



PART 3 ADDITIONAL IMPACT ASSESSMENT SUMMARIES

10 Effects on Land Uses, Businesses and Social Assets

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10.1 Overview

10.1.1 Introduction

This chapter discusses the potential environmental effects of the Project on land uses, businesses and social assets. These effects would be managed through an Environmental Management Framework, as required by the Environment Effects Statement (EES) Scoping Requirements and relevant Evaluation Objectives.

This chapter has been informed by the following specialist technical reports, as well as the risk report found in EES Attachment III *Environmental Risk Report*:

- Technical Report D – *Social Impact Assessment* (WSP 2020)
- Technical Report E – *Business Impact Assessment* (Matters More 2020)
- Technical Report H – *Planning and Land Use Impact Assessment* (WSP 2020).

The land use planning assessment looks at the potential impacts of the Project on land use having regard to air quality, noise, traffic, public safety, landscape and visual amenity, open space, built form and neighbourhood character.

The business impact assessment was conducted to assess the potential impacts of the Project on businesses during construction and operation phases. This included an assessment of the impacts on businesses from permanent land acquisition or temporary occupation as well as access changes.

The social impact assessment was undertaken to assess the potential effects of the project on communities.

An integrated approach has been adopted in the development of this chapter to consolidate the outcomes of the above reports in a consistent manner.

Chapter 9 *Effects on Social and Cultural Values* separately considers key social and cultural values around landscape, remnant, planted and regenerated vegetation, Aboriginal cultural heritage and historical heritage and these matters are not duplicated in this chapter.

The project area encompasses the section of Yan Yean Road between Kurrak Road and Bridge Inn Road and is located in the local government areas of the City of Whittlesea and Shire of Nillumbik. The area presents a combined distinct low density residential and rural living area, as well as suburbanisation, particularly to the north-western end of the project area which is within Melbourne's developing North Growth Corridor. The project area encompasses both well-established and new businesses and community uses reflective of each phase and type of development.

Extensive land development within and around the region has resulted in a significant increase in movement throughout, with particular increases expected to continue along key north-south routes, including Yan Yean Road. The ongoing expansion of the suburbs in the area has significantly increased demands for better, more diverse and safer transport options.

The Project is expected to provide benefits and opportunities for existing and future land uses, businesses and communities within and beyond the project area. The Project is also likely to have construction impacts and potentially require land acquisition, and may lead to significant land use, business and social impacts.

Appropriate mitigation measures have been developed in response to these potential opportunities and impacts, underpinned by ongoing and tailored consultation with affected stakeholders. This would provide the opportunity to receive constructive feedback throughout the different stages of the Project from all relevant stakeholders, minimise adverse impacts and ensure that the Project is developed and delivered in a suitable manner.

10.1.2 EES Scoping Requirements

On 14 October 2018, the Minister for Planning determined under the *Environment Effects Act 1978*, that an Environment Effects Statement (EES) would be required for the Project to assess the potential significant environmental effects of the Project.

The Scoping Requirements, including draft Evaluation Objectives, for the EES were issued by the Minister for Planning in June 2019. The Minister's decision to require an EES for the Project was due mainly to the potential significant effects on biodiversity, social and cultural values as a result of the Project's proposed clearance of a very large number of trees and habitat, including potential cumulative effects on the habitat of the Swift Parrot.

The Minister required the EES to examine the following key matters:

- Projected traffic growth volumes and related uncertainties for Yan Yean Road and related roads in the network
- Design alternatives and refinements and their associated impacts, particularly how they avoid and minimise native tree loss with proposed locations of tree and vegetation removal, no go zones and offset requirements and a demonstration that avoid and minimise principles have been applied
- Consideration of carriageways, medians, shared pathways, footpaths, intersections and other treatments to minimise the loss of preferred foraging trees for the critically endangered *Lathamus discolor* (Swift Parrot) and avoidance of high retention trees of ecological and cultural value.

In addition to the above key matters, the Scoping Requirements include a general requirement for the EES to identify other potential adverse environmental effects of the Project, such as on social, land use, community amenity and planning, and canvass an environmental management approach and performance measures to ensure any effects are identified and avoided, minimised or mitigated.

Accordingly, this chapter identifies potential adverse effects on land uses, businesses and social assets and how these would be avoided, minimised or mitigated.

10.2 Methodology

This section summarises the methodology used to assess the impacts of the Project on land uses, businesses and social assets.

10.2.1 Existing conditions assessments

An assessment of the existing conditions of the project area and its surrounds was undertaken in each of the three specialist technical reports (Technical Report D – *Social Impact Assessment*, Technical Report E – *Business Impact Assessment* and Technical Report H – *Planning and Land Use Impact Assessment*) to understand the particular land use, business and social asset features and values of the area. This included the establishment of specialism-specific study areas, desktop assessments and site visits.

Study area

The extent of the study area was defined as the project area plus land within a 200 metre buffer of the project area for the planning and land use impact assessment, and land within a 300 metre buffer of the project area for the business impact assessment. The buffers were considered appropriate to enable key land uses and businesses within the vicinity of the Project to be captured. Broader consideration was also given to significant land uses, known significant redevelopments, Planning Scheme Amendments (PSAs) and other initiatives outside the study area with the potential to influence the land use and business aspects of the Project.

The initial study area for the social impact assessment was based on Statistical Area Level 1 boundaries (smallest level of output for census data) as defined by the Australian Bureau of Statistics 2016 Census of Population and Housing. This was then divided into three residential communities surrounding the project area and within the suburbs of Doreen, Yarrambat and Plenty based on existing settlement patterns and suburb boundaries to assist with analysis. Please refer to Figure 3.1 in Technical Report D – *Social Impact Assessment* for the location and extent of the study area.

The project area used in the technical assessments is shown in Figure 10.1 and is more fully described in Chapter 5 *Project Description*.

Desktop assessment

Desktop reviews were undertaken using various web-based resources and publicly available data. This included the following (for all assessments):

- Review of relevant legislative frameworks and policies that apply to the Project and the specialism
- Review of publicly accessible aerial imagery and street view to identify current land use and built form
- Review of the land availability plans to identify land which may be required permanently or temporarily for the delivery of the Project.

In addition, the following specialism-specific actions were undertaken:

Land use:

- Review of publicly accessible State and local strategic planning documentation to understand the historical intent to upgrade Yan Yean Road and the planned future growth and land use change for the area, including the Metropolitan Planning Strategy 2017-2050 (Plan Melbourne), Growth Corridor Plans and the Whittlesea Planning Scheme and Nillumbik Planning Scheme, including the Planning Policy Framework and Local Planning Policy Framework for each municipality
- Review of planning scheme zones, overlays and relevant particular and general provisions
- Review of land use planning databases including current and proposed amendments to the Whittlesea and Nillumbik planning schemes and planning permits
- Review of Certificates of Title (CoT) to identify any encumbrances such as covenants, caveats, easements or section 173 agreements under the *Planning and Environment Act 1987* that may impact on the delivery of the Project or impact on the established land use character or built form.

Business:

- Demographic profiling within and beyond the study area
- Online meeting with Nillumbik Shire Council on 8 April 2020 to understand the business context in the municipality, including equine industries, agriculture and domestic animal boarding facilities, as well as Council's economic development priorities
- Online meeting with City of Whittlesea on 15 June 2020 to understand the business context in the municipality, including Doreen Neighbourhood Activity Centre businesses, as well as Council's view on the proposed project design at the Bridge Inn Road intersection.

Social assets:

- Demographic profiling of current residential communities within the study area using the 2016 Census of Population and Housing
- Review of the local area access network including roads, public transport routes and pedestrian and cycle access to understand how areas are connected and how this influences accessibility for local communities
- An audit of community facilities, public services and places of special interest drawing on Council databases to identify likely locations of community activity and access patterns.

Site visit

Site visits of the project area and broader study areas were carried out for all impact assessments.

10.2.2 Risk assessment

As required by the EES Scoping Requirements, a risk-based approach was adopted to understand the key risks and those impact pathways with the potential to lead to significant impacts on the environment and / or on local communities. The risk assessment included assessing impact pathways identified as relevant to the Project and investigating additional design options to minimise environmental impact.

Chapter 4 *Environment Effect Statement Assessment Framework* and Attachment III *Environmental Risk Report* provide more details about the risk assessment methodology.

10.2.3 Impact assessment

Impact assessments were completed to determine the potential impacts on land uses, businesses and social assets during the construction, operational and maintenance phases of the Project. As part of the assessments, potential positive impacts (benefits) associated with the Project were also identified.

Specialists applied their own methods (defined by relevant legislation, policies, standards and guidelines and their professional judgement and experience) to assess the magnitude of the key impacts, taking into consideration management and mitigation measures where appropriate, which informed the development of EPRs. As a result, the approach to impact assessment was specific to each of the specialist aspects. Key legislation and policies that guided the impact assessments are detailed in Attachment II *Legislation and Policy*.

A summary of the specialists' methods for impact assessment is provided below:

Land use impact assessment

A project can result in land use impacts when the function, form, amenity, character or appearance of the existing environment (rural or urban) and/or of a place or location are impacted. To determine the impacts of the Project on land use, the following steps were undertaken:

- Assessing the Project in terms of consistency with existing and future land use policy and planning frameworks, such as the PPF and LPPF of the Victoria Planning Provisions
- Identifying permanent and temporary changes in land use due to acquisition (partial or full land acquisition) and/or changes to access or amenity.

