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# **GLENGARRY EAST DEVELOPMENT PLAN**

**Development Plan Report** 100 & 101 Cairnbrook Road, Glengarry November 2018

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# 1 INTRODUCTION

This Development Plan applies to land at 100 and 101 Cairnbrook Road, Glengarry and covers an area of approximately 21.05 hectares in two parcels separated by Cairnbrook Road.

The Development Plan has been prepared on behalf of Lurganare Pty Ltd, the owner of 101 Cairnbrook Road. The owner of 100 Cairnbrook Road, Mr Peter Walkley, has also been involved in the preparation of the Plan.

The locality plan in *Figure 1* below displays the land in relation to its position within the town of Glengarry.

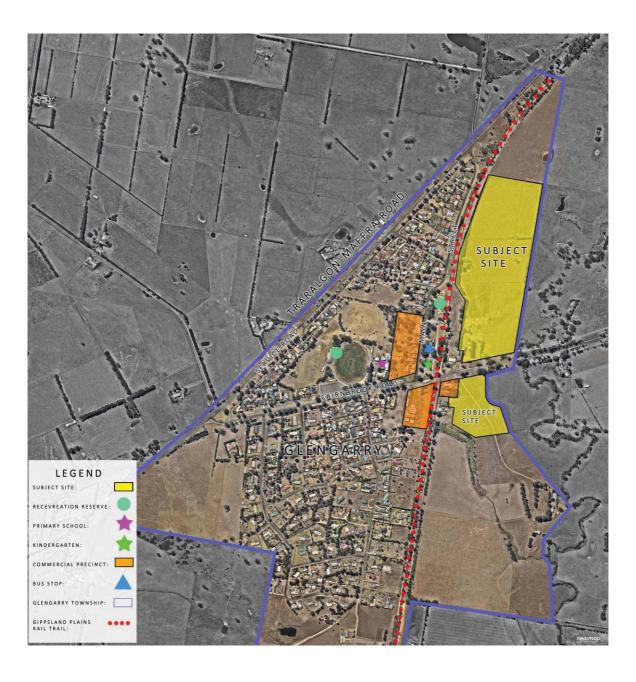


FIGURE 1 Locality Plan displaying the subject site in context of Glengarry's key facilities

All of the land is within the General Residential Zone, Schedule 1 – General Residential Areas (GRZ1) and covered by the Development Plan Overlay, Schedule 5 – Residential Growth Areas (DPO5) under the Latrobe Planning Scheme. The land at 101 Cairnbrook Road is also partially affected by the Land Subject to Inundation Overlay (LSIO). Rezoning of the land to the GRZ1 and DPO5 occurred via Amendment C74 to the Latrobe Planning Scheme, which was gazetted on 15 August 2013.

In accordance with the provisions of **Clause 43.04** of the Latrobe Planning Scheme, the purpose of a Development Plan Overlay is:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- To identify areas which require the form and conditions of future use and development to be shown on a development plan before a permit can be granted to use or develop the land.
- To exempt an application from notice and review if it is generally in accordance with a development plan.

The intent of a Development Plan is to stipulate how a specific area will be developed in terms of overall layout and design, subdivision density, provision of infrastructure and open space, staging and urban design.

The Glengarry East Development Plan (GEDP) has been prepared in accordance with the relevant provisions of the Latrobe Planning Scheme, including Schedule 5 of the Development Plan Overlay, and is informed by the site's key features and the characteristics of the surrounding environment. The Development Plan provides the guidance to create a new residential area that will feature predominantly conventional residential sized lots of varying sizes, a safe and permeable internal road network with efficient access to Glengarry's established residential area to the west, provision for future road linkages to longer term residential growth areas to the north and south, improvements to the Gippsland Plains Rail Trail and provision of on-site stormwater detention and drainage reserves.

The Development Plan is comprised of the following two documents:

- The Report that provides the project background, site context and site analysis, planning policy analysis, infrastructure, traffic and environmental assessments and a design response detailing the key components of the Plan and its implementation; and,
- The Plan that visually depicts how the land should be used and developed for residential purposes, including lot layout, road network, housing densities, location and purpose of reserves, primary infrastructure and stormwater management.

Future planning applications to subdivide, use or develop the land must be prepared generally in accordance with this Development Plan.

The Development Plan has been based on the following investigations, reports and assessments:

- Land Servicing Feasibility Report by Beveridge Williams & Co Pty Ltd, August 2016
- Eaglehawk Creek Flood Study by Beveridge Williams & Co Pty Ltd, January 2013
- Stormwater Management Plans by Beveridge Williams & Co Pty Ltd, May 2018
- Traffic and Transport Assessment by Beveridge Williams & Co Pty Ltd, May 2018
- Preliminary Flora and Fauna Assessment by Indigenous Design Land Management, July 2016



- Habitat Assessment & Targeted Survey of Matted Flax-lily by Indigenous Design Land Management, January 2017
- Targeted Surveys for the endangered Growling Grass Frog and Green & Golden Bell Frog by Indigenous Design Land Management, January 2017
- Targeted Dwarf Galaxia Survey by Aquatica Environmental, January 2017
- Cultural Heritage Management Plan by Extent Heritage Advisors, May 2017

### 2 SITE AND SURROUNDS

# 2.1 Strategic context & site history

The Glengarry East Development Plan applies to land on the eastern edge of the town of Glengarry within the municipality of Latrobe City.

In August 2010, the Latrobe City Council adopted the *Small Towns Structure Plans, Boolarra, Glengarry & Tyers — Background Report*. This report and its associated plans provide a framework to guide the future land use and development within these three towns up to the year 2023 and is noted as a reference document within the Latrobe Planning Scheme. The report was based on the assessment of future residential and rural residential land requirements and recommendations provided in the *Latrobe City Council Residential and Rural Residential Land Assessment Report September 2008*. Both reports identified that due to Glengarry's close proximity to Traralgon and the various constraints limiting future expansion of Traralgon's urban area, there is potential for Glengarry to absorb some of this growth. The reports noted the shortage of residential zoned land within Glengarry had most likely constrained demand in recent years and there was a need to rezone additional land to facilitate conventional residential development in the short to medium term to address this issue.

Following completion of the abovementioned strategic projects, Amendment C74 to the Latrobe Planning Scheme was gazetted on 15 August 2013. This amendment rezoned all of the subject land from Farming Zone to Residential 1 Zone (now General Residential 1 Zone) with a Development Plan Overlay, Schedule 5 and revised the Glengarry Structure Plan in the Municipal Strategic Statement. The revised Structure Plan identified the subject site as 'existing residential' land within the township boundary.

Amendment C87 (Parts 1, 2 & 3) to the Latrobe Planning Scheme was gazetted on 12 January and 10 August 2017. This amendment implements key directions contained in the Traralgon Growth Areas Review (TGAR), which provides a long-term growth strategy for future urban development around Traralgon, the Traralgon-Morwell Corridor, Glengarry and Tyers. TGAR supports the development of unconstrained land on the east side of the Glengarry township with standard residential densities in accordance with the Glengarry Structure Plan. More specifically, the growth area framework plan contained in TGAR, includes the subject land as a 'first stage greenfield' development area for residential growth. A copy of the framework plan is provided in *Figure 2* for reference. Amendment C87 Part 3 also introduced an updated version of the Glengarry Structure Plan in the Municipal Strategic Statement, a copy of which has been provided at *Figure 3*.

