings located in a tree-dominated landscape.

To the west of the study area beyond the Yarra River and Banksia Park is the Heidelberg Major Activity Centre, which forms part of the La Trobe NEIC. Similar to the Greensborough Major Activity Centre, the Heidelberg Major Activity Centre is identified in Victorian Government and local policy as a regionally significant employment and commercial centre and features a growing number of multi-storey residential apartments and townhouses located around the Heidelberg railway station.

### 6.2.2 Open space

Open space forms a large proportion of this precinct located in the municipalities of Banyule and Manningham. The MSS for each municipality identifies their respective open spaces within the precinct as being of high ecological and social importance to their communities.

Banyule Creek is located directly adjacent to Greensborough Road and runs into Borlase Reserve and Creekbend Reserve. Creekbend Reserve in turn leads to Banyule Flats Reserve. These linear reserves typically feature native bushland and passive recreational space.

The North East Link tunnels would travel under an expanse of regionally and locally significant open space surrounding the Yarra River, which includes the Banyule Flats Reserve, Warringal parklands, Yarra Flats Park and Banksia Park. These areas have varied active, passive and conservation open space land uses. For example, the riparian corridors along the Yarra waterway have high biodiversity and habitat values, reflected in the Public Conservation and Resource Zone (PCRZ). Elsewhere, the Heide Museum of Modern Art located within Banksia Park represents a significant cultural and tourism attraction, while areas such as Warringal Parklands features cultural (eg Banyule Theatre Complex) and sporting uses (tennis, cricket, football and soccer).

Large tracks of active open space land use are located in the City of Manningham and include the Trinity College School Sporting Complex, Koonung Reserve and Bulleen Park, which are located adjacent to the reference project. Other notable areas of open space adjacent to the reference project include the Bolin Bolin Billabong, located in proximity to the Yarra River and surrounding parklands, which have significant conservation, Aboriginal and cultural heritage value.

#### 6.2.3 Commercial

Commercial land uses in the precinct are generally limited. The Bulleen Plaza neighbourhood activity centre is located further east of the study area, in the City of Manningham. Similarly, the Heidelberg Major Activity Centre beyond the Yarra River and Banksia Park is located west of the project. The Heidelberg Major Activity Centre forms part of the La Trobe NEIC and features a mixture of commercial uses including retail outlets and a cluster of medical premises.

Commercial land uses in this precinct include two small Neighbourhood Activity Centres located off Templestowe Road and Bulleen Road and the Bulleen Industrial Precinct in the City of Manningham. A number of commercial land uses are located in the Bulleen Industrial Precinct. The estate includes retailers that focus on trades, construction and garden supplies. These retail land uses are located in two to three-storey warehouse and big box retail complexes. The former Bulleen Drive-in is also located in the study area in the City of Manningham and is currently vacant. The Bulleen Swim Centre and the Veneto Club are also located in this precinct and provide services to the community as commercial operations.

#### 6.2.4 Industrial

Industrial land uses in this precinct are generally located at the Bulleen Industrial Precinct, within the project boundary in Manningham and adjacent to the Yarra River. A large number of industrial land uses are located in the Bulleen Industrial Precinct which is the largest of three industrial areas in the City of Manningham. Clause 21.08 *Industrial*, Clause 22.10 *Bulleen Gateway Policy* and Clause 22.16 *Industrial Areas Policy* of the Manningham Planning Scheme state the importance of consolidated industrial land to the economic prosperity of the municipality.

The Bulleen Industrial Precinct contains light industrial businesses including a number of automotive repair premises. Generally, these businesses are housed in single or two-storey warehouses.

Further afield of the study area to the west, industrial land uses are located in the Heidelberg Major Activity Centre, while the Sonoco Plant lies on land zoned for industrial uses further afield of the study area to the east, between the Yarra Valley Country Club and Heide Museum of Modern Art.

#### 6.2.5 Community facilities

Table 6-2 identifies the community facilities in the northern portal to southern portal precinct. This includes a cluster of community facility land uses west of Lower Plenty Road in the City of Banyule. Community facility land uses in this area include St Martin of Tours Catholic Primary School and the Japara Rosanna Nursing Home (aged care).

Other community facilities located in the precinct include the Baptcare Strathallan Macleod Nursing facility located adjacent to Greensborough Road.

North of the Eastern Freeway in the City of Manningham, some of the key community facility land uses include educational facilities such as Marcellin College and the Kalker Montessori School.

Table 6-2 Community infrastructure – northern portal to southern portal

Facility type	Facility name
<b>Child care</b>	Goodstart Early Learning
	Creative Play Early Learning Centre
	Greensborough Road Early Learning and Kinder
<b>Aged care</b>	Assisi Centre Aged Care
	Japara Rosanna Views Nursing Home
	MS Respite Services
	Baptcare – Strathalan Community
<b>Library and cultural spaces</b>	St Martin of Tours Catholic Church
	Heide Museum of Modern Art
<b>Education</b>	St Martin of Tours Catholic Primary School
	Banyule Primary School
	Viewbank College
	Marcellin College
<b>Community centres and spaces</b>	Banyule Theatre Complex
	Banyule Tennis Club
	Trinity College School Sporting Complex
	Carey Grammar Sports Complex

Further discussion about community facilities within and adjacent to the study area is provided in Technical report I – Social.

#### 6.2.6 Noise walls and elevated structures

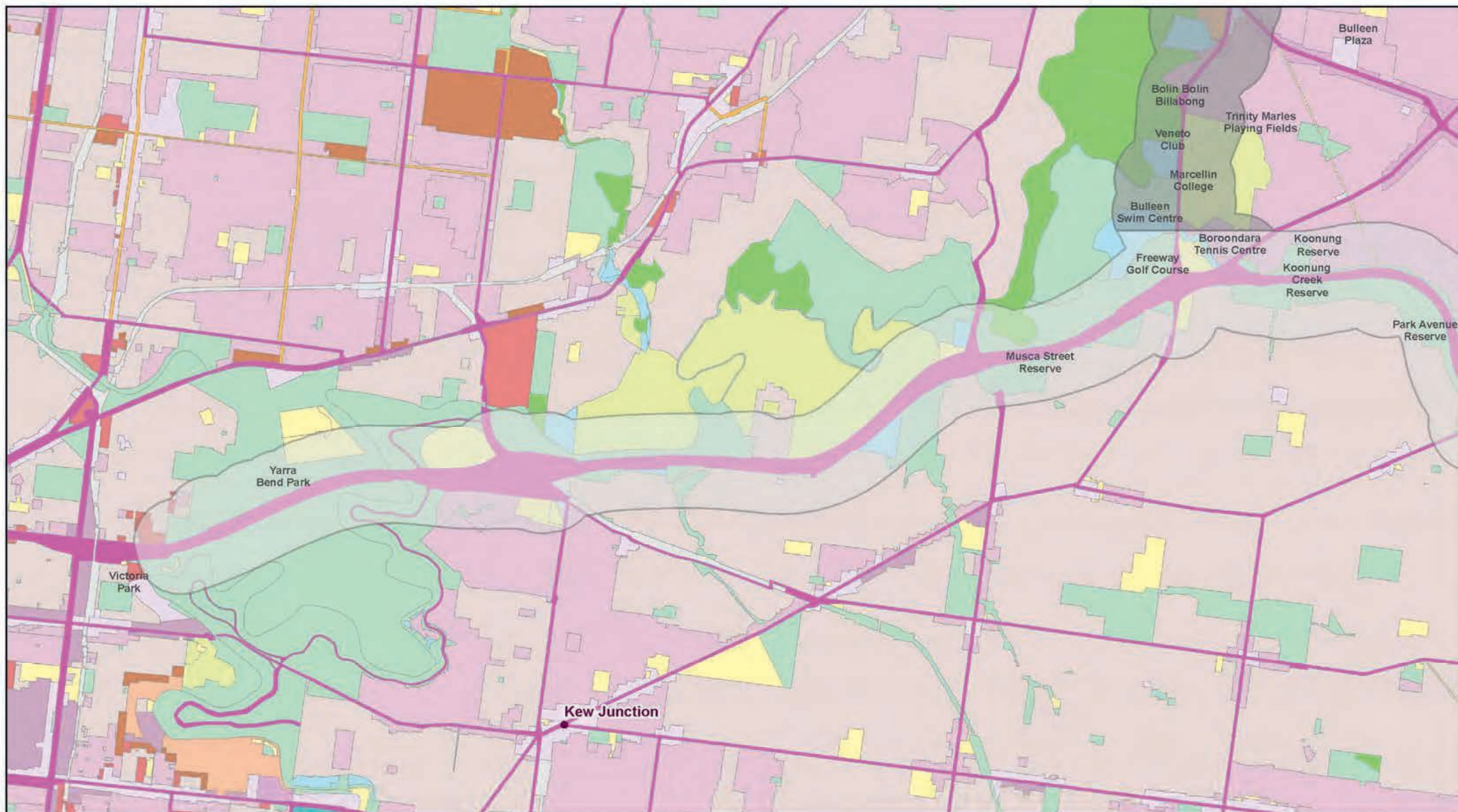
Noise walls and elevated structures are generally not present along Greensborough Road, Lower Plenty Road, Bulleen Road or Manningham Road.

### 6.3 Eastern Freeway

The study area in this precinct features predominantly residential and open space land uses in the municipalities of Manningham and Whitehorse towards the eastern end of the precinct and in the municipalities of Boroondara and Yarra towards the western end of the precinct.

The Boroondara Tennis Club is situated in the centre of the precinct. Key commercial areas are located at the western end of the study area in the City of Yarra and a number of regionally significant activity centres lie further afield of the precinct to the north and south. These include the Doncaster Hill Major Activity Centre, Box Hill Metropolitan Activity Centre and Nunawading Megamile Major Activity Centre.

Further detail on key land use characteristics are summarised below and their locations are shown in Figure 6-3.



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Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 55



#### Legend

Major Activity Centre  
Land Use Planning Precinct

Northern Portal to Southern Portal  
Eastern Freeway  
Planning zone  
Commercial 1  
Commercial 2

Comprehensive Development  
General Residential  
Industrial 1  
Industrial 3  
Mixed Use  
Neighbourhood Residential  
Public Conservation & Resource  
Priority Development  
Public Park and Recreation  
Public Use  
Public use - Transport  
Road - Category 1  
Road - Category 2  
Residential Growth  
Special Use  
Urban Flood



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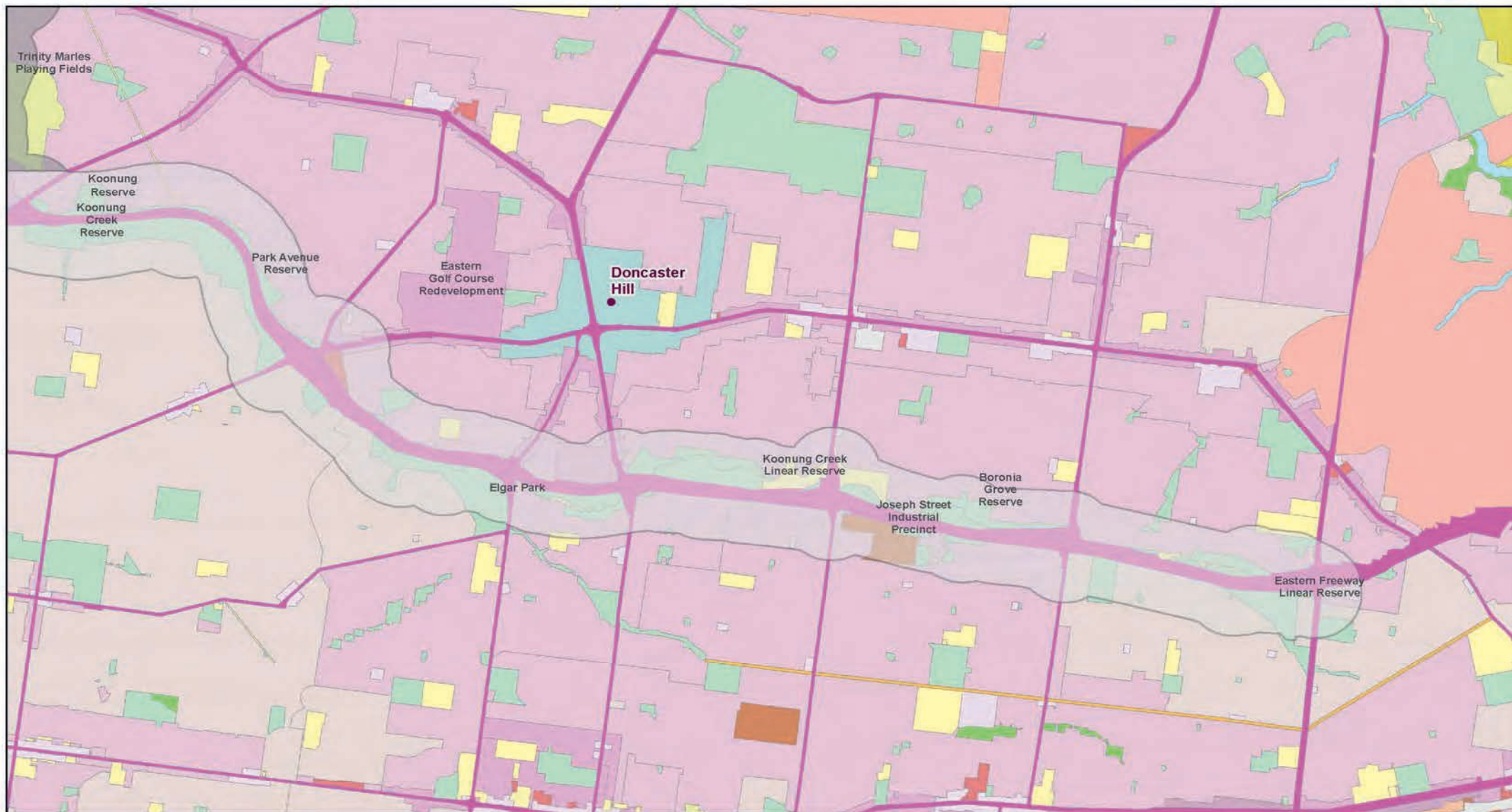
Eastern Freeway land uses

Figure 6-3

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Paper Size A4  
0 237.5 475 950  
Metres  
Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1984  
Grid: GDA 1994 MGA Zone 55



#### Legend

Major Activity Centre  
Land Use Planning Precinct  
Northern Portal to Southern Portal  
Eastern Freeway  
Planning zone  
Activity Centre  
Commercial 1  
Commercial 2

General Residential  
Industrial 1  
Industrial 3  
Low Density Residential  
Mixed Use  
Neighbourhood Residential  
Public Conservation & Resource  
Public Park and Recreation  
Public Use  
Public Use - Transport  
Rural Conservation  
Road - Category 1  
Road - Category 2  
Residential Growth  
Special Use  
Urban Flood



North East Link Project  
Environment Effects Statement (EES)

Job Number | 31-35006  
Revision |  
Date | 28/03/2019

Eastern Freeway land uses

Figure 6-3

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Data source: CIP Imagery - DELWP - 2018 | roads, watercourses, parks, rail, localities, planning zones - Vicmap - 2019 | project infrastructure - GHD, AECOM - 2019 Created by: trighthi

### 6.3.1 Residential

Residential land uses form a large part of this precinct, being located north (Manningham) and south (Whitehorse and Boroondara) of the Eastern Freeway. The built form of the residential land uses are typically characterised by one and two-storey detached dwellings set in well-established landscaped gardens.

The majority of dwellings in the east of Boroondara are from the interwar and post-war era, are generally detached and are considered to be an example of the low density '*Garden Suburb*' form of development, as identified in the *Boroondara Housing Strategy 2015*. Some 1990s subdivisions composed of one and two-storey dwellings are also present in the municipality in this precinct.

Within the western section of Boroondara, there are new medium density developments such as the Kew Residential Services redevelopment, which consists of contemporary one and two-storey town houses with flat roofs.

The majority of residential areas located immediately south of the Eastern Freeway are characterised in the Whitehorse *Neighbourhood Character Study 2014* as '*Garden Suburban*' with some areas identified as '*Bush Suburban*'. Typically, these areas contain development that follow formalised streetscapes with established exotic gardens (*Garden Suburban*) moving towards more informal streetscapes less formalised gardens in vegetation dominated streetscapes (*Bush Suburban*).

Clause 21.05 *Residential* of the Manningham Planning Scheme, Clause 21.06 *Housing* of the Whitehorse Planning Scheme and Clause 21.04 *Built Environment and Heritage* of the Boroondara Planning Scheme generally refer to the desire for limited change in these residential areas, with a focus on higher density development to occur in areas typically surrounding activity centres with good transport connections.

This is demonstrated by limited clusters of medium density townhouses in the precinct, for example along High Street, adjacent to the existing Doncaster Park and Ride bus station and in the City of Yarra. The area in the City of Yarra in proximity to the project particularly demonstrates higher density development, where the built form of residential land uses (including land zoned for Mixed Uses) becomes increasingly denser moving west along the freeway towards the CBD, corresponding with a higher density residential character in these areas of Yarra.

In the City of Yarra in particular, a handful of contemporary multi-storey residential developments are in the study area in the vicinity of the Yarra River in Abbotsford. These developments have changed the character of this part of Yarra from industrial to mixed residential/commercial land uses. As a result, the building character of Yarra in the precinct range from pockets of taller buildings, industrial (or ex-industrial) complexes, Victorian and Edwardian streetscapes with a substantial amount of weatherboard dwellings. A number of Yarra policies note that heritage character and mixture of the suburb needs to be protected.

Clause 21.02 *Municipal Profile*, Clause 21.05 *Built Form* and Clause 21.08 *Neighbourhoods* of the Yarra Planning Scheme identify that there is further opportunity to develop underutilised sites along the Yarra River for further residential development

### 6.3.2 Open space

There are a number of active and passive recreation open space land uses located north (City of Manningham) and south (City of Boroondara and City of Whitehorse) of the Eastern Freeway.

A key feature of these open space areas is their linear nature, providing an interface between the freeway, adjacent residential properties and the Koonung Creek and Yarra River.

Open space in the City of Whitehorse (south of the Eastern Freeway) includes Elgar Park, Slater Reserve and the Eastern Freeway Linear Park, with Eram Park located north of the freeway. These spaces are typically characterised by active recreation uses, native vegetation, landscaped field and shared use paths.

The Koonung Creek Linear Reserve, Park Avenue Reserve and Boronia Grove Reserve are located north of the freeway in the City of Manningham. Key features include native vegetation, conservation corridors and pedestrian pathways. Also adjacent to the reference project are the Freeway Public Golf Course, Koonung Creek Reserve and Musca Street Reserve in Boroondara. These active open spaces are interconnected by the Koonung Trail, which traverses the Eastern Freeway.

A number of smaller pockets of active and passive recreation open space land uses exist along the southern side of the freeway in Boroondara, with larger tracts of open space surrounding the Yarra River north and south of the freeway (including Yarra Bend Park and a number of golf clubs) in Boroondara and Yarra. Victoria Park is located south of the precinct in Abbotsford in the City of Yarra.

### 6.3.3 Commercial

A number of commercial land uses are located in this precinct. The built form of the commercial land uses adjacent to the reference project mostly consists of low rise 20<sup>th</sup> century buildings along neighbourhood high streets, with limited on street parking.

A neighbourhood centre is located south of the freeway in the precinct at Woodhouse Grove and Station Street in Box Hill in the City of Whitehorse. This neighbourhood centre consists of a corporate centre and independent retailers. Small Neighbourhood activity centres (including the Bellevue Neighbourhood Centre in Boroondara) are in the vicinity of the precinct as well as commercial premises such as the Manningham Hotel and Club located on the Koonung Creek in the City of Manningham

A small number of commercial premises also operate in the Joseph Street light industrial cluster, located south of the Eastern Freeway in Blackburn North in the City of Whitehorse.

A number of larger Metropolitan Activity Centres are located further afield of the study area, including the Doncaster Hill Major Activity Centre in the City of Manningham and the Box Hill Metropolitan Activity Centre and Nunawading Major Activity Centre in the City of Whitehorse. These areas are identified in Victorian Government and local land use policy as key employment and business centres.

Other key commercial land uses that lie further afield of the study area include Kew Junction Activity Centre, located further south of the study area in the City of Boroondara and the areas zoned for mixed uses detailed in the *Johnston St Local Area Plan 2015* in the City of Yarra.

### 6.3.4 Industrial

Industrial land uses in this precinct are generally located at the Joseph Street Industrial Estate and a power substation located adjacent to the Eastern Freeway. The Joseph Street Industrial Estate is located in the north-east corner of Blackburn North, south of the freeway in the City of Whitehorse and is zoned for industries and associated uses that are compatible with adjacent residential and other more sensitive land uses. Built form in this area comprises mid-century warehouses and factories.

A small cluster of industrial land uses are also located in Abbotsford and to the west of the study area along Hoddle Street in the City of Yarra. Generally, the light industrial businesses operate in one to two-storey warehouses.

### 6.3.5 Community facilities

There are a number of community land uses in this precinct which are generally adjacent to the Eastern Freeway. These are listed in Table 6-3. In the City of Manningham north of the Eastern Freeway, some of the key community land uses adjacent to the reference project include the Boroondara Tennis Club, Birrallee Primary School, Applewood Retirement Village and the Japara Milward Nursing Home. The Heatherwood High School is within the study area, but is buffered from the Eastern Freeway by residential land uses. South of the Eastern Freeway in the City of Whitehorse are community facilities adjacent to the reference project including the Presbyterian Theological College. The Belle Vue Primary School is adjacent to the reference project to the south of the Eastern Freeway in the City of Boroondara.

**Table 6-3 Community infrastructure – Eastern Freeway**

Facility type	Facility name
<b>Child care</b>	Wonderland Childcare and Kinder
	Warekila Preschool
	Petit Early Learning Journey
<b>Community centre and spaces</b>	Tende Beck Scout Hall
	North Eastern Jewish Centre (Yeshurun Congregation)
<b>Education</b>	Birrallee Primary School
	Heatherwood High School
	State Vision Resource Centre
	Presbyterian Theological College
	Belle Vue Primary School
	Melbourne Polytechnic
	RMIT Surveying Field Station
	Kalker Montessori Centre
<b>Aged care</b>	Applewood Retirement Village
	Japara Sydney Williams Apartments
	Japara Millward Nursing home
<b>Health</b>	Guide Dogs Victoria (National guide dog and mobility Centre)
	Royal Talbot Rehabilitation Centre
	Thomas Embling Hospital
<b>Community centres and spaces</b>	Greythorn Bowling Club
	Boroondara Tennis Centre
	Camberwell Golf Club
	Kew Golf Club
	North Kew Tennis Club
	Melbourne Badminton Club

Further detail about community facilities within and adjacent to the study area is provided in Technical report I – Social.

#### 6.3.6 Noise walls and elevated structures

Existing noise wall structures are located along various sections of the precinct to the north and south of the Eastern Freeway. Noise walls are more evident in urban areas where dwelling and rear fences are close to the existing road surface. There is existing overshadowing caused by these structures, but overshadowing is generally limited to the road reserve or shared use paths.

Notably, noise walls are located where the surface roads adjoin smaller areas of passive or active open space and less evident where the road adjoins larger open space areas.

Noise wall construction in the eastern section of this precinct appears to be generally timber, although a range of materials are used towards the western end and include tilt concrete slabs, stone and feature walls (towards the eastern part of the precinct) and a combination of timber and transparent perspex on the southern side.

## 7. Risk assessment

A risk assessment of project activities was performed in accordance with the methodology described in Section 5.3. The risk assessment has been used as a screening tool to prioritise the focus of the impact assessments and development of EPRs. The risk pathways link project activities (causes) to their potential effects on the environmental assets, values or uses that are considered in more detail in the impact assessment. Risks were assessed for the construction and operation of the project.

The identified risks and associated residual risk ratings are listed in Table 7-1. The likelihood and consequence ratings determined during the risk assessment process and the adopted EPRs are provided in Appendix C.

Table 7-1 Land use planning risks

Risk ID	Potential threat and effect on the environment	Risk rating
<b>Construction</b>		
Risk LU01	Construction activities require permanent acquisition of residential properties, resulting in permanent change in land use	Planned (moderate consequence)
Risk LU02	Construction activities require permanent acquisition of open space and public conservation land uses, resulting in permanent change in land use	Planned (moderate consequence)
Risk LU03	Construction activities require permanent acquisition of commercial and industrial land (eg Bulleen Industrial Precinct), resulting in permanent change to commercial and industrial land use	Planned (moderate consequence)
Risk LU04	Construction activities require temporary occupation of open space resulting in a temporary change in land use	Planned (moderate consequence)
Risk LU05	Construction activities require temporary occupation of education and community facilities resulting in a temporary change in land use	Planned (moderate consequence)
Risk LU06	Construction activities result in impacts associated with traffic, noise, air quality and visual and overshadowing considerations, impacting the ongoing use of residential land	Medium
Risk LU07	Construction activities result in impacts associated with traffic, noise, air quality and visual and overshadowing considerations, impacting the ongoing use of open space and public conservation land	Low
Risk LU08	Construction activities result in impacts associated with traffic, noise, air quality and visual and overshadowing considerations, impacting the ongoing use of education and community facility land	Low

Risk ID	Potential threat and effect on the environment	Risk rating
Risk LU09	Construction activities require permanent acquisition of residential properties, resulting in permanent changes to residential land use character	Planned (moderate consequence)
Risk LU10	Construction activities require permanent acquisition of open space and public conservation land uses, resulting in permanent change in open space and public conservation land use character	Planned (moderate consequence)
Risk LU11	Land use changes brought by the project may result in inconsistencies with planning policies and strategic plans	Planned (major consequence)
<b>Operation</b>		
Risk LU12	Impact of project on future redevelopment of land (ie redevelopment for residential, commercial and industrial land use)	Medium
Risk LU13	Operation activities result in impacts associated with traffic, noise, air quality and visual considerations, impacting the ongoing use of residential land	Low
Risk LU14	Operation activities result in impacts associated with traffic, noise, air quality and visual considerations, impacting the ongoing use of open space and public conservation land	Low
Risk LU15	Operation activities result in impacts associated with traffic, noise, air quality and visual considerations, impacting the ongoing use of education and community facility land uses	Low

## 8. Impact assessment

This section addresses potential land use planning impacts based on the risk pathways identified in Section 7. It includes an assessment of the direct and indirect impacts of the construction and operation of the project on residential, open space, commercial, industrial and community facility land uses. The assessment then outlines the proposed EPRs that would be implemented to address project impacts. Notably, the specifics of the impacts often interrelate with various other technical assessments (as outlined in Section 2.3) prepared for the project and would be mitigated through respective discipline-specific EPRs.

The impact assessment also identifies potential benefits and opportunities to land use the project is expected to generate.

### 8.1 Construction

This section provides a detailed assessment of the impacts of the project's construction on land use planning. This includes long-term impacts from the start of construction, such as acquisition.

The following sections provide the assessment of the project's key impacts by precinct.

#### 8.1.1 Acquisition – impacts on land use

This assessment has considered the impacts for each precinct associated with permanent changes in land use due to project acquisition requirements. This section relates to the risk pathways associated with permanent changes in residential, open space and industrial land use due to acquisition (risks LU01, LU02, LU03).

Section 9 and the discussion below outlines the EPRs that can be implemented to mitigate impacts on land use due to permanent acquisition.

In addition to the direct impact on existing land use by acquisition, permanent acquisition can have social and business impacts, which are addressed in Technical report I – Social and Technical report F – Business.

This report identifies the acquisition requirements associated with the reference project. This is considered a conservative approach and further design refinements would be undertaken during the detailed design process, with a view to ensuring an optimal environmental, economic and social outcome, including the potential for a smaller project footprint.

#### *M80 Ring Road to northern portal*

In this precinct, project works would mainly involve widening the existing road corridor, mainly at surface level, with elevated structures for on- and off-ramps to North East Link, pedestrian overpasses, and new road interchanges at the M80 Ring Road and Grimshaw Street.

Installation of a wireless communications base station and relocation of above-ground 66kv power transmission lines is proposed in the road corridor and easements near Watsonia railway station. Installation of a wireless telecommunications base station and relocation of above-ground power transmission lines is also proposed in the existing road corridor and easements and two 220Kv transmission towers are proposed to be relocated from their current location in the Greensborough Bypass road reserve to the Frensham SEC Reserve (an existing electricity easement). Construction would generally involve surface works with some open cut construction methods and much of the work would be carried out along and on land surrounding the existing road corridor.

Accordingly, and due to the M80 and Greensborough Highway being a dominant land use feature in this precinct, the project would generally be consistent with the existing land uses in this area. In this precinct, the potential to permanently change residential, commercial and open space land uses present along the road corridor would be minimised to the extent practicable.

Permanent land use changes in this precinct generally include sections where project infrastructure (including widening) are proposed and residential/commercial properties or land use would be required for construction activities, or where they are very close to the project alignment. Land uses and properties which would experience a permanent change in land use to road corridor are described below.

18 residential properties would be permanently acquired in the M80 Ring Road to northern portal precinct. This is considered a conservative approach and further design refinements would be undertaken during the detailed design process. In most cases, land would be acquired to accommodate widening of the road corridor and other road infrastructure such as viaduct and surface shared use paths, which would change the land use to road corridor.

In other cases, acquisition would be required to accommodate works undertaken adjacent to the residential land use. The design, acquisition and construction requirements in these instances could generate opportunities to improve the local area and potentially change the land use. The form of any future land use change (ie enhancements) would require a separate approval process, subsequent to this EES.

Six commercial properties in this precinct would need to be permanently acquired for the project. These include privately-owned retail businesses operating on land owned by VicRoads and a fuel service station. In most cases, the land is required to accommodate project infrastructure such as junction widening, a viaduct and a shared use overpass and underpass, resulting in a change of land use to road corridor. However, in some cases, the proposed infrastructure, such as the at-surface shared use overpass, would only require an area of the land and in other cases, acquisition would be required to accommodate surface road widening works adjacent to the commercial land use. Both scenarios could generate opportunity to improve the local area post-construction. The form of any future land use change (ie enhancements) would require a separate approval process, subsequent to this EES.

Nine other land uses on public and private land would be impacted by permanent acquisition for the project. These include part of the Simpson Barracks (Commonwealth land), part of the Watsonia Primary School grounds, VicRoads land, government land and common property on residential land. Land would be acquired to accommodate road widening and project infrastructure such as elevated viaduct structures and the northern tunnel ventilation structure resulting in a change of land use to road corridor. In instances where partial acquisition is required, the majority of the remaining land use would remain available, reducing the scale of impact.