Business impact assessment

Impacts on businesses were assessed having regard to existing conditions, the associated level of risk of potential impacts on businesses and relevant legislative and policy frameworks. Such impacts were mainly identified based on the extent and intensity of the following:

- Required land acquisition
- Proposed change of access to the existing businesses
- The Project's amenity impacts, such as noise impacts from construction activities.

Social impact assessment

Social impacts were assessed based on impacts that are likely to be experienced by the communities within and beyond the study area, principally through land acquisition and change of access arrangements. The level of impact was determined according to the scale and length of the proposed changes:

- Low – Change confined to household or individual level. Can be managed through routine activities
- Medium – Change that is likely to extend beyond the household level and extend into the wider community. May result in changes to the use of a community space. Impact on local community is noticeable; however, can be managed with additional mitigation
- High – Change that is likely to have ongoing adverse consequences for the local community. May result in major changes to or the end of ongoing use of a space. Adverse publicity and community response is considered likely.

10.2.4 Consultation

Consultation has been ongoing throughout the different stages of the Project's development and preparation of this EES including, but not limited to:

- Individual meetings with landowners, tenants and business owners of directly impacted properties since late 2017
- Community consultation in relation to the initial project design between April and May 2018
- Community consultation on the updated design and design options at certain key intersections (Bridge Inn Road intersection, Jorgensen Avenue intersection and Youngs Road intersection) during May 2020
- Ongoing consultation with project stakeholders including the City of Whittlesea, Shire of Nillumbik, government agencies, utilities and service providers (including Yarra Valley Water, Telstra and AusNet), as well as key education and community facilities in the direct project area.

The community input to the Project informed an understanding of the concerns and preferred outcomes of local residents, businesses and other interested parties. Consultation with Councils and relevant government agencies also played a key role in identifying key State and local government issues and policy priorities. Feedback received during consultation has informed all assessments, including feedback on likely changes as a result of the Project, potential land acquisition, access arrangements and the identification of Project construction and operation impacts and mitigation measures.

Chapter 6 *Communications and Engagement* provides further information regarding the consultation process and outcomes.

10.3 Existing conditions

The project area encompasses a 5.5-kilometre section of Yan Yean Road between Kurrak Road and Bridge Inn Road. It is located in the local government areas of the City of Whittlesea (generally to the north-west) and the Shire of Nillumbik (the remainder).

This section of Yan Yean Road is currently an undivided two-lane road. It includes sections with very steep grades and poor sight lines and is currently experiencing poor travel conditions due to rapid population growth that is occurring to the west and north-west of the project area within the North Growth Corridor. The road is now at, or exceeding, capacity and journey times are increasing and becoming more unreliable. This impacts private and public travel times and safety.

10.3.1 Community profile

A demographic profile of residential communities found that residential population density is generally low throughout the majority of the study area; however, residential densities are quite concentrated to the south of the study area and in the North Growth Corridor area of Doreen. Comparison of population densities at 2011 and 2016 confirms that this trend continues as population increases in Doreen and as new subdivisions occur in the City of Whittlesea. In contrast, Yarrambat is a small rural township with low density rural lifestyle residential blocks and a collection of local services. The Yarrambat-Plenty area experienced moderate population growth between 2011 and 2016.

The community profile of the area was assessed to inform understanding of the needs of the community for services and residents' movements within and beyond the project area. Community values and local issues in relation to the Project were identified using feedback from consultation activities, including discussion with affected property owners and stakeholders. Generally, stakeholders and communities acknowledge that congestion and extra pressure on Yan Yean Road is increasing due to rapid population growth and that the Project would enhance safety and reduce travel time delays.

Of note, low-income households and culturally and linguistically diverse communities form only a very small portion of the population of the study area. Further, the absence of any designated aged care accommodation could indicate that elderly residents have chosen to age in place and consequently that they may be reliant on the arterial road network for homecare and transport assistance. Please refer to Technical Report D – *Social Impact Assessment* for more information.

A summary of community values and key issues is provided in Table 10.1.

Table 10.1 Community values and key issues

Aspect	Community value and character	Local issues raised during consultation
Local character and quality of life	Rural aspect, privacy and peace in central study area (mostly Yarrambat and Plenty)	<p>Loss of privacy and higher noise impacts due to the proposed removal of trees between Yan Yean Road and properties</p> <p>Concerns regarding the continuity of some uses (e.g. tennis courts, paddocks and animal grazing areas)</p>
Sense of community and belonging	Property owners' desire to retain the current residential uses and quality of life	<p>Concerns from directly impacted landowners regarding the ability to further subdivide their land</p> <p>Most residents recognised the need for the Project to address congestion but were opposed to the proposed land acquisition</p>
Access and connectivity	The need to improve the safety, accessibility, walking and cycling facilities was acknowledged by residents, cyclists, pedestrians and emergency services	<p>Landowners were generally comfortable with the changes to their private access subject to retaining all legal access points to Yan Yean Road</p> <p>Concerns were raised that having to double back to execute a U-turn due to the proposed central median strip would add extra time</p> <p>Some landowners were satisfied with having access provided onto a side road rather than directly onto Yan Yean Road</p> <p>Several concerns raised regarding land acquisition that would reduce off-street parking at the front of properties or reduce driveway space, making access difficult</p> <p>Concerns raised regarding impacts to business access arrangements due to the proposed land acquisition</p>

10.3.2 Existing land use context: businesses and community facilities

The Project is located in predominantly low density residential and rural living areas within the metropolitan Green Wedge. The north-western end of the Project is within the North Growth Corridor and is experiencing rapid change from rural living to suburban residential.

Residents of Doreen are generally well provided with local level council services but may experience a shortage of some regional facilities including community arts, libraries and learning centres, seniors and youth spaces and aquatic facilities. Local residents are likely to access additional services in Mernda, relying heavily on Yan Yean Road and Bridge Inn Road to access these centres.

In the Yarrambat area, residents are provided with some local level council services, but may experience a shortage in maternal and child health and regional facilities including community arts, libraries and learning centres, seniors and youth spaces and aquatic facilities. Local residents are likely to access local and regional services in Doreen, Diamond Creek or Greensborough. As such, Yan Yean Road is a vital connection for residents of Yarrambat using both private vehicle and public transport, while Ironbark Road is an important connection to Diamond Creek.

The southernmost extent of the study area falls within the suburb of Plenty. It is likely that Plenty operates as an extension of the Greensborough Centre. As such, it is assumed that residents will primarily access local and regional level services in Greensborough. Residents in the south of the study area are unlikely to be as reliant on access to services to the north of Yan Yean Road for daily activities and services. Please refer to Technical Report D – *Social Impact Assessment* for more information.

As noted earlier, the study area includes a range of businesses, some quite established and some quite new, that provide both day to day and more selective services to a local and broader catchment.

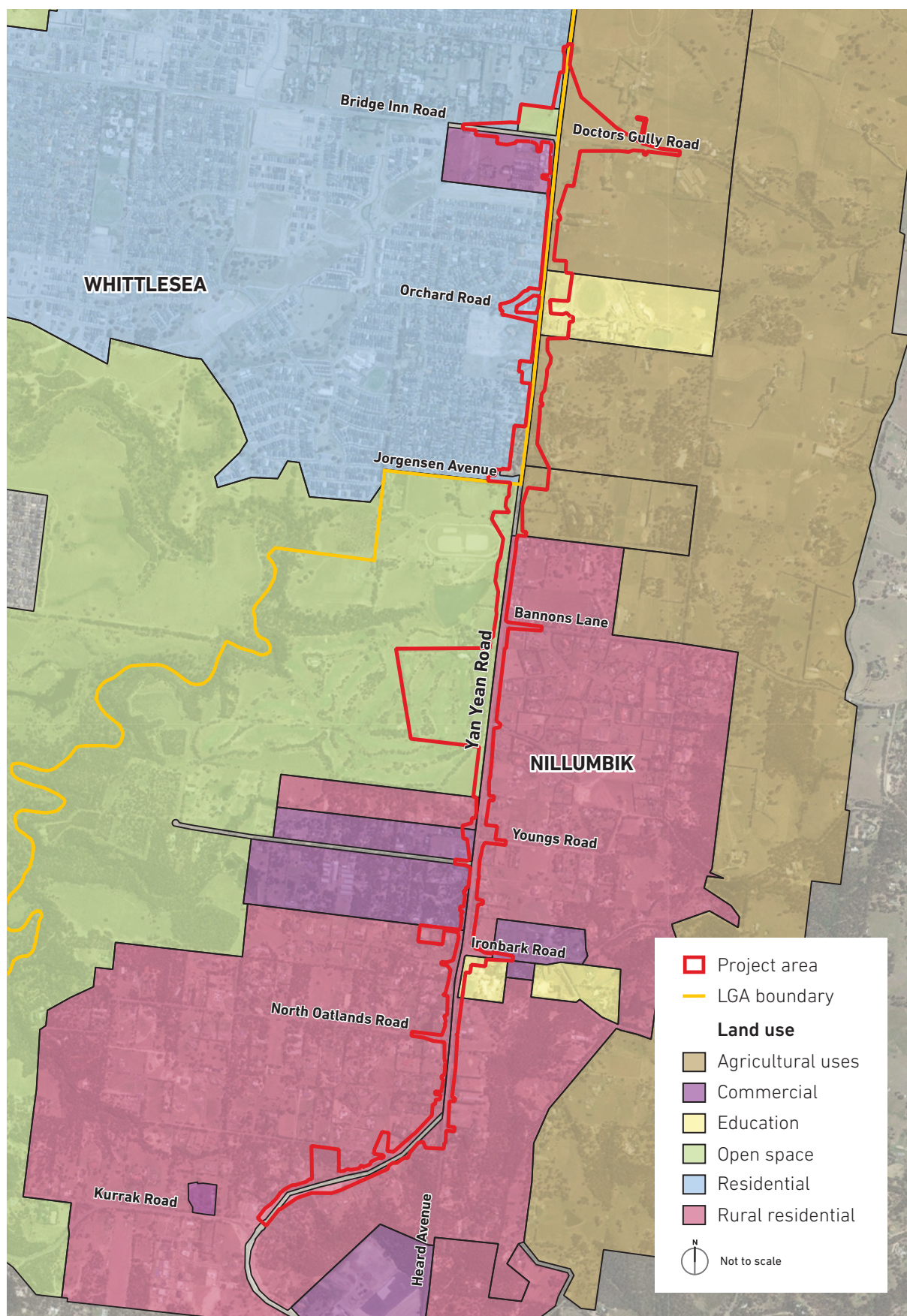
A description of the land uses and activities that exist within the project area and surrounds is provided in Table 10.2. Figure 10.1 shows existing land uses.