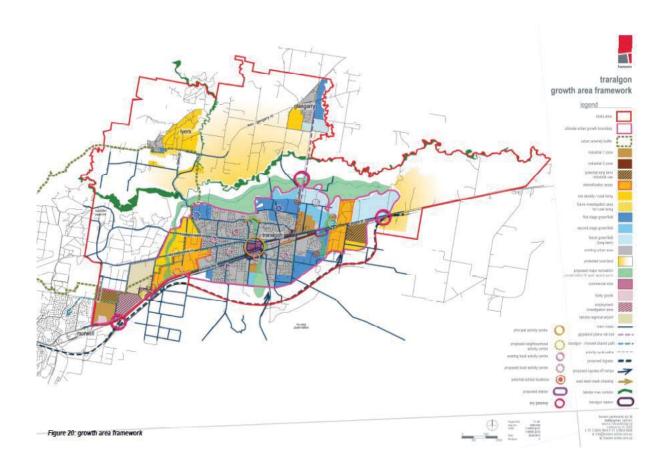


FIGURE 2 Growth Area Framework Plan, Source: Traralgon Growth Areas Review, August 2013

The following strategic planning policy contained in the Latrobe Planning Scheme has influenced the preparation of the Glengarry East Development Plan:

# State Planning Policy Framework

Clause 11.01-1 – Settlement networks

Clause 11.02-3 – Planning for growth areas

Clause 11.10-2 - Gippsland - Planning for growth

Clause 11.10-3 – Sustainable communities

Clause 12.01-2 - Native vegetation management

Clause 13.05 - Bushfire

Clause 15.01-1 - Urban design

Clause 15.01-3 - Neighbourhood and subdivision design

Clause 15.01-4 – Design for safety

Clause 15.01-5 - Cultural identity and neighbourhood character

Clause 15.02-1 – Energy and resource efficiency

Clause 15.03-2 - Aboriginal cultural heritage

Clause 16.01-1 - Integrated housing

Clause 16.01-2 – Location of residential development

Clause 16.01-4 – Housing diversity

Clause 16.01-5 - Housing affordability

### **Local Planning Policy Framework**

Clause 21.02-1 - Urban Growth

Clause 21.02-3 - Small Towns

Clause 21.02-6 – Public Open Space

Clause 21.02-7 - Liveability

Clause 21.02-8 - Healthy Urban Design

Clause 21.03-1 - Sustainability

**Clause 21.03-2 – Significant Environments and Landscapes** 

Clause 21.06-1 – Built Environment

Clause 21.06-3 – Township Identity

Clause 21.08-2 – Community Infrastructure

Clause 21.08-3 – Development Infrastructure

**Clause 21.09-7** contains specific local area strategies for Glengarry. Strategies of particular relevance to the Glengarry East Development Plan are as follows:

- Retain and promote Glengarry's rural atmosphere and residential service centre role.
- Investigate the opportunity for Glengarry's role to expand as a dormitory suburb of Traralgon.
- Provide a visually attractive urban environment and enhance town entrances.
- Provide a safe and effective road and path network that allows for convenient movement of vehicles, pedestrians and cyclists.
- Facilitate development in accordance with the Glengarry Town Structure Plan (GTSP).
- Encourage residential development to the east of the township which is to be sensitive to the Eaglehawk Creek environment and floodplains (GTSP Areas 5 & 6).
- Protect development potential of agricultural land to the north, east and south of the township (GTSP Areas 9, 10, 12 and 14) for future long-term residential expansion. This residential development must be sensitive to the Eaglehawk Creek environment and floodplains.
- Maintain and protect public open space areas including the Gippsland Rail Trail, and implement the recommendations of the Latrobe City Open Space Plan (GTSP Areas 2 & 11).
- Encourage east-west shared path link and vehicular link between GTSP Areas 5 & 6
  and the town centre. Links should be designed to ensure the safe passage of all
  pedestrians, bicycles and vehicles.
- In consultation with stakeholders, investigate and resolve appropriate vehicle access points to GTSP Area 5.

The **Glengarry Structure Plan** at **Clause 21.09-7** identifies the subject land as Areas 5 & 6, being within the township boundary and an 'Existing Residential Zone'. This plan also identifies an east-west vehicle connection between 101 Cairnbrook Road (Area 5) and Main Street. A copy of the structure plan is contained in *Figure 3*.

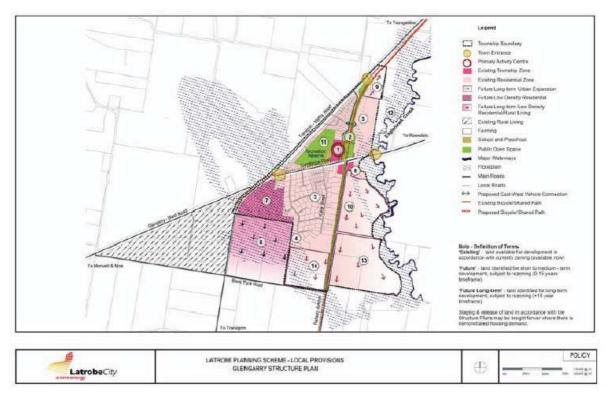


FIGURE 3 Glengarry Structure Plan, Source: Latrobe Planning Scheme, October 2017

# 2.2 Site context

The small town of Glengarry is located in the north-east portion of Latrobe City, approximately 11 kilometres north-east of Traralgon and 165 kilometres south-east of Melbourne. The municipality is located within the Latrobe Valley, south of the foothills of the Great Dividing Range and north of the Strzelecki Ranges. In population terms, it is the third largest municipality outside the Melbourne metropolitan area and Geelong.

Glengarry's resident population was recorded as 1,104 persons at the 2016 ABS Census (source: <a href="www.abs.gov.au">www.abs.gov.au</a>). The town performs a residential service centre role and provides a limited range of commercial and community facilities for its residents and the surrounding rural living communities, including:

- A public primary school and kindergarten;
- A small commercial precinct that accommodates a range of businesses, including an IGA supermarket, bakery/café, post office, hotel/pub and hairdressing salon; and,
- A range of public recreation facilities, including:
  - Glengarry Football Ground and Recreation Reserve precinct, which includes three separate ovals, tennis courts and clubrooms;
  - Apex Park, which includes a skate ramp, the former Glengarry railway station building, access to the Gippsland Plains Rail Trail and a public car parking area; and,
  - Glengarry Park, which includes a children's playground, picnic tables, electric barbeques and public toilets.

A daily public bus service to and from Traralgon operates from the commercial precinct.

The subject land is situated on the east side of Glengarry's existing urban area and represents the most significant residential growth in the town's recent history.