In this precinct and as listed below, part of open space areas available to the public would be required to permanently accommodate project structures or facilities such as shared use paths and in these locations would become inaccessible to the public. Where shared use paths are proposed, the land would only be inaccessible to the public during construction, however, the land use would remain publically accessible during operation. Open space areas required for project infrastructure include:

- Frensham SEC Reserve (east side of Greensborough Bypass on Frensham Road)
- Gillingham Reserve (south west of the M80 Ring Road and Greensborough Bypass interchange)
- AK Lines Reserve (south west corner of Greensborough Bypass and Grimshaw Street junction)

- Watsonia Road reserve (adjacent to the east side of Watsonia Road)
- Watsonia railway station car park reserve (adjacent to the west side of Greensborough Road) where a shared use path is proposed
- Trist Street Reserve (north-west corner of Greensborough Bypass and Grimshaw Street junction) where a shared use path is proposed.

In most cases, partial acquisition of the open space land uses would be required, leaving the majority of the remaining land use available which would reduce the scale of impact. As detailed in EPR SC4, impacts to sporting and recreation facilities would be minimised via consultation with relevant local councils to identify local alternative facilities for formal recreational users displaced from facilities by the project. Adequate notification to clubs and recreation facilities would be provided to minimise the impact of relocation. Where construction or operation activities would directly impact community infrastructure facilities such as schools, child care centres and aged care centres, consultation would occur with managers, owners and user groups of the facilities to identify any practical measures to avoid or minimise impacts.

### ***Northern portal to southern portal***

The majority of proposed works in the northern portal to southern portal precinct would be sub-surface, which would minimise the requirement for permanent acquisition and temporary occupation. Tunnelling protects the existing residential land uses and both ecologically and culturally sensitive land use and open space areas along the alignment, including Banyule Flats, Bolin Bolin Billabong and the Yarra River.

The proposed above-ground project infrastructure would generally be concentrated to the north and south of the precinct and associated with tunnel portal structures such as ventilation stacks and substations. The precinct would also contain the construction of cut and cover tunnels and a new interchange at Manningham Road, and the existing Heidelberg Zone substation in the vicinity of Banksia Street to the west of the study area may also require an upgrade to facilitate tunnelling works.

In the majority of these sections, the potential to permanently change existing residential, open space and public conservation (ie ecological and cultural value) land uses to road corridor would be reduced to the extent practicable and much of the work would be carried out along and on land surrounding the existing road corridor. In the case of the Heidelberg substation, the proposed works would only involve an upgrade to the existing facility. The proposed substation to power the tunnel boring machines (TBM) and then tunnel facilities once North East Link is operating would be located in the Bulleen Industrial Precinct near the southern portal. This would be part of a wider permanent change of land use in this area, as discussed further below.

The precinct would also involve the construction of cut and cover tunnels and a new interchange at Manningham Road. In this section, the road corridor would be below the ground surface.

Land uses which would experience a permanent change in land use to road corridor are described below.

18 residential properties would need to be permanently acquired for the project in the northern portal to southern portal precinct. This is considered a conservative estimate and further design refinements would be undertaken during the detailed design process. No project infrastructure is proposed for this land. Rather, the land would facilitate the trench and the cut and cover construction methods and other construction activities. Subject to a separate approval process to this EES, the design, acquisition and construction requirements in these instances could generate opportunities to enhance the local area, potentially resulting in a change of land use.

97 commercial properties would need to be permanently acquired for the project in the northern portal to southern portal precinct. The majority of this impact is due to the new Manningham Road interchange, which is located immediately south of Bridge Street and to the west side of Bulleen Road within the Bulleen Industrial Precinct. This would result in a permanent change in land use from industrial to road corridor, contrary to local land use policies, including to Manningham City Council's local policy discussed in Section 8.1.5.

Notwithstanding that the substantial disruption proposed to the Bulleen Industrial Precinct with the acquisition of all IN1Z land in the precinct is at odds with local policy, the physical removal of a significant pool of employment use and developed land would mean a substantial land use change in this location during construction. However, the land would remain zoned IN1Z and that industrial and commercial land uses may re-establish post construction. While the impacts on the industrial precinct and nearby business and subsequent geographic shift in employment opportunities are discussed in Technical report F – Business, the project would impact an existing, established land use and built form character during construction.

A construction lay down area is proposed to occupy the Bulleen Industrial Precinct location and would require permanent acquisition of the land as this area is integrated within the Manningham Road interchange land.

A range of other land uses (16) would be impacted due to permanent acquisition in the northern portal to southern portal precinct.

At the northern end of the precinct, the project would require permanent acquisition of part of Simpson Barracks, which is Commonwealth land, Borlase Reserve which is VicRoads and Council-owned open space, and part of land owned by Melbourne Water. The proposed project infrastructure here would mainly comprise road widening, the northern tunnel portal and associated infrastructure (surface and open cut construction methods) which would change the land use to road corridor.

At the southern end of the precinct, the project would require permanent acquisition of part of the Veneto Club car park and access/entrance, PCRZ land currently occupied by a plant nursery, the former Bulleen Drive-in site on the urban floodway zone, part of Bulleen Park (council-owned open space leased to football clubs), part of the Carey Grammar sporting facility and the Bulleen Swim Centre would need to be permanently acquired for the project. Key elements of the project here include the Eastern Freeway interchange, Bulleen Road widening and the southern tunnel portal and associated infrastructure. In these instances, there could be opportunity to improve the local area post-construction.

NELP is working with relevant local councils, facility operators and relevant Victorian Government authorities to identify relocation opportunities with the objective of accommodating displaced facilities and maintaining the continuity of those recreational activities where practicable. A range of relocation options are being evaluated in order for a preferred option to be identified.

In instances where partial acquisition would be required, the majority of the remaining land use would remain available, reducing the scale of impact. As the social-related EPRs referred to in the EPR discussion below, impacts to sporting and recreation facilities would be minimised with relevant local councils to identify available local alternative facilities for formal recreational users displaced from facilities by the project. Adequate notification to clubs and recreation facilities would minimise the impact of relocation. Where construction or operation activities would directly impact community infrastructure facilities such as schools, child care centres and aged care centres, consultation with managers, owners and user groups of the facilities would identify any practical measures to avoid or minimise impacts.

Construction of the tunnels would require the strata acquisition of 227 residential properties, one private commercial property and nine areas of open space (to the north of Warringal Parklands and to the south of Banksia Park) in the northern portal to southern portal precinct. Strata acquisition refers to the acquisition of land below ground surface where tunnel infrastructure would pass beneath properties. Properties or buildings above-ground surface level are not required for this type of acquisition. In addition to the strata acquisition required for the tunnels, the diversion of the Yarra East Main sewer would require either sub-surface strata acquisition or easements affecting 21 residential properties.

Potential land use planning impacts associated with sub-surface acquisition may limit any future redevelopment such as those requiring excavation below a certain level below ground. The potential impact on future redevelopment as well as the large one to two-storey detached residential dwellings and open space type in this area would be managed via the implementation of an appropriate planning control such as a Design and Development Overlay.

### **Eastern Freeway**

Project works in the Eastern Freeway precinct would principally involve:

- Modifications to the Eastern Freeway including widening to accommodate future traffic volumes
- The addition of the Eastern Freeway interchange to connect the existing freeway to the new section of North East Link
- A new dedicated busway along the Eastern Freeway (the Doncaster Busway) with a new Park and Ride facility at Bulleen Road and an upgrade to the Doncaster Park and Ride
- Upgrades to noise walls including new walls in some areas
- New and improved shared use paths.

Construction along this precinct would mainly involve surface works with much of the work conducted along the existing road corridor. Accordingly, and due to the Eastern Freeway being a dominant land use feature in this precinct of the study area, the project would generally be consistent with the existing land uses in this area. In this precinct, the potential to permanently change existing residential, commercial and open space land uses along the road corridor would be reduced to the extent practicable. No residential properties would need to be permanently acquired in this precinct.

Towards the southern end of Bulleen Road, an upgrade to the Eastern Freeway interchange is proposed. Road widening here would occur within the road corridor land use so there would be a minimal impact on land use. Outside the road corridor land use, three Council-owned parcels would need to be permanently acquired to accommodate project infrastructure.

This includes part of the open space land use Freeway Public Golf Course where proposed infrastructure includes sections of viaduct and surface works for Bulleen Road widening, as well as sections of viaduct and surface works for the new slip road and a section of the Doncaster Busway. This would generate potential to enhance the local area between project structures post-construction, such as under viaduct structures, keeping in character with the existing use of the land. The form of any future land use change (ie enhancements) would require a separate approval process, subsequent to this EES.

The remaining two properties comprise tennis court infrastructure, including the Boroondara Tennis Centre and tennis courts located adjacent to the east of Bulleen Road, and part of Koonung Creek Linear Park located to the north of Boroondara Tennis Centre and bordered by Dan Murphy's and the Bulleen Swim Centre. The project infrastructure here would comprise sections of viaduct and surface works for the Bulleen Road widening as well as sections of viaduct and surface works for the new slip road, a section of the Doncaster Busway, and the Bulleen Road and Thompsons Road Park and Ride facility that provides car parking for around 300 to 400 vehicles.

The impact on that part of Koonung Creek Linear Park located to the north of Boroondara Tennis Centre is considered to be minor as the land utilised by the project would be relatively small and the majority of the remaining land use would remain available, minimising the scale of impact. However, the project land requirements and impacts on the existing Boroondara Tennis Centre to the east of Bulleen Road would significantly change the land use (Refer also to Technical report I – Social) via the removal of a significant community recreation facility. This permanent change in land use from community sporting facility and open space (Public Use Zone 6 – Local Government (PUZ6)) to road corridor and a public transport facility is also contrary to the intent of the existing public use zone, which envisages the use of the land for sporting and recreational purposes.

An area of land south of Estelle Street and north of the Eastern Freeway is designated as road reserve and is currently used for open space purposes and the Koonung Creek Trail. The majority of this land would be required for freeway widening, a designated bus lane and shared use infrastructure which would change the land use. However, the proposed infrastructure would not require all the land, with the existing open space land use to continue on the remaining land. The new shared use path infrastructure would also assist in improving east-west connectivity for pedestrians and cyclists along the freeway and adjacent open spaces.

Areas of open space land use summarised below are currently available to the public and would be required for project infrastructure, including surface and shared used overpasses along the Eastern Freeway:

- Koonung Creek Reserve (adjacent to the south side of the Eastern Freeway)
- Koonung Reserve (adjacent to the north side of the Eastern Freeway)
- Part of Koonung Linear Reserve (behind the Boroondara Tennis Centre, bordered by Dan Murphy's and the Bulleen Swim Centre)
- Unnamed reserve (south-west of the Eastern Freeway interchange)
- Elgar Park (adjacent to the south side of the Eastern Freeway)
- Koonung Creek Linear Park (adjacent to the north side of Eastern Freeway).
- Park Avenue Reserve (north of Doncaster Road on the east side of the Eastern Freeway adjacent to Park Avenue)
- Stanton Street Reserve (adjacent to the north side Eastern Freeway)
- Tram Road Reserve (adjacent to the north side of the Eastern Freeway)
- Fairlea Reserve (adjacent to the north side of the Eastern Freeway)
- Koonung Koonung Creek Reserve adjacent to Doncaster Park and Ride, south of Doncaster Road.

Portions of public open space would be occupied by permanent project structures, however the impact on these land uses is considered to be minor as the land utilised would be relatively small in area, and in the case of proposed shared use path infrastructure, it would fit in with the overall recreation land use. Land not required for permanent project infrastructure would be returned to its existing use post-construction.

In this precinct, the potential to permanently change existing residential, commercial and open space land uses along the road corridor would be reduced to the extent practicable.

### ***EPRs for all precincts***

Impacts associated with a change in land use due to permanent acquisition would be managed through the implementation of EPRs in consultation with the stakeholders to minimise disruption to owners and land users to the extent practical. It is noted that post-construction, land not required for permanent project infrastructure would be returned to its existing use.

Temporary and permanent impacts on affected land uses would be minimised with the design footprint avoiding permanent acquisition and temporary occupation to the extent practical, particularly parks and reserves, significant landscapes around the Yarra River, recreational and community facilities land uses, residential properties and commercial and industrial sites (EPR LP1).

Impacts to existing residential areas and recreational facilities would be minimised by locating new above-ground services and utilities infrastructure in a way that considers impacts on adjoining properties and explores the co-location of infrastructure where practicable (LP2).

Inconsistencies with planning policies and strategic plans due to land use changes brought about by the project would be minimised by ensuring the project's development and operation considers strategic land use plans and policies and by consulting with land managers and/or agencies responsible for implementing the policies (EPR LP3).

Acquisition would be undertaken in accordance with the *Land Acquisition and Compensation Act 1986* (Vic) and the *Major Transport Projects Facilitation Act 2009* (Vic). Residential property acquisition would be undertaken in accordance with EPR SC1 to reduce disruption to residents as much as practicable.

Impacts to sporting and recreation facilities would be minimised via consultation with relevant local councils and stakeholders to identify available local alternative facilities for formal recreational users displaced from facilities. Adequate notification to clubs and recreation facilities would be provided to minimise the impact of relocation. Where construction or operation activities would directly impact community infrastructure facilities such as schools, child care centres and aged care centres, consultation with managers, owners and user groups of the facilities would identify any practical measures to avoid or minimise impacts (EPR SC4).

The disruption to businesses from permanent acquisition or temporary occupation of land would be minimised as much as practicable and in consultation with affected businesses and land owners to endeavour to reach agreement on the terms for possession of the land (EPR B2). Pre-construction, business support would be provided to affected businesses including regular updates of the planning and design progress and the requirement for the project to work with local councils to identify alternative location options for displaced businesses (EPR B1). Consultation and engagement with businesses would continue through the Business Liaison Group throughout the construction of North East Link (EPR B6).

By minimising the operational footprint of the project by implementing the above EPRs, the project may leave surplus land parcels. Where surplus land parcels are considered appropriate for a new or pre-existing land use, the relevant planning scheme provisions (including Victorian Government and local policies) would apply and trigger the need to obtain separate planning approvals as required.

Full details of the identified land use EPRs are provided in Section 9.

### ***Benefits and opportunities***

Overall, a permanent change in land use due to acquisition would cause an adverse impact. However, the impact would be minimised through by implementing the EPRs above, including the requirement to minimise the footprint to the extent practicable, such as selecting tunnelling construction methods that avoid large areas of residential and ecological and culturally significant open space and public conservation land uses.

A change in land use due to acquisition also provides opportunity to improve the local area post-construction. These improvements have not been identified and would require a separate approval process to this EES.

#### **8.1.2 Temporary occupation – impacts on the use of land**

This assessment has considered the impacts associated with temporary changes in land use due to the temporary occupation required for the project in each precinct.

This section refers to the risk pathways associated with temporary changes in open space and community facility land uses due to temporary occupation (risks LU04, LU05).

Section 9 and the discussion below outlines the EPRs that can be implemented to mitigate impacts on land use due to temporary acquisition.

Apart from a change in land use, temporary occupation can also result in social and business impacts. These are covered in Technical report I – Social and Technical report F – Business.

### ***All precincts***

Temporary occupation of land would be required to facilitate the construction of project infrastructure and other construction purposes, such as construction compounds and ground improvement works. Temporary occupation would likely involve partial occupation of areas of passive and active open space and Commonwealth land. However, in some cases all the existing land use may be required for temporary occupation.

Overall, a temporary change in land use due to temporary occupation would cause an adverse impact as the current land use would temporarily cease. However, this impact would be temporary and implementation of EPR LP1, including minimising the footprint to the extent practicable at design stage, would assist in avoiding (to the extent practicable) temporary impacts on affected land uses. Furthermore, in some instances where partial temporary occupation occurred, the majority of the remaining land use would remain available, minimising the scale of impact.

As the social-related EPRs refer to in the EPR discussion below, impacts to sporting and recreation facilities would be minimised via consultation with relevant local councils to identify available local alternative facilities for formal recreational users displaced from facilities. Adequate notification to clubs and recreation facilities would minimise the impact of relocation. Where construction or operation activities would directly impact community infrastructure facilities such as schools, child care centres and aged care centres, consultation with managers, owners and user groups of the facilities would identify any practical measures to avoid or minimise impacts.

A temporary change in land use would also provide opportunity to improve the local area post-construction.

Initial consultation has been undertaken with Councils about the use of areas for construction. Detailed consultation would be undertaken following planning approval and prior to the commencement of construction. This would include consideration of temporary occupation and reinstatement requirements.

### ***EPRs for all precincts***

Impacts associated with a change in land use due to temporary occupation would be managed through the implementation of EPRs in consultation with the appropriate stakeholders to minimise disruption to owners and land users to the extent practical.

Temporary and permanent impacts on affected land uses would be minimised with the design footprint avoiding to the extent practicable any permanent acquisition and temporary occupation particularly of parks and reserves, significant landscapes around the Yarra River (in the northern portal to southern portal and the Eastern Freeway precincts), recreational and community facilities, residential properties and commercial and industrial sites (EPR LP1).

Inconsistencies with planning policies and strategic plans due to land use changes brought about by the project would be minimised by ensuring the project's development and operation considers strategic land use plans and policies and by consulting with land managers and/or agencies responsible for implementing the policies (EPR LP3).

Impacts to sporting and recreation facilities would be minimised via consultation with relevant local councils to identify available local alternative facilities for formal recreational users displaced from recreational facilities. Adequate notification to clubs and recreation facilities would minimise the impact of relocation. Where construction or operation activities would directly impact community infrastructure facilities such as schools, child care centres and aged care centres, consultation with managers, owners and user groups of the facilities would identify any practical measures to avoid or minimise impacts (EPR SC4).

By minimising the operational footprint of the project by implementing the above EPRs, the project may leave surplus land parcels. Where surplus land parcels are considered appropriate for a new or pre-existing land uses, the relevant planning scheme provisions (including Victorian Government and local policies) would apply and trigger the need to obtain separate planning approvals as required.

Full details of the identified land use EPRs are provided in Section 9.

### ***Benefits and opportunities***

Overall, a temporary change in land use would cause an adverse impact. However, this impact would be temporary and implementing the EPRs above, including minimising the footprint to the extent practicable, would assist in avoiding to the extent practicable any temporary impacts on affected land uses.

A temporary change in land use also provides opportunities to improve the local area post-construction.

### 8.1.3 Impacts on ongoing land uses

Key construction activities that would impact ongoing land uses include traffic, noise, air quality and visual and overshadowing impacts. The ongoing use of sensitive land uses associated with residential, open space and community facility purposes has been assessed as part of this impact assessment. Potential amenity impacts associated with these considerations are addressed in the relevant technical assessments contained in this EES and would be mitigated through their associated EPRs.

The connections between these assessments, such as connections between landscapes, visual impacts and land use, are provided in the EES chapters.

This section therefore refers to the risk pathways associated with ongoing open space, residential, community facility, commercial and industrial land uses due to traffic, noise, air quality and visual and overshadowing impacts associated with construction activities (risks LU06, LU07, LU08).

Section 9 and the discussion below outlines the EPRs that can be implemented to mitigate impacts on ongoing land uses due to traffic, noise, air quality, visual and overshadowing impacts from construction activities.

As outlined above, potential amenity impacts are discussed in Technical report A – Traffic and transport, Technical report B – Air quality, Technical Report C – Surface noise and vibration, Technical report F – Business, Technical report H – Landscape and visual, Technical report I – Social, Technical report K – Historical heritage and Technical report Q – Ecology.

#### *All precincts*

Across all precincts, above-ground construction activities such as widening of existing roads using surface and open cut methods, cut and cover tunnelling and TBM retrieval may generate traffic, noise, air quality, visual and overshadowing changes. These could potentially impact the ongoing use of residential, open space and community facility land adjacent to the project.

An example of an impact to ongoing use of land could be a scenario where construction activities adjacent to a residential land use increased air and noise emissions or changed the visual aesthetics to the point the existing land use was no longer viable.

Technical report C – Surface noise and vibration identifies that construction activities across all the project's precincts have the potential to increase noise levels in areas close to the project, encompassing land within 300 metres of the project alignment. A small number of discrete construction activities have the potential to cause significant noise impacts for a period of time, such as excavation works for the cut and cover tunnels section north of the northern portal, and unavoidable out-of-hours works associated with demolishing existing bridges and for viaduct earthworks and construction. For these works, mitigation strategies such as physical mitigation of plant, equipment and operations, limits to the hours of operation (for some operations) and consultation with the community would assist in managing the surface noise impacts.

Noise impacts would decrease and be less noticeable the further away from construction activities. Construction surface noise impacts are not expected to change the ongoing use of residential, open space and community facility land uses, given the temporary nature of construction activities and with implementation of project EPRs that address construction surface noise impacts, as outlined in the EPR discussion below.

Across the project, there is potential for air quality impacts during construction works in the form of particulate matter, odour and products of combustion. Construction air quality impacts are not expected to change the ongoing use of residential, open space and community facility land. This is supported by the localised, intermittent and temporary nature of construction activities and the implementation of mitigation measures. Such measures include preparation and implementation of Dust and Air Quality Management and Monitoring Plan(s), which sets out the requirements to minimise and monitor the impacts on air quality during construction.

The assessment undertaken in Technical report A – Traffic and transport found that construction of North East Link would occur in sections, allowing sequencing of works with different construction segments mobilising and demobilising throughout that time. Construction activities would generate additional truck traffic in areas around construction sites, laydown areas and haulage routes. They would also require temporary lane and road closures to facilitate public safety and safety of workers and detours to ensure continual flow of traffic and access, which would change traffic and signalling arrangements. Haulage routes would generally depend on the location of the work zone and are predicted to include EastLink, Bulleen Road, Chandler Highway, Sydney Road, High Street, Plenty Road and Greensborough Road. Key truck generating sites are likely to be from Kempsey Street to the northern portal and the TBM launch site at Manningham Road. Further discussion and details of locations where these changes would occur are provided in Technical report A – Traffic and transport. It is expected that traffic changes associated with the project during construction would not impact the ongoing use of residential, open space and community facility land, given the changes would be temporary, and with the implementation of existing truck curfews and EPRs that address traffic impacts, including Transport Management Plan(s) (TMP). Relevant traffic-related EPRs are outlined in the EPR discussion below.

The impact assessment undertaken for Technical report H – Landscape and visual identified that construction activities across all precincts could mean some residents, community facility and open space users would have direct views of construction works and equipment. Residential, open space and community facility land uses where the existing environment would be highly modified or where existing screening trees and vegetation would be removed would mean that experienced visual impacts. Night works may lead to light spill impacts to sensitive receptors such as nearby residential properties. Details of locations where these changes would occur and further discussion of visual impacts are provided in Technical report H – Landscape and visual.

A mitigating factor of the visual impacts due to construction of the project is their temporary nature. Implementing the project EPRs that address visual operation impacts, including through the design process, would mean that visual impacts are not expected to change the current or future (planned) land use. Relevant landscape visual-related EPRs are outlined in the EPR discussion below.

The installation of noise walls and elevated structures (including shared use overpasses and elevated ramps) have the potential overshadow some locations in the M80 Ring Road to northern portal precinct, generally on the southern side of the M80 and isolated locations south of the Greensborough Bypass. Shading from the ventilation structure has also been considered, but doesn't produce shading impacts on residential properties and only relatively small amount on open space.

There is also potential for overshadowing in the Eastern Freeway precinct, generally on the southern side of the Eastern Freeway. This overshadowing could adversely impact the amenity of existing dwellings by restricting sunlight/solar access to private open space.

Where overshadowing would extend into areas of private open space, this could reduce its usability and adversely impact amenity of the dwelling. Overshadowing from the installation of noise walls, shared use overpasses and other elevated structures could significantly reduce the amenity of existing dwellings and mean that areas of private open space are not suitable for their intended use. Furthermore, there may be some circumstances where overshadowing affects existing solar panels. This would occur along various part of the project alignment where noise walls and elevated structures would be constructed near existing dwellings or abutting private open space.

Approximately 26 dwellings in the M80 Ring Road to northern portal precinct to the south of the project would be impacted by overshadowing where areas of secluded private open space abut a proposed noise wall on the northern boundary of the site. Approximately six dwellings to the south of elevated shared use paths would be impacted by overshadowing from these structures. Overshadowing open space to the south of the project would occur in the morning, with solar access increasing in the early afternoon.

Within this precinct there are approximately 10 houses to the east of the project with areas of open space orientated to the west. In these instances, the afternoon shadow from project structures would extend into areas of secluded private open space and impact amenity.

For properties to the west of the Greensborough Bypass which runs in a north-south alignment, the overshadowing would affect approximately 10 properties. Noise walls are proposed on the eastern and western boundaries of the project alignment near or directly abutting areas of secluded private open space. For properties on the west, the noise walls would impact solar access in the morning till midday and for properties on the east, the noise walls would impact solar access during the afternoon period.

In the area between the northern to southern portal, there would be little overshadowing to the private realm from project structures.

Along the Eastern Freeway precinct, the shadow cast by project structures would extend into approximately 19 properties. The majority of the overshadowing would occur to properties on the south side of the project with areas of private open space located to the north of the dwelling.

Refer to Appendix D for mapping showing overshadowing associated with the installation of noise walls and elevated structures, including shared use overpasses. The mapping is conservative and has assumed all noise walls and elevated structures would be solid material. Although it is noted that the actual design of the noise walls may incorporate the use of transparent material at some locations, this has not been reflected in the overshadowing maps as this detail is not yet known.

The majority of the alignment preserves solar access to areas of open space for adjoining dwellings due to the land use separation from project structures. Notwithstanding the above, there are a number of ways the extent of overshadowing could be reduced through the design and construction of the project. This includes changing the location of the structure(s) causing the overshadowing, reducing the height, or selecting materials to allow the penetration of sunlight/solar access to areas of open space and/or solar panels. Implementing these measures must also have regard to other EPRs and standards to be achieved, such as noise attenuation and visual impact.

In summary, above-ground construction activities across all precincts such as the widening of existing roads using surface and open cut methods, cut and cover tunnelling, would result in traffic, noise, air quality, overshadowing and visual impacts. These in turn have potential to impact the ongoing use of residential, open space, community facility land adjacent to the project.

However, construction activities are temporary in nature and implementing the identified mitigation strategies and project EPRs that address construction traffic, noise, air quality, visual and overshadowing impacts, would mean that a change in land use is unlikely.

Notwithstanding the above, mitigation through established standards and project EPRs should minimise the likelihood of any change in land use due to impacts associated with construction activity and minimise the extent of overshadowing across the project.

### ***EPRs for all precincts***

Temporary and permanent impacts on affected land uses would be avoided to the extent practicable (EPR LP1), particularly to parks and reserves, significant landscapes around the Yarra River, sensitive land use including those hosting recreational and community facilities and residential properties.

Impacts to existing residential areas and recreational facilities would be minimised by locating new above-ground services and utilities infrastructure in a way that considers impacts on adjoining properties and explores the co-location of infrastructure where practicable (EPR LP2).

Inconsistencies with planning policies and strategic plans due to land use changes brought about by the project would be minimised by design and development of the project having regard to strategic land use plans and policies in conjunction with consultation with land managers and/or agencies responsible for implementation of the relevant policies (EPR LP3).

Overshadowing from elevated structures and noise walls to residential properties (including existing solar panels), community facilities, open spaces and waterways must be minimised through detailed design (EPR LP4).

EPRs to minimise impacts on ongoing land uses due to construction traffic, noise, air quality and visual impacts include an Environmental Strategy and management plans such as a Construction Environmental Management Plan (CEMP) (EPR EMF2), a Dust and Air Quality Management and Monitoring Plan(s) (EPR AQ1) and a Construction Noise and Vibration Management Plan (CNVMP) (EPR NV4) which sets out measures to minimise and monitor the construction noise and vibration impacts. Measures set out in these plans would need to comply with the requirements of relevant State Environment Protection Policies (SEPPs) and industry standards for noise and air quality issues. Construction vibration targets would need to comply with industry standards to minimise impacts on amenity and structures (EPRs NV8; NV9). Management actions would be implemented if the guideline target levels for continuous vibration from construction activity to protect human comfort of occupied buildings (including heritage buildings) were not achieved. Management actions, as determined in consultation with potentially affected land owners, would be implemented to protect amenity at residences where ground borne noise guideline targets were exceeded during construction (EPRD NV10). Construction of permanent noise attenuation must, where feasible, be installed in advance of adjacent works (EPR NV13).

EPR SC2 associated with preparation and implementation of a Communications and Community Engagement Plan would address stakeholder concern, including the mitigation of community impacts such as those relating to dust, noise and light.

EPRs to minimise impacts of construction activities on the ongoing use of land for business include the need to minimise access and amenity or function impacts of any business or commercial facility (EPR B4). Also, at detailed design and during construction, damage or impacts on third-party property and infrastructure would be minimised (EPR B3).

The design of the project would be required to be generally in accordance with Urban Design Strategy (EPR LV1). The design response must, to the extent practicable, avoid or minimise landscape and visual, overlooking, and shading impacts in extent, duration and intensity and maximise opportunities for enhancement of public and private receptors including public amenity, open space and facilities, and heritage places resulting from the project (EPR LV1 and LP4).

Landscape and visual EPRs relating to impacts on land use change and ongoing land uses would include: implementing measures to use temporary landscaping, features or structures (including viewing portals) during construction to minimise adverse visual impact of project works and provide visual appeal and landscaping enhancement before construction works started (EPR LV2); temporary landscape treatments, features or screening across the project where appropriate (EPR LV2) and lighting measures to minimise light spillage protecting the amenity of adjacent neighbourhoods, parks, and any known significant native fauna habitat and community facilities to the extent practicable (EPR LV3).

EPRs that minimise disruption would manage connectivity considerations via Transport Management Plan(s) (EPR T2).

Full details of identified land use EPRs are provided in Section 9.

### ***Benefits and opportunities***

No particular benefits or opportunities during construction have been identified with respect to ongoing land uses associated with traffic, noise, air quality and visual and overshadowing impacts.

#### **8.1.4 Impacts on land use character**

This assessment has considered the impacts associated with permanent changes in land use character due to the acquisition requirements of the project. This relates to the risk pathways associated with permanent changes in open space and residential land use character due to acquisition requirements associated with construction activities (risks LU09, LU10).