Table 10.2 Existing uses and activities

Use / Activity	Description
Residential	New developments There is a newly developed residential area which is mostly concentrated toward the north-west end of the project area, between Jorgensen Avenue and Cookes Road. This area is situated in the Mernda Local Structure Plan – Part 1 1994 and Mernda Strategy Plan 2004 (Amended 2016). Large rural lots are being subdivided into standard residential lots, and there remain a number of areas along the alignment that are yet to be built out.
	Rural residential The land to the east and the south-west of Yan Yean Road is characterised by rural-residential allotments. A ribbon of smaller rural-residential lots sit between Laurie Street and Bannons Lane. The majority of the lots within the rural residential areas are between one to three hectares, which is smaller than a typical area for such lots in a rural residential context (normally approximately eight hectares).

Use / Activity	Description
Open space	<p>Doreen Recreation Reserve – the Reserve is located at the north-west corner of Bridge Inn Road and Yan Yean Road. This area is subject to the Doreen Reserve Masterplan 2014 and is planned to be further developed to support future residential growth. It currently includes an oval, two tennis courts and a barbeque area. This area is also within Precinct 2A of the Mernda Strategy Plan. Within the reserve, a portion of the project area towards the north-west intersects with an existing transmission line easement (Ausnet); at the present time, land in this area remains largely undeveloped.</p> <p>Plenty Gorge Parkland Reserve and Yarrambat Park – the Reserve and Park occupy much of the land to the west of Yan Yean Road between Ashley Road and Jorgensen Avenue. The majority of this open space relates to Yarrambat Park, which is managed by the Shire of Nillumbik. This land currently hosts a range of active recreation facilities, including an 18-hole golf course and a driving range, and is home to a number of sporting and recreation clubs and activities including horse riding and archery.</p> <p>A portion of this land is within the Plenty Gorge Park Reserve and is managed by Parks Victoria. This section of the reserve contains a picnic area and car park, which are well setback off the road behind established vegetation.</p> <p>Werther Park – is a linear passive open space, approximately 50 metres wide and 250 metres long, north of Jorgensen Avenue and abutting Yan Yean Road, managed by the City of Whittlesea. A walking track runs from Jorgensen Avenue and connects to Yan Yean Road and to Latera Place.</p>
Businesses (incl. commercial and health facilities)	<p>There are collections of businesses on Kurraik Road (Rivers of Yarrambat establishment), at Ashley Road (domestic animal boarding), at the intersection between Ironbark Road and Yan Yean Road (including an early learning centre, retail (clothing), a veterinary hospital and a café), south-west and south east of the Bridge Inn Road / Yan Yean Road Intersection (Doreen Neighbourhood Activity Centre) and at the north-east end of the project area, including a slate wholesaler operating from 25 Doctors Gully Road. Many of these businesses provide convenience shopping for residents of the area and enjoy convenient vehicular access. These businesses are shown in purple in Figure 10.1.</p> <p>Refer to Section 4.1.1 in Technical Report E – <i>Business Impact Assessment</i> for the full list of businesses.</p>
Education	<p>Plenty Valley Christian College is located opposite Orchard Road to the east of Yan Yean Road. There is cluster of educational uses is also located at Ironbark Road to the east of Yan Yean Road, including Yarrambat Primary School, Yarrambat Plenty Preschool and Glenvale School Melbourne Campus. These are shown in yellow in Figure 10.1.</p>
Agricultural uses	<p>Agricultural uses within proximity to the project area include broad-acre cropping and grazing and rural enterprises (shown in brown in Figure 10.1).</p> <p>To the east, beyond the interface with Yan Yean Road, land is being used for broad-acre cropping and grazing. These lots contain limited built form, which is setback from the boundary. This land use has an interface with Yan Yean Road north of Laurie Street and lots at this interface range from two to 12 hectares.</p> <p>Land to the east of Yan Yean Road to the north and south of the Bridge Inn Road intersection is used for rural enterprises including racehorse breeding and agistment. In addition, the Yarrambat Estate Vineyard is situated to the east of Yan Yean Road, well setback beyond rural residential uses, to the north of Laurie Street.</p>

Figure 10.1 Existing land use map



10.3.3 Future use and development proposals

Key Planning Scheme Amendments, planning permits, development plans and masterplans that are relevant to the project area are identified and discussed below.

Planning Scheme Amendments

Planning schemes can be subject to amendments for different reasons. Whether an amendment applies to an entire municipality (a new policy) or only a parcel of land, it can affect the land use context and character of the area to which it applies.

The following key existing and potential Planning Scheme Amendments and seriously entertained plans have been identified as relevant to the Project:

Amendment C67 (approved) – Yan Yean Road duplication (Diamond Creek Road to north of Kurrak Road)

Amendment C67 to the Nillumbik Planning Scheme applied a Public Acquisition Overlay Schedule 1 (PAO1) to land along Yan Yean Road between Diamond Creek Road to north of Kurrak Road. This amendment enabled the duplication of that section of Yan Yean Road under the Yan Yean Road Upgrade – Stage 1 Project between Diamond Creek Road and Kurrak Road in Plenty.

Land to the south end of the project area (north of Kurrak Road) and on either side of Yan Yean Road is affected by this PAO (Refer to the Planning Overlays Map in Attachment VI *Map Book* for the location of this PAO). Schedule to Clause 45.01 (Public Acquisition Overlay) of the Nillumbik Planning Scheme specifies that the purpose of this PAO is for road widening and VicRoads (Department of Transport) is the Acquiring Authority.

Amendment C201 (approved) – Mernda Rail Extension Project

Amendment C201 to the Whittlesea Planning Scheme enabled road and railway works and associated infrastructure proposed by the Mernda Rail Extension Project. This Project was completed in 2018 and includes the addition of three new stations, over 2,000 carparks, new cycling and pedestrian facilities, grade separation at road intersections and altering bus routes (including the bus route along Yan Yean Road).

Amendment C235wsea (approved) – Bridge Inn Road (Plenty Road, Mernda to Yan Yean Road, Doreen) Upgrade Project

Amendment C235wsea to the Whittlesea Planning Scheme facilitates the Bridge Inn Road upgrade between Plenty Road and Yan Yean Road by applying a Public Acquisition Overlay (PAO2). A portion of this PAO2 falls within the project area and is discussed further in Section 10.5.2. Refer to the Planning Overlays Map in Attachment VI *Map Book* for the location of this PAO.

Planning permits

The following planning permits are relevant to the Project:

- *6 Youngs Road* – A planning permit has been issued for the Use and Development of the Land for a Childcare Centre for 80 Children
- *807 Yan Yean Road* – This permit relates to the Rising Sewer Project by Yarra Valley Water. Of relevance to the Project, the pipeline includes an open cut adjacent to Yan Yean Road (west) from Jorgensen Avenue to Raoul Court that will be completed in 2020
- *920 Bridge Inn Road* – A planning permit has been issued for a multi lot staged subdivision of the land and creation of access to a Road Zone Category 1. A planning permit application has also been received by City of Whittlesea for the use and development of an office building on the northern part of the lot.

Development plans

The following development plans are relevant to the Project:

- *815–835 Yan Yean Road* – The Mernda Development Plan affects 815–835 Yan Yean Road and facilitates the future development of that land for residential purposes. The Development Plan recognises that Yan Yean Road will need to be widened in the future and provides for the widening of the intersection with Orchard Road. Construction has commenced on two northern lots. The Development Plan provides that the extent of the road widening is to be determined in consultation with Council and VicRoads at the time of the planning permit application for subdivision
- *Garden Road Development Plan* – land south of Bridge Inn Road and on the western side of Yan Yean Road is within the Garden Road Development Plan. The Development Plan which was prepared to implement the objectives of the Mernda Strategy Plan and to incorporate design principles that respond to site specific characteristics, provides for the widening of Yan Yean Road.

Masterplans

The following masterplans are relevant to the Project:

- *Plenty Gorge Park Reserve Masterplan 2018* – The Masterplan was approved in October 2018 and provides guidance on improvements to the park in order to meet the open space needs of the rapidly growing surrounding community. It includes recommendations to construct a shared trail to connect the Mayfield site with Yarrambat and to improve safe public and vehicle access into Yarrambat Park (refer to Figure 5.3 in Technical Report H – *Planning and Land Use Impact Assessment* for further information)
- *Doreen Reserve Masterplan 2014* – The Masterplan sets out the vision for the redevelopment of the recreation reserve at the north-west corner of the Yan Yean Road and Bridge Inn Road intersection. The Masterplan proposes the redevelopment of the site, including the removal of existing assets and creation of new tennis courts, car parking and site access inset from existing road alignments (refer to Figure 5.6 in Technical Report H – *Planning and Land Use Impact Assessment* for further information)
- *Yarrambat Park Masterplan 2012* – The Masterplan guides the future development of the park and golf course having regard to user and community aspirations and enhancing the natural character and ambience of the park. The masterplan acknowledges that Yan Yean Road will need to be widened in the future and that the golf course should be designed to take this into consideration (refer to Figure 5.10 in Technical Report H – *Planning and Land Use Impact Assessment* for further information)
- *Plenty Valley Christian College Masterplan 2008* – The Masterplan applies to land at 840 Yan Yean Road, Doreen within the Shire of Nillumbik and provides for a number of building works to be completed in stages, including a childcare centre that has been developed.