The locality plan at *Figure 1* and the site context plan provided in *Appendix B* display the position of the land in relation to Glengarry's town boundary and key facilities.

# 2.3 Subject site

The Glengarry East Development Plan (GEDP) applies to two parcels of land situated on opposite sides of Cairnbrook Road, Glengarry:

- 100 Cairnbrook Road, being Lot 1 on Plan of Subdivision 725168S and contained in Certificate of Title Vol. 11907 Fol. 683. This parcel has an area of 2.96 hectares.
- 101 Cairnbrook Road, being Lot 1 on Title Plan 122959H and contained in Certificate of Title Vol. 9927 Fol. 881. This parcel has an area of approximately 18.09 hectares.

The Certificate of Title for each property is contained in *Appendix A*. The title to 100 Cairnbrook Road is encumbered by a Section 173 Agreement (AN406313G), registered 22 December 2016, which requires the construction of a vehicle crossing to service Lot 2 on Plan of Subdivision 725168S at such time that planning or building approval is granted for the development of Lot 1 Plan of subdivision 725168S (being the land at 100 Cairnbrook Road).

The features of the two sites are detailed in aerial photograph in *Figure 4* and the site analysis plan contained in *Appendix C*.

Land at 100 Cairnbrook Road is vacant, predominantly cleared of vegetation and covered in pasture grass. It is traversed by a long gravel driveway that provides access to the existing dwelling on the balance farm from which the subject land was excised in 2017. Vehicular access to this driveway is currently obtained from Cairnbrook Road via a gate positioned at the western end of 100 Cairnbrook Road's northern boundary. The land is currently grazed by a small number of beef cattle.

Land at 101 Cairnbrook Road is used for rural residential purposes and developed with a single storey dwelling and associated shedding in its south-west corner. These improvements are accessed from Cairnbrook Road via a gravel crossover and driveway positioned at the western end of the site's southern boundary. The balance land is predominantly cleared, covered in pasture grass and used to graze a small number of horses.

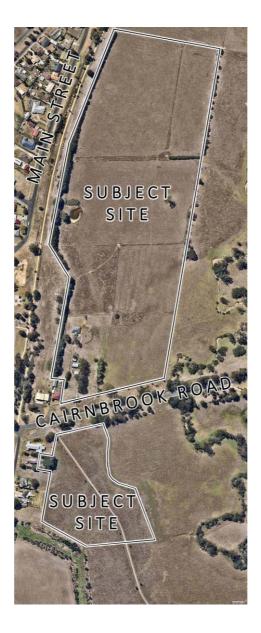


FIGURE 4 Aerial photograph with sites outlined; Source: Nearmap

The topography of the land at 100 Cairnbrook Road is relatively flat. The northern half of 101 Cairnbrook Road is also relatively flat, whilst the southern half falls towards an open drainage channel that traverses the majority of the remainder of the site. The channel is a registered tributary of Eaglehawk Creek and the majority of land comprising the southern portion of the site is subject to inundation from this creek. The extent of the Land Subject to Inundation Overlay is displayed in *Figure 5* and is discussed further at section 3.2 of this report.

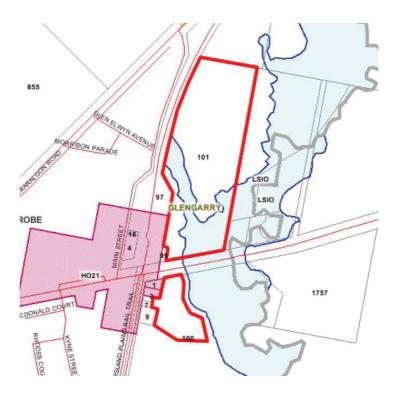


FIGURE 5 Extent of Land Subject to Inundation Overlay; Source: Latrobe Planning Scheme, land.vic.gov.au

The majority of the GEDP area has been subjected to agricultural practices over a long period of time, with moderate grazing having occurred by both cattle and horses. Hence, the land is highly modified, predominantly cleared of its original native vegetation and covered in pasture grass. Existing vegetation within 101 Cairnbrook Road includes several scattered remnant canopy trees and aquatic vegetation around an existing dam, as well as planted vegetation in a garden setting around the existing dwelling complex and planted shelterbelt vegetation. The land at 100 Cairnbrook Road is covered in pasture grass and devoid of trees. Patches of the *Plains Grassy Woodland* Ecological Vegetation Class and Matted Flax-lily plants (*Dianella amoena*) have been identified within the Gippsland Plains Rail Trail Crown land adjacent to the western boundary of 101 Cairnbrook Road. The significance of the vegetation within both the site and adjacent rail trail and its potential to provide habitat for Growling Grass Frog and Dwarf Galaxias is discussed in further detail in section 3.8.

Part of the GEDP area is within an area of Aboriginal cultural heritage sensitivity, as displayed in *Figure 6*. A Cultural Heritage Management Plan (CHMP) for 101 Cairnbrook Road has been prepared and approved under the *Aboriginal Heritage Act 2006* and a copy of the Notice of Approval is provided in *Appendix D*. A full copy of the CHMP can be provided to Council upon request. The CHMP contains specific impact mitigation and long-term protection recommendations relating to registered cultural heritage site 'Cairnbrook Road 2 VAHR 8221-0027', in addition to construction management recommendations relating to three other registered sites. This is discussed further in section 3.9.

A detailed cultural heritage investigation should be carried out for the land at 100 Cairnbrook Road at the subdivision stage, to determine the extent of significance prior to any development of the affected area.

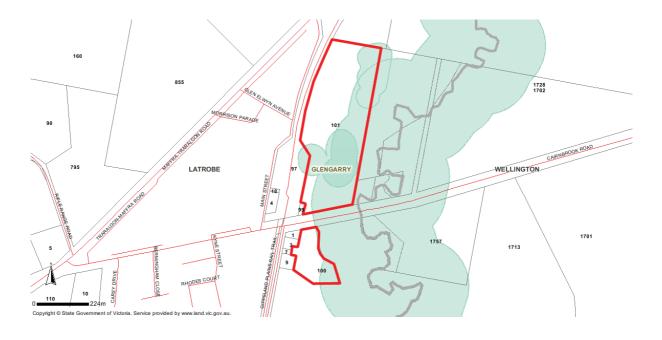


FIGURE 6 Extent of Aboriginal Cultural Heritage Sensitivity; Source: land.vic.gov.au

# 2.4 Surrounding Environment

### North

The northern portion of the GEDP area has an abuttal to agricultural land that is used for extensive animal husbandry (cattle grazing). Although currently used for farming purposes, this land is situated within the town boundary and has been identified as a future long term residential growth area on the Glengarry Structure Plan (refer to *Figure 3*). It is predominantly cleared and covered in pasture grass, has a man-made dam straddling its eastern boundary and abuts the Gippsland Plains Rail Trail to the west.



PHOTO 1 – Land to the agricultural land north of 101 Cairnbrook Road

### **East and South**

Land to the east of 101 Cairnbrook Road is used primarily for agriculture (cattle grazing) and is traversed by Eaglehawk Creek. The creek alignment defines the municipal boundary between Latrobe City and Wellington Shire.