For the purposes of this land use planning impact assessment, character is considered to make a land use distinctive and contributes to the purpose of the land use. It is the interaction between land uses and their built form, architectural style, subdivision patterns, land use activities and environmental considerations such as topography, vegetation and waterways.

While character applies to all land uses, it is particularly important to the fabric of more sensitive land uses which typically include residential and open space land uses, as character forms a significant part of what makes these land uses distinctive and attractive.

Acquisition of open space and residential land changes the land use, which in turn contributes to the potential for existing land use character to be altered. Section 9 outlines the EPRs that can be implemented to mitigate impacts on land use character due to permanent acquisition.

Refer to Technical report H – Landscape and visual for a discussion on landscape character and the visual impacts to landscape character due to a change in built form and to environmental features such as waterways. This includes details on the removal of vegetation and proposed landscaping in accordance with the project's Urban Design Strategy.

Permanent acquisition of open space and residential land also has the potential to impact social considerations, including reduced connectivity between communities and facilities and changing character of an area. Other issues potentially impacting residential and open space land use character can include impacts to vegetation, lighting, the presence of noise walls and other visually prominent infrastructure including tunnel portals, ventilation and other elevated structures.

Detail on these matters are included in the project's Urban Design Strategy, Technical report I – Social, Technical report H – Landscape and visual, Technical report K – Historical heritage and Technical report Q – Ecology.

### ***M80 Ring Road to northern portal***

Residential land use adjacent to the reference project in the M80 Ring Road to northern portal precinct is characterised by a lower density pattern of dwellings with extensively vegetated gardens, contributing towards a leafy, spacious residential character that has remained largely unchanged since the mid to early second half of the 20<sup>th</sup> century.

As outlined in Section 8.1.1, residential properties in this precinct would be permanently acquired to accommodate project infrastructure, resulting in a change of land use. The change in land use would in turn change the interplay between the residential land use character considerations such as land use activities and built form, potentially impacting the long-established neighbourhood character conditions of the area. However, by reducing residential acquisition requirements to the extent practicable, changes to the overall residential land use character in this precinct would be minimised. There may also be potential post-construction to implement localised enhancements to acquired residential land, with potential to enhance local residential land use character. The form of any future land use change (ie enhancements) would require a separate approval process, subsequent to this EES.

In this precinct, open space land use adjacent to the project is characterised by a number of linear active and passive recreation open space areas located along the M80 Ring Road and Greensborough Road (refer to Section 6.1). As outlined in Section 8.1.1, open space land uses would be permanently acquired or used for the project, changing the land use. Similar to the discussion on impacts to residential land use character above, a change in land use would potentially change the tangible and intangible land use character elements that make the purpose of each open space distinctive. However, the impact is minimised given some area would still be available to the public during construction and as outlined in Section 8.2.1, in some cases new shared use path infrastructure can enhance the recreational character of the open space. Acquired open space land may also provide opportunity to improve the local area post-construction, with potential to enhance local open space land use character.

The project also provides opportunity to contribute to the overall open space land use character in this precinct via a series of land bridges for open space purpose, as shown in Figure 8-1. The opportunity to implement potential benefits to open space land use character has been facilitated by design and siting considerations. Measures include the trenched roadways in this precinct, including where land bridge infrastructure at existing ground level facilitates the potential to enhance pedestrian and cyclist connectivity across the road corridor. The location of the land bridges would be determined during detailed design and the project's Urban Design Strategy would provide guidance on outcomes to be achieved, such as establishing green links that physically and visually connect open space and vegetation elements.



Figure 8-1 Land bridges over North East Link

#### ***Northern portal to southern portal***

As outlined in Section 8.1.1, some residential properties in the northern portal to southern portal precinct would be permanently acquired for North East Link. Residential land uses in the municipalities of Banyule and Manningham are characterised by lower density, detached dwellings in a tree-dominated landscape with little development in these residential areas since the mid-20<sup>th</sup> century. The change in land use due to acquisition has the potential to impact the character of these residential areas, as outlined in key policy such as the *Manningham Streetscape Character Study 2009* and *Banyule Neighbourhood Character Strategy 2012*. However, the reference project minimises the impact to residential land use in this precinct given much of the infrastructure would be underground and in tunnels.

Open space and public conservation land uses in this precinct are generally characterised by the environmentally and culturally significant riparian environment around the Yarra River and Banyule Creek and the recreational land uses associated with active open spaces such as ovals. As identified in Section 8.1.1, areas of open space land uses would be permanently acquired or utilised by the project, including open space in the vicinity of sections of Banyule Creek which requires diversion. The acquisition would change the land use and therefore the land use character conditions.

As noted in Section 8.1.1, land zoned PCRZ in the vicinity of the Manningham interchange would be permanently acquired for the project. As this land has been developed and is currently occupied by a plant nursery, the conservation values of this land are considered minimal, although being zoned PCRZ.

However, similar to the discussion on impacts to residential land use character in this precinct, the impact to open space land use character is minimised given much of the infrastructure in this precinct would be underground and subsurface tunnel boring construction would avoid at-surface works which could potentially impact culturally and ecologically sensitive areas of open space and public conservation land uses surrounding the Yarra River.

Where open space land acquisition would be required, impacts to open space land use character are considered to be minimised as the land utilised by the project (and therefore the change in land use) would be relatively small and the remaining areas of the open spaces land uses would be available to the public during construction. The acquired open space land may also provide opportunity to enhance the local area post-construction.

### ***Eastern Freeway***

Residential land uses in the north (in the City of Manningham) and south (in the City of Whitehorse and City of Boroondara) of the Eastern Freeway precinct are typically characterised by one and two-storey detached dwellings set in well-established landscaped gardens. As outlined at Section 4.3.1, local planning policy envisages limited change from the existing character in these areas, with clusters of medium density residential development generally limited to the western end of the precinct in the City of Yarra and around activity centres. Residential land use character would not be impacted due to land use changes from acquisition, given no residential properties would need to be acquired in this precinct.

As outlined at Section 6.3, open space land use in this precinct is characterised by linear open space along the Koonung Creek, with larger tracts of open space surrounding the Yarra River north and south of the Eastern Freeway, such as Yarra Bend Park and a number of golf courses in the municipalities of Boroondara and Yarra. The project would require permanent acquisition at a number of open space locations in this precinct, including open space surrounding parts of the Koonung Creek that would require diversion and enclosure. However, the impact on the land use character is considered to be minor as the land utilised by the project is relatively small and the remaining areas of the open spaces land uses would be available to the public during construction.

Similar to the other precincts and subject to a separate approval process to the EES, acquired open space land may also provide opportunity to enhance local open space character post-construction.

### ***EPRs for all precincts***

Impacts associated with permanent changes in land use character due to the acquisition and land utilisation requirements of construction activities would be managed through the implementation of EPRs in consultation with the appropriate stakeholders to minimise disruption to owners, occupiers and land uses to the extent practical.

Temporary and permanent impacts on affected open space and residential land uses would be reduced with the design footprint avoiding to the extent practicable any permanent acquisition at parks and reserves, significant landscapes around the Yarra River and residential properties (EPR LP1).

Impacts to existing residential areas and recreational facilities would be minimised by locating new above-ground services and utilities infrastructure in a way that considers impacts on adjoining properties and explores the co-location of infrastructure where practicable (EPR LP2).

Inconsistencies with planning policies and strategic plans due to land use changes brought about by the project would be minimised by design and development of the project having regard to strategic land use plans policies in conjunction with consultation with land managers and/or agencies responsible for implementation of the relevant policies (EPR LP3).

Potential impacts from a change in residential and open space land use character would be addressed through the design which is to be generally in accordance with project's Urban Design Strategy (EPR LV1). By giving appropriate consideration of the character of local areas within the project boundary, this would reduce the potential for impacts during construction and from the project's permanent structure and elevated roadways.

Full details of the identified land use EPRs are provided in Section 9.

## Benefits and opportunities

In some cases, open space and residential acquisition requirements of the project generate the opportunity to improve local land uses, which in turn would provide the opportunity to enhance surrounding open space and residential land use character. The form of any future land use change (ie enhancements) would require a separate approval process, subsequent to this EES. The project also provides the opportunity to contribute to the overall open space land use character in this precinct, with a series of land bridges for open space purposes.

### 8.1.5 Land use planning policy

This assessment has considered the impacts associated with land use changes due to the project that potentially result in inconsistencies with Victorian Government and local planning policy and strategic plans. The EES technical reports provide further detail on policies that apply to other considerations of the project.

This section refers to the risk pathways associated with land use changes due to the project that potentially result in inconsistencies with planning policy and strategic plans (risk LU11).

Section 9 and the discussion below outlines the EPRs that can be implemented to mitigate impacts on inconsistencies with planning policy and strategic plans.

### State Planning Policy

State planning scheme policy and key strategic planning policy relevant to the project at a state level is outlined for each municipality below.

### Planning Policy Framework

The Planning Policy Framework (PPF) is planning policy that is consistent to each municipality and applies to all parts of the project except for Commonwealth land (Simpson Barracks).

From a land use perspective, North East Link is considered to be predominantly consistent with the PPF, particularly Clause 11.01-1R *'Metropolitan Melbourne'* which recognises North East Link as a potential transport project of regional importance in the metropolitan planning policy, *Plan Melbourne 2017–2050* referenced in the clause.

With the tunnels component traversing the Yarra River, the project also aligns with the objectives of Clause 12.03 – 1R *'Yarra River protection'* which seeks to *'maintain and enhance the natural landscape character of the Yarra River corridor'*.

With implementation of the relevant EPRs relating to noise and emissions, the project would align with Clause 13.05 – 1S *'Noise abatement'* which seeks to *'assist the control of noise effects on sensitive land uses'* and Clause 13.06 – 1S 61S *'Air Quality Management'* which seeks to *'assist the protection and improvement of air quality'*.

The project is not consistent with the objectives and relevant strategies of Clause 17.03- *'Industrial Land Supply'* which seeks to *'ensure the availability of land for industry'*, specifically in relation of the need to *'protect and carefully plan existing industrial areas to, where possible, facilitate further industrial development'*. The project would require land in the Bulleen Industrial Precinct, resulting in significant impact for this locally significant industrial land use to enable the cut and cover construction of tunnels. Further discussion surrounding industrial policy and the Bulleen Industrial Precinct is outlined in the Manningham local policy discussion below.

The project would also work towards meeting the aim of relevant parts of Clause 18 *‘Transport’* as it would assist in providing for *‘a safe and sustainable transport system by integrating land use and transport’* (18.01 – 1S *‘Land use and transport planning’*) and contributing to the management of the road system *‘to achieve integration, choice and balance by developing an efficient and safe network and making the most of existing infrastructure’* (Clause 18.02 – 3S *‘Road system’*). In respect of potential overshadowing caused by noise walls and elevated structures, it is considered that where the project has the potential to result in inconsistencies with Strategy 18.01 – 2S *‘Transport system’* which seeks to *‘locate and design new transport routes and adjoining land uses to minimise disruption or residential community and their amenity’*, this would be minimised through the application of EPR LP4.

Furthermore, it is noted that sections of planning schemes that include reference to specific objectives and standards to measure overshadowing in Clause 54 (One Dwelling on a Lot) and 55 (Two or more dwellings on a lot and residential buildings). It is noted these standards and objectives primarily relate to residential and apartment development where triggered under the specific zone and subsequent ResCode assessment. While not strictly applicable, it is considered the overshadowing to open space objective provides guidance in the assessment of the impact of overshadowing on adjacent residential land.

As noted above, discrete sections of the project across the alignment are inconsistent with objectives seeking to protect solar access and amenity of existing dwellings due to the level of proposed overshadowing. However, the implementation of the mitigation measures and EPRs associated with minimising overshadowing would assist in the project to minimise any reduction of solar access to residential properties.

#### **Plan Melbourne 2017–2050**

Plan Melbourne provides guidance on the development and growth of Melbourne to 2050 and is the key strategy for supporting jobs, housing and transport. The plan seeks to integrate long-term land use, infrastructure and transport planning.

North East Link is recognised in Plan Melbourne as a project that would contribute to an integrated transport system connecting people to jobs and services. The strategic need for North East Link is recognised in Plan Melbourne, with specific references including:

- Map 2 of the Melbourne 2050 plan shown in Figure 8.2 includes North East Link alignment (subject to investigation) as a potential transport corridor project.
- Policy 3.1.5 – Improve the efficiency of the motorway network. Specific reference to North East Link notes that *‘Optimisation of the existing motorway network will be achieved through the use of technology and new and upgraded connections, including consideration of how to fill the missing North East Link on the Metropolitan Ring Road’*.
- Policy 3.4.1 – Support sufficient gateway capacity with efficient landside access. This policy notes that *‘Continuous improvement of the freight network is critical to the maintenance of an efficient and effective network. Projects such as the completion of the Dingley Road corridor, supporting the growing industrial area of Dandenong South, and the national employment and innovation cluster are important ongoing improvements. Long-term future projects, such as North East Link and the Outer Metropolitan Ring Road, may form part of the expanse of the freight network’*.

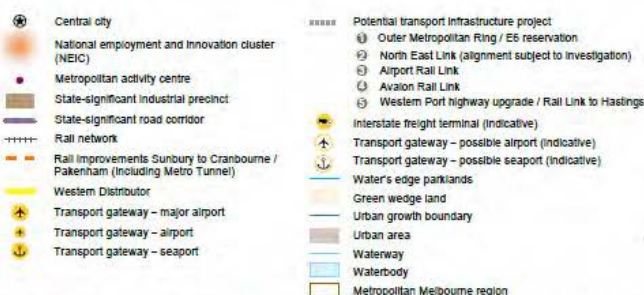
Key strategic directions identified in Plan Melbourne relevant to the project are centred around improving connectivity, maintaining neighbourhood amenity, supporting employment and economic development, facilitating urban consolidation to maintain the urban growth boundary and the ‘20 minute neighbourhood concept’ and consideration of locally and regionally significant environmental and heritage values.

The project would implement key directions identified in Plan Melbourne by providing an integrated transport network, general use of existing alignments for above-ground infrastructure in already urbanised areas, access and connectivity to centres of employment and investment such as at the La Trobe NEIC and activity centres near the project, and designing for extensive underground components in the vicinity of the Yarra River and surrounding regionally significant open space.



## Map 2

### Melbourne 2050 Plan



Source:  
Department of  
Environment, Land,  
Water and Planning



**NOTE: POTENTIAL INFRASTRUCTURE PROJECTS AND GATEWAYS ARE SUBJECT TO INFRASTRUCTURE VICTORIA ADVICE AND VICTORIAN GOVERNMENT APPROVAL. THIS FRAMEWORK WILL BE UPDATED AT THE END OF 2017, FOLLOWING THE GOVERNMENT RESPONSE TO INFRASTRUCTURE VICTORIA'S 30 YEAR PLAN.**

Figure 8-2 Melbourne 2050 Plan (Plan Melbourne 2017–2050)

## **Infrastructure Victoria**

Victoria's 30-Year Infrastructure Strategy (December 2016) sets out a vision for Victoria in 2046, with accompanying objectives and needs.

North East Link is identified in the strategy to address multiple needs:

- Need 11 – Build new transport links to enhance the accessibility of the major employment centres
- Need 13 – Increase the capacity and connectivity of Victoria's freight network.
- Need 11.5.6 – Construct the North East Link within 10–15 years. This link would enhance access to major employment centres, particularly the La Trobe NEC and the Epping, Ringwood and Broadmeadows Major Activity Centres, through improved orbital road connectivity and improve the capacity of the freight network.

North East Link would provide accessibility through some of the most congested parts of the road network and improves access to major employment centres, as well as improved cross-town travel.

## **Yarra River Action Plan (Wilip-gin Birrarung murrn) (February 2017)**

The Yarra River Action Plan documents the Victorian Government's response to the Yarra Ministerial Advisory Committee report.

Key land use actions (noting there are a number of actions relevant for a few disciplines) include:

- Action 3 – State Policy Recognition
- Action 5 – Yarra River (Birrarung) Protection Bill
- Action 7 – State of the Yarra and its parklands reporting
- Action 10 – Stronger Planning Controls
- Action 11 – Align public land reservations
- Action 14 – Yarra Strategic Plan
- Action 15 – Protect and promote cultural and heritage values.
- Action 21 – Yarra River – Bulleen Precinct Land Use Framework Plan.

The implementations of the actions are in varying states of execution and need to be monitored, particularly those actions likely to influence land use planning which include the preparation of the Yarra Strategic Plan (Action 14) which seeks to establish a regional land use framework for the Yarra and the preparation of a structure plan for the Yarra River – Bulleen Precinct Land Use Framework Plan (Action 21).

An exemption from the provisions of the Act applies for projects declared under Victoria's Major Transport Projects Facilitation Act 2009 (including North East Link). However, NELP has considered the long-term community vision within the Yarra Strategic Plan, and has had regard to the Yarra Protection Principles set out in the Act.

## **Yarra Strategic Plan and Yarra River – Bulleen Precinct Land Use Framework Plan**

The Yarra Strategic Plan and Yarra River – Bulleen Precinct Land Use Framework Plan are both currently under preparation and represent key Victorian Government directives affecting land located near the Yarra River.

### **Local planning policy**

Planning scheme policy and supporting local strategic planning policy relevant to the project is outlined for each municipality below.

#### **Banyule**

Clause 21.07 refers to *Transport and Infrastructure* and identifies the following relevant key issues for transport:

- *Many arterial roads that perform a regional function are congested. Future changes that affect Banyule's road networks need to be monitored and assessed*
- *Residents have a high dependency on private vehicles*
- *Expected population growth will increase travel demand within and across Banyule*
- *Adverse impacts resulting from increasing freight movements across the Banyule road network.*

Overall, North East Link is predicted to reduce congestion across Banyule's local road network as well as adverse impacts from existing freight-related travel across the municipality. Refer to Technical report A – Traffic and Transport for further detail on traffic-related considerations associated with the project in the north-east.

The *Heidelberg Structure Plan (2010)* provides statutory policy recommendations to change the land use of Heidelberg to enhance its liveability and sustainability. The council would be reviewing the plan in light of the activity centre's inclusion in the La Trobe NEIC. North East Link is not expected to prevent the change of land uses in Heidelberg, or built form controls as identified in the structure plan. However, in improving connectivity and reducing congestion across the north-east, North East Link aligns with the plan's objectives around enhancing access and connection to Heidelberg to:

2. Improve, promote and encourage safe cycling access to and within the precinct
5. Provide for vehicular accessibility and connectivity
6. Provide for convenient access to commercial premises by service and delivery vehicles
8. Ensure the efficient operation of the regional road network.

Furthermore, new cycling infrastructure may assist in increasing sustainable transport usage in the Major Activity Centre.

The Greensborough Major Activity Centre is located further afield to the east of the precinct. The *Greensborough Activity Centre Structure Plan* refers to the use of land use controls to support higher density, mixed use and Transit Oriented Developments (TOD) adjacent to the Greensborough railway station. North East Link is not expected to prevent the adaptive change of buildings or land use to support higher density, mixed use or TOD. Technical report F – Business identifies likely flow-on benefits to businesses in the Greensborough Major Activity Centre due to improved access across Greensborough Road and benefits to traffic movement. EES Attachment I – Urban Design Strategy recognises the Grimshaw Street interchange as a potential node with identifiable features and landmarks for navigation, providing an improved user experience on a key route towards the Greensborough Major Activity Centre.

The Watsonia Neighbourhood Centre is located directly adjacent (west) of the reference project. The *Picture Watsonia – A Vision for Watsonia Village 2014 Plan* outlines a number of place making and land use community suggestions to make Watsonia a more vibrant retail, residential and community hub. Banyule City Council passed a resolution in June 2018 to refresh Picture Watsonia to include consideration of North East Link in developing a revised vision for the Watsonia Neighbourhood Centre. Banyule City Council has subsequently commenced development of a concept plan for Watsonia Neighbourhood Centre, in collaboration with NELP. Technical report F – Business addresses potential impacts due businesses in the Watsonia Neighbourhood Centre from the project, such as the potential loss of passing trade for businesses in the Watsonia Neighbourhood Centre because of the improved access along and across Greensborough Road and changes to business access during construction. Population growth, implementation of business EPRs as outlined in the EPR discussion below and implementation of the refreshed Picture Watsonia to transform the Watsonia Neighbourhood Centre into a more attractive place to stop and shop would potentially improve patronage for businesses and contribute to achieving the underlying policy intent for the area. It is also acknowledged there are opportunities in this area, particularly to improve east-west connectivity. NELP is working with Transport for Victoria, Banyule City Council, traders and other stakeholders to identify these improvements.

Overall, once North East Link is open there would be significant benefits to businesses and activity centres with improved connectivity across the north-east. This would improve the efficiency of business with faster journey times, broadly aligning with the general principles of activity centre policy. Refer to Technical report F – Business for further detail on business impacts, including for activity centres.

North East Link would traverse through a number of suburbs within the central corridor of the City of Banyule. The *Banyule City Council Neighbourhood Character Strategy (2012)*, Clause 22.02 *Residential Neighbourhood Character Policy* and Clause 21.06 *Built Environment* details the important attributes of each suburb's respective neighbourhood character, and their respective development guidelines. As outlined at Section 8.1.4, change in land use due to acquisition has the potential to impact the area's long-established neighbourhood character conditions. However, by reducing residential acquisition requirements to the extent practicable would minimise changes to the overall residential land use character in Banyule.

The *Banyule Open Space Plan (2016 – 2031)* categorises land into precincts which contain a number of the open spaces adjacent or near the reference project. These include areas of active open space such as Gabonia Reserve and Winsor Reserve in addition to large tracts of council and Parks Victoria-managed open space sites along the Plenty River and Yarra River corridor identified in the open space plan as having high ecological value as well as cultural heritage significance (Refer to Technical report K – Historical heritage and Technical report L – Aboriginal cultural heritage). A number of recommendations in the Plan relate to improving access to open space for residents, increasing natural habit corridors and ecological diversity, providing new play experiences and strengthening pedestrian and cycling links in these open spaces. In some cases, North East Link would require some of Banyule's open space for permanent and temporary project requirements. The impacts of acquisition and occupation would be minimised by applying the appropriate EPRs (refer to the EPR discussion below and in Section 9). Guidance on the use of open spaces has been included in the project's Urban Design Strategy, which has incorporated feedback from local councils.

The project can also generate benefits and opportunities for open space strategic policy objectives in the municipality, with new land bridges between Grimshaw Street and Lower Plenty Road, creating new open space and enhancing pedestrian connectivity. Detail on other matters associated with open spaces are covered in Technical report G – Arboriculture, Technical report I – Social, Technical report K – Historical heritage and Technical report Q – Ecology.

### **Boroondara**

Clause 21.06 – 3 refers to the *Road system* and relevant to the project identifies that:

- The Yarra River creates pinch points, with east-west traffic movements funnelled into several crossing points
- Boroondara's local road network can create traffic issues. Long straight, roads can encourage motorists to seek alternative routes to more congested arterial roads. Some local streets also suffer from high traffic speeds.

Relevant key issues include:

- Traffic congestion and capacity issues on key arterial roads, particularly in the morning peak
- Road safety on the arterial and local road networks.

North East Link aligns with the general intent of the road planning policy by assisting to reduce traffic congestion, including reduced traffic volumes at existing Yarra River crossings and improving safety of the arterial and local road network. Refer to Technical report A – Traffic and Transport for further detail on changes in traffic associated with the project.

The *Boroondara Open Space Strategy (2013)* identifies actions over a 15-year timeframe to enhance Boroondara's open space and includes reserves that are within or adjacent to the study area, such as Koonung Creek Reserve, Yarra Flats Reserve, Hays Paddock and Columbia Street Reserve. Environment and open space objectives of the MSS, including Clause 21.03 *Environment and Open Space*, refer to the importance of the municipality's open space assets and identifies the need to provide for distribution of open space in the municipality. The MSS and the *Open Space Strategy* place an emphasis on filling gaps in the provision of open space, such as land immediately south of the Chandler Highway and Eastern Freeway interchange.

The project would require sections of Boroondara open space for permanent and temporary construction. Impacts due to acquisition and occupation would be minimised by applying the appropriate EPRs (refer to the EPR discussion below and in Section 9). As referenced earlier, guidance on the use of open spaces forms part of the content of the project's Urban Design Strategy. Additionally, the project could support Parks Victoria upgrades to habitat corridor values, cultural heritage values and improve trail links at Yarra Bend Park. Detail on other matters associated with open spaces, such as historical, ecological and social considerations are covered in Technical report G – Arboriculture, Technical report I – Social, Technical report K – Historical heritage and Technical report Q – Ecology.

The *Boroondara Housing Strategy (2015)* reviews the existing character of the municipality's suburbs and identifies where future population growth would occur, typically in areas surrounding activity centres such as Kew Junction. Key areas identified for residential growth are located further south of the study area. North East Link would abut a number of residential suburbs in the northern region of Boroondara which are generally identified as areas envisaged to support minimal change.

The housing strategy and accompanying policy such as Clause 21.04 *Built Environment and Heritage*, Clause 22.05 *Neighbourhood Character Policy* and the *Boroondara Neighbourhood Character Precinct Statements (2013)* support the preservation of the existing neighbourhood character of Boroondara's suburbs, which is reflected in the design and planning of North East Link to avoid the acquisition of residential properties in the municipality.

### **Manningham**

Clause 21.02 – 10 relates to *Industry* and includes the following relevant commentary:

- There is limited potential for industrial development with a lack of vacant land available. There are three industrial areas located in Bulleen, Doncaster and Templestowe, predominantly used for light industrial purposes. It is envisaged that industrial uses in Doncaster Hill will be phased out over time as the area is developed for higher density living.

Clause 21.08 refers to *Industrial* land use and provides the following relevant policy guidance:

- Council will discourage the establishment of non-industrial uses in the Bulleen and Templestowe areas to consolidate the role of these light industrial areas
- It is envisaged that industrial uses in Doncaster Hill will be phased out over time as the area is developed for higher density living.

Relevant objectives and strategies include:

- To retain opportunities for industrial uses in existing industrial areas
- Consolidate the role of the Bulleen and Templestowe industrial estates to minimise the need to rezone additional land for industrial purposes
- Discourage the further expansion of industrial uses in the Doncaster Hill Activity Centre.

Clause 22.10 refers to the *Bulleen Gateway Policy* and identifies that:

- Bulleen is a major gateway to Manningham and adjoins the Yarra Valley Parkland and the Yarra River
- The Municipal Strategic Statement encourages the improvement and enhance of the visual amenity and function of the Bulleen Gateway area.

Relevant objectives and policy include:

- To encourage appropriate built form to enhance this gateway to the municipality
- View lines between development and adjoining parklands be protected and enhanced through the sensitive siting and design of buildings and works
- The role of the industrial area to be consolidated by discouraging non-industrial uses.

Clause 22.16 is the Industrial Areas Policy and applies to all land in an *Industrial 1 Zone* and identifies:

- *Clause 21.08 of the Municipal Strategic Statement recognises that there are no further opportunities for the development of new industrial centres in the municipality. It is therefore important to discourage the establishment of non-industrial uses in the Bulleen and Templestowe industrial centres and consolidate the industrial role of these centres. It is also important that use and development in the industrial centres does not have a detrimental impact on existing landscape and/or environmental values and/or nearby residential areas.*

The objectives of this policy are:

- *To ensure that land use and development in industrial centres is compatible with the surrounding landscape and/or environmental qualities*
- *To ensure that use, development and/or redevelopment of sites within the industrial centres are for industrial uses.*

North East Link would require land in the Bulleen Industrial Precinct for cut and cover construction of tunnel infrastructure. The acquisition of land for project purposes would adversely impact the vision and intent of the Bulleen Industrial Precinct to provide future opportunity for industrial development in the City of Manningham, noting that the land would remain zoned IN1Z and that industrial and commercial land uses may return post construction. Business-related impacts and EPRs associated with the project for the Bulleen Industrial Precinct and other businesses in Manningham are addressed in Technical report F – Business. This includes pre-construction business support such as working with the council to identify alternative location options for displaced businesses.

The *Manningham Open Space Strategy (2014)* and local policy such as the *Koonung Creek Linear Park Management Plan (2011)* sets out priorities and guidelines for the protection, development and use of public open space in the municipality over 10 years, including the Koonung Creek Reserve Linear Park. The policies refer to open space adjacent to or near the study area, such as the Koonung Creek Reserve Linear Park and other areas of open space surrounding the Yarra River, such as Boronia Reserve and areas of active open space such as the Trinity College School Sporting Complex, Koonung Reserve and Bulleen Park. As outlined at Section 8.1.1 and Section 8.1.2, in some cases construction activities would temporarily or permanently impact on the amount of available open space due to temporary occupation or permanent acquisition. Impacts due to acquisition and occupation would be minimised by applying the appropriate EPRs (refer to the EPR discussion below and in Section 9). Guidance on the use of open spaces, such as the area east of the Heidelberg Activity Centre is included in the project's Urban Design Strategy. Overall, the design and planning of the project to incorporate underground construction under the Yarra River aligns with the intent of the strategy for open space in this area. Detail on other matters associated with open spaces are covered in Technical report G – Arboriculture, Technical report I – Social, Technical report K – Historical heritage and Technical report Q – Ecology.

Manningham's industrial land use local planning policy at *Clause 21.08 Industrial* and *Clause 22.16 Industrial Area Policy* has identified the Bulleen Industrial Precinct as one of the industrial areas for further consolidation of light industrial purposes. This would be achieved by discouraging the establishment of non-industrial uses in the industrial precinct and minimising the need to rezone additional land for industrial purposes. The *Bulleen Gateway Policy* at *Clause 22.10* also aims to retain the commercial area as a 'neighbourhood' level centre, encouraging high standards of development and built form.

The project would need to acquire 112 commercial properties which accommodate 90 businesses at the Bulleen Industrial Precinct which would change the land use from industrial to road corridor, and inconsistencies with the council's local planning policy framework. Refer to Technical report F – Business for detail on the business impacts and EPRs for this area.

The *Manningham Activity Centre Strategy (2005)* sets out the future planning needs for the municipality's activity centres. North East Link could fulfil some of the public transport actions in the strategy via the proposed Doncaster Busway which could improve the connectivity and accessibility of Manningham's Major Activity Centres and Neighbourhood Activity Centres and enhance the '*level of comfort for public transport users*'. Refer to Technical report F – Business for detail on the project and potential impacts, benefits and opportunities associated with accessibility, connectivity and economic development.