10.3.4 Key strategies and policies

This section describes the key strategies and policies from Plan Melbourne and the Planning Policy Framework and Local Planning Policy Framework in the Whittlesea and Nillumbik Planning Schemes that are relevant to the Project.

A full assessment of the Project against the relevant legislation and policy is provided in Attachment II *Legislation and Policy* and Section 5.6 (Strategic Planning Context) of Technical Report H – *Planning and Land Use Impact Assessment*.

Table 10.3 Relevant strategies and policies

Strategy / policy	Description
Plan Melbourne 2017-2050	<p>Plan Melbourne, released in March 2017, sets out the State Government's vision for the city to 2050 (this is a 'revision' of the previous Plan Melbourne released in May 2014).</p> <p>A key outcome of Plan Melbourne is that '<i>Melbourne has an integrated transport system that connects people to jobs and services and goods to market</i>'. Two key directions supporting this outcome are to '<i>transform Melbourne's transport system to support a productive city</i>' and to '<i>improve transport in Melbourne's outer suburbs</i>'.</p>

Strategy / policy	Description
Planning Policy Framework	<p>The Planning Policy Framework sets out the key policy directions for State planning issues. Of relevance to the Project are Clause 11 (Settlement), Cause 12 (Environmental and landscape values), Clause 13 (Environmental risks and amenities), Clause 14 (Natural resource management), Clause 15 (Built environment and heritage) and Clause 18 (Transport).</p> <p>Refer to Attachment II <i>Legislation and Policy</i> and Appendix B (Planning Policy Framework Assessment) in Technical Report H – <i>Planning and Land Use Impact Assessment</i> for the full list of relevant clauses and their description.</p>
Local Planning Policy Framework	<p>The Local Planning Policy Framework contains the municipal strategic statement and local planning policies. The following clauses from the Local Planning Policy Frameworks of Whittlesea and Nillumbik Planning Schemes are relevant to the Project:</p> <ul style="list-style-type: none"> • Whittlesea Planning Scheme – Clause 21.02 (Municipal Profile), Clause 21.04 (Settlement), Clause 21.08 (Built environment and heritage) and Clause 21.11 (Transport) • Nillumbik Planning Scheme – Clause 21.04 (Strategic framework), Clause 21.05-1 (Settlement and Housing) and Clause 21.05-3 (Environment, Conservation and Landscape). <p>Please refer to Attachment II <i>Legislation and Policy</i> and Appendix C (Local Planning Policy Framework) in Technical Report H – <i>Planning and Land Use Impact Assessment</i> for the full list of relevant clauses and their description.</p>
Growth Corridor Plans	<p>Growth Corridor Plans were developed in 2012 by the then Growth Areas Authority (now the Victorian Planning Authority) to provide an integrated approach to planning land use, transport and services in Melbourne's outer growth areas. The northern section of Yan Yean Road forms the eastern boundary of the North Growth Corridor.</p> <p>A key objective of the North Growth Corridor Plan is '<i>extending the northern region's public transport and arterial road networks into the Growth Corridor so that future residents and workers will enjoy a similar level of accessibility to those living and working in established parts of the north</i>'.</p>
Mernda Local Structure Plan – Part 1	<p>This document was approved in 1994 and established the framework for Laurimar Park (west of Yan Yean Road) and Mernda Township. Subdivision of Doreen began in 1999 with the establishment of the 334 hectare, 2,500 lot subdivision of Laurimar, west of Yan Yean Road. A town centre, including shops, community hall, a primary school (2009) and a linear park, was established at Laurimar.</p>
Mernda Strategy Plan 2004 (Amended 2016)	<p>This strategy is incorporated into the Whittlesea Planning Scheme. It identifies Yan Yean Road as an important north-south secondary arterial road to support the growth of Mernda/Doreen and the introduction of high capacity rail to this area through the Mernda Rail Extension Project.</p>
Yarrambat Local Structure Plan 1993 (Revised 2000), and Yarrambat Extension Area Local Structure Plan 1995 (Revised 2000)	<p>These documents are incorporated into the Nillumbik Planning Scheme and encourage rural housing on larger lots serviced by the existing facilities in Ironbark Road. They acknowledge the role of Yan Yean Road as a secondary north-south arterial road that all other local roads intersect.</p>

10.4 Risk assessment

A risk assessment was undertaken in relation to the environmental aspects of the existing conditions discussed in Section 10.3. For more information on the risk assessment process, refer to Chapter 4 *Environment Effects Statement Assessment Framework* and Attachment III *Environmental Risk Report*. Key risks are defined as those having an initial rating of 'significant' and above and are shown in Table 10.4 below. Refer to Attachment III *Environmental Risk Report* for the complete list of initial and residual risks. These risks require management through the Project and are addressed through the EPRs listed in Section 10.6 and the Environmental Management Framework described in Chapter 12.

A discussion of the impact pathways and the likely effectiveness of the proposed EPRs to minimise risk of impacts is provided in Section 10.5.

Table 10.4 Key risks

Risk #	Aspect	Impact pathway	Project Phase	Initial rating	EPR #	Residual rating
4	Business	Potential business impacts such as displacement or acquisition, or impact to business operation due to changes in access and/or amenity	Site establishment	Significant	EPR B1 EPR B2 EPR B3	Medium
11	Land use planning	Potential changes inconsistent with current or proposed future land use, including land acquisition, severance and occupation	Site establishment	High	EPR LU1 EPR LU2	Significant
14	Social	Potential impacts on social and cultural values such as community, educational, religious or recreational facilities due to changes to access or amenity	Site establishment	High	EPR S1 EPR S2 EPR S3	Significant
24	Business	Potential business impacts such as displacement or acquisition, or impact to business operation due to changes in access and/or amenity	Earthworks	Significant	EPR B1 EPR B2 EPR B3	Medium
31	Land use planning	Potential changes inconsistent with current or proposed future land use, including land acquisition, severance and occupation	Earthworks	High	EPR LU1 EPR LU2	Significant
34	Social	Potential impacts on social and cultural values such as community, educational, religious or recreational facilities due to changes to access or amenity	Earthworks	Significant	EPR S1 EPR S2 EPR S3	Medium

Risk #	Aspect	Impact pathway	Project Phase	Initial rating	EPR #	Residual rating
44	Business	Potential business impacts such as displacement or acquisition, or impact to business operation due to changes in access and/or amenity	Civils and structures	Significant	EPR B1 EPR B2 EPR B3	Medium
51	Land use planning	Potential changes inconsistent with current or proposed future land use, including land acquisition, severance and occupation	Civils and structures	High	EPR LU1 EPR LU2	Significant
54	Social	Potential impacts on social and cultural values such as community, educational, religious or recreational facilities due to changes to access or amenity	Civils and structures	High	EPR S1 EPR S2 EPR S3	Significant
71	Land use planning	Potential changes inconsistent with current or proposed future land use, including land acquisition, severance and occupation	Reinstatement	Significant	EPR LU1 EPR LU2	Medium
74	Social	Potential impacts on social and cultural values such as community, educational, religious or recreational facilities due to changes to access or amenity	Reinstatement	Significant	EPR S1 EPR S2 EPR S3	Medium

10.5 Impact assessment

This section describes the potential impacts that might occur during design, construction, operation and maintenance phases of the Project and appropriate mitigation measures to avoid or otherwise minimise adverse impacts. The mitigation measures inform the EPRs, which set out the desirable outcomes for different phases of the Project (refer to Section 10.6).

The impact assessments identified that potential impacts on land uses, businesses and social assets could be temporary or permanent. Temporary impacts occur for a limited time and extent and generally occur during construction activities or when maintenance is required, such as the short term (six to 12 months) occupation of land as a laydown area for construction materials. Permanent impacts include changes such as permanent occupation of land currently outside of the road corridor (for example, acquisition of private property for use in new road duplication).

10.5.1 Temporary impacts during construction

The road reserve along Yan Yean Road (between Youngs Road and Jorgensen Avenue) would be used for temporary construction and laydown areas, temporary site offices, the relocation and construction of minor utility installations and traffic diversions. Short-term impacts are expected from:

- Temporary delays, congestion and change of access arrangements during construction
- Temporary disruptions to utility services during construction
- Temporary amenity impacts during construction such as noise and vibration.

Temporary delays, congestion and change of access during construction

Short-term delays, congestion and change of access for some existing uses would occur as a result of certain construction activities (for example, site establishment). This could result in an inconvenience for some land uses and associated users within the area, including:

- Businesses – There is a risk that if accessibility deteriorates, customers may become discouraged and shift their patronage elsewhere. The business impact assessment identified that affected businesses are currently located in a convenient area for residents of Doreen and for commuters along the section of Yan Yean Road within the project area, and that it is unlikely that customers would shift their patronage elsewhere in the longer term
- Residential properties – Some local residents could experience inconvenience in the short term due to changed access arrangements to their properties and diversions to side streets.