To the immediate east and south of 100 Cairnbrook Road is the balance land from which it was recently subdivided. This land is used for agriculture (cattle grazing) and contains a single dwelling and ancillary shedding near its eastern boundary abuttal to Eaglehawk Creek. All of this land is situated within the town boundary and has been identified as a future long term residential growth area on the Glengarry Structure Plan.

Cairnbrook Road separates the two land parcels within the GEDP area and is a bitumen sealed rural collector with a two-way undivided carriageway with a single lane in each direction within an approximately 60 metre wide road reservation. Adjacent to the site, the speed limit is 80km/h, decreasing to 60km/h and 40km/h during school hours.

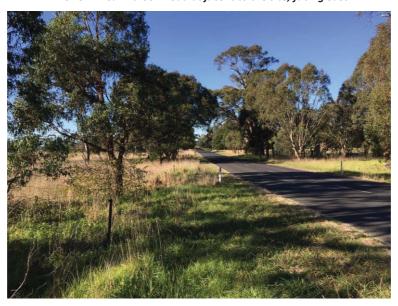


PHOTO 2 - Cairnbrook Road adjacent to the site, facing east

PHOTO 3 - Cairnbrook Road adjacent to the site, facing west

### West

Abutting the majority of the western boundary of 101 Cairnbrook Road is Crown land comprising the alignment of the former Maffra railway line, which now forms the Gippsland Plains Rail Trail. The rail trail allows for shared cyclist and pedestrian usage of a gravel path that extends through central Gippsland, commencing at Traralgon and terminating at Stratford.

The former Glengarry Train Station site is located within the portion of Crown land adjacent to the southern section of 101 Cairnbrook Road and accommodates a variety of public facilities, including the original station building, a skate park and car park, Glengarry kindergarten, Apex Park and fire station. The remainder of the western boundary of 101 Cairnbrook Road abuts a residential property at 99 Cairnbrook Road.

Further to the west of 101 Cairnbrook Road, is Main Street. The southern section of Main Street accommodates Glengarry's commercial precinct, whilst the northern section is residential in usage and comprises allotments ranging in size between approximately 550m² and 2,700m² that are each developed with a single dwelling and ancillary sheds/garages.

In proximity to the northern section of the site, Main Street is a bitumen sealed access road with a two-way undivided carriageway and a single lane in each direction within an approximately 20 metre wide reservation. It has a speed limit of 60km/h.

Abutting the western boundary of 100 Cairnbrook Road is the Mechanics Institute Hall and St. Johns Anglican Church at 1 Railway Avenue and residential properties at 5 to 9 Railway Avenue.

PHOTO 4 – Gippsland Plains Rail Trail adjacent to the site, facing north



PHOTO 5 – Former Glengarry Train Station site and skate park



PHOTO 6 – Residential development on the west side of Main Street



PHOTO 7 – Mechanics Institute Hall, St Johns Anglican Church and residential development in Railway Avenue



PHOTO 8 – Glengarry commercial precinct

### **3 SITE ASSESSMENTS**

The Glengarry East Development Plan (GEDP) has been informed by a series of background investigations and reports, including:

- Land Servicing Feasibility Report
- Eaglehawk Creek Flood Study
- Stormwater Management Plans
- Traffic and Transport Assessment
- Preliminary Flora and Fauna Assessment
- Habitat Assessment & Targeted Survey of Matted Flax-lily
- Targeted Surveys for the endangered Growling Grass Frog and Green & Golden Bell Frog
- Targeted Dwarf Galaxia Survey
- Cultural Heritage Management Plan

A summary of the report findings and other relevant investigations and their implications for the design of the Development Plan are detailed below.

# 3.1 Infrastructure Servicing

A Land Servicing Feasibility Report was prepared by Beveridge Williams & Co Pty Ltd in August 2016 and provides an assessment of the infrastructure available and its ability to service the GEDP area. This report is included in *Appendix E* and its key findings are summarised as follows:

### Sewerage

Wastewater services are available for the proposed development. Gippsland Water has identified several options with the preferred discharge point being the Glengarry Sewer Pumping Station on Black Tank Road approximately 1.7 kilometres south of the site. A sewer pump station reserve may be required within the proposed development and its location will be determined at the planning permit application stage.

# **Electricity**

Both High Voltage and Low Voltage electricity is available to the development site with no requirements for upgrades to the existing network. Extension of existing infrastructure is, however, required to service the proposed development. An electricity substation kiosk will be required within the proposed development and its location will be determined at the planning permit application stage.

### Natural gas

Natural gas is currently unavailable within Glengarry and there are no proposed works to service the area in the foreseeable future.

### **Telecommunications (NBN)**

The National Broadband Network (NBN) service can be made available to the development either wirelessly or by fibre optics with upgrades to the existing infrastructure required in each instance.

### Reticulated water

Reticulated potable water is available for the proposed subdivision with extensions required to the current watermain networks on Cairnbrook Road and Main Street.

### Stormwater drainage

Stormwater drainage is available for the development with the likely requirement of detention and treatment systems to maintain water quality and runoff from the development.

### 3.2 Flood Assessment

The Eaglehawk Creek Flood Study was prepared by Beveridge Williams & Co Pty Ltd in January 2013 to support rezoning of the GEDP area through Amendment C74. The purpose of the report was to define the creek's flooding regime and determine the level of hazard and risk potential for flood damage and subsequent impacts on infrastructure and surrounding land resulting from residential development of the subject land. It also guided an alteration to the extent of the Land Subject to Inundation Overlay affecting the GEDP area. A copy of this report is included in *Appendix F* and its key conclusions can be summarised as follows:

- During the flood of Eagleahawk Creek in 1995, a significant portion of the subject site and Cairnbrook Road was inundated. This flood has been used to establish the current alignment of the LSIO.
- The southern section of 101 Cairnbrook Road, between the road and the drainage channel crossing the site, is not considered suitable for development without significant infrastructure and bulk earthworks.
- The northern section of 101 Cairnbrook Road is elevated and stays dry allowing development with a low risk and cost. Gaining access off Main Street and crossing the Gippsland Plains Rail Trail should be considered as an option for site access.
- 100 Cairnbrook Road can have access off this road during a 1 in 100 year flood event.
- The proposed development of the subject sites will not obstruct or divert floodwater and will not increase flood risk. Any assets can be constructed above the flood level and will not be surrounded or isolated by floodwaters.
- Surrounding and downstream land parcels will not be affected by development of the subject sites.

### 3.3 Stormwater Management

Stormwater Management strategies for both 100 and 101 Cairnbrook Road were prepared by Beveridge Williams & Co Pty Ltd in May 2018. A copy of each report is provided in *Appendix G*. Both strategies confirm that stormwater drainage can be managed to meet the Stormwater Best Practice Environmental Management Guidelines.