## **Nillumbik**

Clause 21.05 – 5 refers to *Infrastructure* with relevant objectives including the need to:

- *Provide safe and efficient roads and road links within the municipality and to the wider region.*

North East Link would progress this objective by improving road links to the wider region.

The *Diamond Creek Major Activity Centre Structure Plan and Leisure Facilities Plan (2006)* deals with land use, buildings and landscape, community and leisure facilities, and transport and mobility considerations at the Diamond Creek Activity Centre. It sets a vision for the activity centre with objectives, strategies and actions focused on provision of employment, services and higher density housing. The Diamond Creek Major Activity Centre is not in the study area (it is further afield) but North East Link could fulfil some of the transport and accessibility actions in the strategy by enhancing the role of the Major Activity Centre as a place for development (as opposed to areas outside the urban growth boundary in the green wedge).

The *Nillumbik Green Wedge Management Plan (2010–2025)* sets out the concept of green wedges as rural landscapes and natural areas separating corridors of urban development. Key objectives are to conserve and enhance natural and cultural values, bush and rural landscapes and create a local identity that connects community knowledge and support of the green wedge. North East Link is outside the green wedge, but these areas form a large part of the Shire's key attributes and strategic policy framework. North East Link has been designed and planned so that it lies outside the green wedge, aligning with the intent of the Nillumbik Green Wedge Management Plan to maintain the protection of land uses and character of green wedge rural areas.

The *Nillumbik Housing Strategy (2001)* refers to the need provide housing that provides diversity in housing stock, maintains neighbourhood character and consolidates residential growth in existing urbanised areas to protect the green wedge. North East Link has been designed and planned to be located in existing urbanised areas, aligning with the intent of this objective.

## **Whitehorse**

Clause 21.08 refers to *Infrastructure* and notes that:

- *Whitehorse City is committed to providing a safe and high quality transport network for the benefit of all users, including drivers of freight transport, motorists traversing the City, motorists on local trips, pedestrians, cyclists, public transport users, and those in the community with limited mobility. This requires an arterial road network designed to operate at capacity and not beyond, but also a road network that makes safety a priority. The local road network also needs to be protected from traffic that is not generated from the immediate neighbourhood.*
- *Several arterial roads serve the City, with freeways located to the north and south and to the east. Completion of the freeway network has had some impact upon the main arterials that traverse the City by reducing traffic on other main roads. With the completion of EastLink it is hoped that there will be a long term reduction in freight traffic, and to an extent some private vehicle traffic. This will enable the arterial roads in Whitehorse to operate more efficiently and possibly enable greater consideration of local issues in the operation of the network.*

Key relevant issues include:

- *To ensure that future roads are only constructed where they provide a net benefit to the community. New roads must be designed and developed in a manner which is environmentally sensitive, whilst minimising impacts on abutting land uses, particularly if they abut residential uses.*
- *In order to preserve residential amenity, it is vital that non-residential traffic travelling on residential streets is minimised. This is an ongoing and significant issue that faces this Council. Council is therefore committed to investigate and implement traffic management measures that will reduce through traffic.*

North East Link would improve the arterial road network in the municipality and appropriate EPRs would be implemented to minimise off-site amenity impacts on abutting land uses, particularly residential uses.

The *Whitehorse Industrial Strategy (2011)* provides actions to enhance economic health and success of Whitehorse's industrial estates. The strategy stresses the importance of the existing industrial land uses for local jobs and spill over economic activity. The Joseph Street Industrial Estate is located directly south of the reference project on the Eastern Freeway. While not one of the largest estates in the municipality, the industrial strategy acknowledges its important economic and employment role in Whitehorse. The strategy acknowledges the importance that *'freight transport and logistics have access to, and are able to operate on, a sustainable and efficient freight network'* to ensure that timely and cost effective access to goods and services. North East Link has the potential to enhance connectivity and access to key industrial areas in Whitehorse, but especially the Joseph Street Estate. It is noted these improvements would most benefit logistics and transport enterprises.

The *Elgar Park Master Plan (2016)* establishes a clear pathway for future development at Elgar Park. Elgar Park is located to the south of the Eastern Freeway adjacent to the reference project. The masterplan identifies future landscaping and community infrastructure works at Elgar Park, which would increase public activity and ecological biodiversity in the area. The project is likely to require some sections of Elgar Park for temporary construction and storage. The master plan states there is potential for urban design improvements to establish a new gateway at Elgar Park from Elgar Road and the Eastern Freeway. The project's Urban Design Strategy would assist with this.

The *Whitehorse Open Space Strategy 2007* strategy stipulates future council investment in community infrastructure, as well as ongoing maintenance of existing revegetation works across the municipality. It includes reserves that are adjacent to the reference project, such as Koonung Creek Linear Park. The Eastern Freeway Linear Reserve and Koonung Creek Linear Park are identified to receive *'maintenance of existing revegetation work, progressive increase of indigenous vegetation over time'*. The open space strategy notes that Melbourne Water has been earmarked to focus on improving *'the streamside zone rather than in-stream values'* and the project's Urban Design Strategy will assist in providing further guidance. Detail on other matters associated with open spaces are covered in Technical report G – Arboriculture, Technical report I – Social, Technical report K – Historical heritage and Technical report Q – Ecology.

The *Housing Strategy 2014* and *Neighbourhood Character Study 2014* identify the council's vision for housing development, in line with preferred neighbourhood character objectives in residential areas, including areas adjacent to the project south of the Eastern Freeway. Generally, the documents support the preservation of the existing neighbourhood character in these areas, which is reflected in the design and planning of North East Link to avoid acquisition of residential properties in the municipality.

The *Box Hill Structure Plan 2007*, *Nunawading Megamile Major Activity Centre and Mitcham Neighbourhood Activity Centre Structure Plan 2008* and *Megamile (west) and Blackburn Activity Centres Urban Design Framework 2010* identify the appropriate development controls and policies to facilitate urban consolidation in the activity centres. The activity centres mentioned in these strategic policy documents are located further afield to the south of the study area along the Eastern Freeway. North East Link would not change the land use strategies that have been earmarked in the plans, although the project's Doncaster Busway and the enhancement of the Eastern Freeway capacity would support a key vision of the plans to ensure the activity centre is serviced by good transport and road connections.

## Yarra

Clause 21.06 refers to *Transport* and identifies that:

- *Yarra needs to reduce car dependence by promoting walking, cycling and public transport use as viable and referable alternatives. This is also a key message of Melbourne 2030 and fundamental to the health and wellbeing of the community.*

Relevant objectives include:

- *Objective 32 – To reduce the reliance on the private motor car.*
- *Objective 33 – To reduce the impact of traffic.*

North East Link does not generally align with the relevant policy objectives of promoting walking, cycling and public transport over private vehicle use. Through the design, opportunities for improved cycling and walking infrastructure would be created.

The *Johnston Street Local Area Plan (2015)* provides a future vision and framework for the Johnston Street Activity Centre. The study area for the Johnston Street Local Area Plan is south of the study area, stretching from Johnston Street next to Yarra River (Abbotsford) at the east through to Smith Street (Collingwood) in the west. Directions for change that influence the project include increasing pedestrian activity at street level in the area and concentrating development close to Victoria Park railway station as part of a broader urban renewal of the area. North East Link is not expected to prevent the adaptive reuse of commercial and industrial buildings in the precinct being redeveloped into residential dwellings. Additionally, a potential benefit for the activity centre associated with North East Link is to improve access and connectivity in the future. Refer to Technical report F – Business for detail on the potential impacts, benefits and opportunities associated with accessibility, connectivity and economic development.

The *Yarra Business and Industrial Land Strategy (2012)* identifies land parcels in the study area and adjacent to the reference project (as mentioned above) that have the potential to be converted into mixed use land uses that could accommodate alternative employment through commercial office conversions and new residential dwellings. North East Link would not impact the change of land use for properties that are adjacent to the reference project. Rather, the project could improve transport connectivity for future workers of those proposed redevelopments through the development of the Doncaster Busway. North East Link may also improve accessibility for the freight and transport logistics businesses that operate in and out of the precinct.

The *Yarra Open Space Strategy (2006)* provides a high level direction about conservation and expansion of Yarra's open space. The strategy includes open spaces in the study area, including Victoria Park, Yarra Bend Park and Fairfield Park. North East Link would require temporary occupation of parts of open space adjacent to the Eastern Freeway, including parts of Yarra Bend Park. Impacts due to temporary occupation would be minimised by applying the appropriate EPRs (refer to the EPR discussion below and Section 9). North East Link could provide opportunity to improve active transport infrastructure in the open space in the study area, which would fulfil a key objective of the Yarra Open Space Strategy to improve walking and cycling links between open space reserves. The council is currently updating its Open Space Strategy to inform provision, design and management for the next 15 years.

The Alphington Paper Mill site in Alphington is a 16.5-hectare parcel of land located further afield of the study area on the corner of Heidelberg road and the Chandler Highway and extending down to the Yarra River. The site has long been identified in Victorian Government and local policy as a strategic redevelopment opportunity for Melbourne, with redevelopment activities already underway in line with the *Alphington Paper Mill Development Plan 2016*. The development plan was incorporated into the planning scheme via Amendment C161 after being adopted by Yarra City Council in December 2015 and outlines the vision for the site as a mixed use residential redevelopment. Provision of shared use path infrastructure along the Eastern Freeway and linking into existing walking and cycling connections near the redevelopment site supports a key objective of the development plan to facilitate walking and cycling connectivity and linkages with public transport.

#### ***EPRs for all precincts***

Temporary and permanent impacts on affected land uses were minimised with the design footprint avoiding to the extent practicable any inconsistencies with land use planning policy particularly surrounding parks and reserves, significant landscapes around the Yarra River, recreational and community facilities land uses, residential properties, and commercial and industrial sites (EPR LP1).

Inconsistencies with planning policies and strategic plans due to land use changes by the project would be minimised by the project's design and development having regard to strategic land use plans and policies in consultation with land managers and/or agencies responsible for implementing the relevant policies (EPR LP3).

Impacts associated with a change in land use due to permanent acquisition and temporary occupation would be managed by implementing EPR LP1, EPR LP3 and the EPRs discussed below in consultation with stakeholders and by minimising disruption to owners and users of land to the extent practical.

Acquisition would be undertaken in accordance with the *Land Acquisition and Compensation Act 1986 (Vic)* and the *Major Transport Projects Facilitation Act 2009 (Vic)*. Residential property acquisition would also be undertaken as per EPR SC1 to reduce disruption to residents as much as practicable. Impacts to sporting and recreation facilities would be minimised with consultation with relevant local councils to identify available local alternative facilities for formal recreational users displaced from facilities by the project. Adequate notification to clubs and recreation facilities would be provided to minimise the impact of relocation. Where construction or operation activities would directly impact community infrastructure facilities such as schools, child care centres and aged care centres, consultation with managers, owners and user groups of the facilities would identify any practical measures to avoid or minimise the impacts (EPR SC4).

The disruption to businesses from permanent acquisition or temporary occupation of land would be minimised as much as practicable and consultation with affected businesses and land owners would endeavour to reach agreement on the terms for possession of the land (EPR B2). Business support would also involve regular updates to affected businesses of the planning and design progress for the project in addition to working with local councils to identify alternative location options for displaced businesses (EPR B1).

Full details of the identified land use EPRs are provided in Section 9.

### ***Benefits and opportunities***

North East Link would provide a significant addition to the state's transport network, with large portions consisting of underground infrastructure traversing areas of residential and open space land uses surrounding the Yarra River, aligning with Victorian and local land use policy that seeks to provide an integrated transport system and maintain the natural landscape of the ecologically and culturally significant Yarra River.

It is also noted that a change in land use due to acquisition also provides opportunity to improve local areas post-construction. This is particularly relevant for land acquisition requirements and policy implications relating to the Bulleen Industrial Precinct. The form of any future land use change (ie enhancements) would require a separate approval process, subsequent to this EES.

## **8.2 Operation**

This section provides a detailed assessment of land use planning impacts due to the operation of North East Link. It includes impacts on the ongoing residential land, future redevelopment of land, and on the intended use of open space land due to project structures.

The following sections outline the assessment of the key impacts for each precinct.

### **8.2.1 Impacts on ongoing land uses**

This assessment has considered the impacts associated with ongoing land due to traffic, noise, air quality and visual impacts associated with the operation of North East Link. The ongoing use of sensitive land uses associated with residential, open space, public conservation and community facility purposes has been assessed. Potential amenity impacts associated with these considerations are addressed in the relevant EES technical reports and would be mitigated by implementing their associated EPRs.

The connections between these assessments, such as the connection between landscape and visual impacts and land use, are identified in the main EES Chapters.

Therefore, this section refers to the risk pathways associated with ongoing open space, public conservation, residential and community facility land uses due to traffic, noise, air quality and visual impacts associated with the operation of North East Link (risks LU13, LU14, LU15).

Section 9 and the discussion below outlines the EPRs that can be implemented to mitigate impacts on ongoing land use due to traffic, noise, air quality and visual impacts from the operation of North East Link.

As outlined above, potential amenity impacts associated with traffic, noise, air quality and visual considerations are covered in detail in Technical report A – Traffic and transport, Technical report B – Air quality, Technical report C – Surface noise and vibration, Technical report F – Business, Technical report H – Landscape and visual, Technical report I – Social, Technical report K – Historical heritage and Technical report Q – Ecology.

### **All precincts**

Similar to the discussion on ongoing use of land during the construction of North East Link, above-ground operation activities including traffic movements and the presence of project structures have the potential to cause traffic, noise, air quality and visual impacts. These can lead to impacts on the ongoing use of residential, open space, public conservation and community facility land adjacent to the project. Such an example is a scenario where increased air and noise emissions from greater traffic volumes once North East Link is open, reaches a point where the ongoing land use is no longer viable.

Findings of Technical report C – Surface noise and vibration show the diversion of traffic to North East Link during operation would result in reduced traffic on a number of local and arterial roads in the surrounding road network, and so would reduce traffic-related noise. This would include Greensborough Road, Rosanna Road and Manningham Road, Lower Plenty Road, Banksia Street and Bulleen Road based on noise modelling for years 2026 and 2036. Overall, the underground tunnel components of the project would reduce traffic surface noise, benefiting the majority of ongoing uses of residential, open space, public conservation and community facility land.

The operation of North East Link has been predicted to increase surface noise in some areas near the project due to new road infrastructure and increased traffic volumes along some roads. Increased traffic noise may occur along some feeder routes to North East Link and some arterial roads south of the Eastern Freeway. However, the noise level increases are predicted to be minimal (less than 1.5dBA) and would generally be unnoticeable. Consequently, surface noise impacts due to the project's operation are not expected to change the current or future (planned) land uses. Notwithstanding, implementing measures such as low noise-generating pavement, noise walls and potentially at-receiver noise abatement would assist in managing surface noise impacts and potential implications for ongoing land uses.

Across the project there is potential for air quality impacts due to the project's operation. Air quality impacts are not expected to change the current or future (planned) land uses in these locations, with the implementation of EPRs to address operation air quality impacts as discussed in the EPR section below. Furthermore, a key long-term mitigating factor in air quality emissions (and in turn, associated implications for ongoing land uses) would also be the use of vehicles with improved emissions capability.

The impact assessment undertaken as part of Technical report A – Traffic and transport found that a project scenario at 2036 would improve travel times and reduce congestion across the north-east due to redistributed traffic from local and arterial roads and reduced traffic volumes across the five existing Yarra River crossings. Truck volumes are generally forecast to decrease across the north-eastern arterial road network, the Doncaster Busway would improve travel times for users and shared use path upgrades would improve accessibility and travel time for pedestrians and cyclists. The assessment anticipated traffic to increase on a number of feeder routes across the precincts including the M80 Ring Road, Eastern Freeway, near some arterial roads south of the Eastern Freeway and near the Greensborough Bypass/Grimshaw Street interchange. A change in ongoing land uses are not expected due to traffic impacts by implementing EPRs addressing traffic-related impacts of the project's operation, such as by optimising design performance and undertaking traffic monitoring. Relevant traffic-related EPRs are outlined in the EPR discussion below. Overall, the improved traffic times and reduced congestion would likely benefit ongoing residential, open space and community facility land uses.

The operation of North East Link would create new infrastructure such as noise walls and elevated structures including shared use overpasses as well as lighting. Findings of the impact assessment undertaken for Technical report H – Landscape and visual indicate the presence of new road infrastructure such as ventilation structures, noise walls and viaducts would expose nearby adjacent residences, community facilities and open space land uses to views of the infrastructure, leading to altered views and light spill. This would include residential properties to the south of the M80 Ring Road, the M80 interchange, adjacent to the Grimshaw Street interchange, the tunnel portals, south of the Eastern Freeway interchange and along the Eastern Freeway. Visual impacts could also be associated with loss of vegetation and loss of open space, such as along the Eastern Freeway, in addition to overshadowing from noise walls and elevated structures (including shared use overpasses). Further details of locations where these changes would occur and discussion of the visual impacts are provided in Technical report H – Landscape and visual. Implementing the EPRs that address visual operation impacts, including through the design process, means the visual impacts are not expected to change the current or future (planned) land uses. Visual impacts would also decrease as distance from the project increased. Relevant landscape visual-related EPRs are outlined in the EPR discussion below.

Above-ground operation activities such as traffic movements and the presence of project structures may cause traffic, noise, air quality and visual impacts. These in turn could potentially impact the ongoing use of residential, open space, community facility land adjacent to the project.

However, implementing the identified mitigation strategies and project EPRs that address construction traffic, noise, air quality and visual impacts means these impacts would unlikely change land uses.

Notwithstanding the above, mitigation through established standards and project EPRs should minimise the likelihood of any change in land use due to impacts associated with the operation of North East Link.

### ***EPRs for all precincts***

Temporary and permanent impacts on affected land uses, particularly parks and reserves, significant landscapes around the Yarra River, sensitive land use including those hosting recreational and community facilities as well as residential properties would be avoided to the extent practicable (EPR LP1).

For all precincts, impacts on ongoing land use during the project's operation would be managed by implementing the Operational Environmental Management Plan (OEMP) (EPR EMF2).

Implementation of an ambient air quality monitoring program (EPR AQ4) would assist in managing operational ambient air quality impacts. Where underground tunnel infrastructure is proposed, impacts on the ongoing use of land from air emissions would be managed through the design of the tunnel ventilation system to meet air quality requirements (SEPP and EPA Victoria Works Approval) (EPR AQ2) and through monitoring the compliance of in-tunnel air quality and ventilation structure emissions (EPR AQ5).

Similarly, impacts on the ongoing use of land from traffic noise would be subject to monitoring to verify conformance with external traffic noise performance requirements as set out in EPR NV1 (EPR NV2). Noise and vibration for sections of underground infrastructure would be mitigated through the design of the tunnel ventilation system to meet noise requirements (EPR NV6) and implementation of tunnel ventilation system noise monitoring to demonstrate compliance (EPR: NV7).

EPR B3 requires damage or impacts on third-party property and infrastructure to be minimised and remedied in consultation with the property owner or asset (EPR B3).

The detailed design of the project must be generally in accordance with Urban Design Strategy to minimise the extent practicable landscape and visual impacts, and maximise opportunities for enhancement of public amenity, open space and facilities (EPR LV1). Lighting used during operation of permanent structures would be in accordance with council requirements and relevant standards, including but not limited to AS 4282 –1997 *Control of the obtrusive effects of outdoor lighting* (EPR LV4).

Optimising design performance as part of the detailed design process would minimise adverse impacts on travel times, maintain and where practicable enhance existing traffic movements and pedestrian/bicycle movements, and minimise loss of car parking (EPR T1). Traffic monitoring would be undertaken on selected roads to monitor condition during operation of the project (EPR T5)

Full details of identified land use EPRs are provided in Section 9.

### **Benefits and opportunities**

North East Link would reduce operational surface noise in some locations, largely due to the significant underground tunnel components of the project.

The project is also predicted to improve travel times and reduce congestion across the north-east due by redistributing traffic from local and arterial roads and reducing traffic volumes across the five existing Yarra River crossings. Other predicted traffic-related benefits of the project include truck volumes generally forecast to decrease across the north-eastern arterial road network, the Doncaster Busway improving travel times for users and shared use path upgrades as outlined in Chapter 8 of the EES that improve accessibility and travel time for pedestrians and cyclists.

In these instances, ongoing uses of residential, open space, public conservation and community facility land in the vicinity of the project would benefit from reduced surface noise. Ongoing land uses across the north-east are likely to benefit in terms of connectivity and access from improved travel times and reduced congestion.

#### **8.2.2 Impacts on future redevelopment**

This assessment has considered the impact of the project on future redevelopment of residential, commercial and industrial land use in the study area via a review of strategic policy, major development applications and relevant planning scheme amendments.

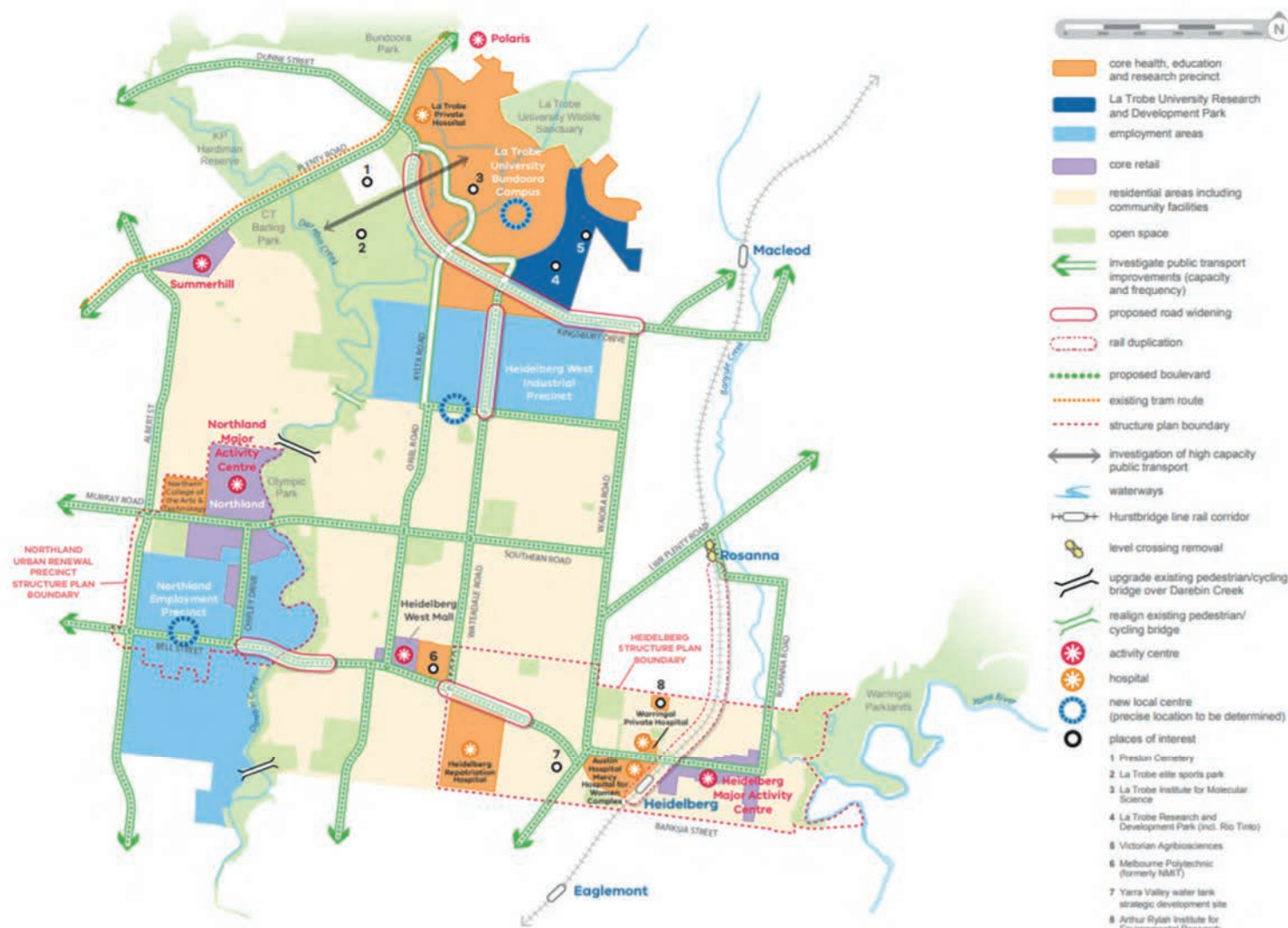
For the purposes of the land use planning assessment, a major development is considered to consistent with the data principles that underpin state-wide development analysis initiatives such as the DELWP Urban Development Program.

This section refers to the risk pathways associated with the impact of the project on future redevelopment of land (risk LU12).

Section 9 and the discussion below outlines the EPRs that can be implemented to mitigate the impact of the project on future redevelopment of land.

### ***M80 Ring Road to northern portal***

Future redevelopment in the M80 Ring Road to northern portal precinct has been principally identified as being associated with the La Trobe NEIC which lies further afield to the west of the study area, as shown in Figure 8-3. The La Trobe NEIC is identified in Victorian Government strategic policy (Plan Melbourne 2017–2050) as the key location for growth of employment and business in the north-eastern part of Melbourne and includes La Trobe University, the Heidelberg Major Activity Centre, and the Northland and Heidelberg West employment areas. The La Trobe NEIC Draft Framework Plan (VPA, 2017) incorporates a vision and actions for developing this area. Although the La Trobe NEIC is located outside the study area, the operation of the project would have a positive impact on the redevelopment potential of the La Trobe NEIC, as a key Strategic Outcome of the Framework Plan includes the need for a *‘transformed transport network that supports the economic growth of the cluster’* (VPA, 2017). North East Link is specifically mentioned in the Framework Plan, which recognises that determining potential links between North East Link and the NEIC will be a key action to be undertaken in the short term.



**Figure 8-3 La Trobe National Employment and Innovation Cluster Framework Plan, La Trobe NEIC Draft Framework Plan (VPA, 2017)**

As outlined at Section 4.4, preparation of the planning scheme amendment would be undertaken. The amendment would insert new Schedules to the Design and Development Overlay (DDO) into the Banyule and Manningham planning schemes to protect the construction and operation of the tunnels from incompatible development, providing a layer of control for future development in the DDO area. The presence of the tunnels is unlikely to prevent development, although engineering measures may be required in some cases to stay clear of North East Link assets, or to keep the loading on North East Link assets to acceptable levels. Development potential may not therefore be specifically restricted by the tunnels (except where there is potential for built form or structural interference or foundation depths are limited).

Other than the above, strategic Victorian Government or local policy that relates to future redevelopment of land and which the project could impact has not been identified in the study area for this precinct.

Four planning permits in the City of Banyule have been identified adjacent to the project which the proposed works could impact. These are summarised in Table 8-1.

**Table 8-1** Development proposals in M80 Ring Road to northern portal precinct

Planning Permit/ PSA ID	Municipality	Address	Location in relation to the project	Status	Details
<b>P1413/2017</b>	Banyule	347–359 Greensborough Road, Watsonia	Located adjacent to surface works associated with the Watsonia railway station precinct	Permit issued	Use and development of the land for a car wash associated food and drinks premises (cafe)
<b>P601/2015 PT3</b>	Banyule	252–256 Greensborough Road Macleod	On land to be acquired by the project – adjacent to the west side of open cut construction method and new road	Current	Use of land and buildings and works associated with a food and drink drive through premise
<b>P306/2018</b>	Banyule	21–31 Knight Street, Watsonia	Located AK Lines Reserve. A large proportion of the open space at the reserve may be required for construction and delivery of the project	Permit issued	Buildings and works associated with construction of 21 dwellings, vegetation removal and variation to an easement.
<b>P1372/2017</b>	Banyule	44 Sellars Road Watsonia North	Located adjacent to surface works associated with Greensborough Road widening	Permit refused by Council – VCAT appeal underway	Construct new dwelling to the rear of the existing dwelling
<b>P778/2018</b>	Banyule	26 Sellars Road Watsonia North	Located adjacent to surface works associated with Greensborough Road widening	Permit issued	Two dwellings and vegetation removal
<b>P1068/2018</b>	Banyule	31 Watsonia Road Watsonia	Located adjacent to surface works associated with the Watsonia railway station precinct	Current	Change of use to existing property – personal training studio

Construction and operation activities that cause traffic, noise, air quality and visual impacts have the potential to impact future redevelopment adjacent to the project (such as the proposed applications above and other future development applications). Notwithstanding this, any future impact would be minimised by implementing the EPRs associated with minimising impacts to affected land and managing traffic, noise, air quality and visual impacts. Refer to Section 9 and the discussion below for EPRs and to the relevant EES technical reports for further detail on traffic, noise, air quality and visual risks and performance requirements.

The application at 252–256 Greensborough Road, Macleod refers to a property that has been identified for permanent acquisition for the project, which would change the land use from the proposed commercial use.

Banyule City Council has issued a planning permit at 21–31 Knight Street, Watsonia, where a material proportion of the land at AK Lines Reserve to be used for the proposed development may be required for North East Link. Implementing EPR LP1 to minimise the design footprint to the extent practicable would reduce the impact of the project on the proposed development. Banyule City Council's resolution regarding the project and this planning permit application notes that the sale of the site would undergo public notification process in accordance with the *Local Government Act 1989* (Vic) and the council's policy. The council's resolution also notes that any future sale of the site and subsequent use and development will occur after the North East Link route has been confirmed and the impacts on local residents and the development site are fully understood.

#### ***Northern portal to southern portal***

For impacts from the operation of North East Link on the La Trobe NEIC, refer to the discussion for the M80 Ring Road to northern portal precinct above.

The Yarra Strategic Plan and Yarra River – Bulleen Precinct Land Use Framework Plan are currently in preparation and are Victorian Government directives affecting part of this precinct that is located near the Yarra River.

As mentioned in previous sections, construction and delivery requirements of the project (such as at the Bulleen Industrial Precinct) may also generate opportunity to improve the local area post-construction. The form of any future land use change (ie enhancements) would require a separate approval process, subsequent to this EES. In these instances, it would also be necessary to have regard to policy and strategy documents such as the Yarra Strategic Plan and Yarra River – Bulleen Precinct Land Use Framework Plan for key relevant strategic direction.