Temporary disruption to utility services during construction

The construction of the Project would require the relocation of existing utility services such as water, electricity and telecommunications within the road reserve or on land to be acquired. This relocation is likely to result in temporary disruption to services within the area and subsequent inconvenience for the land uses and users. The extent of relocation has not been established yet and would be clarified as part of detailed design.

Early consultation has been undertaken with Melbourne Water and Yarra Valley Water to identify any existing assets or proposed projects that interface with Yan Yean Road in relation to the Project. Yarra Valley Water has indicated the potential for the Project to interact with the new rising sewer main currently under construction.

Details of the interaction, if any, and subsequent avoidance and management measures are being developed in consultation with Yarra Valley Water. Melbourne Water has also been consulted to identify opportunities to integrate drainage into existing drainage schemes and to implement landscaping enhancement such as grass swales. This would be confirmed at the detailed design stage (refer to Technical Report G – *Landscape Strategy*).

Temporary amenity impacts during construction

Amenity impacts likely to result from construction activities are expected to include noise and vibration. These impacts are discussed in detail in Chapter 11 *Effects on Physical Environment* and relevant technical reports listed in Section 11.1 of Chapter 11.

Potential impacts from construction activities on air quality, contaminated land, groundwater and surface water are expected to be minimal. Key potential impacts are associated with noise during the construction phase. Additionally, there is potential for vibration impacts associated with driven piling works and the compaction of road surfaces.

Mitigation measures

The following mitigation measures have been developed to address the impacts discussed above. These measures would be reinforced through the Project's Construction Environment Management Plan (CEMP) and supported by recommended consultation measures to enhance community interaction, awareness and communication.

Minimising delays, congestion and change of access during construction

To minimise impacts on the use of Yan Yean Road during construction, the duration and extent of occupancy of each section of the road must be managed. During periods of occupation, alternative access must be made available to maintain movement along the corridor and to avoid restricting access to public and private land. Chapter 7 *Effects on Transport Capacity and Connectivity* provides details of the mitigation measures required to address potential traffic and access issues during construction, including preparation of a Traffic Management Plan (refer to EPRs TP2, LU1, B2 and S2).

Pedestrian, cycle and horse riding access would be retained wherever possible during construction so that local communities have access to safe and convenient active modes of transport, particularly between residential areas and service centres such as Yarrambat township and major recreational hubs such as Yarrambat Public Golf Course and Yarrambat Park (refer to Chapter 7 *Effects on Transport Capacity and Connectivity* and to EPRs LU1 and B1).

Any reduction in the level of access, amenity or function of any use, and the extent of land required must be minimised to the duration necessary to carry out the relevant construction works (refer to EPRs LU1 and B1).

Impacts to existing bus timetables, routes and bus stops would be minimised through liaison with local bus companies and opportunities would be investigated to enhance existing infrastructure (refer to EPR TP2 in Chapter 7 *Effects on Transport Capacity and Connectivity*).

Minimising disruption to utility services during construction

Early consultation has been undertaken with Melbourne Water and Yarra Valley Water to identify any existing assets or proposed projects that interface with Yan Yean Road. Discussions with Yarra Valley Water have ensured the project boundary does not impact on the current rising sewer main project (refer to Section 10.3.3), which runs parallel to Yan Yean Road from Jorgensen Avenue to Raoul Court and then crosses Yan Yean Road to Ironbark Road. The majority of this project will be underground bored (refer to EPR LU1).

Early consultation with Melbourne Water has been undertaken to identify opportunities to integrate drainage into existing schemes and to implement landscaping enhancement. This would be confirmed at detailed design stage; accordingly, the impact on land use change has not been assessed within this EES. Further details are provided in Technical Report L – *Surface Water Impact Assessment*. Ongoing consultation with Melbourne Water would be required as the Project progresses (refer to EPR LU1).

Minimising temporary amenity impacts during construction

Mitigation measures to address potential amenity impacts during construction are discussed in Chapter 11 *Effects on Physical Environment*.

Enhancing community interaction, awareness and communication

A detailed and targeted consultation strategy would be prepared to build awareness of the Project among residents and local communities before and throughout construction. The plan would establish a 24-hour, single point of contact for affected communities to report concerns, ensure that communities are notified of construction works and changes well in advance. The Project would also be required to set up a process for recording, managing and resolving complaints from affected stakeholders during construction (refer to EPR EMF3).

A Trader Engagement Plan must be prepared to manage impacts to non-acquired businesses and to engage with business and property owners throughout the construction phase (refer to EPR B2).

Ongoing consultation must occur with landowners / occupiers to receive continuous feedback about impacts, as well as to inform them of the changes to the road corridor (including changed access arrangements) and potential disruption to utility services (refer to EPRs EMF3, LU1, B2 and S2).

Liaison with emergency services, including Yarrambat CFA, would ensure these services receive notification well in advance of any planned disruptions and have a nominated 24-hour point of contact with the Project's construction team should any concerns arise (refer to EPR B2). The Project would be required to maintain 24-hour access for all emergency services (refer to EPRs B2 and S2).

Construction Environment Management Plan

Implementation of mitigation measures would be achieved through the Construction Environmental Management Plan (refer to EPRs EMF 2 and EMF4). This plan is a detailed site-specific plan governing the environmental management of all project activities. To minimise the impacts on utilities, appropriate construction methodologies must be developed as part of the CEMP, including underground boring. Chapter 12 *Environmental Management Framework* provides further details on the CEMP. Also refer to EPR EMF2.

10.5.2 Operational and maintenance impacts

Operational and maintenance impacts include permanent impacts to established and / or future land uses and associated social and business impacts, as well as with regard to planning policy and strategic plans that apply to the project area.

Impacts to rural character are further discussed in the relevant sections of the Landscape Strategy: 4.6 Historical Landscape, 5.2 Cultural Value of Vegetation, 5.4.2 Landscape Character Zones, 5.5 Visual Impact Assessment, 5.6.2 Landscape Character, 5.6 Value Assessment summary.

The consultation activities described in Section 10.2.4 indicated that the broader community acknowledges the need for road upgrades (including Yan Yean Road) in the area to support the increasing population to the north-west of the project area.

The Project is expected to result in some permanent impacts to the land uses discussed in Section 10.3.2, as outlined below.

Land acquisition

The Project would require acquisition of private and public land. Land acquisition can result in land use impacts such as disruption to the continuity of a use. It can also result in social impacts such as relocating residents or reduced accessibility/mobility that may impact sense of community and belonging. This in return can also result in feelings of social isolation and disconnection for households or residents who are displaced.

The Project requires acquisition from 96 parcels of land (including 28 council properties, 60 private lots and eight lots owned by public authorities / State).

As discussed in Section 10.3.3, Amendment C67 also applied a Public Acquisition Overlay for Stage One of the Yan Yean Road Upgrade Project (north of Kurrak Road). Eight parcels were partially acquired by the Department of Transport, along with one full parcel acquisition as part of the Stage One project where it falls within the southern extent of the Stage Two project area. Additional land would be required from one of the eight parcels (3\LP43702).

Acquisition along the majority of the Project alignment is limited to areas of land at the frontage of lots to Yan Yean Road. In most cases, the area of the proposed acquisition is small in comparison to the entire lot size. Consequently, the acquisition is less likely to impact the continuity of the existing uses or result in significant social or business impacts. However, partial acquisition would reduce property size and may result in functional changes to activities undertaken on private property.

The potential loss of land has caused concern for some impacted landowners and residents as it may result in changes to their properties. Discussions with respective landowners regarding acquisition of land is ongoing and compensation for land acquired would be in accordance with the *Land Acquisition and Compensation Act 1987*. Appendix I (Land Acquisition Tables) in Technical Report H – *Planning and Land Use Impact Assessment* provides full details of the proposed land acquisition.

Permanent change of access and local movement

The majority of acquisition comprises linear portions of properties adjacent to Yan Yean Road, including driveways directly fronting onto Yan Yean Road. This would change current access arrangements to these land uses. However, these access changes are unlikely to result in a land use change. Alternative access arrangements, including re-establishment of affected driveways onto Yan Yean Road or an adjacent road as well as U-turn facilities or service roads would ensure no resultant loss in access. While enhancing access and safety, these arrangements are expected to result in limited increase in difficulty of access.

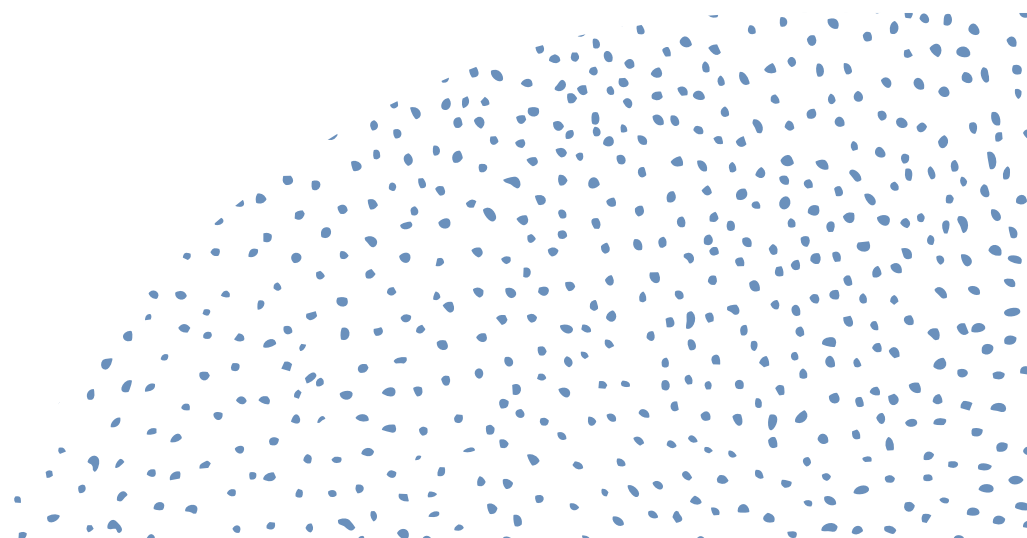
Users may experience longer travel due to permanent changes to the access to their properties. For example, the proposed centre median on Yan Yean Road would restrict direct access for vehicles making a right and hand turn in and out of properties fronting Yan Yean Road. While provision for U-turns is included in the design, this would result in some users being required to back track and increase the length of some local trips. In some instances, this has the potential to alter travel behaviours whereby users may perceive greater convenience in continuing to travel straight ahead to access facilities and services rather than turn around at a U-turn point to access facilities or services that may be closer.