### 3.4 Road Network and Traffic Impacts

A Traffic and Transport Assessment was prepared by Beveridge Williams & Co Pty Ltd in May 2018 and provides an assessment of the GEDP with regards to traffic impact and road hierarchy. This report is included in *Appendix H* and confirms the following:

- The GEDP is anticipated to generate in the order of 1,200 daily vehicle movements, with 10% occurring in the peak AM and PM periods.
- It is anticipated that site generated traffic will be primarily distributed into the wider road network via the intersections of Main Street/Cairnbrook Road, Cairnbrook/Traralgon-Maffra Road and to a lesser extent Glen Elwyn Avenue/Traralgon-Maffra Road and Main Street/Traralgon-Maffra Road.
- There is appropriate capacity within the surrounding road network to accommodate the anticipated traffic generation.
- The current street forms can adequately accommodate post-development traffic volumes.
- Access to the 101 Cairnbrook Road is to be via accesses from Cairnbrook Road and Main Street which are to be constructed as Access Streets within road reserves of 16.0m and 20.0m respectively. There is no requirement from a traffic management perspective for the Main Street access to be constructed prior to stage 4 of the development. Access to 100 Cairnbrook Road is to be via a single access point to Cairnbrook Road which is to be constructed as an Access Street within a 16.0m road reserve. The proposed access arrangements will provide adequate capacity to accommodate all site generated traffic.
- The internal road networks of the GEDP are proposed to comprise a series of Access Streets within 16 metre and 14.5 metre road reserves, providing connection to the wider road network.
- Shared paths between the site and the main Glengarry township are to be provided facilitating pedestrian and cyclist connectivity as well as providing convenient links to the available public transport.
- Sufficient road network planning and capacity will be available in the short and long term to cater for traffic generated from the GEDP area.

At its meeting of 5 November 2018, the Latrobe City Council resolved that, at the detailed design stage, further consideration will be given to the most appropriate location for the access/egress point onto Main Street. This will include appropriate treatments to ensure impact to residents in the immediate proximity is kept to a minimum.

# 3.5 Public Open Space

The Latrobe City Public Open Space Strategy 2013 identifies three main open space reserves within Glengarry; the Gippsland Plains Rail Trail, Apex Park and Glengarry Recreation Reserve. The Strategy states that open space provision and distribution in residential areas within small towns such as Glengarry should be guided by the following:

• Local – the majority of houses in residential areas should have access to a minimum of 0.5 hectares of public open space within a 500 metre radius; and,

• District – the majority of houses in residential areas should have access to district level public open space within a 3km radius.

The Strategy identifies the Glengarry Recreation Reserve as a District Sport Reserve, Apex Park as a District Parkland Reserve and the Gippsland Plains Rail Trail as a Regional Parkland Special Use Reserve. All of these facilities are located within 3km of the GEDP area.

Although the strategy does not identify any specific recommendations with respect to Glengarry, it does encourage improved linkages and usage of existing public open space.

An extract of the Glengarry public open space plan from the Strategy is provided in Figure 7.



FIGURE 7 Glengarry public open spaces; Source: Latrobe Public Open Space Strategy 2013 – Glengarry

### 3.6 Bicycle Network

The Latrobe City Bicycle Plan (2007-2010) contains a series of recommendations for the improvement of bicycle user facilities within Glengarry, one of which is relevant to the proposed GEDP:

• A shared bicycle/pedestrian path should be constructed on the east side of Main Street, between the former railway station and Cairnbrook Road.

It is noted that the abovementioned path connection has been completed.

In more general terms, the Bicycle Plan states that the provision of bicycle routes should be considered as part of the establishment of a new residential area and, in particular, links should be provided to existing bicycle networks and key activity centres.

An extract of the Glengarry Bicycle Network Plan is provided in Figure 8.

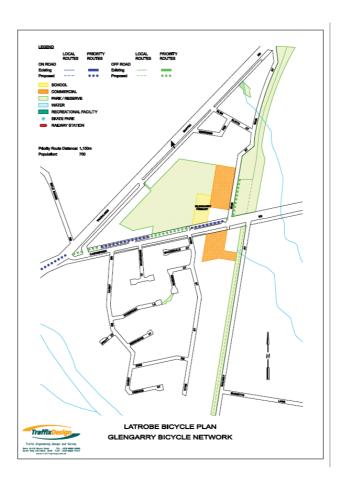


FIGURE 8 Latrobe Bicycle Plan – Glengarry Bicycle Network; Source: Latrobe City Council Bicycle Plan 2007-2010

# 3.7 Public Transport

Glengarry is provided with a regional V-Line bus service that operates daily between the towns of Maffra and Traralgon. The only bus stop within Glengarry is centrally located in Main Street opposite the Glengarry Hotel.

As demonstrated in the Mobility Plan provided in both *Appendix P* and *Figure 9*, approximately 50 percent of all land within the GEDP area is within 400 metres of the bus stop.

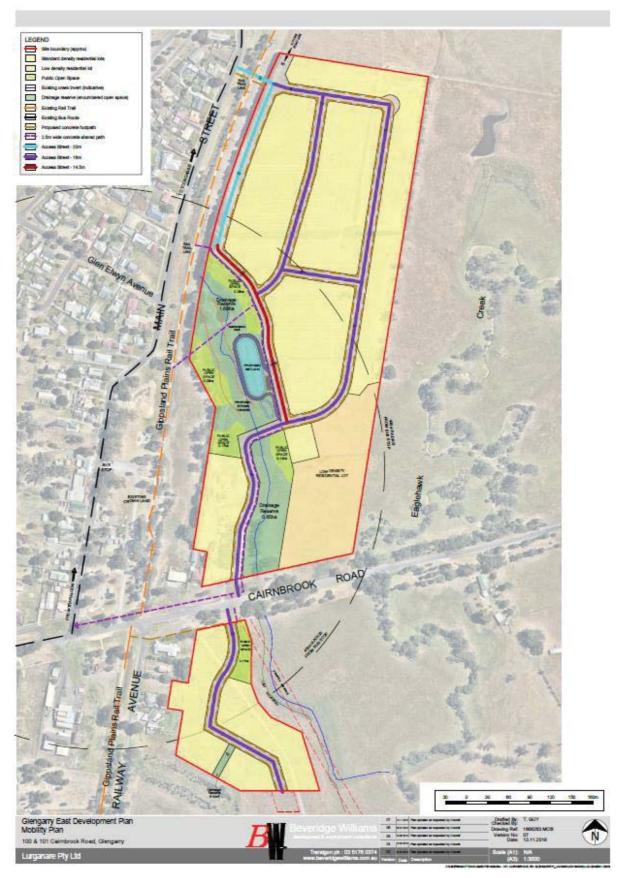


FIGURE 9 Mobility Plan

### 3.8 Ecological Assessments

A Preliminary Flora and Fauna Assessment was prepared by Indigenous Design Land Management in July 2016. It provided a full site-based flora and fauna assessment for 101 Cairnbrook Road and a desktop based assessment for 100 Cairnbrook Road, a summary of which is provided as follows:

- The predominant vegetation type covering the 101 Cairnbrook Road property is open pasture with native vegetation consisting of sparsely scattered remnant canopy trees, in addition to fringing and aquatic vegetation associated with a manmade dam.
- Native vegetation in the form of grassland, woodland and semi aquatic vegetation was found in the Gippsland Plains Rail Trail and both grassland and woodland were identified within the adjacent southern roadside.
- The significant flora species *Dianella amoena* (Matted Flax-lily) and native grassland remnants that meet the definition criteria of the *Environment Protection and Biodiversity Conservation (EPBC) Act (1999)* protected vegetation community *Gippsland Red Gum Grassy Woodland and Associated Native Grassland* were identified at several locations within the Gippsland Plains Rail Trail. The 101 Cairnbrook Road property and adjacent southern road reserve were found not to support any significant flora species.
- The 101 Cairnbrook Road property was deemed to provide only limited potential habitat for some significant waterbirds, the Growling Grass Frog and Dwarf Galaxias, whilst the Gippsland Plains Rail Trail was found to provide only limited potential habitat for the Growling Grass Frog. The southern roadside area was deemed unlikely to support any significant fauna species.
- Targeted surveys to ascertain the extent of Matted Flax-lily plants within the Gippsland Rail Trail were recommended to be undertaken during Spring. Following these surveys, modification of the access roads to the Development Plan area may be necessary to avoid the abovementioned vegetation.
- Following finalisation of the subdivision design, a *Flora and Fauna Guarantee Act* (1988) permit may be required to remove any protected flora species within the Crown land Rail Trail and western road reserve.
- The desktop analysis of 100 Cairnbrook Road revealed that the highest quality vegetation is likely to be fringing the western and eastern boundaries, with swampy remnants possibly remaining within the drainage lines within the property. Potential habitat for significant species was deemed minimal, however this will need to be confirmed via a detailed on-ground analysis.

A Habitat Assessment and Targeted Survey for Matted Flax-lily was undertaken by Indigenous Design Land Management in January 2017. The assessment included a targeted search for Matted Flax-lily and assessed the habitat present and those potentially impacted by the development's infrastructure requirements. The following is a summary of the key findings:

- The 101 Cairnbrook Road property is not considered to provide suitable or important habitat for the Matted Flax-lily.
- The southern road reserve is not considered to provide high quality habitat for the species.



- The Gippsland Rail Trail adjacent to the site contains vegetation species and structure consistent with Plains Grassy Woodland, a preferred Ecological Vegetation Class for the Matted Flax-lily.
- A number of Matted Flax-lily patches were found within the Gippsland Rail Trail and road reserve adjacent to the western boundary of the GEDP area.
- Measures should be taken to avoid locating subdivision infrastructure within areas comprising suitable habitat for the species.

Targeted Surveys for the endangered Growling Grass Frog and Green & Golden Bell Frog were undertaken by Indigenous Design Land Management in January 2017. The key findings and recommendations of this assessment are as follows:

- The nocturnal surveys for the frogs failed to detect either species at the site.
- Although habitat on the site was found to be suitable for these species, it is considered less than ideal and unlikely to support significant populations of these species given current and past management regimes.
- Best practice stormwater management design and construction should be incorporated into the development of the site to ensure there are no negative impacts downstream in Eaglehawk Creek where suitable frog habitat has been identified.

A Targeted Survey for the Dwarf Galaxia was undertaken by Aquatica Environmental in January 2017. The following is a summary of the key findings:

- No Dwarf Galaxias were recorded during the survey and the desktop review confirmed that there have been no records of the fish within 10 kilometres of the study area.
- The lack of nearby records of the species and low-moderate habitat quality indicates that overall Dwarf Galaxias are unlikely to occur in the study area.
- Notwithstanding this, development of the site should include measures to protect
  water quality during construction and incorporate best practice water sensitive
  urban design to ensure that development of the site does not impact on
  downstream receiving waterways.

A copy of each of the reports is provided in **Appendices I to L**.

# 3.9 Cultural Heritage Investigations

Extent Heritage Advisors completed a Cultural Heritage Management Plan for 101 Cairnbrook Road in May 2017 and Notice of Approval of the plan under the *Aboriginal Heritage Act 2006* is provided in *Appendix D*.

The CHMP contains specific impact mitigation and long-term protection recommendations relating to registered cultural heritage site 'Cairnbrook Road 2 VAHR 8221-0027', in addition to management recommendations relating to three other registered sites. Of particular relevance to the design of the GEDP area is the location of VAHR 8221-0027, which is to be fenced off and excluded from the works area during construction. Following completion of the works, the extent of the Aboriginal Place must be retained as passive space and the only permitted activities will be vegetation management (including running of stock, mowing, weed control and manual re-vegetation). The extract from the CHMP displaying the location of the Place and summary of management conditions is provided in *Figure 10*.

A CHMP will need to be prepared for 100 Cairnbrook Road prior to approval of a planning permit to subdivide the land in accordance with the GEDP.



FIGURE 10 Extract of CHMP Activity Area Map and Registered Sites for 101 Cairnbrook Road, Glengarry (AV # 14406) May 2017

### 3.10 Bushfire

The GEDP area is not affected by a Bushfire Management Overlay under the provisions of the Latrobe Planning Scheme, but is within a designated Bushfire Prone Area (refer *Figure 11*).



FIGURE 11 Extract of Bushfire Prone Area mapping for Glengarry (GEDP area outlined in red)
Source: www.land.vic.gov.au

As the land is proposed to be developed for residential use and is within a designated Bushfire Prone Area, in accordance with **Clause 13.05** of the Latrobe Planning Scheme the risk of bushfire must be considered. Before a development plan is approved, **Clause 13.05-1** requires the consideration of bushfire risk and bushfire protection measures. A high level assessment has been undertaken for the GEDP with further detailed assessment to occur during the planning permit application process. The GEDP appropriately considers the protection of human life by directing development to a low risk location and reducing the vulnerability of the future community by consideration of bushfire risk in decision-making at all stages of the planning process. The relevant fire authority (CFA) has been consulted early in the process to receive their recommendation and to implement appropriate bushfire protection measures (a copy of this advice is provided in **Appendix M**) and is summarised below:

- The land is not remarkable for fire threat and is located east of the general town area and bordered to the existing township development on the western side by the N/S rail trail.
- It is mapped under the Bushfire Prone Area (BPA) as driven by proximity to a rural landscape fire risk and it would be expected that landscape controls may be governed principally on adjoining farm land by the Municipal Fire Prevention Management Plan process rather than subdivision design, specifically for that point. The BPA may be reviewed for removal in part considering the extent of the residential lots proposed.
- Deferring to the design team and Council Planning controls CFA takes the view that at some point a large subdivision of this order of magnitude (or above) should have considerations under a risk assessment of emergency impacts present or likely at the locality, beyond fire, and relevant to lot amenity and trafficable egress direction.

The impact on egress should also be considered for potentially an emergency event blocking/restricting entry to an estate with a single circulation egress/access roadway.