As outlined at Section 4.4, preparation of the planning scheme amendment would be undertaken. The amendment would insert new Schedules to the DDO into the Banyule and Manningham Planning Schemes to protect the construction and operation of the tunnel from incompatible development, controlling future development in the DDO area. The presence of the tunnels would unlikely prevent development, although engineering measures may be required in some cases to stay clear of North East Link assets, or to keep the loading on North East Link assets to acceptable levels. Development potential may not therefore be specifically restricted by the tunnels (expected to be where there is potential for built form or structural interference or foundation depths are limited).

Other than the above, key Victorian Government and local strategic policy concerned with future redevelopment of land which the project has the potential to impact has not been identified in the study area for this precinct.

It is noted that realignment of a Melbourne Water Sewer asset would be required in this precinct, affecting residential properties and the sporting fields of Trinity Grammar School and Marcellin College. The realignment would require the creation or variation of easements on these properties, which would result in an encumbrance on this land that could potentially impact future development opportunity.

Development applications and planning scheme amendments in the City of Banyule and the City of Manningham have been identified in the vicinity of the project and have the potential to be impacted by the proposed works, as summarised in Table 8-2.

**Table 8-2** Development proposals in northern portal to southern portal precinct

Planning Permit/PSA ID	Municipality	Address	Location in relation to the project	Status	Details
<b>Combined permit and PSA (s96A)</b>	Banyule	340–360 The Boulevard, Ivanhoe (Yarra Flats Reserve)	West of the Yarra River	Current	A proposed tree-based eco adventure facility
<b>P881/2017</b>	Banyule	139 Greensborough Road, Macleod	West side of Greensborough Road immediately north of tunnel portal and adjacent to surface construction method	Permit issued	Construction of two dwellings
<b>PL15/025573</b>	Manningham	Yarra Valley Country Club 9–15 Templestowe Road Bulleen	Refers to land at the Yarra Valley Country Club and part of Heide land. Construction and operation of the project would be entirely underground under this land.	Current	Use of land for dwellings in association with a leisure and recreation facility and buildings and works for the construction of dwellings (202 two or three-storey townhouses style) and a leisure and recreation facility (two-storey clubhouse).
<b>PLN18/0573</b>	Manningham	3A Kim Close, Bulleen	On land to be acquired by the project – associated with the interchange at the Bulleen Industrial Precinct	Permit issued	Change of use to a distillery
<b>N/A</b>	Manningham	191 Bulleen Road Bulleen	The Veneto Club is located adjacent to surface works and cut and cover tunnelling. A small portion of the carpark will be acquired.	Current	Veneto Club Development Plan

Planning Permit/PSA ID	Municipality	Address	Location in relation to the project	Status	Details
<b>PLN18/0858</b>	Manningham	191 Bulleen Road Bulleen	As above	Current	Refurbishment of existing building and extension to kitchen
<b>PLN19/0007</b>	Manningham	176 Bulleen Road Bulleen	Located to the east of surface works associated with Bulleen Road	Current	Construction of 3 storey development – 5 dwellings and ground floor café
<b>PLN19/0076</b>	Manningham	220 Bulleen Road Bulleen	Located to the east of works associated with the proposed Manningham interchange	Current	Buildings and works for alterations and additions to the existing building for a medical centre and alteration of existing dwelling

Construction and operation activities that generate traffic, noise, air quality and visual impacts have the potential to impact future redevelopment adjacent to the project (such as the proposed applications above and other future development applications). Notwithstanding this, any future impact would be minimised by implementing EPRs associated with minimising impacts to affected land and managing traffic, noise, air quality and visual impacts. Refer to Section 9 for further detail on traffic, noise, air quality and visual risks and EPRs.

It is understood a planning scheme amendment has been prepared for a proposed tree-based eco adventure activity at the Yarra Flats open space in the City of Banyule. A small portion of the Yarra Flats between the Yarra River and the Bulleen Industrial Precinct is required for temporary occupation during construction. Further information on the proposed amendment is required to determine if the project would directly impact the proposed redevelopment. It is noted the Parks Victoria Yarra Flats Revised Concept Plan (2013) refers to a tree-based eco adventure activity to be located in the section of Yarra Flats open space to the west of the Yarra River (the project footprint is located to the east of the Yarra River).

It is considered unlikely the project would impact the redevelopment potential of the Yarra Valley Country Club as proposed, given the underground construction of the project in this area. It is understood that underground construction (such as basements) is not proposed as part of the application.

The permit issued for 3A Kim Close, Bulleen refers to a property that has been identified for permanent acquisition by the project, resulting in a change of use that would be different to the proposed use of the land as a distillery.

The Veneto Club is subject to Development Plan Overlay Schedule 2 'Veneto Club' (DPO2), which refers to development plan requirements intended to guide and provide certainty surrounding preferred future use and development, such as development to remain within existing footprints and consideration of aesthetics and landscaping in the context of the Yarra River. Partial acquisition of the Veneto car park would be required to accommodate the project, however the car park would be reconfigured and the total number of spaces retained post-construction.

## Eastern Freeway

The Yarra Strategic Plan and Yarra River – Bulleen Precinct Land Use Framework Plan are currently in preparation and cover part of the Eastern Freeway precinct located near the Yarra River.

As mentioned in previous sections, construction and delivery requirements of the project (such as to facilitate the proposed Bulleen Park and Ride and proposed upgrade to the Doncaster Park and Ride in this precinct) could provide opportunity to improve the local area post-construction. Future strategic redevelopment such as the park and ride facilities would require a separate approval process to the EES and would need to have regard to local strategic planning objectives and the views of relevant key stakeholders, in the absence of a dedicated strategic plan or policy.

Other than the above, Victorian Government and local strategic policy relating to the future redevelopment of land and which the project has the potential to impact has not been identified in the study area for this precinct.

Planning permit applications in the City of Manningham and City of Boroondara and proposed development in the City of Yarra and City of Whitehorse have been identified near the project and have the potential to be impacted by the proposed works, as summarised in Table 8-3.

**Table 8-3** Development proposals in Eastern Freeway precinct

Planning Permit/ PSA ID	Municipality	Address	Location in relation to the project	Status	Details
<b>PP18/00147</b>	Boroondara	10 Koonung Street	Adjacent to the project in the vicinity of Koonung Creek Reserve	Current	Subdivision into three lots (this land has been identified as the Balwyn North Social Housing residential development site according to the Urban Development Program 2016)
<b>PLN18/0060</b>	Manningham	37 Stanton Street, Doncaster	On the north side of the Eastern Freeway, adjacent to the project	Permit approved	Construction of a two-storey dwelling
<b>TBC</b>	Yarra	Fairlea Reserve, Yarra Bend Park, Fairfield	On the north side of the Eastern Freeway, adjacent to the project	Preparing to lodge application	Parks Vic (proposed development involves construction of leisure and recreation facilities including new sporting ovals, netball courts and upgrades to existing infrastructure.
<b>PP17/00492</b>	Boroondara	2–6 Chandler Highway Kew	Adjacent to surface works on the north side of the Eastern Freeway	Permit issued	Buildings, works, landscaping and tree removal
<b>WH/2018/697</b>	Whitehorse	641–643 Middleborough Road Box Hill North	Adjacent to surface works on the western side of Middleborough Road	Current	Construction of 10 two storey dwellings and associated tree removal

Construction and operation activities that generate traffic, noise, air quality and visual impacts have the potential to impact future redevelopment near the project, such as the proposed applications above. However, such impacts would be minimised by implementing EPRs associated with traffic, noise, air quality and visual impacts. Refer to Section 9 and the discussion below for EPRs and to the relevant EES technical reports for further detail on traffic, noise, air quality and visual risks and EPRs.

It is noted the proposed shared use path in the southern portion of Fairlea Reserve would enhance east-west pedestrian and cycling access and connectivity. The proposed shared use overpass located to the east of the property referred to in the application at 37 Stanton Street, Doncaster would provide access to the open space on the south side of the Eastern Freeway (Koonung Creek Trail and Elgar Park).

### ***EPRs for all precincts***

Impacts associated with future redevelopment of land would be mitigated by implementing EPRs in consultation with the appropriate stakeholders to minimise disruption to owners and users of land to the extent practical.

The application of EPR LP1, which seeks to minimise the project footprint, and EPR LV1 which refers to the need to provide an appropriate urban design response in general accordance with the Urban Design Strategy would assist in mitigating potential impacts to redevelopment potential.

Inconsistencies with planning policies and strategic plans due to land use changes brought about by the project would be minimised by ensuring the project's development and operation considers strategic land use plans and policies and by consulting with land managers and/or agencies responsible for implementing the policies (EPR LP3).

EPRs to minimise the impact on ongoing land uses due to construction and operational traffic, noise, air quality and visual impacts include an Environment Strategy and management plans such as a Construction Environmental Management Plan (CEMP)) (EPR EMF2), a Dust and Air Quality Management and Monitoring Plan(s) (EPR AQ1) and Construction Noise and Vibration Management Plan (CNVMP) (EPR NV4), which set out measures to minimise and monitor the impact of construction dust and noise. Measures set out in these plans would need to comply with the requirements of relevant State Environment Protection Policies (SEPPs) and industry standards for noise and air quality issues. Management actions, as determined in consultation with potentially affected land owners, would be implemented to protect amenity at residences where the ground borne noise guideline targets were exceeded during construction (EPRNV10).

Full details of the identified land use EPRs are provided in Section 9.

### ***Benefits and opportunities***

Where major development and conservation is proposed (such as the La Trobe NEIC and Yarra Strategic Plan) opportunity would be provided to embrace and provide benefit to these pursuits by way minimising land use impacts and enhancing connectivity.

Furthermore, components of the project in the vicinity of land that includes regionally significant environmental and open space assets surrounding the Yarra River (including land identified for the Yarra Valley Country Club proposed redevelopment) would be in tunnels.

Construction and delivery land requirements of the project (such as surrounding the Watsonia railway station, the interchange at the Bulleen Industrial Precinct, the proposed Bulleen Park and Ride and proposed upgrade of the Doncaster Park and Ride) could also provide opportunity to improve the local area post-construction. The form of any future land use change (ie enhancements) would require a separate approval process, subsequent to this EES.

In these instances, it would also be necessary to have regard to the relevant strategic policy (such as the Yarra Strategic Plan and Yarra River – Bulleen Precinct Land Use Framework Plan), Victorian Government and local strategic planning objectives and the views of relevant key stakeholders. In some instances, the project may leave surplus land parcels. Where surplus land parcels are considered appropriate for a new or pre-existing land use, the relevant planning scheme provisions (including Victorian Government and local policies) would apply and trigger the need to obtain separate planning approvals as required.

### 8.3 Alternative design options

Although the reference project for North East Link has largely been finalised, there are currently two design options being considered for the arrangement of the Manningham interchange, and two locations for the launch and retrieval of the tunnel boring machine (TBM) being considered. For information on the design options, refer to EES Chapter 8 – Project Description.

This section explains how the potential impacts associated with the alternative design options would differ from the impacts associated with the project design assessed in Section 8.1 and Section 8.2 above.

#### 8.3.1 Manningham interchange alternative

The potential land use planning impacts of the alternative design for the Manningham Road interchange have been reviewed.

As the acquisition requirements are the same for the alternative Manningham interchange, there would be no change to the land use impacts as described in in Section 8.1 and Section 8.2 above.

#### 8.3.2 Northern tunnel boring machine (TBM) launch and retrieval site

The potential impacts associated with the alternative TBM launch and retrieval sites have been reviewed and there would be no change to the land use impacts identified and discussed in the sections above.

Therefore the same EPRs would be relevant to minimising the potential project impacts.

## 9. Environmental Performance Requirements

Table 9-1 lists the recommended Environmental Performance Requirements (EPRs) relevant to the land use planning assessment.

Table 9-1 Environmental Performance Requirements

EPR ID	Environmental Performance Requirement
<b>EPR LP1</b>	<p><b>Minimise land use impacts</b></p> <p>The project must be designed and constructed to:</p> <ul style="list-style-type: none"> <li>Minimise the design footprint and avoid, to the extent practicable, any temporary and permanent impacts on the following land uses: <ul style="list-style-type: none"> <li>Parks and reserves</li> <li>Significant landscapes around the Yarra River</li> <li>Other sensitive land uses such as educational facilities</li> <li>Recreational and community facilities</li> <li>Residential properties</li> <li>Commercial and industrial sites.</li> </ul> </li> <li>Minimise the design footprint to the extent practicable.</li> </ul>
<b>EPR LP2</b>	<p><b>Location of services and utilities</b></p> <p>New above-ground services and utility infrastructure are to be located in a way that minimises impacts to existing residential areas and recreational facilities. This must include considering options to co-locate infrastructure where practicable.</p>
<b>EPR LP3</b>	<p><b>Minimise inconsistency with strategic land use plans and policies</b></p> <p>The project must minimise to the extent practicable, impacts on residential, commercial, industrial, open space and community facility land uses from project development and operations which are inconsistent with strategic land use plans and policy.</p> <p>Development of the project is to have regard to relevant strategic land use plans and policies and consultation must occur with land managers and/or authorities responsible for the implementation of the relevant strategic land use plans and policies.</p>
<b>EPR LP4</b>	<p><b>Minimise overshadowing from noise walls and elevated structures</b></p> <p>Overshadowing from elevated structures and noise walls to residential properties (including existing solar panels), community facilities, open spaces, waterways and valuable natural habitats must be minimised through detailed design.</p>

In addition to the above land use planning EPRs, the additional EPRs listed in Table 9-2 are recommended. These are from other EES technical reports. Refer to the relevant technical reports for further detail.

**Table 9-2 Environmental Performance Requirements**

EPR ID	Environmental Performance Requirement
<b>EPR AQ1</b>	Implement a Dust and Air Quality Management and Monitoring Plan to minimise air quality impacts during construction
<b>EPR AQ2</b>	Design tunnel ventilation system to meet EPA Victoria requirements for air quality
<b>EPR AQ4</b>	Monitor ambient air quality
<b>EPR AQ5</b>	Monitor compliance of in-tunnel air quality and ventilation structure emissions
<b>EPR B1</b>	Business support
<b>EPR B2</b>	Minimise disruption to businesses from land acquisition and temporary occupation
<b>EPR B3</b>	Minimise and remedy damage or impacts on third party property and infrastructure
<b>EPR B4</b>	Minimise access and amenity impacts on businesses
<b>EPR B6</b>	Business liaison groups
<b>EPR EMF2</b>	Deliver project in accordance with an Environmental Strategy and Environmental Management Plans
<b>EPR LV1</b>	Design to be generally in accordance with the Urban Design Strategy
<b>EPR LV2</b>	Minimise landscape impacts during construction
<b>EPR LV3</b>	Minimise construction lighting impacts
<b>EPR LV4</b>	Minimise operation lighting impacts
<b>EPR NV2</b>	Monitor traffic noise
<b>EPR NV4</b>	Implement a Construction Noise and Vibration Management Plan (CNVMP) to manage noise and vibration impacts
<b>EPR NV6</b>	Design permanent tunnel ventilation system to meet EPA requirements for noise
<b>EPR NV7</b>	Monitor noise from tunnel ventilation system
<b>EPR NV8</b>	Minimise construction vibration impacts on amenity)
<b>EPR NV9</b>	Minimise construction vibration impacts on structures
<b>EPR NV10</b>	Minimise impacts from ground-borne (internal) noise
<b>EPR NV13</b>	Noise mitigation – noise walls
<b>EPR SC1</b>	Reduce community disruption
<b>EPR SC2</b>	Implement Communications and Community Engagement Plan
<b>EPR SC4</b>	Minimise impacts on sporting, recreation and other facilities
<b>EPR T1</b>	Optimise design performance
<b>EPR T2</b>	Transport Management Plan(s) (TMP)
<b>EPR T5</b>	Traffic Monitoring

# 10. Conclusion

The purpose of this report is to provide land use planning impact assessments to inform the preparation of the EES required for the project.

The report provides an assessment of land use planning considerations associated with the construction and operation of North East Link that would have the potential to impact existing and future land use, land use character, built form and the strategic land use planning policy framework.

Key considerations in the assessment of land use planning impacts of the project include:

- Permanent and temporary change in land use due to acquisition and occupation
- Permanent and temporary changes in the ongoing use of land adjacent to the project during construction and operation
- Property acquisition required for the project eroding established land use character
- Inconsistencies with planning policies and strategic plans due to land use changes brought about by the project, including the potential for future redevelopment of residential, commercial and industrial land use in the study area.

## 10.1 Existing conditions

The existing land use planning conditions for each precinct are summarised as follows.

**M80 Ring Road to northern tunnel** – located in the City of Banyule and Nillumbik Shire, the northern-most precinct is principally characterised by commercial, open space, and residential land uses. Other key land uses include Simpson Barracks, community facilities and a number of key activity centres such as Greensborough Major Activity Centre, Watsonia Neighbourhood Centre and the La Trobe NEIC (including Heidelberg Major Activity Centre) further afield to the west.

**Northern portal to southern portal** – the precinct travels through the City of Banyule and City of Manningham and includes significant open space and public conservation areas surrounding the Yarra River in addition to extensive residential land uses. A locally significant cluster of commercial and industrial land uses are located in the Bulleen Industrial Precinct, while the Heidelberg Major Activity Centre and La Trobe NEIC lie further afield to the west. The precinct also comprises Simpson Barracks and a number of key community facilities including schools and sporting clubs.

**Eastern Freeway** – the precinct is located in the City of Manningham, City of Whitehorse, City of Boroondara and City of Yarra. The precinct is generally characterised by residential and open space land uses surrounding the Koonung Creek along the Eastern Freeway and surrounding the Yarra River in the Boroondara and Yarra municipalities. The Boroondara Tennis Club is located in the centre of the precinct. Key commercial areas centred at the western end of the study area in the City of Yarra and a number of regionally significant activity centres lie further afield of the precinct to the north and south, such as the Doncaster Hill Major Activity Centre, Box Hill Metropolitan Activity Centre and Nunawading Megamile Major Activity Centre.

## 10.2 Impact assessment

The following section summarises the identified land use construction and operation impacts associated with the project.

### 10.2.1 Construction

#### *Land use change due to acquisition*

This report presents the acquisition requirements associated with the reference project. The assessment of potential land use impacts associated with acquisition requirements is considered a conservative approach and further design refinements would be undertaken during the detailed design process, with a view to ensuring an optimal environmental, economic and social outcome, including the potential for a smaller project footprint. Land use change due to acquisition is summarised per precinct below.

The majority of land uses permanently required for the project in the M80 Ring Road to northern portal precinct relate to residential properties, open space and Simpson Barracks on Commonwealth land. Permanent land use changes in this precinct include sections where project infrastructure (including widening) are proposed and residential, open space and commercial properties or land use are required for construction activities and in close proximity to the project. Surface and open cut construction methods are proposed for this precinct and much of the work would be carried out along and on land surrounding the existing road corridor.

In the northern portal to southern portal precinct, the majority of proposed works would be sub-surface (sections of tunnelling) minimising the requirement for permanent acquisition. Tunnelling protects the existing residential land uses and ecologically and culturally sensitive open space and public conservation areas along the alignment, including Banyule Flats, Bolin Bolin Billabong and Yarra River. As such, the project minimises land use impacts and changes in the City of Manningham and City of Banyule. Apart from strata acquisition requirements, acquisition in this precinct includes industrial land uses at the Bulleen Industrial Precinct, residential properties, the Veneto Club, Carey Grammar sporting facility, as well as open space recreation facilities (such as Bulleen Park and Borlase Reserve).

Construction would mainly involve surface works in the Eastern Freeway precinct, with much of the work to be carried out along and on land surrounding the existing road corridor. This means that no residential properties would be permanently acquired in this precinct, although acquisition of land would be required at the Boroondara Tennis Club and a number of open space land uses would be permanently required along the Eastern Freeway.

Overall, a permanent change in land use would result from acquisition as land that is currently used for open space, residential, commercial, and industrial and Commonwealth land purposes would no longer be available for that purpose. However, the impact would be minimised by applying the project EPRs, including the requirement for the project footprint to be minimised to the extent practicable (EPR LP1) (such as via tunnelling construction to avoid large areas of residential and ecological and culturally significant open space land uses) and consideration of strategic land use plans and policies during the project's development and operation (EPR LP3). Minimising the operational footprint of the project by implementing the above EPRs means the project may leave surplus land parcels. Where surplus land parcels are considered appropriate for a new or pre-existing land use the relevant planning scheme provisions (including Victorian Government and local policies) would apply and trigger the need to obtain separate planning approvals as required.

It is also noted that in some cases a change in land use due to acquisition also provides opportunity to improve the local area post-construction. These enhancements have not been identified and would require a separate approval process to this EES.

### ***Land use change due to temporary occupation***

In all precincts, temporary occupation is generally limited to areas of passive and active open space and Commonwealth land for construction activities such as lay down areas and ground improvement.

Generally, temporary occupation requirements would enable the remainder of the existing land use to be available during construction, although in some cases all the existing land use would be required for temporary occupation. Where full occupation was required, this land use would no longer occur. The impact would be temporary and implementation of EPR LP1 and EPR LP3, including minimising the footprint to the extent practicable at design stage and consideration of strategic land use plans and policies during development and operation would assist in avoiding (to the extent practicable) temporary impacts on affected land uses. Impacts to sporting and recreation facilities would be minimised via consultation with relevant local councils to identify available local alternative facilities for formal recreational users displaced from facilities by the project. Adequate notification to clubs and recreation facilities would minimise the impact of relocation. Where construction or operation activities would directly impact community infrastructure facilities such as schools, child care centres and aged care centres, consultation with managers, owners and user groups of the facilities would identify any practical measures to avoid or minimise impacts (EPR SC4).

A temporary change in land use also provides opportunity to improve the local area post-construction. The form of any future land use change (ie enhancements) would require a separate approval process, subsequent to this EES.

Consultation with key stakeholders, including local councils about temporary occupation requirements (including the location of construction compounds and potential post-construction opportunities) is underway and ongoing.

### ***Impacts to ongoing land use due to traffic, noise, air quality, overshadowing and visual impacts during construction***

Across all precincts, above-ground construction activities (such as widening of existing roads using surface and open cut methods, cut and cover tunnelling) would result in traffic, noise, air quality, overshadowing and visual impacts. These in turn could potentially impact the ongoing use of residential, open space, public conservation and community facility land near the project.

However, as construction activities are temporary in nature, and with the implementation of project EPRs that address construction traffic, noise, air quality and visual impacts (EPRs AQ1, B2, B3, EMF2, LP1, LP2, LP3, LV1, LV2, LV4, NV4, NV8, NV9, NV10, SC2, T1, T2, T5), these impacts would unlikely change land uses. It is therefore not expected that changes in traffic, noise, air quality and visual considerations due to construction activities would impact ongoing land uses.

Potential amenity impacts associated with traffic, noise, air quality and visual considerations are addressed in the relevant EES technical reports.

It is considered that the potential overshadowing impacts of the noise walls and elevated structures could have significant adverse effects depending on the extent of the increased overshadowing. However, by implementing project the EPR that addresses overshadowing impacts through urban design response (EPR LP4) and subsequent detailed design, residual overshadowing impacts may be minimised or reduced and so would unlikely to cause land use change.

### ***Impacts to land use character due to acquisition***

Across all precincts, acquisition requirements of the project would have adversely impact existing open space and residential land use character. This is because changing open space and residential land use character diminishes the elements that make open space and residential land uses distinctive and attractive.

However, the impact would be minimised by implementing project EPRs, including the requirement to minimise the footprint to the extent practicable (such as via tunnelling construction to avoid large areas of residential and ecological and culturally significant open space and public conservation land uses) (EPR LP1), consideration of strategic land use plans and policies during development and operation (EPR LP3).

Acquired open space and residential land may provide opportunity to improve the local area post-construction, with potential to enhance local open space land use character. The project also provides opportunity to contribute to the overall open space land use character in this precinct, with a series of land bridges for open space purposes

### ***Consistency (or otherwise) of the project with land use planning policy***

Generally, the project is considered to be predominantly consistent with Victorian Government and local land use policy objectives that seek to provide an integrated transport system and maintain the natural landscape of the ecologically and culturally significant Yarra River. However, the project would permanently acquire land for the cut and cover tunnel construction in the Bulleen Industrial Precinct, significant impacting this locally significant industrial land use. This is inconsistent with Victorian Government and Manningham City Council planning policy that seek to foster and maintain existing industrial land uses. It is noted the land would remain zoned IN1Z and that commercial and industrial land uses may return post construction.

Inconsistencies with planning policies and strategic plans due to land use changes brought about by the project would be minimised by design and development of the project having regard to strategic land use plans and policies in conjunction with consultation with land managers and/or agencies responsible for implementation of the relevant policies (EPR LP3). In some cases, the project may leave surplus land parcels. Where surplus land parcels are considered appropriate for a new or pre-existing land use the relevant planning scheme provisions (including Victorian Government and local policies) would apply and trigger the need to obtain separate planning approvals as required.

It is also noted that a change in land use due to acquisition also provides opportunity to improve the local area post-construction. This is particularly relevant for land acquisition requirements and policy implications relating to the Bulleen Industrial Precinct.

## **10.2.2 Operation**

### ***Impacts to ongoing land use due to traffic, noise, air quality and visual impacts during operation***

Across all precincts, above-ground operation activities (such as traffic movements and the presence of project structures) would cause traffic, noise, air quality and visual impacts. These could potentially impact the ongoing use of residential, open space, public conservation and community facility land adjacent to the project.

However, by implementing project EPRs that address construction traffic, noise, air quality and visual impacts (EPRs LP1, EMF2, AQ4, AQ5, NV6, NV7, LV4, T1, T5), these impacts would unlikely change ongoing land use. It is therefore not expected that changes in traffic, noise, air quality and visual considerations due to the project's operation would impact ongoing land uses.

Potential amenity impacts associated with traffic, noise, air quality and visual considerations are addressed in the relevant EES technical reports.

### ***Impacts to redevelopment potential***

Future significant redevelopment of land has been identified at the La Trobe NEIC that lies further afield to the west of the M80 Ring Road to northern portal and the northern portal to southern portal precincts. Victorian Government strategic policy sees the NEIC as the key location for growth of employment and business in the north-eastern part of Melbourne. Although the La Trobe NEIC is located outside the study area, the project's operation would have a positive impact on the redevelopment potential of the La Trobe NEIC by providing a *'transformed transport network that supports the economic growth of the cluster'* (VPA, *Latrobe National Employment and Innovation Cluster Draft Framework Plan, 2017*).

Construction and delivery requirements for the project (such as surrounding the Watsonia railway station, the interchange at the Bulleen Industrial Precinct, the proposed Bulleen Park and Ride and proposed upgrade of the Doncaster Park and Ride) could provide opportunity to improve the local area post-construction. The form of any future land use change (ie enhancements) would require a separate approval process, subsequent to this EES. In these instances, it would also be necessary to have regard to the relevant strategic policy (such as the Yarra Strategic Plan and Yarra River – Bulleen Precinct Land Use Framework Plan (once approved)), Victorian Government and local strategic planning objectives and the views of relevant stakeholders.

The planning scheme amendment to facilitate the North East Link would insert new Schedules to the Design Development Overlay (DDO) into the Banyule and Manningham planning schemes. The DDO would protect the construction and operation of the tunnel from incompatible development and control future development in the DDO area.

A number of current development proposals exist in the vicinity of the project. The majority of the proposals are generally small in scale and located adjacent to the project, where potential impacts to ongoing use of the land due to traffic, noise, air quality and visual impacts can be managed in accordance with EPRs that address these issues, to assist in avoiding (to the extent practicable) temporary and permanent impacts on affected land uses.

A Notice of Decision has been issued by Banyule City Council regarding a planning permit application seeking to develop land that in AK Lines Reserve, in light of land requirements for construction and delivery of North East Link across the material portion of land that is the subject of the planning permit application. Minimising the design footprint to the extent practicable would reduce the impact of the project on the proposed development as will the Council's resolution that any future sale of the site and subsequent use and development would occur after the design for North East Link has been confirmed and the impacts on local residents and the development site are fully understood.

A planning permit application in the northern portal to southern portal precinct is also current for a significant redevelopment of land at the Yarra Valley Country Club and part of the Heide Museum of Modern Art, for use of land associated with a leisure and recreation facility including 202 dwellings. Impacts to redevelopment potential would be minimised given construction and operation of the project would be entirely underground under this area.

Inconsistencies with planning policies and strategic plans due to land use changes brought about by the project would be minimised by design and development of the project having regard to strategic land use plans and policies in conjunction with consultation with land managers and/or agencies responsible for implementation of the relevant policies (EPR LP3).

Construction and delivery land requirements of the project (such as surrounding the Watsonia railway station, the interchange at the Bulleen Industrial Precinct, the proposed Bulleen Park and Ride and proposed upgrade of the Doncaster Park and Ride) could provide opportunity to improve the local area post-construction. The form of any future land use change (ie enhancements) would require a separate approval process, subsequent to this EES. In these instances, it would also be necessary to have regard to the relevant strategic policy (such as the Yarra Strategic Plan and Yarra River – Bulleen Precinct Land Use Framework Plan), Victorian Government and local strategic planning objectives and the views of relevant key stakeholders. In some instances, the project may leave surplus land parcels. Where surplus land parcels are considered appropriate for a new or pre-existing land use, the relevant planning scheme provisions (including Victorian Government and local policies) would apply and trigger the need to obtain separate planning approvals as required.

Overall, where major development (such as La Trobe NEIC) and conservation (such as the Yarra Strategic Plan) is proposed in and in proximity to the project study area, North East Link provides an opportunity to embrace and benefit these pursuits by improving access and enhancing connectivity.

#### 10.2.3 Environmental Performance Requirements

EPRs relevant to land use planning were described in the discussion of identified land use impacts in Section 8 and are listed in Section 9.