All existing bus stops would be retained in the vicinity of existing infrastructure, with the exception of the north bound stop at Jorgensen Avenue, which would be relocated a short distance to the south. Improved traffic flow would provide benefits for public bus routes and school buses, including safer passenger access and more reliable travel times. Any changes to bus stop locations would be managed during the detailed design phase in consultation with the Department of Transport.

Chapter 7 *Effects on Transport Capacity and Connectivity* describes the Project's impacts to the transport network in detail.

Operational amenity impacts

Chapter 11 *Effects on Physical Environment* details operational impacts on the physical environment including air quality, contaminated land, groundwater, surface water, noise and vibration. Amenity impacts during the operation of the Project are generally expected to be of low risk (for example, a minimal increased noise level associated with increased traffic levels on the road), noting that different users may have different perceptions about the impact.



A summary of other potential changes to the uses discussed in Section 10.3.2 are provided in the below table.

Table 10.5 Permanent land use, business and social asset impacts

Use / Activity	Description
Residential	<p><i>590 Yan Yean Road</i> – The Project would need to acquire land from the frontage of this lot. This property contains an unoccupied dwelling and an additional new dwelling. The Project would result in demolition of the original unoccupied dwelling but would not impact the new dwelling. As the original dwelling is currently unoccupied, it is possible that the Project would not displace residents and the remaining land would still be used for residential purposes.</p> <p><i>815-835 Yan Yean Road</i> – This land is west of Yan Yean Road between Jorgensen Avenue and Orchard Road and is subject to the Mernda Local Structure Plan – Part 1, Mernda Strategy Plan 2004 and Development Plan 815-835 Yan Yean Road 2017 as outlined in Table 10.3 and Section 10.3.3. Minor land acquisition (approximately 1.5 percent of the total landholding) would be required along the frontage of these lots.</p> <p>The orderly use and development of this land as intended by the relevant plans remains feasible, noting that any such development will need to take into consideration the additional land requirements for road widening and provide an appropriate landscape buffer between future residential development and the Project.</p> <p><i>Yarrambat Township</i> – The Project would require the acquisition of land from within the Yarrambat Township between Yarrambat Park and Kurra Road. The majority of properties are large rural-residential allotments and acquisition would be limited to linear portions of land at the frontage of these lots and driveways at the interface with Yan Yean Road. Given the extent of acquisition, particularly in relation to the lot size, it would not impact on the ongoing existing use of land in this area and is not expected to have a significant impact on land users.</p>
Open space	<p><i>Doreen Recreation Reserve</i> – Land acquisition would be required from the land within the Doreen Recreation Reserve. This would reduce the land available along the southern and eastern boundaries of the Reserve. It may also result in the need to reconfigure or relocate the tennis court and oval; however, this is yet to be confirmed with the City of Whittlesea.</p> <p>In general, the Project would not change the intended use of the land by the Mernda Strategy Plan or the Doreen Recreation Reserve Masterplan 2014 and is unlikely to result in any permanent or long-term disruption to land use. The proposed changes may result in impacts to the users of the reserve as they would reduce the land area currently available and may require amendment of the Masterplan.</p> <p><i>Plenty Gorge Parkland Reserve</i> – Partial acquisition (approx. 468 square metres) from the linear area east of the picnic area would be required. Acquisition of this land would not impact on any structures or built form within the site and would not impact on the orderly planning of this area as intended by the Plenty Gorge Park Reserve Masterplan 2018 (discussed in Section 10.3.3).</p> <p><i>Yarrambat Park</i> – The Project would require the partial acquisition of land within Yarrambat Park. This acquisition comprises a linear area directly adjacent to Yan Yean Road. This would not have an impact on any built form on site or the function of the park; however, it may affect the layout and use of part of the golf course and the archery range.</p> <p><i>Werther Park</i> – The Project would acquire part of the southern portion of Werther Park for construction of the Project, resulting in the removal of some vegetation. The northern portion would be subject to a no-go zone which would protect significant vegetation.</p>

Use / Activity	Description
Businesses (incl. commercial and health facilities)	<p>The majority of impacts to businesses would be limited to a change of access and are unlikely to affect the ongoing use of current commercial activities or significantly impact users. The businesses that are expected to experience the most impacts are described below:</p> <ul style="list-style-type: none"> • <i>Yarrambat Veterinary Hospital</i> (541 Yan Yean Road) – This property would lose part of its front paddock fronting Yan Yean Road that is currently used for grazing animal patients, as well as trees that provide screening in front of the property. This would result in diminished space to accommodate animals under observation or care. Loss of vegetation may increase exposure to traffic and noise • <i>Smiling Children Childcare and Early Learning Centre</i> (553 Yan Yean Road) – This property would lose part of the land and vegetation abutting Yan Yean Road; however, as the business is located to the rear of the site, the current use would be able to continue. No buildings would be affected • <i>M&S Franco Builders, Personal Training, Firewood</i> (815 Yan Yean Road) – As discussed in Section 10.3.3, the Mernda Strategy Plan applies to this site and contemplates the future development of the site for residential purposes. The Project would result in partial acquisition of the site and a change of access to these businesses. However, the current uses would not be impacted by those changes as the businesses are unlikely to rely on the full extent of the property for operation. Further, future development for residential purposes remains possible • <i>Yarrambat Park Golf Course and Bunkers Café</i> (649 Yan Yean Road) – The Project proposes to permanently change access pattern to this property to left in, left out. It is also proposed to remove some trees on the road reserve that currently act as a buffer between Yan Yean Road and this property. This is expected to result in amenity impacts to this land use. In addition, construction activities are likely to create disruption for users • <i>J&C Yeoman Slate Wholesalers & Homestead Farm</i> (25 Doctors Gully Road) – This agricultural property would lose land along its abuttal with Yan Yean Road and Doctors Gully Road, being part of a paddock at the front of property. The current design requires realignment of entry to the property. Land acquisition would permanently reduce the carrying capacity of the agricultural property. The amount of land required would reduce the area of level ground available for horse training purposes and have impacts on the capacity to train harness horses on the property. Infrastructure impacts on Homestead Farm would be loss of fences and possibly loss of the brick front entry, which would be reinstated as part of the Project.

Use / Activity	Description
Other	<ul style="list-style-type: none"> • <i>Plenty Valley Christian College</i> – The Project would require acquisition of land from this site and would result in impacts to site access arrangements and onsite parking. The existing school dam is likely to be impacted by the Project (refer to Chapter 11 <i>Effects on Physical Environment</i> and Technical Report L – <i>Surface Water Impact Assessment</i>). No substantial impacts are expected • <i>Yarrambat Primary School</i> – The Project would require partial acquisition of land from the frontage of this school and alter the main vehicular access and onsite parking provisions. No substantial impacts are expected • <i>Agricultural uses (rural land uses)</i> – Partial land acquisition would be required from agricultural uses (rural land uses) abutting Yan Yean Road. Most of the lots within such areas have already been subject to subdivision and are unlikely to be further subdivided. Therefore, it is unlikely that the acquisition would have an impact on the future development potential of this land or impact on the viability of the land • <i>St Macarius Coptic Orthodox Church</i> – The Church is located on the west side of Yan Yean Road, with access from Ashley Road. The Project proposes to acquire land along the frontage of this property to the extent of 750 square metres, but would not directly impact the church building, car parking and existing access. Acquisition of this land is unlikely to significantly impact the Church • <i>Private roadside memorials</i> – There are two private roadside memorials adjacent to the Yarrambat Veterinary Hospital and Plenty Gorge Parkland Reserve that would require relocation. This may cause stress for victims' families and friends. As impacts are confined to the individual level, they are considered low. However, a considered and sensitive approach would be taken to attempting to contact and consulting with the memorial makers and relocating these memorials to an appropriate location.