The development plan has been designed to provide for lots that can accommodate a dwelling that will experience a radiant heat flux of less than 12.5kW/m2 under AS3959 Construction of Buildings in Bushfire-prone Areas (Standards Australia, 2009). Bushfire construction standards will apply to any future building constructed on the land in accordance with the Building Regulations 2006. Furthermore, safe access to areas assessed as BAL-LOW rating under AS3959 Construction of Buildings in Bushfire-prone Areas (Standards Australia, 2009) is integrated into the design by providing vehicle and pedestrian links west to the Glengarry Township.

### 4 CONSULTATION

The Glengarry East Development Plan has been prepared following extensive consultation with Latrobe City Council officers and representatives from relevant authorities and interest groups. Key stages and outcomes of this consultation are detailed as follows:

- Preliminary advice was sought from Latrobe City Council's urban growth team in December 2015 as part of a due diligence investigation into the development requirements for 101 Cairnbrook Road. The following feedback was provided:
  - Development would not need to meet a '15 dwellings per net developable hectare' outcome, as Glengarry is not a major town and that density would be contrary to existing neighbourhood character;
  - Lot density is to be based on neighbourhood character and physical capacity of the land, with an average lot size of approximately 800m² considered acceptable;
  - The development plan would need to include land at 100 Cairnbrook Road.
- Preliminary flood advice was sought from the West Gippsland Catchment Management Authority (WGCMA) in April 2016. The advice confirmed that the WGCMA has completed a hydraulic flood modelling project to estimate the 1% Annual Exceedance Probability (AEP) for the site and that all proposed lots and roads must be outside the 1% AEP extent. It was also advised that the floodprone portion of the property is not suitable for residential development and that a Waterway Management Plan and Stormwater Management Plan would be required to be prepared as part of any future development of the land.
- Further preliminary advice was sought from Latrobe City Council's urban growth team in May 2016, which confirmed the following:
  - That the development plan must incorporate both land at both 100 & 101
     Cairnbrook Road;
  - That it would be acceptable to present desktop-based assessments for 100 Cairnbrook Road, with more detailed site assessments for 101 Cairnbrook Road, given the level of involvement of the respective land owners in the development plan process.
- Advice was sought from the Public Land Administration section of the Department of Environment, Land, Water & Planning (DELWP) regarding the processes involved in gaining approval to construct vehicular access across the Crown land rail trail reserve to service 101 Cairnbrook Road. The response received provided detail of each required step, including initial consultation with the Gippsland Plains Rail Trail Committee of Management and completion of both cultural heritage and environmental assessments.
- A site meeting was held with the president of the Gippsland Plains Rail Trail Committee, at which it was indicated that the committee would only support one point of access to the site across the rail trail and that this should be located as far south as possible. It was also suggested that the development plan be designed so that there is a road reserve running parallel to the trail and that chicanes and signage be provided along the trail for the safety of its users. Following this meeting, it was confirmed that the matter had been discussed at the rail trail committee meeting on 7 June 2016 and that the committee had agreed to provide 'in-principle' support for one access point across the rail trail.



- Advice was sought from the Country Fire Authority regarding bushfire risk matters and requirements relating to subdivision design, particularly the need for more than one access/egress roadway. The feedback received is detailed in section 3.9 of this report.
- Representatives from the Beveridge Williams project team met with Latrobe City Council officers on 23 November 2016 to present and discuss the first version of the development plan. Formal feedback on the plan was received from Council's urban growth team via email on 16 December 2016, which is summarised as follows:

### Positives

- Road network that has roads abutting public open space
- Access over rail trail is important
- Utilising existing public open space areas
- Lots well orientated and would meet Clause 56 objectives

### Density

- Overall the density is good.
- Whilst we acknowledge that this area is in Glengarry, through the consultation of the Live Work Latrobe project we received feedback around people who would like to age in their own town and would like some opportunity for smaller blocks or medium density development. Given there is limited opportunity for this to occur in Glengarry, we would like to see 1 medium density site identified. This site should be located close to open space areas and closer to the village centre.

### Future growth to the north

-The Glengarry Structure Plan identified land to the north of this site as 'future residential opportunity'. Therefore, the development should show a future connection to this land to the north.

### Tree Reserve

- Can further explanation on the tree reserve be provided. What is its purpose? Can this area be included in the road reserve instead?

### Open Space Connections

- As part of the overall Development Plan, pathway connections will need to be identified that connect the development to the rail trail, to the town centre and Cairnbrook Road.

### Existing House Lot

- We have concerns regarding the retention of the existing house lot, in particular its size. The Development Plan should show the future development potential of all available land. Therefore, we would like to see housing lots identified in this area.

### Drainage Reserve

- We also have concerns regarding the size of the drainage reserve and request further consideration be made to the size of this area. In the Eaglehawk Creek Flood Study as prepared for the Planning Scheme



Amendment it was identified that with drainage solutions, the extent of the LSIO could be altered. At the time it appeared that West Gippsland Catchment Management Authority would support cut and fill on the site.

- Is there the potential to create larger lots in the LSIO affected area?

### Access point

- At this point in time, we believe one access point is a poor planning outcome especially for the amount of lots being created.
- Representatives from the Beveridge Williams project team met with the West Gippsland Catchment Management Authority's in January 2017 to seek advice regarding the potential for cut and fill works within the floodplain. The advice given was that no fill works aside from around the fringes of the floodplain would be permitted.
- A formal request for approval to use the adjacent Crown land for road purposes was submitted to DELWP on 9 February 2017.
- The second version of the development plan was provided to Latrobe City Council for comment in March 2017. This version addressed all matters outlined in Council's feedback of 16 December 2016, except for the provision of a second vehicular access point across the rail trail. Council requested further information regarding the estimated cost to construct a road link to the south, connecting to Cairnbrook Road. This was completed by Beveridge Williams and provided to Council on 11 April 2017. The cost estimate demonstrated that construction of a southern road link over the floodprone portion of the site would render the development uneconomical to complete.
- Latrobe City Council coordinated two meetings in May and June 2017 with staff from DELWP and representatives from both the Gippsland Plains Rail Trail Committee and Beveridge Williams. Following the second meeting, in-principle agreement had been reached between all parties that there would need to be two vehicular crossings over the rail trail to service the development.
- Correspondence was received from DELWP on 16 June 2017 and 2 August 2017 confirming that consent would be provided for the two access points across the rail trail, subject to preparation of a 5 year management plan for the section of rail trail abutting the GEDP area and a once-off payment of \$50,000 to implement the plan.
- The GEDP was formally submitted to Council for consideration on 26 September 2017 and released for public exhibition during February/March 2018. Following the review of submissions received from the public and further discussions with the Council project team, matters relating to vehicular access, residential lot density and provision of reticulated sewerage were given further consideration. This resulted in modifications to the GEDP during April/May 2018.