# 11. References

## Commonwealth

Australian Commonwealth, Department of Prime Minister and Cabinet 2016, *Smart Cities Plan*

Infrastructure Australia 2018, *Infrastructure Priority List*

## State

DELWP 2017, Victorian Department of Environment, Land, Water and Planning, *Plan Melbourne 2017 – 2050*

DEDJTR 2018, Victorian Department of Economic Development, Jobs, Transport and Resources, *Delivering the Goods, Creating Victorian Jobs – Victorian Freight Plan*

Infrastructure Victoria 2016, *Victoria's 30-Year Infrastructure Strategy December 2016*

Victorian Planning Authority 2017, *La Trobe National Employment and Innovation Cluster Draft Framework Plan (2017)*

Victorian Government 2013, *Victoria the Freight State, the Victorian Freight and Logistics Plan*

## Local

Banyule City Council 2016, *Public Open Space Plan (2016–2031)*

Banyule City Council 2015, *Banyule Integrated Transport Plan 2015–2035*

Banyule City Council 2014, *Picture Watsonia: A Vision for Watsonia Village*

Banyule City Council 2012, *Neighbourhood Character Strategy*

Banyule City Council 2010, *Structure Plan for the Heidelberg Precinct*

Boroondara City Council 2006, *Boroondara Integrated Transport Strategy*

Boroondara City Council 2013, *Boroondara Open Space Strategy*

Boroondara City Council 2015, *Boroondara Housing Strategy*

Boroondara City Council 2013, *Neighbourhood Character Precinct Statements*

DELWP, Victorian Department of Environment, Land, Water and Planning, *Banyule Planning Scheme*, <[planningschemes.dpcd.vic.gov.au/schemes/banyule](http://planningschemes.dpcd.vic.gov.au/schemes/banyule)>

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DELWP, Victorian Department of Environment, Land, Water and Planning, *Manningham Planning Scheme*, <[planning-schemes.delwp.vic.gov.au/schemes/manningham](http://planning-schemes.delwp.vic.gov.au/schemes/manningham)>

DELWP, Victorian Government of Victoria Department of Environment, Land, Water and Planning, *Nillumbik Planning Scheme*, <[planning-schemes.delwp.vic.gov.au/schemes/schemes/nillumbik](http://planning-schemes.delwp.vic.gov.au/schemes/schemes/nillumbik)>.

DELWP, Victorian Department of Environment, Land, Water and Planning, *Whitehorse Planning Scheme*, <[planning-schemes.delwp.vic.gov.au/schemes/whitehorse](http://planning-schemes.delwp.vic.gov.au/schemes/whitehorse)>

DELWP, Victorian Department of Environment, Land, Water and Planning, *Whittlesea Planning Scheme*, <[planning-schemes.delwp.vic.gov.au/schemes/whittlesea](http://planning-schemes.delwp.vic.gov.au/schemes/whittlesea)>

DELWP, Victorian Department of Environment, Land, Water and Planning, *Yarra Planning Scheme*, <[planning-schemes.delwp.vic.gov.au/schemes/yarra](http://planning-schemes.delwp.vic.gov.au/schemes/yarra)>

Manningham City Council 2016, *Koonung Park Management Plan 2016*

Manningham City Council 2014, *Open Space Strategy 2014*

Manningham City Council 2012, *Manningham Residential Character Guidelines 2012*

Manningham City Council 2011, *Koonung Creek Linear Park Management Plan 2011*

Manningham City Council 2010, *Making Manningham Mobile*

Manningham City Council 2009, *Manningham Streetscape Character Study 2009*

Manningham City Council 2005, *Manningham Activity Centre Strategy*

Mirvac and Urbis 2014, *Eastern Golf Course Development Plan September 2014*

Nillumbik Shire Council 2011, *Nillumbik Trails Strategy 2011*

Nillumbik Shire Council 2011, *Nillumbik Biodiversity Strategy and Action Plan 2011*

Nillumbik Shire Council 2010, *Green Wedge Management Plan 2010–2025*

Nillumbik Shire Council 2006, *Diamond Creek Major Activity Centre Structure Plan and Leisure Facilities Plan*

Nillumbik Shire Council 2001, *Housing Strategy*

Whitehorse City Council 2016, *Elgar Park Master Plan Draft*

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Whitehorse City Council 2014, *Whitehorse Neighbourhood Character Study 2014*

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Whitehorse City Council 2007, *Whitehorse Open Space Strategy*

Whitehorse City Council 2007, *Box Hill Transit City Activity Centre Structure Plan*

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Yarra City Council 2012, *Yarra Business and Industrial Land Strategy*

Yarra City Council 2006, *Open Space Strategy*

## **Websites**

DELWP, Urban Development Program, < <https://www.planning.vic.gov.au/land-use-and-population-research/urban-development-program> >

## **EES Technical Reports**

Technical report A – Traffic and transport

Technical report B – Air quality

Technical report C – Surface noise and vibration

Technical report F – Business

Technical report H – Landscape and visual

Technical report I – Social

Attachment II – Urban Design Strategy

Attachment V – Planning Scheme Amendment

# Appendices

# Appendix A – Legislation and policy

## A.1 Commonwealth legislation

Australian Government legislation relevant to the land use planning impact assessment for the project is summarised in Table 3.

Table 3 Australian Government legislation

Legislation/Policy/Guideline	Relevance to this impact assessment
<p><b>Environment Protection and Biodiversity Conservation Act 1999 ('EPBC Act')</b></p> <p>The EPBC Act provides for the protection of defined Matters of National Environmental Significance (MNES) including World Heritage Properties, National Heritage Places, Ramsar wetlands, nationally-listed threatened species and ecological communities and listed migratory species.</p>	<p>In January 2018, a referral for the project was submitted to the Australian Government's Department of Environment and Energy (DoEE). On 13 April 2018, a delegate of the Minister for Environment and Energy decided the construction of North East Link is a controlled action under the EPBC Act'.</p> <p>NELP will prepare a Public Environment Report (PER) to be assessed by DoEE.</p> <p>The DoEE has advised NELP that the following controlling provisions under the EPBC Act apply to the PER:</p> <ul style="list-style-type: none"><li>• Listed threatened species and communities</li><li>• Listed migratory species</li><li>• Environment on Commonwealth lands.</li></ul>

## A.2 State legislation

Victorian Government legislation relevant to the land use planning impact assessment for North East Link are summarised in Table 4.

Table 4 Victorian Government legislation

Legislation/Policy/Guideline	Relevance to this impact assessment
<p><b>Planning and Environment Act 1987</b></p> <p>The Planning and Environment Act establishes a framework for planning and managing the use, development and protection of land in Victoria in the present and long-term interest of all Victorians. Planning schemes prepared under the provisions of the Planning and Environment Act apply to each municipality in Victoria.</p>	<p>North East Link has been planned in a manner consistent with the objectives of planning in Victoria, which are:</p> <p><i>Objective 1 – (a) To provide for the fair, orderly, economic and sustainable use, and development of land; (e) To protect public utilities and other assets and enable the orderly provision and co-ordination of public utilities and other facilities for the benefit of the community; (g) To balance the present and future interests of all Victorians.</i></p> <p><i>Objective 2 – (a) to ensure sound, strategic planning and co-ordinated action at State, regional and municipal levels; (c) to enable land use and development planning and policy to be easily integrated with environmental, social, economic, conservation and resource management policies at State, regional and municipal levels; (d) to ensure that the effects on the environment are considered and provide for explicit consideration of social and economic effects when decisions are made about the use and development of land; (i) to ensure that those affected by proposals for the use, development or protection of land or changes in planning policy or requirements receive appropriate notice.</i></p> <p>The Planning and Environment Act governs the process for approval pathways, including the preparation, approval and adoption of planning schemes and planning scheme amendments by planning authorities.</p> <p>The construction and operation of North East Link would occur within the municipalities of Banyule, Boroondara, Manningham, Nillumbik, Whitehorse and Yarra and is subject to a range of planning controls. An amendment would be required to each of the municipality planning schemes under the Planning and Environment Act including:</p> <ul style="list-style-type: none"> <li>• An Incorporated Document that would authorise the use and development of the land within the project boundary for the purposes of North East Link.</li> <li>• Introducing a Specific Controls Overlay to land within the project boundary, to allow the land to be used or developed in accordance with the Incorporated Document.</li> <li>• Introducing a Design and Development Overlay to protect the tunnels and other infrastructure during the construction and operation of North East Link from adverse impacts by developments and to protect proposed developments from adverse impacts resulting from the project. The amendment would also make the Minister for Planning the responsible authority for administering and enforcing the planning scheme provisions applicable to the use and development of land for the project.</li> </ul> <p>The decision on the planning scheme amendment would be made by the Minister for Planning following the release of the Minister's assessment of the EES.</p> <p>Further information on the planning scheme amendment process is included in Chapter 13 – Land use planning, and the exhibited planning scheme amendments are included as EES Attachment V – Draft Planning Scheme Amendment.</p>

Legislation/Policy/Guideline	Relevance to this impact assessment
<b>Environment Effects Act 1978</b>	<p>In February 2018, the Minister for Planning declared the works proposed for North East Link to be public works for the purposes of the Environment Effects Act, triggering the need for an Environment Effects Statement (EES).</p> <p>The EES and the Minister's assessment will be provided to relevant decision-makers to inform their decision on whether or not to approve the project and if so on what conditions.</p> <p>This includes the decision to prepare, adopt and approve a planning scheme amendment for the project under the Planning and Environment Act.</p>
<b>Environment Protection Act 1970</b> The Environment and Protection Act provides for the preparation of the State Environment Protection Policies (SEPPs) which are used to implement the policies outlined in the primary legislation to protect the environment. The SEPPs relate to emissions to air, water and land in Victoria. <i>It is noted that the amended Environment Protection Amendment Act 2018 will take effect from 1 July 2020.</i>	<p>The project must consider impacts to the environment, as outlined by the relevant State Environment Planning Policy (SEPP) including:</p> <ul style="list-style-type: none"> <li>• State Environment Protection Policy (Ambient Air Quality)</li> <li>• State Environment Protection Policy (Air Quality Management)</li> <li>• State Environment Protection Policy (Prevention and Management of Contamination of Land)</li> <li>• State Environment Protection Policy (Groundwaters of Victoria)</li> <li>• State Environment Protection Policy (Control of Noise from Commerce, Industry and Trade)</li> <li>• State Environment Protection Policy (Waters of Victoria).</li> </ul> <p>Other technical reports and EES Technical report – Works Approval Application address environmental matters in detail.</p>
<b>Aboriginal Heritage Act 2006</b> The objective of the Aboriginal Heritage Act is to provide for the protection of Aboriginal cultural heritage in Victoria. It recognises Aboriginal people as the primary guardians, keepers and knowledge holders of Aboriginal cultural heritage and promotes the use of agreements that provide for the management and protection of Aboriginal cultural heritage.	<p>The Aboriginal Heritage Act states that a Cultural Heritage Management Plan (CHMP) is required for any project requiring an EES. A CHMP is presently being prepared concurrent to the North East Link EES, which will be submitted to the Office of the Aboriginal Victoria for approval following the Minister's assessment of the EES.</p> <p>Refer to Technical report L – Aboriginal cultural heritage for further information relating to aboriginal heritage.</p>
<b>Heritage Act 2017</b> The primary purpose of the Heritage Act is to provide for the protection and conservation of places and objects of cultural heritage significance through the registration of such places and objects via Heritage Victoria.	<p>Consent is required from Heritage Victoria for any heritage listed sites (Victorian Heritage Register or the Heritage Inventory) impacted by the project. A formal heritage assessment is occurring as part of the EES process, which will identify any heritage sites that are impacted by the project.</p> <p>There are two classes of approvals required from Heritage Victoria:</p> <ul style="list-style-type: none"> <li>• For places listed on the Victorian Heritage Register, section 74 of the Heritage Act where works are considered minor and have little no impact. Heritage Victoria is able to issue an exemption from a permit under section 66 of the Act.</li> <li>• For places listed on the Victorian Heritage Inventory, consents to damage or remove archaeological artefacts are required under section 129 of the Heritage Act.</li> </ul> <p>Refer to Technical Report K – Historical heritage for further information relating to historical heritage.</p>

Legislation/Policy/Guideline	Relevance to this impact assessment
<p><b>Yarra River Protection (Willip-gin Birrarung murrn) Act 2017</b></p> <p>The Yarra River Protection (Willip-gin Birrarung Murrn) Act provides an overarching planning framework for the Yarra River. It strengthens the management of the Yarra River by establishing a new statutory body, the Birrarung Council, to act as an independent voice for the river and sets out the principles that guide management of environmental, social and recreational decision-making in relation to the protection of the Yarra River.</p>	<p>The Yarra River Protection (Willip-gin Birrarung Murrn) Act provides an overarching policy and planning framework to coordinate and harmonise planning for the use, development and protection of the Yarra River, its parklands and other land in its vicinity. A purpose of the Act is to protect the Yarra River and the surrounding parcels of public land as one living and integrated natural entity. The Act also recognises the importance of the Yarra River and its parklands and associated public places to the economic prosperity, vitality and liveability of Melbourne and the Yarra Valley.</p> <p>The Act provides for the preparation of a Yarra Strategic Plan in accordance with Yarra Protection Principles to guide future use and development, and areas for protection within the Yarra corridor. An exemption from the provisions of the Act applies for projects declared under the <i>Major Transport Projects Facilitation Act 2009 (Vic)</i> (including North East Link). However, NELP has undertaken strategic planning to consider the long-term community vision within the Yarra Strategic Plan, as well as having regard to the Yarra Protection Principles set out in the Act.</p>
<p><b>Major Transport Project Facilitation Act 2009 ('MTPF Act')</b></p> <p>The purpose of the MTPF Act is to facilitate the development of major transport projects.</p>	<p>Section 10(1) of the MTPF Act provides that the Premier may declare a transport project to be a declared project if it is of economic, social or environmental significance to the state or a region of the state.</p> <p>The Act contains a range of facilitating provisions relating to:</p> <ul style="list-style-type: none"> <li>• Land acquisition and assembly including public, private Council and Crown land.</li> <li>• Road construction, deviation, closure and management</li> <li>• Dealing with utilities.</li> </ul> <p>North East Link was declared (gazetted 28 June 2018) by the Premier under section 10(1)(b) of the MTPF Act for delivery purposes. The MTPF Act applies to North East Link with the exception of Part 3 (Assessment and approval of major transport projects) and Part 8 (Assessment Committees). This means that if North East Link is granted the principal environmental and planning approvals, the project authority will be able to use the project delivery and utilities interface powers in Parts 6 and 7 of the MTPF Act to deliver the project.</p> <p>The Premier appointed the Minister for Roads and Road Safety to be the Project Minister for the declared project known as the North East Link Project (gazetted 28 June 2018).</p>
<p><b>Crown Land (Reserves) Act 1978</b></p> <p>The Crown Land (Reserves) Act provides for the reservation of Crown land for certain public purposes by the Governor in Council and sets out the administrative and legal framework for managing reserved Crown land and the processes for revoking Crown land reservations</p>	<p>Crown land can be reserved for a range of public purposes, including public parks and gardens, the beds and banks of waterways and railways.</p> <p>Approval is required from the Minister for Environment or the relevant Committee of Management to use and occupy land before the designation of the project.</p> <p>The MTPF Act (see above) provides the ability to temporarily and permanently revoke reserves on Crown land for the purpose of a major transport project. These provisions are likely to be utilised to facilitate development of North East Link, to the extent that any reserved Crown land would be impacted by the project.</p>

Legislation/Policy/Guideline	Relevance to this impact assessment
<b>Land Act 1958</b> The Land Act deals with sale, grants and occupation of unreserved Crown land in Victoria.	North East Link would impact a range of unreserved Crown land. The project may need to obtain a lease or license to occupy Crown land. The MTPF Act (see above) provides the ability to reserve Crown land for the purposes of major transport projects.
<b>Flora and Fauna Guarantee Act 1988 ('FFGA Act')</b> The FFGA Act is the primary legislation associated with biodiversity conservation in Victoria.	<p>The FFGA Act provides for the listing of threatened species, communities of flora and fauna and potentially threatening processes. A number of non-threatened flora species are also protected under the FFGA Act.</p> <p>A permit is required to take species protected under the FFGA Act from public land, and may also be required to remove protected species from private land in certain circumstances.</p> <p>The project must consider impacts to flora and fauna, including the proposed removal, destruction or lopping of native vegetation necessary for the construction of North East Link, which must be undertaken in accordance with the <i>Guidelines for the removal, destruction or lopping of native vegetation</i> (DELWP, 2017) to the satisfaction of the Secretary to the Department of Environment, Land, Water and Planning (or delegate). Native vegetation offsets must also be provided in accordance with these guidelines.</p> <p>Refer to EES Technical Report Q – Ecology for further details on the potential ecological impacts of North East Link.</p>
<b>Land Acquisition and Compensation Act 1986</b> The main purposes of the Land Acquisition and Compensation Act are ' <i>(a) to establish a new procedure for the acquisition of land for public purposes; and</i> <i>(b) to provide for the determination of the compensation payable in respect of land so acquired.</i> '	The project authority for the project (North East Link Project) is obliged to comply with the provisions of the Land Acquisition and Compensation Act as modified by the MTPF Act (see above), to the extent that any interest in land needs to be compulsorily acquired for the project. The provisions of the Land Acquisition and Compensation Act (as modified) may also apply to the extent that any access or temporary occupation of land is required for development of North East Link.

Legislation/Policy/Guideline	Relevance to this impact assessment
<p><b>Transport Integration Act 2010</b></p> <p>The Transport Integration Act states that transport planning should provide for the effective integration of transport and land use and facilities access to social and economic opportunities. The transport system and land use should be aligned, complementary and supportive and ensures that transport decisions are made having in regard to current and future impact of land use, and the operation of the transport system.</p>	<p>North East Link has been planned in a manner consistent with the principles of the Transport Integration Act, adopting a triple bottom line approach that considers social, environmental and economic principles.</p> <p>In doing so, North East Link meets key objectives within <i>Part 2 – Vision statement, objectives, principles and statements of policy principles – Division 2 – Transport System Objectives</i>, including:</p> <ul style="list-style-type: none"> <li>• Objective 8 – Social and economic inclusion – (1) The transport system should provide a means by which persons can access social and economic opportunities to support individual and community wellbeing</li> <li>• Objective 9 – Economic prosperity – (1) The transport system should facilitate economic prosperity by— (a) enabling efficient and effective access for persons and goods to places of employment, markets and services; (b) increasing efficiency through reducing costs and improving timeliness; (c) fostering competition by providing access to markets; (d) facilitating investment in Victoria; (e) supporting financial sustainability.</li> <li>• Objective 11 – Integration of transport and land use – (1) The transport system should provide for the effective integration of transport and land use and facilitate access to social and economic opportunities Without limiting the generality of subsection (1), transport and land use should be effectively integrated so as to improve accessibility and transport efficiency with a focus on— (a) maximising access to residences, employment, markets, services and recreation (d) facilitating better access to, and greater mobility within, local communities.</li> <li>• Objective 12 – Efficiency, coordination and reliability – (1) The transport system should facilitate network wide efficient, coordinated and reliable movements of persons and goods at all times.</li> </ul> <p>The Explanatory Report of the North East Link planning scheme amendment also outlines how the amendment addresses the requirements of the Transport Integration Act.</p>

## A.3 Planning Policy Framework (PPF)

### A.3.1 State-wide and regional planning policy

State-wide and regional planning policies and objectives relevant to the land use planning impact assessment for North East Link are summarised in Table 5.

Table 5 State-wide and regional planning policy

Legislation/Policy/Guideline	Relevance to this impact assessment
<b>Planning Policy Framework (PPF)</b> <p>The PPF is common on content across all Victorian Planning schemes. These high-level policy directives help guide and responsible authorities regarding matters of state, regional and local significance that must be considered when administering the planning scheme in their respective municipalities.</p> <p>North East Link would need to consider relevant clauses of the PPF as set out below.</p>	
<b>Clause 11 – Settlement</b> <p>This clause identifies that planning is to anticipate and respond to the needs of existing and future communities. Relevant sub clauses of relevance to North East Link include:</p> <b>Clause 11.01-1R1 Settlement – Metropolitan Melbourne</b> <p>Relevant strategies include the <i>Melbourne 2050 Plan</i> and to ‘focus investment and growth in places of state significance, including:</p> <ul style="list-style-type: none"><li>• <i>Metropolitan Melbourne Central City</i></li><li>• <i>National Employment and Innovation Clusters</i></li><li>• <i>Metropolitan Activity Centres</i></li><li>• <i>State-Significant Industrial Precincts</i></li><li>• <i>Transport Gateways</i></li><li>• <i>Health and Education Precincts</i></li><li>• <i>Major Urban-Renewal Precincts.</i></li></ul> <b>Clause 11.03-1S Activity Centres</b> <p>To encourage the concentration of major retail, residential, commercial, administrative, entertainment and cultural developments into activity centres that are highly accessible to the community.</p>	<p>These clauses and associated objectives and strategies are relevant, as the project would result in impacts and potential opportunities with respect to the considerations outlined in the relevant Settlement clauses. Section 8 of EES Technical report E – Land use planning addresses land use implications of the project and policy.</p> <p>Refer to relevant EES technical reports for further detail on impacts other than land use that are associated with these considerations.</p>

Legislation/Policy/Guideline	Relevance to this impact assessment
<p><b>Clause 11.03-1R Activity Centres – Metropolitan Melbourne</b>  Relevant strategies include the need to:  <i>Support the development and growth of Metropolitan Activity Centres by ensuring they:</i></p> <ul style="list-style-type: none"> <li>• <i>Are able to accommodate significant growth for a broad range of land uses</i></li> <li>• <i>Are supported with appropriate infrastructure</i></li> <li>• <i>Are hubs for public transport services</i></li> <li>• <i>Offer good connectivity for a regional catchment</i></li> <li>• <i>Provide high levels of amenity.</i></li> </ul> <p><b>Clause 11.03-6S Regional and local places</b>  <i>To facilitate integrated place-based planning.</i></p>	
<p><b>Clause 12 – Environmental and Landscape Values</b>  The clause identifies that planning should help protect the health of ecological systems, biodiversity and conserve areas with identified environmental value, as follows in the relevant subclauses below.</p> <p><b>Clause 12.01-1S Protection of biodiversity</b>  <i>To assist the protection and conservation of Victoria's biodiversity.</i></p> <p><b>Clause 12.01-2S Native vegetation management</b>  <i>To ensure that there is no net loss to biodiversity as a result of the removal, destruction or lopping of native vegetation.</i></p> <p><b>Clause 12.03-1S River corridors, waterways, lakes and wetlands</b>  <i>To protect and enhance river corridors, waterways, lakes and wetlands.</i></p> <p><b>Clause 12.03-1R Yarra River protection</b>  <i>To maintain and enhance the natural landscape character of the Yarra River corridor.</i></p> <p><b>Clause 12.05-1S Environmentally sensitive area</b>  <i>To protect and conserve environmentally sensitive areas.</i></p> <p><b>Clause 12.05-2 Landscapes</b>  <i>To protect and enhance significant landscapes and open spaces that contribute to character, identity and sustainable environments.</i></p>	<p>The identified clauses and associated objectives and strategies are relevant to North East Link, as the project may result in environmental and landscape value impacts.</p> <p>Other EES technical reports address environmental and landscape matters in detail.</p>

Legislation/Policy/Guideline	Relevance to this impact assessment
<p><b>Clause 13 – Environmental Risks</b></p> <p>This clause states that planning should adopt a best practice environmental management and risk management approach which aims to avoid or minimise environmental degradation and hazards. Subclauses of relevance to the project are as follows:</p> <p><b>Clause 13.03-1S Floodplain management</b></p> <p><i>To assist the protection of:</i></p> <ul style="list-style-type: none"> <li>• Life, property and community infrastructure from flood hazard</li> <li>• The natural flood carrying capacity of rivers, streams and floodways</li> <li>• The flood storage function of floodplains and waterways</li> <li>• Floodplain areas of environmental significance or of importance to river health.</li> </ul> <p><b>Clause 13.04-1S Contaminated and potentially contaminated land</b></p> <p><i>To ensure that potentially contaminated land is suitable for its intended future use and development, and that contaminated land is used safely.</i></p> <p><b>Clause 13.04-2S Erosion and landslip</b></p> <p><i>To protect areas prone to erosion, landslip or other land degradation processes.</i></p> <p><b>Clause 13.05-1S Noise abatement</b></p> <p><i>To assist the control of noise effects on sensitive land uses.</i></p> <p><b>Clause 13.06-1S Air quality management</b></p> <p><i>To assist the protection and improvement of air quality.</i></p>	<p>The identified clauses and associated objectives and strategies are relevant to North East Link, as the project may result in impacts to the environmental risks identified in the clauses.</p> <p>Other EES technical reports address environmental risks in detail.</p>
<p><b>Clause 14 – Natural Resource Management</b></p> <p>This clause acknowledges that planning should assist in the conservation and wise use of natural resources, as outlined in the relevant subclauses below.</p> <p><b>Clause 14.02-1S Catchment planning and management</b></p> <p><i>To assist the protection and restoration of catchments, water bodies, groundwater, and the marine environment.</i></p> <p><b>Clause 14.02-2S Water quality</b></p> <p><i>To protect water quality.</i></p> <p><b>Clause 14.02-3S Water conservation</b></p> <p><i>To ensure that water resources are managed in a sustainable way.</i></p>	<p>The identified clauses and associated objectives and strategies are relevant to North East Link, as the project may result in changes to natural resources as identified in the relevant clauses.</p> <p>Other EES technical reports address natural resource management matters in detail.</p>

Legislation/Policy/Guideline	Relevance to this impact assessment
<p><b>Clause 15 – Built Environment and Heritage</b>  It is identified in the clause that planning should ensure all new land use and development appropriately responds to its landscape, valued built form and cultural context, and protect places and sites with significant heritage, architectural, aesthetic, scientific and cultural value.</p> <p><b>Clause 15.01-1S Urban design</b>  <i>To create urban environments that are safe, functional and provide good quality environments with a sense of place and cultural identity.</i></p> <p><b>Clause 15.01-1R Metropolitan Melbourne</b>  <i>To create a distinctive and liveable city with quality design and amenity.</i></p> <p><b>Clause 15.01-2S Building design</b>  <i>To achieve building design outcomes that contribute positively to the local context and enhance the public realm.</i></p> <p><b>Clause 15.01-4S Healthy neighbourhoods</b>  <i>To achieve neighbourhoods that foster healthy and active living and community wellbeing.</i></p> <p><b>Clause 15.01-4R Healthy neighbourhoods – Metropolitan Melbourne</b>  <i>Create a city of 20 minute neighbourhoods, that give people the ability to meet most of their everyday needs within a 20 minute walk, cycle or local public transport trip from their home.</i></p> <p><b>Clause 15.01-5S Neighbourhood character</b>  <i>To recognise, support and protect neighbourhood character, cultural identity, and sense of place.</i></p> <p><b>Clause 15.03-1S Heritage conservation</b>  <i>To ensure the conservation of places of heritage significance.</i></p> <p><b>Clause 15.03-2S Aboriginal cultural heritage</b>  <i>To ensure the protection and conservation of places of Aboriginal cultural heritage significance.</i></p>	<p>The identified clauses and associated objectives and strategies are relevant to North East Link, as the project may result in impacts to the built environment and heritage considerations.</p> <p>Other EES technical reports and the EES Technical report II – Urban Design Strategy address built environment and heritage matters in detail.</p>

Legislation/Policy/Guideline	Relevance to this impact assessment
<p><b>Clause 17 – Economic Development</b></p> <p>This clause acknowledges that planning provides for a strong and innovative economy, where all sectors of the economy are critical to economic prosperity. Relevant subclauses are summarised below.</p> <p><b>Clause 17.01-1S Diversified economy</b></p> <p><i>To strengthen and diversify the economy.</i></p> <p><b>Clause 17.01-1R Diversified economy – Metropolitan Melbourne</b></p> <p><i>Facilitate the development of National Employment and Innovation Clusters by ensuring they:</i></p> <ul style="list-style-type: none"> <li>• <i>Have a high level of amenity to attract businesses and workers</i></li> <li>• <i>Are supported by good public transport services and integrated walking and cycling paths</i></li> <li>• <i>Maximise investment opportunities for the location of knowledge intensive firms and jobs.</i></li> <li>• <i>Support the employment and servicing role of Health and Education Precincts by:</i></li> <li>• <i>Focussing on improving access, particularly public transport access</i></li> <li>• <i>Encouraging co-location of facilities to better utilise existing infrastructure</i></li> <li>• <i>Supporting and facilitating growth of associated businesses and industries</i></li> <li>• <i>Reinforcing their specialised economic functions while also providing opportunities for ancillary retail, commercial, accommodation and supporting services.</i></li> <li>• <i>Plan for industrial land in suitable locations to support employment and investment opportunities.</i></li> </ul> <p><b>Clause 17.01-2S Innovation and research</b></p> <p><i>To create opportunities for innovation and the knowledge economy within existing and emerging industries, research and education.</i></p> <p><b>Clause 17.02-1S Business</b></p> <p><i>To encourage development that meets the community's needs for retail, entertainment, office and other commercial services.</i></p> <p><b>Clause 17.03-1S Industrial land supply</b></p> <p><i>To ensure availability of land for industry.</i></p> <p><b>Clause 17.03-2S Industrial development siting</b></p> <p><i>To facilitate the sustainable development and operation of industry.</i></p>	<p>The identified clauses and associated objectives and strategies are relevant to North East Link, as the project would be related to economic development considerations as outlined in the identified clauses and subclauses.</p> <p>Other EES technical reports address economic development matters in detail.</p>

Legislation/Policy/Guideline	Relevance to this impact assessment
<p><b>Clause 18 – Transport</b></p> <p>The clause states that planning should ensure an integrated and sustainable transport system that provides access to social and economic opportunities, facilitates economic prosperity, contributes to environmental sustainability, coordinates reliable movements of people and goods, and is safe.</p> <p><b>Clause 18.01-1S Land use and transport planning</b></p> <p><i>To create a safe and sustainable transport system by integrating land-use and transport.</i></p> <p><b>Clause 18.01-2S Transport system</b></p> <p><i>To coordinate development of all transport modes to provide a comprehensive transport system.</i></p> <p><i>Relevant strategies include 'locate and design new transport routes and adjoining land uses to minimise disruption of residential communities and their amenity'.</i></p> <p><b>Clause 18.02-1S Sustainable personal transport</b></p> <p><i>To promote the use of sustainable personal transport.</i></p> <p><b>Clause 18.02-1R Sustainable personal transport - Metropolitan Melbourne</b></p> <p><i>Improve local travel options for walking and cycling to support 20 minute neighbourhoods.</i></p> <p><i>Develop local cycling networks and new cycling facilities that support the development of 20-minute neighbourhoods and that link to and complement the metropolitan-wide network of bicycle routes – the Principal Bicycle Network.</i></p> <p><b>Clause 18.02-2S Public transport</b></p> <p><i>To facilitate greater use of public transport and promote increased development close to high-quality public transport routes.</i></p> <p><b>Clause 18.02-2R Principle Public Transport Network</b></p> <p><i>Facilitate high-quality public transport access to job-rich areas.</i></p> <p><i>Maximise the use of existing infrastructure and increase the diversity and density of development along the Principal Public Transport Network, particularly at interchanges, activity centres and where principal public transport routes intersect. Identify and plan for new Principal Public Transport Network routes.</i></p> <p><i>Support the Principal Public Transport Network with a comprehensive network of local public transport. Plan for local bus services to provide for connections to the Principal Public Transport Network.</i></p>	<p>The identified clauses and associated objectives and strategies are relevant to North East Link, as the project may result in transport impacts and benefits.</p> <p>Other EES technical reports address transport related matters in detail.</p>

Legislation/Policy/Guideline	Relevance to this impact assessment
<p><i>Improve the operation of the Principal Public Transport Network by providing for:</i></p> <ul style="list-style-type: none"> <li>• <i>A metro-style rail system</i></li> <li>• <i>Extended tram lines and the establishment of a light rail system</i></li> <li>• <i>Road space management measures including transit lanes, clearways, stops and interchanges.</i></li> </ul> <p><b>Clause 18.02-3S Road system</b></p> <p><i>To manage the road system to achieve integration, choice and balance by developing an efficient and safe network and making the most of existing infrastructure.</i></p> <p><b>Clause 18.05-1S Freight links</b></p> <p><i>To further develop the key Transport Gateways and freight links and maintain Victoria's position as the nation's premier logistics centre.</i></p>	
<p><b>Clause 19 – Infrastructure</b></p> <p>This clause specifies that planning should enable social and physical infrastructure in an efficient, equitable, accessible and timely manner.</p> <p><b>Clause 19.02-6S Open space</b></p> <p><i>To establish, manage and improve a diverse and integrated network of public open space that meets the needs of the community.</i></p> <p><b>Clause 19.02-6R Open space – Metropolitan Melbourne</b></p> <p><i>To strengthen the integrated metropolitan open space network.</i></p> <p><b>Clause 19.03-2S Infrastructure design and provision</b></p> <p><i>To provide timely, efficient and cost-effective development infrastructure that meets the needs of the community.</i></p>	<p>The identified clauses and associated objectives and strategies are relevant to North East Link, as the project would result in infrastructure impacts and potential opportunities, including open space land uses, as assessed in detail in Section 8 of Technical report 13 – Land use planning.</p> <p>Refer to relevant EES technical report for further detail on impacts other than land use that are associated with open space and infrastructure design considerations.</p>

### A.3.2 Local planning policy

**The tables below refer to sections of the Banyule, Boroondara, Manningham, Nillumbik, Whitehorse and Yarra Municipal Strategic Statements (MSS) and Local Planning Policies (LPP) of the Local Planning Policy Framework (LPPF) of relevance to the land use planning impact assessment.**

#### City of Banyule

Sections of the Municipal Strategic Statement and local policy within the Banyule Planning Scheme relevant to the land use planning impact assessment for North East Link are summarised in Table 6. The clauses referenced in Table 6 are reinforced by plans and strategies, which are summarised in Table 7.