Impacts to future use and development proposals

The Project's potential impacts on the Planning Scheme Amendments and planning permits that are relevant to the Project (discussed in Section 10.3.3) are summarised below:

- *Amendment C235 Bridge Inn Road (Plenty Road, Mernda to Yan Yean Road, Doreen) Upgrade Project* – As outlined earlier, the Public Acquisition Overlay for this project connects with the project area and potential required Public Acquisition Overlay for the Project. Lot 1\TP139445 will be partially acquired by Amendment C235. An additional area of this lot would also be acquired for the Project. In addition, a continuous walking and cycling path along the majority of the west side of Yan Yean Road is proposed as part of this Project, connecting with the walking and cycling path to be delivered on the south side of Bridge Inn Road under Amendment C235
- *Rising Sewer Project (807 Yan Yean Road)* – As part of this Project, an underground pipeline is proposed across Yan Yean Road to Ironbark Road. Engagement between Yarra Valley Water, Melbourne Water and MRPV is ongoing to ensure that neither project would result in detrimental land use impact
- *6 Youngs Road (Hippity Hop Childcare)* – A permit has been issued for a childcare centre at this property. This property would lose land abutting Yan Yean Road, significantly reducing open space between the road and the future childcare centre. Access would need to be realigned and is likely to be affected during construction only
- *Garden Road Development Plan* – The Garden Road Development Plan has provided for widening of Yan Yean Road. Aerial photography confirms that the built development on the corner of the site has been completed and is well setback from the intersection, with a significant reserve separating the commercial uses and onsite parking facilities from the intersection. While the project boundary abuts this parcel, the proposed works are located entirely in the grass reserve and link into the existing walking and cycling path. The existing access to the commercial development via Yellow Brick Road would be retained.

Consistency with key land use planning policies and strategies

The Project is generally consistent with the relevant policies and strategies as fully discussed in Attachment II *Legislation and Policy* and Technical Report H – *Planning and Land Use Impact Assessment*. A summary of the Project's assessment against the relevant policies and strategies is provided below:

- Plan Melbourne 2017-2050 – The Project would support the rapid growth of Mernda/Doreen in the North Growth Corridor and improve regional arterial road network capacity and connectivity to the M80, La Trobe National Employment and Innovation Cluster, Melbourne Airport and the Northern Industrial Precinct. The Project would contribute to an improved outer suburbs arterial road network, leading to greater efficiencies, improved productivity and greater access to jobs, services, community facilities and markets
- Planning Policy Framework – The Project supports the implementation of Clause 18 (Transport) by improving arterial road capacity and enabling improved sustainable transport connections (bus services, cycling and walking) to the Mernda Train Station and bus interchange and future Mernda Town Centre. Full duplication of Yan Yean Road would facilitate improved connections to the M80, which provides regional access to employment and services. The Project also responds to Clause 12 (Environmental risk and amenity) by undertaking the relevant investigations to understand the Project's amenity impacts. Those investigations concluded that the Project is not expected to pose significant amenity impacts. In addition, the Project is generally consistent with strategic planning for the area as per Clause 19 (Infrastructure). Future growth will be concentrated in existing urban areas in the south and the developing areas of Mernda-Doreen in the north. Refer to Attachment II *Legislation and Policy* and Technical Report H – *Planning and Land Use Impact Assessment* for the detailed assessment of the Project against the relevant policies
- Local Planning Policy Framework (LPPF) – The Project has endeavored to provide an integrated response to the relevant policies of the LPPF. It supports the implementation of the transport related policies such as Clause 21.11 (Transport) of Whittlesea Planning Scheme and Clause 21.05 (Infrastructure) of Nillumbik Planning Scheme by enhancing the road capacity and integrating the different modes of transport. Also, effort has been made to avoid and minimise impacts to the environmental values (biodiversity, social and cultural values) in support of the relevant LPPF policies such as Clause 22.10 (River Red Gum Protection Policy) of Whittlesea Planning Scheme and Clause 22.06 (Roadside Management Policy) of Nillumbik Planning Scheme. Please refer to Attachment II *Legislation and Policy* and Technical Report H – *Planning and Land Use Impact Assessment* Report for detailed assessment of the Project against the relevant clauses of the LPPF.
- The Project includes improved road safety initiatives to reduce risk to existing and future road users. The Project also includes a continuous walking and cycling path along the western side of Yan Yean Road and a separated footpath along the east. This would deliver improved active transport links to key land uses such as Yarrambat Primary School, the Plenty Valley Christian College, Yarrambat Park, Werther Park, Plenty Gorge Park Reserve and Doreen Recreation Reserve, which is consistent with State and local policy objectives. In particular, the walking and cycling path at Werther Park has been designed to traverse through the park to minimise tree loss and link up with the existing path network. South of Werther Park, the walking and cycling path provides direct access to Yarrambat Park and the Plenty Gorge Park Reserve to the west.

Mitigation measures

Mitigation measures have been developed in relation to the identified permanent impacts to ensure that such impacts are avoided, where practicable, or otherwise minimised both in extent and intensity. Again, these measures are underpinned by recommended consultation measures to enhance community interaction, awareness and communication.

Minimising permanent land acquisition

The Project would be designed and constructed to minimise the design footprint and consequently the extent of acquisition, vegetation removal and impacts on businesses, residential properties, parks and reserves, recreational and community facilities and other sensitive land uses (refer to EPRs LU1 and S1).

Where permanent acquisition of a dwelling or private land is unavoidable, compensation for interests in acquired land would be assessed in accordance with the *Land Acquisition and Compensation Act 1986* and early and consistent consultation would be undertaken with affected landowners and tenants (refer to EPR LU2).

Minimising permanent change of access and local movement

Where possible, reductions in the level of access for businesses, residences and commercial community facilities would be minimised (refer to EPRs B1, B3 and S3).

Minimising operational amenity impacts

Appropriate mitigation measures to address the Project's potential amenity impacts must be undertaken as detailed in Chapter 11 *Effects on Physical Environment*.

Other impacts on land

To address the safety risk associated with the proximity of the golf course and archery range within Yarrambat Park to the proposed road alignment, safety management measures would be installed along the boundary with Yan Yean Road to prevent balls or arrows entering into the road reserve.

This EES assumes that a 30 to 36 metre high fence along the edge of the golf course would be included in the design to avoid golf ball collisions with pedestrians, cyclists or vehicles. The alternative option to building a fence is to reconfigure golf course holes 1, 10 and 18 to increase the distance from the road and reduce the risk of golf balls landing on the new road and walking and cycling path to an acceptable level. This would not require a reduction in the number of holes at the golf course.

Any reduction in current parking numbers at existing businesses should be avoided; however, where a loss in existing car parking is unavoidable, losses must be minimised and occur in consultation with relevant stakeholders (refer to EPR B3).

Ongoing consultation and liaison with stakeholders

Ongoing and continuous consultation with the relevant stakeholders such as Councils, landowners / occupiers and businesses must occur throughout the different phases of the Project (refer to EPRs LU2, B3 and S3).

Ongoing consultation would be undertaken with the City of Whittlesea and Shire of Nillumbik regarding the Planning Scheme Amendments and planning permits with the potential to affect / be affected by the Project (refer to EPR LU1).

10.6 Environmental Performance Requirements

This EES includes an Environmental Management Framework (refer to Chapter 12 *Environmental Management Framework*) which provides a transparent and integrated framework for managing environmental risk for the Project. It contains Environmental Performance Requirements, which set the environmental outcomes that must be achieved during design, construction and operation.

Initial EPRs for the Project were prepared to inform the environmental risk assessment. This performance-based approach defines the legislative requirements, standards, limits and processes that the Project must meet or follow, while still providing flexibility to accommodate minor modifications during the detailed design process – provided the outcomes specified in the EPRs are achieved.

In developing the EPRs, the following hierarchy of control was used to identify potential mitigation and management measures:

- Avoidance through design refinements
- Minimisation through timing of the activities
- Mitigation or management through physical/engineering controls
- Mitigation or management through operational controls
- Induction, training and awareness
- Monitoring and measurement
- Adaptive management and contingency protocols.

EPRs relevant to land uses, businesses and social assets have been grouped by Evaluation Objective and are shown in Table 10.6.

Table 10.6 Environmental Performance Requirements

Performance objective	Applicable legislation, policy and guidelines	Impact pathway	EPR Code	Environmental Performance Requirement	Project phase
Environmental Management Framework To provide a transparent framework with clear accountabilities for managing and monitoring the environmental effects associated with the Project	Legislation and policy as identified in all EPRs	These EPRs are relevant for all impact pathways across the Project.	EMF2	Environmental Management Plans Prepare and implement a Construction Environmental Management Plan (CEMP) and other relevant plans as required by the EPRs and in accordance with this Environmental Management Framework (EMF). The development of the CEMP and sub-plans must include consultation with relevant stakeholders as listed in this EMF and as required under any statutory approvals. The CEMP and all sub-plans shall be approved by MRPV before construction commences (excluding preparatory buildings and works permitted under the Incorporated Document).	Design and construction
			EMF3	Complaints management Prepare and implement a process for recording, managing, and resolving complaints received from affected stakeholders during construction. The complaints management system must be consistent with the Project's Communications and Stakeholder Engagement Plan (see also EPR S2) and Australian Standard AS/NZS 100002:2014 Guidelines for Complaint Management in Organisations.	Design and construction
			EMF5	Operation and maintenance Any potential impacts during operation and maintenance will be managed in accordance with the Department of Transport's environmental management system and standards for managing declared roads in Victoria.	Operation and maintenance