**Table 6** City of Banyule local planning policy

Legislation/Policy/Guideline	Relevance to this impact assessment
Clause 21.01 – Municipal Profile	The City of Banyule is located between inner Melbourne and outer rural areas and forms an integral part of the regional open space network associated with the Yarra and Plenty River valleys which provide an environmental and recreational resource to metropolitan Melbourne. The municipality is seen as an ‘employer’ based on the provision of a broad range of employment opportunity to the region, notably industrial, retail and public sectors. The City of Banyule is also generally well serviced by public transport and roads that are part of the regional network, providing relatively good access to the Melbourne CBD and urban fringe.
Clause 21.02 – Vision and Strategic Framework	Banyule City Council’s vision refers to the need to manage development in the context of the municipality’s environmental assets, economic development as well as community development and support so that development of the municipality combines the <i>‘best features of the natural and urban environments with safety, convenience and the ability to manage social and economic change’</i> .
Clause 21.04 – Land Use	Clause 21.04 outlines a number of local policy issues which includes housing and the need to provide a diversity of housing types and housing affordability close to activity centres, including the Greensborough and Heidelberg Activity Centres located close to the study area.
Clause 21.05 – Natural Environment	Key objectives of clause 21.05 seek to protect, conserve and enhance areas of floral, faunal and habitat significance and the natural value of waterways and wetlands.  The clause recognises that rehabilitation and enhancement of remnant habitats is needed for a number of threatened indigenous species. Promoting their survival requires linking areas of natural habitat. Also of relevance to the project, the clause identifies natural habitats along the Yarra River, Plenty River and Darebin Creek as areas requiring rehabilitation to provide adequate buffers from development.
Clause 21.06 – Built Environment	Clause 21.06 identifies the prominent built environment issues and includes a Residential Areas Framework Map which provides guidance in relation to future residential development across the municipality. Of relevance to the study area are areas identified as ‘Accessible areas’ typically selected as suitable for higher density development with convenient access to the business core of an activity centre or neighbourhood centre and ‘incremental areas’ generally represented by single dwellings and medium density dwellings located further away from activity centres and the Principal Public Transport Network.
Clause 21.08 – Local Places (Activity Centres and employment precincts)	Clause 21.08 generally seeks to encourage retail activity and higher density development around nominated activity centres and employment precincts. Local places identified in the policy that are in proximity to the study area include the La Trobe National Employment (and Innovation) Cluster (NEIC), Greensborough Activity Centre, Watsonia Neighbourhood Centres and Diamond Village Neighbourhood Centre.

Legislation/Policy/Guideline	Relevance to this impact assessment
Clause 22.02 – Residential Neighbourhood Character Policy	<p>The Residential Neighbourhood Character Policy seeks to guide future development that contributes to the preferred character of an area, enhances community pride, sense of place and support for local economic growth and vitality.</p> <p>Residential land in the vicinity of the project is identified as Garden Court and Garden Suburb, with the former being typically characterised by low rise dwellings in spacious gardens and mature vegetation setting and the latter typically exhibiting a spacious leafy character and generally formal garden settings.</p>

Table 7 City of Banyule – plans and strategies

Policy/Guideline	Relevance to this impact assessment
<p><b>Banyule Integrated Transport Plan 2015-2035</b></p> <p>The Banyule Integrated Transport Plan provides long-term direction and objectives on future transport and land use decisions in the City of Banyule.</p>	<p>The Banyule Integrated Transport Plan identifies 22 strategic directions and 68 actions to improve transport across the municipality. The directions and actions relate to accessibility and mobility, land use and development, walking and cycling, public transport, streets and public spaces, and advocacy and leadership.</p> <p><i>A33 Improve cyclist navigation through wayfinding and directional signs.</i></p> <p><i>SD16 Arterial road upgrades will improve safety and amenity.</i></p> <p><i>A49 Ensuring safety and amenity on our arterial roads is very important to our community. Our arterial roads provide links through our municipality – understanding the key routes and links in Banyule plays a key part of ensuring these connections are managed to protect our residential areas.</i></p> <p><i>A51 Advocate for a North-East Link as a direct orbital link from the Metropolitan Ring Road to Eastlink.</i></p>
<p><b>Heidelberg Structure Plan 2010</b></p> <p>The Heidelberg Structure Plan identifies the preferred location for further higher density housing, retail and commercial uses and community facilities in Heidelberg Major Activity Centre and Biomedical Alliance Precinct Specialised Activity Centre Structure Plan.</p>	<p>The Heidelberg Major Activity Centre (HMAC) extends east to Warringal and Banksia Parklands, which is to the east of the study area. The Structure Plan sets out statutory policies and recommendations to change the land use of Heidelberg to enhance its liveability and sustainability. This would be achieved by increasing commercial activities and the residential population through mixed use medium density developments.</p> <p>Key relevant objectives include those centred around enhancing access and connection:</p> <p><i>2. Improve, promote and encourage safe cycling access to and within the precinct.</i></p> <p><i>5. Provide for vehicular accessibility and connectivity.</i></p> <p><i>6. Provide for convenient access to commercial premises by service and delivery vehicles.</i></p> <p><i>8. Ensure the efficient operation of the regional road network.</i></p>

Policy/Guideline	Relevance to this impact assessment
<p><b>Greensborough Activity Centre Structure Plan</b></p> <p>The Greensborough Activity Centre Structure Plan provides a detailed strategic basis and instrument for Greensborough's integrated town centre redevelopment. It highlights the underlying attributes of Greensborough as an important activity centre.</p>	<p>The Greensborough Activity Centre is located to the east further afield of the study area.</p> <p>The Greensborough Structure Centre Plan aims to change land use controls to support higher density, mixed use and Transit Oriented Developments (TOD) adjacent to the Greensborough railway station. The plan's vision aims to ensure local streets around the Greensborough Activity Centre are safe to accommodate a projected increase in pedestrians and cyclists. Objectives of relevance to North East Link include:</p> <p><i>To enhance the pedestrian experience of Flintoff Street as a major movement link connecting the station with Main Street.</i></p> <p><i>Development facing Flintoff Street and Grimshaw Street frontage should have active frontages at the ground level to provide a safe and lively environment.</i></p>
<p><b>Picture Watsonia – A Vision for Watsonia Village 2014</b></p> <p>Picture Watsonia articulates the aspirations of the community and describes what is possible to achieve in the future. It identifies many ideas to help Watsonia address the challenges of a growing and changing population, while strengthening and celebrating its character.</p>	<p>Watsonia Village is located directly adjacent (west) of North East Link. Picture Watsonia outlines a number of place-making and land use community suggestions to make Watsonia are more vibrant retail, residential and community hub.</p> <p>Objectives relevant to North East Link include to provide a new public park, increase community services (tool library, men's shed) and cultivate more foot traffic within Watsonia through place-making strategies (markets, public art, festivals) that rely on expanding the public urban realm, with the elimination of car parking and road space. The Banyule City Council has recently completed the streetscape and landscape improvements.</p> <p>The Council passed a resolution in June 2018 to refresh Picture Watsonia to include consideration of North East Link in developing a revised vision for the Watsonia town centre and transport interchange.</p>
<p><b>Banyule City Council Neighbourhood Character Strategy 2012</b></p> <p>The Neighbourhood Character Strategy chronicles features of the municipality's neighbourhood features such as buildings, trees and the landscape of its suburbs.</p>	<p>North East Link would pass through a number of suburbs within the central corridor of the City of Banyule. The Neighbourhood Character Strategy details the important attributes of each suburb's respective neighbourhood character and their respective development guidelines. The Neighbourhood Character Strategy highlights the Council's objective to preserve the character of the existing residential land uses within the municipality.</p>
<p><b>Banyule Open Space Plan 2016 – 2031</b></p> <p>The Open Space Plan lays out Banyule City Council's planning and decision-making relating to public open space for the next 15 years.</p>	<p>A number of open spaces identified in Open Space Plan are adjacent or in proximity to North East Link. These include large tracts of Council and Parks Victoria-managed open space sites along the Plenty River and Yarra River corridor that are identified in the Open Space Plan as having high ecological value.</p> <p>Further detail on ecological matters are covered in EES Technical report Q –Ecology and Technical report G – Arboriculture.</p> <p>A number of recommendations are put forward regarding improving access to open space for residents, increasing natural habit corridors and ecological diversity, providing new play experiences and strengthen pedestrian and cycling links within these open spaces.</p>

## City of Boroondara

Sections of the Municipal Strategic Statement and local policy within the Boroondara Planning Scheme relevant to the land use planning impact assessment for North East Link are summarised in Table 8. The clauses referenced in Table 8 are reinforced by plans and strategies, which are summarised in Table 9.

**Table 8** City of Boroondara local planning policy

Legislation/Policy/Guideline	Relevance to this impact assessment
<b>Clause 21.01 – Municipal Strategic Statement</b>	The City of Boroondara in Melbourne's inner east is characterised by low rise development, valued vegetation and public open space, including frontage on the Yarra River. Residential suburbs (and associated retail shopping strips) are the predominant land use, with protection of neighbourhood amenity and heritage concerns a key priority in the face of newer development. The municipality has a high degree of east-west accessibility but north-south links are weak. The proportion of highly educated residents continues to support the municipality as a suburban office location and key employment hub east of the CBD.
<b>Clause 21.02 – Objectives, Strategies and Implementation Themes</b>	Clause 21.02 of the local planning policy primarily refers to neighbourhood centres, local centres, commercial corridors and out of centre development. The policy seeks to prevent loss of active street frontages and retail and office floorspace to high density housing and is cognisant of the need to manage the impact of development on sensitive residential interfaces by way of visual bulk, noise, traffic and vehicle access. Preserving attractive heritage streetscapes, centre character and identity is also seen as a key issue for the municipality.
<b>Clause 21.03 – Environment and Open Space</b>	<p>Clause 21.03 sets out the Environment and Open Space policy with relevant objectives to North East Link being:</p> <ul style="list-style-type: none"> <li>• To provide an equitable distribution of open space, with an emphasis on filling gaps in the provision of open space</li> <li>• To diversify and improve the settings, services and facilities provided by the open space network to meet the needs of residents.</li> </ul> <p>Koonung Creek is identified to support important riverine ecosystems and the environment and the Yarra River environs comprise most of Boroondara's regional open space and provides a significant landscape feature within the municipality.</p>
<b>Clause 21.04 – Built Environment and Heritage</b>	Clause 21.04 sets out the Council's policy for the built environment and heritage protection. A key planning objective of Boroondara City Council is to ensure that development contributes positively to the existing or preferred neighbourhood character, while minimising adverse impacts on neighbouring properties. Achieving the preferred future character is to be achieved via key precinct character elements, a preferred future character, and design guidelines.
<b>Clause 21.05 – Housing</b>	<p>Clause 21.05 sets out the Council's housing policy. Boroondara's residential areas are much sought after, having an abundance of high quality community facilities and public infrastructure, a high level of residential amenity and quality of residential design. The Council has established a clear vision to facilitate a diverse range of housing in line with housing demand while ensuring the preferred character of established residential areas is achieved and residential amenity is maintained.</p> <p>Growth and diversity in housing is encouraged in identified areas, generally in the vicinity of activity centres, while moderate growth is envisaged for the majority of remaining residential areas including those adjacent to North East Link along the Eastern Freeway.</p>

Legislation/Policy/Guideline	Relevance to this impact assessment
<b>Clause 21.06 – Transport and infrastructure</b>	<p>Clause 21.06 sets out the Council's transport and infrastructure policy. Encouraging walking and cycling are seen as key to reducing the number of short motor vehicle trips and local traffic congestion in the City of Boroondara. The municipality's existing bicycle network is extensive and plays a central role in the wider Melbourne network.</p> <p>The municipality's road network is a grid network bordered by the Eastern Freeway to the north and the Monash Freeway to the south-west. The Yarra River creates pinch points, with east-west traffic movements funnelled into several crossing points. The local road network features long straight roads which can create traffic issues from motorists using these as alternative routes when arterial roads are congested. There is a need to address congestion and funnel traffic onto arterial routes to combat these 'rat-running' activities.</p>
<b>Clause 21.07 – Local Areas</b>	<p>Clause 21.07 covers the Kew Junction and Glenferrie Major Activity Centres which are nominated activity centres in the Victorian Government's metropolitan planning strategy, <i>Plan Melbourne 2017–2050</i>. The Kew Junction is the municipality's nearest relevant Activity Centre to North East Link. The local planning policy seeks to strengthen the role of the Activity Centre as a vibrant, mixed-use centre supporting a range of retail and commercial activity and encouraging increased residential density around select locations.</p>
<b>Clause 22.05 – Neighbourhood Character Policy</b>	<p>Clause 22.05 sets out the Council's Neighbourhood Character Policy. The policy refers to the Boroondara Neighbourhood Character Precinct Statements (2013), which is a reference document in the Boroondara Planning Scheme. The objective of the policy is to ensure new development retains and enhances the key character attributes that contribute to a precinct's preferred character.</p> <p>The majority of residential land adjacent to North East Link along the Eastern Freeway in the City of Boroondara is zoned Neighbourhood Residential Zone Schedule 3 (NRZ3), with a typical neighbourhood character that is identified in the policy as having a low rise suburban character in well-established gardens with a spacious character.</p>

Table 9 City of Boroondara – plans and strategies

Policy/Guideline	Relevance to this impact assessment
<p><b>Boroondara Integrated Transport Strategy 2006</b></p> <p>The Integrated Transport Strategy sets out a number of actions to achieve better integration of all forms of public transport.</p>	<p>The Boroondara Integrated Transport Strategy identifies actions to improve public transport, promote walking and cycling, and manage car travel more effectively.</p> <p>The strategy lists a number of actions applicable to the land use considerations associated with North East Link including:</p> <p><i>1.3 Investigate Additional Park and Ride Services – Encourage local park and ride use</i></p> <p><i>3.5 Improve Bus Priority – Support SmartBus Program.</i></p> <p><i>5.4 Regional Bicycle Routes – Improve regional bicycle routes – include connections to surrounding municipalities of Banyule, Manningham, Stonnington and Monash.</i></p> <p><i>7.6 Freight – Consider, identify and promote certain arterial roads for freight use (associated with deliveries to retail and office uses) to maintain and encourage use of the Eastern Freeway (northern boundary) and Monash Freeway (southern boundary).</i></p>

Policy/Guideline	Relevance to this impact assessment
<p><b>Boroondara Open Space Strategy 2013</b></p> <p>The Open Space Strategy provides the strategic direction for the future planning, provision, design and management of open space in Boroondara through to 2026.</p>	<p>The Boroondara Open Space Strategy identifies actions over a 15-year timeframe to enhance the municipality's open space.</p> <p>The strategy includes reserves that are within or adjacent to North East Link such as Koonung Creek Reserve, Yarra Flats Reserve, Hays Paddock and Columbia Street Reserve.</p> <p>Key actions identified for these areas include upgrades to improve and increase neighbourhood unstructured and informal recreational facilities and the ongoing improvement of environmental values.</p>
<p><b>Boroondara Housing Strategy 2015</b></p> <p>The Housing Strategy identifies key housing issues in Boroondara and provides objectives and strategies to address these issues, including impacts of population growth, preservation of neighbourhood character and heritage places.</p>	<p>The Boroondara Housing Strategy reviews the existing character of the municipality's suburbs and identifies where future population growth will occur. North East Link abuts a number of suburbs in the northern region of the City of Boroondara.</p> <p>The strategy places a strong emphasis on preserving the existing neighbourhood character of suburbs and the continued identification of heritage places within the municipality. The majority of the residential areas in proximity to North East Link have been identified to support moderate change, while increasing housing density has been earmarked for commercial areas such as Hawthorn East, Hawthorn, Camberwell and Kew Junction.</p>
<p><b>Boroondara Neighbourhood Character Precincts Statements 2013</b></p> <p>The Neighbourhood Character Precincts Statements divide residential areas into precincts that identify the common characteristics and preferred character of each precinct.</p>	<p>North East Link would abut a number of suburbs in the north of the City of Boroondara. The Neighbourhood Character Precincts Statements detail the important attributes of each precinct's respective neighbourhood character, and their respective development guidelines.</p> <p>The Precinct Statements highlight the Council's objective to preserve the character of the existing residential land uses within the municipality.</p>

## City of Manningham

Sections of the Municipal Strategic Statement and local policy within the Manningham Planning Scheme relevant to the land use planning impact assessment for North East Link are summarised in Table 10. The clauses referenced in Table 10 are reinforced by plans and strategies, which are summarised in Table 11.

**Table 10** City of Manningham local planning policy

Legislation/Policy/Guideline	Relevance to this impact assessment
<b>Clause 21.02 Municipal Profile</b>	<p>The City of Manningham is characterised by natural topographic features including the Yarra River, Koonung Creek and Mullum Creek. These influence the location of highly urbanised land uses to the west of the municipality and primarily semi-rural land uses to the east (areas outside the Urban Growth Boundary which are zoned Green Wedge).</p> <p>The municipality provides access to lifestyle attributes such as landscapes of significant environmental value and a broad range of recreational opportunities.</p> <p>Road-based movement flows are generally well supported, but the lack of rail-based public transport in the municipality places high importance improving the road network.</p> <p>Tourism is a key economic priority, based on the natural, historical and cultural assets and location of the municipality, which is the gateway to the Yarra Valley.</p>
<b>Clause 21.03 – Key Influences</b>	<p>Clause 21.03 identifies land use and development issues across the municipality. Relevant land use issues include.</p> <ul style="list-style-type: none"> <li>Residential development that consolidates the role of established urban areas and reduces pressure for development in more sensitive locations will be encouraged.</li> <li>Higher density housing proximate to activity centres, major roads and transport routes and that addresses changing demographic needs will be encouraged.</li> </ul>
<b>Clause 21.04 – Vision – Strategic Framework</b>	<p>Clause 21.04 sets out the strategic overview and key influences across the municipality. Of relevance to North West Link is the major gateway in Bulleen, the Bulleen Industrial Precinct and the Bulleen Plaza Activity Centre on Manningham Road, which nominates a preferred character of medium and higher density development.</p>
<b>Clause 21.05 – Residential</b>	<p>Clause 21.05 includes the Residential Framework Plan which seeks to manage change and growth in the residential areas of the municipality while maintaining residential amenity to facilitate current and ongoing residential use of land.</p> <p>Map 1 Residential Character Precincts in the Residential Framework Plan identifies the majority of residential land within and adjacent to the study area as Precinct 1, where an incremental level of change is anticipated. Areas relevant to North East Link are principally along Manningham Road leading to the Doncaster Hill Activity Centre are designated Precinct 2, where a substantial level of change is anticipated.</p>
<b>Clause 21.08 – Industrial</b>	<p>Clause 21.08 considers industrial land uses across the municipality. The Bulleen Industrial Precinct is one of three industrial areas identified within the City of Manningham. The local policy seeks to consolidate the role of the existing industrial areas of Bulleen and Templestowe. This would be achieved by discouraging the establishment of non-industrial uses within the Bulleen Industrial Precinct and minimising the need to rezone additional land for industrial uses.</p>
<b>Clause 21.09 – Activity Centres and Commercial Areas</b>	<p>Clause 21.09 relates to the Activity Centre network across the City of Manningham. Relevant to North East Link is the proximity of the Bulleen Plaza Major Activity Centre along Manningham Road and Doncaster Hill along the Eastern Freeway. Two small Neighbourhood Activity Centres are located on Templestowe Road and Bulleen Road.</p>

Legislation/Policy/Guideline	Relevance to this impact assessment
<b>Clause 21.12 – Infrastructure</b>	Clause 21.12 refers to the use of land for infrastructure provision and considers measures associated with the management of open space. While much of the Eastern Freeway upgrades (surface construction) for North East Link would be within the existing road corridor, some sections would encroach into adjacent areas of active and passive recreation/open space, potentially affecting the ability to achieve the open space land use management policy objectives.
<b>Clause 21.13 – Open Space and Tourism</b>	<p>Clause 2.13 refers to <i>‘Council’s vision for open space is to provide a range of active and passive recreation opportunities in accordance with community needs, which is readily accessible, conserves and enhances natural and cultural resources, contributes to the local economy, and contributes to an amenable environment in which to live, work and visit for current and future generations’</i>.</p> <p>The Open Space and Tourism Framework Plan 7 identifies key open space and cultural assets in the municipality, including parklands surrounding the Yarra River, Heide Museum and Bolin Bolin Billabong.</p>
<b>Clause 22.10 – Bulleen Gateway policy</b>	<p>Clause 22.10 refers to the Bulleen Gateway Policy which applies to the Bulleen Industrial Precinct and seeks to maintain the integrity of the residential and industrial land.</p> <p>Bulleen is subject to a number of development pressures from industrial, commercial and retail development and transport-based impacts, including road development. Bulleen is a major gateway to the City of Manningham and adjoins the significant Yarra Valley Parklands and Yarra River. The Municipal Strategic Statement encourages the improvement and enhancement of the function of the Bulleen Gateway area.</p>
<b>Clause 22.16 – Industrial Area Policy</b>	Clause 22.16 sets out the Industrial Area Policy which relates to the industrial centres of Bulleen and Templestowe. The policy notes that Clause 21.08 of the Municipal Strategic Statement recognises there are no further opportunities for the development of new industrial centres within the municipality. The policy indicates it is important to discourage the establishment of non-industrial uses in the Bulleen and Templestowe industrial precincts and to consolidate their industrial role. The policy also indicates that use and development in the industrial centres does not have a detrimental impact on the existing industrial land uses or nearby land uses, such as residential.
<b>Clause 22.17 – Eastern Golf Course Key Redevelopment Site Policy</b>	<p>Clause 22.17 sets out the Eastern Golf Course Key Redevelopment Site Policy for the site at 463 – 535 Doncaster Road, Doncaster. The policy provides a strategic policy framework for redevelopment of the site which covers approximately 47 hectares and encompasses areas of environmental and cultural heritage value.</p> <p>The policy seeks to encourage mostly residential uses, with a limited range of non-residential uses at appropriate locations that serve the local community. The policy also seeks to facilitate an open space network that supports an integrated pedestrian and cycling network that provides linkages to the surrounding activity centres, public transport networks and other community facilities.</p>

Table 11 City of Manningham – plans and strategies

Policy/Guideline	Relevance to this impact assessment
<p><b>Eastern Golf Course Development Plan September 2014 by Mirvac</b></p> <p>Prepared by Mirvac, the Eastern Golf Course Development Plan outlines the urban design, residential and open space requirements of the Eastern Golf Course Development Plan Overlay, and <i>Clause 22.17 Eastern Golf Course Key Redevelopment Site Policy</i>.</p>	<p>The Eastern Golf Course (now known as Tullamore) is north of North East Link, along Doncaster Road. Mirvac is redeveloping the site into detached dwellings and townhouses, with new public open space included.</p>
<p><b>Make Manningham Mobile Transport Strategy 2010</b></p> <p>The Mobile Transport Strategy sets out the actions to improve, manage and promote all transport modes, with particular emphasis on sustainable transport such as walking, cycling and public transport.</p>	<p>The municipal-wide Mobile Transport Strategy sets targets to increase sustainable and active transport use by City of Manningham residents and businesses. The strategy stipulates the road and public transport infrastructure investment that Council believes is required to achieve sustainable development. It should be noted the City of Manningham is the only Melbourne municipality without tram or train services.</p> <p>A key objective of the Mobile Transport Strategy is to work with relevant government agencies to increase investment in much needed public transport infrastructure in the municipality.</p> <p>The Mobile Transport Strategy argues that buses are the immediate solution to the transport problem faced by residents. The Council recommends an enhanced Doncaster Area Rapid Transit (DART) bus system, which is classified as a 'high' priority. The strategy also supports investigating linking the M80 Ring Road to the Eastern Freeway.</p>
<p><b>Manningham Activity Centre Strategy 2005</b></p> <p>The Active Centre Strategy sets out the future planning needs for the municipality's Neighbourhood Activity Centres.</p>	<p>The Activity Centre Strategy identifies opportunities and actions for the City of Manningham's Activity Centres so they develop into vibrant, prosperous and sustainable centres over the next 20 years. These include centres within the vicinity of North East Link and include Major Activity Centres (The Pines and Doncaster Hill) and Neighbourhood Activity Centres (including Bulleen Plaza and Doncaster East).</p> <p>The Activity Centre Strategy is focused on encouraging medium-density developments, while protecting surrounding low density suburbs from intensification. The strategy also outlines actions to improve public transport, bike and pedestrian network connectivity within the Activity Centres.</p>
<p><b>Manningham Open Space Strategy 2014</b></p> <p>The Open Space Strategy sets priorities and guidelines for the protection, development and use of public open space in the municipality over 10 years.</p>	<p>The Open Space Strategy sets the Council's intention to improve the quality and quantity of open space across the City of Manningham. The strategy seeks to enhance open space in the municipality by providing more recreational facilities and natural habitat to support local biodiversity.</p> <p>The scope of the Open Space Strategy includes open space adjacent or in close proximity to North East Link, such as Koonung Reserve Linear Park. The strategy also provides the basis and overarching direction of management plans for key reserves within Manningham, including Koonung Creek Linear Park and Koonung Park. These reserves are earmarked for future landscaping and community infrastructure improvements in the Open Space Strategy.</p>

Policy/Guideline	Relevance to this impact assessment
<p><b>Koonung Creek Linear Park Management Plan 2011</b></p> <p>The objective of the Koonung Creek Linear Park Management Plan is to continue to protect and enhance the environmental values of the Koonung Creek Linear Park, balanced with the provision of recreational opportunities and experiences.</p>	<p>The Management Plan states the actions required to improve the amenity of the Koonung Creek Linear Park for local users as well as the quality of the natural habitat. Koonung Creek is adjacent to the Eastern Freeway. The vision of the plan is to improve open space and recreation opportunities, while also sustaining the natural environment of Koonung Creek.</p> <p>The relevant strategies of the Management Plan include:</p> <p><i>Upgrade or install supporting infrastructure; ie toilets, way finding signage, drinking fountains, exercise equipment, secondary paths, connections, car parking, seating and a dedicated area for dog owners to exercise their dogs</i></p> <p><i>To offer a variety of landscapes and accessible paths</i></p> <p><i>Investigate linkages with Bulleen Park, Mullum Creek Linear Park, Doncaster and surrounding open space and activity centres</i></p> <p><i>To protect and conserve the natural environment including rehabilitating and restoring degraded areas.</i></p> <p><i>To align the municipal boundary with the freeway.</i></p>
<p><b>Koonung Park Management Plan 2016</b></p> <p>The Management Plan stipulates the objectives and actions for the future development of the Park.</p>	<p>The goal of the Koonung Park Management Plan is to provide high quality recreation services that respond to community demand, respect the natural environment and are maintained effectively into the future. The relevant strategies of the plan include:</p> <p><i>New paths improving access through the Park to specific community facilities</i></p> <p><i>Options for the community tennis courts</i></p> <p><i>Improvements to the carpark</i></p> <p><i>Landscaping and planting throughout the Park to improve amenity.</i></p>
<p><b>Manningham Residential Character Guidelines 2012</b></p> <p>The purpose of the Residential Character Guidelines is to ensure development is in line with the surrounding context and changing community needs.</p>	<p>City of Manningham residential areas are adjacent to North East Link. The Residential Character Guidelines detail the important attributes of each suburb's respective residential character and development guidelines.</p> <p>The guidelines highlight the Council's objective to preserve the character of the existing residential land uses within the municipality.</p>
<p><b>Manningham Streetscape Character Study 2009</b></p> <p>The Streetscape Character Study provides a streetscape character assessment of the key characteristics of City of Manningham suburbs. The study includes a list of implementation activities that can assist in enhancing the identifiable character of the municipality and its individual areas.</p>	<p>The Streetscape Character Study seeks to provide assessment of the characteristics of each residential neighbourhood, including native vegetation of the suburbs and main roads across the municipality. The aim is to enhance the character of residential areas and strengthen their sense of identity.</p> <p>North East Link would abut mostly residential land uses and open space areas within the City Manningham. The Streetscape Character Study reflects the Council's aspiration for the municipality to continue to reflect the qualities of the natural environment and to maintain each suburb's sense of identity.</p> <p>The key action of the Streetscape Character Study relevant to North East Link is the implementation program to enhance the character of Manningham, which includes a capital works program, Streetscape Improvement Program, Streetscape Improvement in Street Light Replacement Area, Subdivision Street Trees, Tree Planting Timing Planting Processes, and Strategic Open Space and Streetscape Design Task Force.</p>

## Nillumbik Shire

Sections of the Municipal Strategic Statement and local policy within the Nillumbik Planning Scheme relevant to the land use impact assessment for North East Link are summarised in Table 12. The clauses referenced in Table 12 are reinforced by plans and strategies, which are summarised in Table 13.

**Table 12** Nillumbik Shire local planning policy

Legislation/Policy/Guideline	Relevance to this impact assessment
<b>Clause 21.03 – Municipal Profile and Key Influences</b>	<p>The Municipal Profile and Key Influences are discussed in Clause 21.03 of Nillumbik Shire Council's Planning Scheme. With respect to residential land use, the policy recognises the importance of maintaining the land uses and the rural landscapes. The policy also states the need to protect agricultural land from inappropriate development (including subdivision). Similarly, the protection of land uses in rural areas is identified as an outcome within the Council's Green Wedge Management Plan.</p> <p>The local policy identifies the following influence of relevance to North East Link:</p> <p><i>'The high level of car usage and projected population increase may encourage the upgrade of arterial roads in the municipality. Similarly, there is mounting pressure for the sealing of rural connector local roads to provide improved access and to reduce the amount of sediment making its way into streams and rivers. The construction of new roads or road upgrades should be considerate of possible impacts on the rural amenity and should be consistent with local environmental values. Alternative travel arrangements such as public transport should be explored'.</i></p> <p>Clause 21.03 also states that a number of Activity Centres are key providers of goods and services, employment and higher density housing, including Diamond Creek and Eltham Activity Centres.</p>
<b>Clause 21.05 – Objectives, Strategies and Implementation</b>	<p>A relevant objective Clause 21.05 refers to Settlement and Housing where it is recognised that containing urban development is required to avoid outward metropolitan growth. An additional key objective is to protect, enhance or create open space linkages in the municipality.</p>
<b>Clause 22.01 – Medium Density Housing Policy</b>	<p>Clause 22.01 identifies that locations considered most appropriate for medium density residential development are those in already urbanised areas close to services and transport, assisting to protect the highly valued extensive natural and rural aspects of the Shire.</p>
<b>Clause 22.12 – Neighbourhood Character Policy</b>	<p>The Neighbourhood Character Policy implements the findings of the Shire of Nillumbik Neighbourhood Character Study 2000, which identifies the key existing characteristics and preferred future character of the Shire's residential areas.</p> <p>Of relevance to residential areas in the vicinity of North East Link, the Neighbourhood Character Policy states the built form of the residential land use in the precinct is Garden Court, which features predominantly two-storey 1970s – 1980s dwellings with mostly low hipped or split gable roof forms. The dwellings are located on curvilinear street layouts, which feature significant maturing canopy of native and exotic vegetation.</p>
<b>Clause 22.14 – Diamond Creek Major Activity Centre</b>	<p>The Diamond Creek Activity Centre is a shopping, service and community centre for Diamond Creek and adjoining areas of the Shire. It contains a range of retail, commercial, community and leisure activities and facilities, and is serviced by public transport the Hurstbridge rail line, limited bus services and a road network dominated by Main Hurstbridge Road.</p> <p>The area is designated as an Activity Centre within Plan Melbourne for the purpose of consolidating retail, commercial and residential development while meeting the needs of the community.</p>

Table 13 Nillumbik Shire – plans and strategies

Policy/guideline	Relevance to this impact assessment
<b>Nillumbik Trails Strategy 2011</b> The Trails Strategy guides the development of additional recreation trails in Nillumbik.	The vision of the Nillumbik Trails Strategy is to expand the bike and trail network over the next decade within the Shire. A number of new trails are proposed, which are located near North East Link.
<b>Nillumbik Biodiversity Strategy and Action Plan 2011</b> The Biodiversity Strategy and Action Plan sets the strategic direction for biodiversity management across the Shire of Nillumbik to inform programs, standards and targets for the Shire.	The Biodiversity Strategy and Action Plan aims enhance areas of biodiversity significance and to protect important habitat corridors in the Shire. North East Link is adjacent to the Lower Plenty River, which is identified within the Biodiversity Strategy as an important ecological asset within the Shire.
<b>Diamond Creek Major Activity Centre Structure Plan and Leisure Facilities Plan 2006</b> Major Active Centre Structure Plan and Leisure Facilities Plan detail the vision and priorities for new infrastructure in the town centre and its immediate surrounds.	The Major Activity Centre Structure Plan and Leisure Facilities Plan deals with land use, buildings and landscape, community and leisure facilities, and transport and mobility considerations at the Diamond Creek Activity Centre. It sets out an overall vision for the Activity Centre and objectives, strategies and actions focused on providing employment, services and higher density housing in an accessible Activity Centre on the fringe of Melbourne.
<b>Nillumbik Green Wedge Management Plan 2010-2025</b> The Green Wedge Management Plan sets out the concept of green wedges as rural landscapes and natural areas separating corridors of urban development.	Key objectives of the Green Wedge Management Plan are to conserve and enhance natural and cultural values, bush and rural landscapes and create a local identity that connects community knowledge and support of the green wedge. North East Link would be located outside the green wedge area of the Shire of Nillumbik but these areas form a large part of the Shire's key attributes and strategic policy framework.
<b>Nillumbik Housing Strategy 2001</b> The Housing Strategy seeks to address housing diversity, unsustainable residential development negatively impacting the environment and neighbourhood character and capitalising on opportunities to accommodate and consolidate future household growth in existing urbanised areas.	A key relevant objective of the Housing Strategy is the need to encourage a range of housing types in urbanised areas close to Activity Centres to protect the green wedge concept.

## City of Whitehorse

Sections of the Municipal Strategic Statement and local policy within the Whitehorse Planning Scheme relevant to the land use impact assessment for North East Link are summarised in Table 14. The clauses referenced in Table 14 are reinforced by plans and strategies, which are summarised in Table 15.

**Table 14** City of Whitehorse local planning policy

Legislation/Policy/Guideline	Relevance to this impact assessment
<b>Clause 21.01 – Municipal Profile</b>	<p>Clause 2.01 summarises the municipal profile of the City of Whitehorse and provides an overview of key issues within the municipality. The Activity Centres in the municipality are identified as a key strength for the region.</p> <p>A number of key Activity Centres, including the Box Hill Employment Precinct (also listed as a Metropolitan Activity Centre in Plan Melbourne) have some of the biggest concentrations of office space outside the Melbourne CBD and St Kilda Road. Key health and education facilities are also located in the Box Hill Activity Centre, and areas of retail and industrial activity such as the Nunawading 'MegaMile' represent important contributors to the local economy. The municipal profile also notes the City of Whitehorse is served by the arterial road network and freeway linkages, supporting the flow of goods, services and people.</p> <p>Clause 21.01 notes the Koonung Creek holds significant recreational value with an advanced open space network highly valued by the community.</p>
<b>Clause 21.05 – Environment</b>	<p>Clause 21.05 recognises the urgency for appropriate controls to avoid further loss of the municipality's environmental assets, including the protection of areas of special significance and of vegetation.</p>
<b>Clause 21.06 – Housing</b>	<p>Clause 21.06 sets out the Council's Housing Policy. The City of Whitehorse is seen as a middle-ring municipality where Activity Centres are identified for areas of increased housing growth, while areas of Limited Change and Natural Change (the majority of residential areas within proximity to the North East Link land use impact assessment study area) seek to maintain the existing character or allow for modest housing growth. Clause 21.06 also notes the municipality's leafy character is valued.</p>
<b>Clause 21.08 – Infrastructure</b>	<p>Clause 21.08 seeks to ensure adequate road capacity is provided to meet the future needs of the municipality and recognises that future roads should only be constructed where they provide a net benefit to the community and must be designed and developed in a manner which is environmentally sensitive, while minimising impacts on abutting land uses, particularly if they abut residential uses. Maximising the existing arterial network and minimising non-residential traffic on residential streets is also an objective.</p>
<b>Clause 22.06 – Activity Centres</b>	<p>Clause 22.06 sets out the Council's policy to support the development of Metropolitan Activity Centres for their role in servicing a regional catchment. Objectives include the need to improve the appearance and amenity of Activity Centres by enhancing connectivity and access.</p> <p>The clause identifies a number of Activity Centres relevant to North East Link, including Neighbourhood Activity Centres (such as the Woodhouse Grove and Station Street, Box Hill) and Box Hill and Nunawading MegaMile Activity Centres.</p>

Table 15 City of Whitehorse– plans and strategies

Policy/Guideline	Relevance to this impact assessment
<b>Whitehorse Industrial Strategy 2011</b> The Industrial Strategy provides a framework to develop ongoing employment and business investment in eight key industrial areas within the City of Whitehorse.	<p>The Industrial Strategy sets out actions to enhance the economic health and success of City of Whitehorse industrial estates. It stresses the importance of the existing industrial land uses for local jobs and spill-over economic activity. The Joseph Street Industrial Estate is located directly south of the Eastern Freeway element of North East Link. While not one of the largest estates within the municipality, the Industrial Strategy acknowledges the important economic and employment role of the Joseph Street Industrial Estate within the municipality.</p> <p>The Industrial Strategy acknowledges the importance that ‘freight transport and logistics have access to, and are able to operate on, a sustainable and efficient freight network’ to ensure timely and cost effective access to goods and services.</p>
<b>Elgar Park Master Plan Draft 2016</b> The Master Plan establishes a clear pathway for future development at Elgar Park, with the intention of improving its facilitation of recreational and sporting activity, while balancing environmental qualities.	<p>Elgar Park is located to the south of the Eastern Freeway and is within the project boundary of North East Link. The Master Plan identifies future landscaping and community infrastructure works at Elgar Park, which would increase public activity and ecological biodiversity within the area.</p>
<b>Whitehorse Open Space Strategy 2007</b> The Open Space Strategy sets a cohesive direction for the future provision, planning, design and management of publicly owned land in the City of Whitehorse that is set aside for leisure, recreation and nature conservation purposes.	<p>The Open Space Strategy stipulates future Council investment in community infrastructure as well as ongoing maintenance of existing revegetation works across the municipality. The strategy includes reserves within or adjacent to North East Link, such as Koonung Creek Linear Park.</p> <p>The Eastern Freeway Linear Reserve and Koonung Creek Linear Park are identified to receive ‘maintenance of existing revegetation work, progressive increase of indigenous vegetation over time’. It was noted that Melbourne Water has been earmarked to focus on improving ‘the streamside zone rather than in-stream values’.</p>
<b>Whitehorse Housing Strategy 2014</b> The Housing Strategy provides a framework that encourages and supports the provision of housing in the City of Whitehorse that meets residents’ needs	<p>The Housing Strategy reviews the existing character of the municipality’s suburbs and identifies housing development trends. North East Link would abut a number of suburbs in the northern region of the City of Whitehorse.</p> <p>The Housing Strategy identifies Activity Centres as the best places to accommodate additional housing growth, also recognising the desire to preserve areas of valued character and vegetation or landscape significance.</p>
<b>Whitehorse Neighbourhood Character Study 2014</b> The Neighbourhood Character Study describes the prevailing character types of the City of Whitehorse and guides development that will maintain and enhance the established character.	<p>Land use objectives and strategies outlined in the Neighbourhood Character Study identify preferred locations for growth—substantial change, natural change and minimal change—and preferred design objectives and responses.</p> <p>North East Link would abut mostly residential land uses and open space areas within the City of Whitehorse. The Neighbourhood Character Study reflects the Council’s aspiration for the municipality to continue to maintain each suburb’s sense of identity.</p>

Policy/Guideline	Relevance to this impact assessment
<b>Box Hill Transit City Structure Plan 2007</b> The Structure Plan identifies the appropriate development controls and policies to facilitate urban consolidation within the Box Hill Activity Centre.	<p>The Box Hill Activity Centre is located to the south of the study area of the North East Link land use assessment, along the Eastern Freeway.</p> <p>The Box Hill Structure Plan details statutory planning land use recommendations, policies and guidelines to facilitate Box Hill's development into a successful mixed use high density Activity Centre. In regard to transport policy, the plan focuses on increasing active and sustainable transport modes within the Activity Centre as well as access to Box Hill.</p> <p>Box Hill is one of Melbourne's most successful metropolitan Activity Centres. This is due to its diverse employment options, services and housing stock, supported by good transport and road connections.</p> <p>Key relevant objectives of the Structure Plan include:</p> <p><i>4.4.A Improve existing transport infrastructure</i></p> <p><i>4.4.C Improve bus routing and services.</i></p>
<b>Nunawading MegaMile Major Activity Centre and Mitcham Neighbourhood Activity Centre Structure Plan 2008</b> The Structure Plan guides future planning of the Mitcham Neighbourhood Activity Centre and Nunawading Major Activity Centre.	<p>The Structure Plan refers to the role of Nunawading MegaMile as a Major Activity Centre and Mitcham as a designated Neighbourhood Activity Centre. The plan guides future development of these Activity Centres to increase their attractiveness with a mix of businesses that service the community's needs.</p> <p>Nunawading MegaMile and the Mitcham Neighbourhood Activity Centre are located further afield to the south of the North East Link land use assessment study area along the Eastern Freeway, but the objectives relating to improving access and linkages to the area are of relevance.</p>
<b>MegaMile (west) and Blackburn Activity Centres Urban Design Framework 2010</b>	<p>The MegaMile [West] Major Activity Centre is considered to have a regional role as a bulky goods retailing destination. Good access and movement linkages for private vehicles is seen as key to the future of this retailing centre.</p>

## City of Yarra

Sections of the Municipal Strategic Statement and local policy within the Yarra Planning Scheme relevant to the land use impact assessment for North East Link are summarised in Table 16. The clauses referenced in Table 16 are reinforced by plans and strategies, which are summarised in Table 17.

**Table 16** City of Yarra local planning policy

Legislation/Policy/Guideline	Relevance to this impact assessment
<b>Clause 21.02 Municipal Profile</b>	<p>The City of Yarra's retail activity centres extending along much of its arterial road network are prominent components of the urban fabric and an important economic driver for the municipality.</p> <p>The Strategic Framework plan at Clause 21.03 identifies Johnston Street as a Neighbourhood Activity Centre, which is located further afield to the south of North East Link.</p> <p>The Yarra River and its adjoining linear open space reserves are valued by City of Yarra residents and to wider metropolitan Melbourne for their recreational and nature conservation values.</p> <p>The Council identifies significant traffic and transport challenges with amenity being adversely impacted by high volumes of traffic moving through the municipality, much of it bound for destinations outside the City of Yarra. However, a positive outcome of the municipality's central location is its access to well established public transport networks.</p>
<b>Clause 21.04 Land Use</b>	<p>Clause 21.04-1 acknowledges the City of Yarra is experiencing consistent residential growth, a trend forecast to continue. The clause notes that areas in Mixed Use or Business zones will accommodate growth, while most established Residential 1 zones will experience minimal change. Land within the vicinity of North East Link is zoned for these uses.</p> <p>Clause 21.04-5 recognises that potential to expand the City of Yarra's open space network is limited, so protecting and enhancing the assets of the existing system is the focus. A key objective is to establish a linked open space network, including development of a walking and cycling path network across open space assets.</p> <p>Industry office and commercial uses are located within the vicinity of North East Link. Fostering service businesses is seen as a key objective, assisting to maintain employment levels within the City of Yarra.</p>
<b>Clause 21.05 Built Form</b>	<p>Clause 21.05 sets a key objective to protect and enhance the City of Yarra's heritage places, with over half of the municipality having heritage protection, underpinning Yarra's valued character. Improving the built form character of transport corridors is also important given '<i>transport corridors offer a window into the City of Yarra seen by thousands of people every day</i>'.</p>
<b>Clause 21.06 Transport</b>	<p>Clause 21.06 affirms the commitment of Yarra City Council to promote walking, cycling and public transport, with key objectives seeking to provide safe and convenient pedestrian and bicycle environments and to facilitate public transport usage.</p>

Table 17 City of Yarra – plans and strategies

Policy/Guideline	Relevance to this impact assessment
<b>City of Yarra Strategic Transport Statement</b> The Strategic Transport Statement chronicles the actions, progress and proposed actions of transport projects.	The Strategic Transport Statement sets the actions and investments required to boost sustainable transport usage and the liveability of the City of Yarra. The key action relevant to North East Link are: <i>STO3 – Advocate for increased performance of public transport across Melbourne and thereby reduce the number of car trips and through traffic by both Yarra and non-Yarra residents.</i> <i>STO4 – Ensure that any new road construction is not in conflict with encouraging more sustainable transport use.</i> <i>STO 2 – Create the most bicycle friendly city in Australia and increase the numbers of those cycling in Yarra.</i>
<b>Johnston Street Local Area Plan 2015</b> The Local Area Plan sets a future vision and framework for the Johnston Street Activity Centre.	The focus of the Local Area Plan is south of the North East Link land use study area, stretching from Johnston Street next to the Yarra River (Abbotsford) at the east through to Smith Street (Collingwood) in the west. Relevant directions include to increase pedestrian activity at street level in the area, and concentrate development close to Victoria Park railway station as part of a broader urban renewal of the area.
<b>Yarra Business and Industrial Land Strategy 2012</b> The Business and Industrial Land Policy explores the demand and supply side contexts for business and industrial land in the City of Yarra, the local policy context and presents a summary of precincts and consultation findings.	The Business and Industrial Land Strategy provides practical guidance for the Council and local stakeholders for land use planning on industrial land adjacent to North East Link on Hoddle Street, Trenerry Crescent and Alexander Parade East. The strategy identifies that land parcels adjacent to North East Link have the potential to be converted into mixed use land uses that could accommodate alternative employment through commercial office conversions and new residential dwellings.
<b>Yarra Open Space Strategy 2006</b> The Open Space Strategy guides the future provision, planning, design and management of public land reserved for recreation and nature conservation purposes – the parks, gardens and other reserves that make up the City of Yarra's open space network	The Open Space Strategy provides a high level direction for the conservation and expansion of the City of Yarra's open space. The strategy includes open spaces adjacent to North East Link including Victoria Park, Yarra Bend Park and Fairfield Park. A number of the recommendations identified in the strategy have been undertaken. These include the Victoria Park Oval Redevelopment and improvements in active transport infrastructure where the strategy seeks to ' <i>improve the walking and cycling links between open space reserves, including additional access points into linear trail systems and improvements to on-street pedestrian and cycle access and amenity</i> '. The Open Space Strategy is being updated and is currently undergoing community consultation.
<b>Alphington Paper Mill Development Plan 2016</b>	The Alphington Paper Mill site in Alphington is a 16.5-hectare parcel of land located further afield of the North East Link land use impact assessment study area, on the corner of Heidelberg road and the Chandler Highway and extending down to the Yarra River. The paper mill site represents a major strategic redevelopment opportunity for Melbourne, with redevelopment already underway. The Development Plan was finalised in May 2016 and incorporated into the planning scheme via Amendment C161 after being adopted by Yarra City Council in December 2015. The Development Plan outlines the master planning for reuse of the site as a mixed used residential community. A key principle of the Development Plan is to facilitate walking and cycling connectivity and linkages with public transport.

## A.4 Strategic policy

Australian, Victorian and local government strategic policy documents considered relevant to the land use impact assessment for North East Link are summarised in Table 18 and Table 19.

Table 18 Australian Government policy and guidelines

Policy/Guideline	Relevance to this impact assessment
<b>Infrastructure Australia – Infrastructure Priority List</b> Infrastructure Australia is an independent Commonwealth body with a mandate to prioritise and progress nationally significant infrastructure. The Infrastructure Priority List details the significant projects that can improve the nation's liveability, productivity and sustainability and has been developed to guide government decision making on future infrastructure spending priorities.	The Infrastructure Priority List identifies North East Link as a Priority Initiative. A Priority Initiative is a project that seeks to address a problem or opportunity of national significance. North East Link would seek to address congestion and capacity constraints in the north-eastern Melbourne corridor, providing support for commercial and freight transport activities that are constrained by the existing network.
<b>Department of Prime Minister and Cabinet – Smart Cities Plan</b> The Smart Cities Plan sets out the Australian Government's vision for the nation's metropolitan and regional cities and its commitment to smart investment, smart policy and smart technology to deliver better outcomes	North East Link is consistent with the objectives stipulated in the Smart Cities Plan as it aims to improve connections and access for residents, improve connections and access for business, improve freight efficiency and industrial growth and improve safety and reduce local congestion for communities.

Table 19 Victorian Government policy and guidelines

Policy/Guideline	Relevance to this impact assessment
<p><b>Plan Melbourne 2017–2050</b></p> <p>Plan Melbourne provides guidance on the development and growth of Melbourne over the next 35 years and is the key strategy for supporting jobs, housing and transport. Plan Melbourne seeks to integrate long-term land use, infrastructure and transport planning.</p>	<p>North East Link is recognised in Plan Melbourne as a project that will contribute to an integrated transport system connecting people to jobs and services. Plan Melbourne notes that for Melbourne to create an integrated transport system, there needs to be improvements in the arterial road connections and road upgrades to support the freight network.</p> <p>The strategic need for North East Link is recognised in Plan Melbourne. Specific references to North East Link are included at Map 2 of the Melbourne 2050 plan and at Policy 2.1.5 and 3.4.1, which specifically refer to North East Link in improving efficiency of the motorway and freight networks.</p> <p>Key strategic directions identified in Plan Melbourne of relevance to North East Link are centred around improving connectivity, maintaining neighbourhood amenity, supporting employment and economic development, facilitating urban consolidation to maintain the UGB and the '20 minute neighbourhood concept' and consideration of locally and regionally significant environmental and heritage values.</p> <p>North East Link would implement key directions identified in Plan Melbourne by Providing of an integrated transport network, general use of existing alignments for above ground infrastructure in already urbanised areas, access and connectivity to centres of employment and investment (such as the La Trobe NEIC and Activity Centres in areas surrounding North East Link) and designing for extensive underground components located in the vicinity of the Yarra River and surrounding regionally significant open space.</p>
<p><b>Infrastructure Victoria 30 Year Strategy, 2016</b></p> <p>Victoria's first ever infrastructure strategy and sets out a pipeline of projects to be delivered over the next three decades. The strategy sets out a number of objectives, needs and recommendations to help create the best possible future for all Victorians.</p>	<p>Infrastructure Victoria identifies North East Link as a short to medium priority in its 30-year strategy as the project fulfils Need 11 – <i>Build new transport links to enhance the accessibility of the major employment centres (Latrobe NEIC and the Epping, Ringwood and Broadmeadows Major Activity Centres)</i> and Need 13 – <i>Increase the capacity and connectivity of Victoria's freight network.</i></p> <p>Infrastructure Victoria's 30-year strategy also specifies that North East Link would will 'provides accessibility through some of the most congested parts of the road network ... improved cross-town travel'.</p>
<p><b>Delivering the Goods – Victorian Freight Plan, 2018</b></p> <p>The Freight Plan builds upon previous freight plans and policies, plans and strategies across land use planning, transport, infrastructure, economic development, to provide the framework for achieving an efficient safe and sustainable freight and logistics system for the State.</p>	<p>The Victorian Freight Plan identifies North East Link as a key major investment to boost freight efficiency and support the freight network. A number of short, medium and long-term priorities to support Victoria's freight and logistics network are identified, including North East Link. The project is identified as a key medium-term (5–10-year) action in the expansion of the High Productivity Freight Vehicles (HPFV) network, which is seen as key in the management of existing and proposed freight corridors and places in conjunction with urban form changes</p>
<p><b>Victoria the Freight State – the Victorian Freight and Logistics Plan, 2013</b></p> <p>The Freight and Logistics Plan outlines the Victorian Government's long-term vision for managing freight to improve freight efficiency and grow productivity.</p>	<p>North East Link would assist in achieving the objectives of the Victorian Freight and Logistics Plan by helping to increase freight efficiency and growing the sector's productivity by removing freight from local roads and investing in enhanced network links by ensuring the safe movement of freight through metropolitan Melbourne.</p>

Policy/Guideline	Relevance to this impact assessment
<p><b>Yarra River Protection (Amendment GC48)</b></p> <p>Amendment GC48 applies to land within approximately 500 metres of the Yarra River between Punt Road, Richmond and the outer extent of the township of Warrandyte.</p>	<p>Amendment GC48 seeks to protect the Yarra River from inappropriate development which encroaches on the landscape and environmental values of the Yarra River corridor.</p> <p>Statutory planning controls introduced by the amendment include new or updated Design and Development Overlays (DDO), new Significant Landscape Overlays (SLO), schedules on an interim basis for four years and impacts Banyule, Boroondara, Manningham, Nillumbik, Stonington and Yarra Planning Schemes.</p> <p>Each new control provides a consistent approach to managing built form and vegetation removal throughout the Yarra River corridor. The amendment builds on and concludes previous strategic work undertaken for the Yarra River by the Victorian Government as well as local governments, and is consistent with State Planning Policy Framework (SPPF) clause 12.03-1R 'Yarra River Protection'.</p>
<p><b>La Trobe National Employment and Innovation Cluster (NEIC) Draft Framework Plan, 2017</b></p> <p>The La Trobe NEIC Draft Framework Plan is a strategic action plan and part of the implementation of Plan Melbourne 2017–2050. The Draft Framework Plan incorporates visions and actions for developing La Trobe University, Heidelberg Major Activity Centre and Medical Precinct, Northland and Heidelberg West employment areas.</p>	<p>Key strategic outcomes the La Trobe NEIC Draft Framework Plan sets that are relevant to North East Link include the need for a <i>'transformed transport network that supports the economic growth of the cluster'</i>.</p> <p>North East Link is specifically mentioned in the Draft Framework Plan, which recognises that determining potential links between North East Link and the cluster should be a key short-term action.</p>
<p><b>Northern Regional Trails Strategy, 2016</b></p> <p>The Councils of Banyule, Darebin, Hume, Moreland, Nillumbik and Whittlesea developed the Northern Regional Trails Strategy to improve and develop trails in the northern region.</p>	<p>North East Link would pass through municipalities that are included in the Northern Regional Trails Strategy. The strategy proposes an integrated trail network across the region and lists 29 priority trails for short-term implementation. A number of trails identified are close to North East Link.</p>
<p><b>Ministerial Direction 9 – Metropolitan Planning Strategy</b></p> <p>The purpose of this Ministerial Direction 9 is to ensure that planning scheme amendments have regard to the Metropolitan Planning Strategy.</p>	<p>The planning framework for metropolitan Melbourne, Plan Melbourne 2017–2050, seeks to integrate long-term land use, infrastructure and transport planning to meet the city's future environmental, population, housing and employment needs.</p> <p>Plan Melbourne reinforces the strategic need for North East Link, specifically referencing it as a project that will contribute to an integrated transport system connecting people to jobs and services.</p>
<p><b>Ministerial Direction 11 – Strategic Assessment of Amendments</b></p> <p>The purpose of this Ministerial Direction 11 is to ensure a comprehensive strategic evaluation of a planning scheme amendment and the outcomes it produces.</p>	<p>This Strategic Assessment and Explanatory Report of the North East Link have been prepared in regard to Direction 11. These documents form part of the Planning Scheme Amendment for the project (refer to EES Attachment V – Draft Planning Scheme Amendment).</p>

Policy/Guideline	Relevance to this impact assessment
<p><b>Ministerial Direction 19 – Ministerial Direction on the Preparation and Content of Amendments that may Significantly Impact on the Environment, Amenity and Human Health (Part A)</b> and <b>Ministerial Requirement for Information for Authorisation or Preparation of Amendments that may Significantly Impact the Environment, Amenity and Human Health (Part B)</b></p> <p>Part A: The purpose of Ministerial Direction 19 is to require planning authorities to seek the views of the Environment Protection Authority (EPA) in the preparation of planning scheme reviews and amendments that could result in use or development of land that may result in significant impacts on the environment, amenity and human health due to pollution and waste.</p> <p>Part B: The purpose of this document is to set out information required of planning authorities by the Minister under section 12(1)(f) of the Planning and Environment Act 1987 (Act) in respect of planning scheme amendments that could result in significant impacts on the environment, amenity and human health due to pollution and waste.</p>	<p>This Strategic Assessment and Explanatory Report of the North East Link have been prepared in regard to Ministerial Direction 19. These documents form part of the Planning Scheme Amendment for the project (refer to EES Attachment V – Draft Planning Scheme Amendment).</p>
<p><b>Practise Note 46: Strategic Assessment Guidelines</b></p> <p>Ministerial Direction No. 11 Strategic Assessment of Amendments requires a planning authority to evaluate and discuss how an amendment addresses a number of strategic considerations. Practice Note 46 explains what should be considered as part of the direction.</p>	<p>This Strategic Assessment and Explanatory Report of the North East Link have been prepared in regard to Practice Note 46. These documents form part of the Planning Scheme Amendment for the project (refer to EES Attachment V – Draft Planning Scheme Amendment).</p>
<p><b>Ministerial Guidelines for assessment of environment effects under the Environmental Effects Act 1978 (Seventh edition, 2006)</b></p> <p>The Ministerial Guidelines supplement the requirements of the <i>Environment Effects Act 1978</i> (Vic) by providing detail about the administration of the EES process.</p>	<p>The North East Link EES has been prepared in regard to these Ministerial Guidelines.</p>