Performance objective	Applicable legislation, policy and guidelines	Impact pathway	EPR Code	Environmental Performance Requirement	Project phase
Effects on transport capacity and connectivity – To provide for an effective corridor through the northern outer suburbs of Melbourne, to improve travel efficiency, road safety, and capacity					
Transport (active users and road users) To provide for an effective corridor through the northern outer suburbs of Melbourne, to improve travel efficiency, road safety, and capacity	<i>Transport Integration Act 2010</i> <i>Road Management Act 2004</i> <i>Planning and Environment Act 1987</i>	Construction activities impede the efficient movement of road traffic including general traffic, emergency services, public transport (i.e. buses)	TP2	Traffic Management Plan The Project should be constructed in stages to minimise impact on road users and prior to commencement of relevant works, a Traffic Management Plan (TMP) must be developed and implemented to minimise disruption during construction in accordance with AS1742.3-2009 and in consultation with relevant authorities including Department of Transport, Shire of Nillumbik and City of Whittlesea. The TMP will clearly outline measures to: <ul style="list-style-type: none"> • Minimise road closures, access restrictions and disruption to all road users, public transport users and active users, including pedestrians, cyclists and horse riders • Minimise impacts on local streets such as from 'rat running' during construction closures • Provide for safe construction practices in accordance with road authority requirements • Provide alternative routes for affected road users, public transport users and active users where practicable • Maintain property accesses during construction where practicable or provide alternative access • Potential routes for construction haulage and construction vehicles travelling to and from the project, recognising sensitive receptors and avoiding the use of local streets where practicable • Maintain community safety through appropriate measures such as providing convenient and safe access across Yan Yean Road at all bus stops, activity nodes and places of community significance • Suitable measures, developed in consultation with emergency services, to ensure emergency service access is not inhibited as a result of project construction activities Ensure affected community is notified in advance (in accordance with EPR S2) of changed traffic conditions.	Construction

Performance objective	Applicable legislation, policy and guidelines	Impact pathway	EPR Code	Environmental Performance Requirement	Project phase
Effects on land use planning- Identify other potential adverse environmental effects of the project, such as on land use, and planning, and canvass an environmental management approach and performance measures to ensure any effects are identified and avoided, minimised or mitigated.					
Land use planning To minimise impacts on existing and proposed future land use	<i>Planning and Environment Act 1987</i> <i>Land Acquisition and Compensation Act 1986</i>	Potential changes inconsistent with current or proposed future land use, including land acquisition, severance and occupation	LU1	Minimise land use impacts The Project must be designed and constructed to 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"> – Parks and reserves – Recreational and community facilities – Residential properties and other sensitive land uses such as educational facilities – Commercial and industrial sites. • Consolidate or minimise the fragmentation of, and provide access to, residual land parcels to support future viable land use to the extent practicable and consistent with land zoning and the planning policy framework • Consultation must occur with land managers and/or authorities responsible for the implementation of the relevant strategic land use plans and policies, including City of Whittlesea, Shire of Nillumbik, Melbourne Water and Yarra Valley Water. 	Design and construction
		Potential changes inconsistent with current or proposed future land use, including land acquisition, severance and occupation	LU2	Land acquisition Where permanent land acquisition is unavoidable: <ul style="list-style-type: none"> • Early and consistent consultation with affected land owners and occupiers must occur • Continue one-on-one consultation with affected landowners and occupiers to outline the acquisition and compensation process, discuss changed access arrangements and provide clear timelines of proposed action • Compensation for interests in acquired land must be assessed in accordance with <i>Land Acquisition and Compensation Act 1986</i>. 	Design and construction

Performance objective	Applicable legislation, policy and guidelines	Impact pathway	EPR Code	Environmental Performance Requirement	Project phase
Business To avoid where possible, and otherwise minimise adverse impacts on business and commercial facilities	<i>Land Acquisition and Compensation Act 1986</i>	Potential business impacts such as displacement or acquisition, or impact to business operation due to changes in access and/or amenity Potential business impacts such as changes to amenity, or changed road conditions affecting businesses as a result of operation	B1	Avoid and minimise business disruption Avoid and minimise to the extent practicable any reduction in the level of access, amenity or function of any business or commercial facility, including any reduction in car parking available for businesses or commercial facilities. Ensure that the construction program minimises impacts on businesses and facilities to the extent practicable, with consideration of operating hours and peak visitation times (see also EPR B2).	Design and construction
		Potential business impacts such as displacement or acquisition, or impact to business operation due to changes in access and/or amenity	B2	Implement a Trader Engagement Plan Prepare and implement a Trader Engagement Plan in accordance with <i>Victorian Small Business Engagement Guidelines</i> to manage impacts to non-acquired businesses and to engage with business and property owners throughout the construction phase. The plan shall include: <ul style="list-style-type: none"> • Timely information on key project milestones • Changes to traffic conditions and duration of impact • A project construction schedule developed in coordination with transport authorities and City of Whittlesea and Shire of Nillumbik and in consultation with businesses to minimise cumulative impacts of this and other projects • Plans for signage to notify customers of proposed changes to business operations, including the setting of suitable timeframes for notification prior to commencement of changes 	Design and construction

Performance objective	Applicable legislation, policy and guidelines	Impact pathway	EPR Code	Environmental Performance Requirement	Project phase
Continued As above	Continued As above	Continued As above		<ul style="list-style-type: none"> Measures to ensure access to businesses is maintained for customers, delivery and waste removal unless there has been prior engagement with affected businesses (including mutually agreed mitigation measures as required). This could include the installation of directional and business signage to assist customers and minimising reduction in carparking available to shoppers and traders Process for registering and management of complaints from affected businesses and potential support services offered Ensure emergency services are notified ahead of major works Provide the opportunity for issues / concerns to be raised through a 24-hour phone number (see also EPR S2). 	Continued As above
		Potential business impacts such as changes to amenity, or changed road conditions affecting businesses as a result of operation	B3	Business access and car parking All permanent access to and parking for business and commercial facilities affected by the works is to be restored, in consultation with the relevant stakeholders, including associated landscaping and restoration works. Any temporary access arrangements put in place for the duration of construction must be removed when construction has ceased, unless they become the permanent arrangement. Any reduction in current parking numbers at existing businesses will be avoided; however, where a loss in existing car parking is unavoidable, losses must be minimised and occur in consultation with relevant stakeholders.	Design and construction
Social To avoid where possible, and otherwise minimise adverse effects on social and cultural values, and maximise the enhancement of these values where opportunities exist	<i>Planning and Environment Act 1987</i> <i>Land Acquisition and Compensation Act 1986</i>	Potential impacts on social and cultural values such as community, educational, religious or recreational facilities due to changes to access or amenity	S1	Social access and amenity To develop and implement measures to avoid and minimise impacts on social and cultural values, including: <ul style="list-style-type: none"> Design permanent and temporary works to avoid where possible, and otherwise minimise adverse effects on trees (see also EPR AR1) Detailed design to protect and, where practicable, improve access to amenity for potentially affected residents, users of the transport corridor (pedestrians, cyclists, horse riders and motorists), open space, social and community infrastructure and commercial facilities, and implementing the principles of Crime Prevention Through Environmental Design. 	Design and construction

Performance objective	Applicable legislation, policy and guidelines	Impact pathway	EPR Code	Environmental Performance Requirement	Project phase
Continued As above	Continued As above	Potential impacts on social and cultural values such as community, educational, religious or recreational facilities due to changes to access or amenity	S2	Implement a Communications and Stakeholder Engagement Plan Prior to construction, develop and implement a Communications and Stakeholder Engagement Plan to engage and consult the community and affected stakeholders and discuss progress of construction activities. The Communications and Stakeholder Engagement Plan must include measures to: <ul style="list-style-type: none"> Identify a process for identifying community issues and the recording, management and resolution of complaints from affected stakeholders including business owners, community service providers, education providers, public and active transport key user groups and residents, consistent with Australian Standard AS/NZS 10002:2014 Guidelines for Complaint Management in Organisations Communicate and engage with the community and potentially affected stakeholders in relation to: <ul style="list-style-type: none"> Construction activities including temporary works and impacts that may affect the community, businesses or individual stakeholders (e.g. dust, noise, vibration and light) and relevant mitigation Changes to transport conditions and relevant mitigation (e.g. road closures, detours) Ensure that communities are notified of construction and changes well in advance of works commencing as approved by MRPV Ensure that the consultation program includes provision for onsite signage of affected properties that provide a service to the local or regional community Continue consultation with people affected by the relocation of memorials 	Design and construction

Performance objective	Applicable legislation, policy and guidelines	Impact pathway	EPR Code	Environmental Performance Requirement	Project phase
Continued As above	Continued As above	Continued As above		<ul style="list-style-type: none"> Outline the timing of works that will affect particular local areas, to be updated to reflect current and anticipated conditions Communicate incidents and emergencies, including notification methods and timeframes in the event of a major incident or overrun Ensure the workforce has appropriate community awareness and sensitivity Implement innovative communications tools and methods to enhance the Project's ability to effectively communicate and engage with the community and stakeholders including best available technology in addition to conventional means Make provision for a 24-hour phone number to be available to the community to report concerns. 	Continued As above
		Potential impacts on social and cultural values such as isolation of community, educational, religious or recreational facilities, changes to amenity, or changed road conditions affecting access as a result of operation	S3	To mitigate impact to community facilities and the community after construction, driveway and access will be reinstated. Where access cannot be reinstated, alternative access is required to be provided in consultation with stakeholders.	Design and construction

10.7 Conclusion

This chapter summarises the findings of the technical assessments that have been undertaken to determine the Project's impacts on land uses, businesses and social assets. The outcome of the technical assessments indicated that the Project's most significant impacts to land use, business and social assets are likely to result from the required permanent land acquisition and potential disruption to residents and occupiers during the construction phase.

To address potential adverse impacts, appropriate mitigation measures have been developed. A key to avoiding and minimising impacts is continuous and ongoing consultation with affected stakeholders. The mitigation measures informed the development of EPRs, which set the environmental outcomes that must be achieved during the Project's design, construction and operation.

Therefore, the Project is considered to respond to the land use, business and social asset objectives of the EES Scoping Requirements by:

- Identifying the potential adverse environmental effects using a risk-based approach
- Proposing a comprehensive environmental management approach including appropriate performance measures to avoid, otherwise minimise and mitigate adverse impacts.