 The revised GEDP was released for public exhibition from July to October 2018. The Council formally considered the GEDP at its meeting of 5 November 2018 and resolved:

"That Council endorses the Glengarry East Development Plan (May 2018) subject to the following changes being made;

- 1. That an unencumbered reserve area of at least 5% is provided with an average lot size of no less than 900m² for the entire development area;
- 2. Confirms that any cash contribution in lieu of the 8% of the public open space land contribution received by Latrobe City Council as a result of any future subdivision within the Glengarry East Development Plan precinct will be utilised to improve open space amenities in Glengarry in consultation with the Glengarry Community;
- 3. At the detailed design stage, further consideration be given to the most appropriate access/egress point onto Main Street, with attention to appropriate treatments to ensure impact to residents in the immediate proximity is kept to a minimum; and
- 4. Notifies submitters, in writing, of Council's decision."

The feedback received and in-principle agreements made during the consultation process have been taken into consideration and incorporated into the final design of the GEDP.

# 5 THE GLENGARRY EAST DEVELOPMENT PLAN

# 5.1 Development Plan

The Glengarry East Development Plan is displayed in *Figure 12* and *Appendix N*. The Plan identifies the form and conditions for future subdivision and development of the land.

The Plan seeks to provide a comprehensively designed residential subdivision to accommodate the future growth of Glengarry across two land parcels, with good connectivity to the town's existing commercial and community facilities and road network.

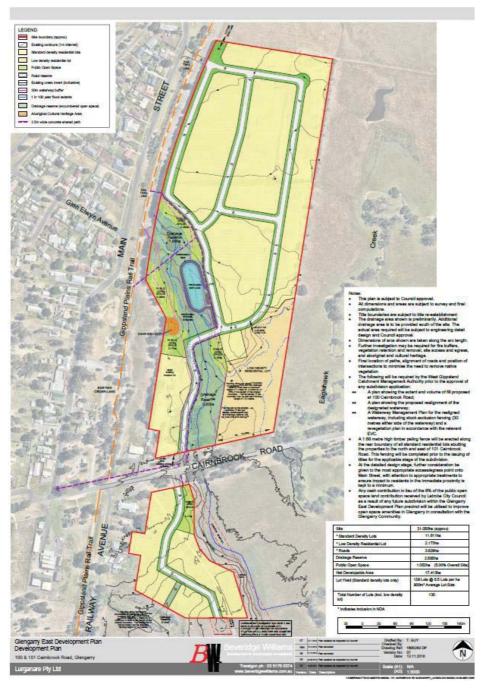


FIGURE 12 Glengarry East Development Plan



### 5.2 General Residential Zone

The GEDP precinct area is included in the General Residential Zone, the purposes of which are:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- To encourage development that respects the neighbourhood character of the area.
- To encourage a diversity of housing types and housing growth particularly in locations offering good access to services and transport.
- To allow educational, recreational, religious, community and a limited range of other nonresidential uses to serve local community needs in appropriate locations.

The Glengarry East Development Plan (GEDP) has been prepared in accordance with the relevant provisions of the Latrobe Planning Scheme and is informed by the site's key features and characteristics of the surrounding environment. The Development Plan provides the guidance to create a new residential area that will feature predominantly conventional residential sized lots of varying sizes, a safe and permeable internal road network with efficient access to Glengarry's established residential area to the west, provision for future road linkages to longer term residential growth areas to the north and south, improvements to the Gippsland Plains Rail Trail and provision of on-site stormwater detention and drainage reserves. It seeks to create a residential area that is respectful of the established character of the township, whilst still providing a range of lot sizes to improve housing choice in close proximity to the variety of commercial and community facilities on offer. The key elements of the GEDP are detailed in the following sections of this report.

## 5.3 Principles and Objectives

The GEDP has been prepared in accordance with the relevant provisions of the Latrobe Planning Scheme and the Victorian Planning Authority (VPA) Precinct Structure Planning Guidelines.

The VPA's Precinct Structure Planning Guidelines are designed to guide the development of greenfield urban growth areas in metropolitan Melbourne. However, aspects of the guidelines are a useful tool to also assist in the preparation of a development plan for a small regional town such as Glengarry.

The GEDP seeks to achieve the following objectives:

### Image and character

- Create a residential precinct that integrates with Glengarry's existing residential area, through appropriately located road and pedestrian/cyclist linkages; and,
- Provide a landscape theme throughout the precinct to create its own unique and attractive neighbourhood character.

### Housing

- Provide efficient use of serviced residential land within Glengarry's town boundary;
- Provide a development density that complements the existing residential character of the town;
- Provide a range of lot sizes to meet a variety of household types and promote and improve housing choice and affordability within the town;



- Provide a large low density residential lot that can accommodate a single dwelling whilst also incorporating a portion of undevelopable flood-prone land; and,
- Provide active frontages to the Gippsland Plains Rail Trail and proposed drainage reserve in order to facilitate passive surveillance of the public realm.

## **Open Space and Natural Systems**

- Provide a development design that is based upon the natural site features and constraints, including topography, flood-prone land, drainage, Aboriginal heritage and vegetation;
- Recognise the importance of the Gippsland Plains Rail Trail and the need to enhance this
  area and encourage increased usage of it;
- Consider the existing native vegetation within both the rail trail and the site and its contribution to Victoria's Biodiversity;
- Provide open space to accommodate passive recreational pursuits as well as drainage requirements;
- Provide cash in lieu for any open space required in addition to unencumbered land adjacent to the drainage reserve;
- Provide landscaping to create an attractive neighbourhood character;
- Enhance the environmental values of the drainage reserve through appropriate revegetation works comprising vegetation that is low maintenance and a low fire risk; and,
- Protect the built environment within both the GEDP precinct and surrounding area from inundation resulting from riverine or storm events.

### **Transport & Movement**

- Provide connectivity to Glengarry's existing urban area, particularly its commercial precinct and community facilities;
- Create a new road network that integrates with the town's existing road network;
- Provide a safe and convenient road network that is accessible to its users;
- Provide for infrastructure upgrades to the existing road network as required;
- Provide a road network that is designed to accommodate pedestrian, cyclist, motor car and other motorised vehicle usage; and,
- Promote walkability and cycling through the provision of shared paths and connections to the Glengarry Plains Rail Trail and town centre.

## **Utilities and Energy**

- Provide the full suite of reticulated service infrastructure and underground drainage to the GEDP area;
- Incorporate Water Sensitive Urban Design (WSUD) for stormwater management;
- Create lots that are orientated to facilitate solar efficient housing development and thereby reduce energy consumption; and,
- Promote walkability and cycling as alternative forms of transport through the provision of shared paths and connections to the rail trail and town centre, thereby reducing carbon emissions.

A Design Response Plan detailing the above principles and objectives is provided at *Appendix S*.



# 5.4 Land Budget

The VPA's Precinct Structure Planning Guidelines provide the basis for calculating land use within a development precinct. The land budget table at *Table 1* sets out the total area of the GEDP precinct, gross developable area, net developable area and land uses.

The VPA uses the following area definitions for the land budget table:

### • Gross Development Area

- Is the total precinct area excluding encumbered land, arterial roads and other roads with four or more lanes.

### Encumbered Land

- Is land that is constrained for development purposes. Includes easements for power/transmission lines, sewers, gas, waterways/drainage; retarding basins/wetlands; landfill; conservation and heritage areas. This land may be used for a range of activities (e.g. walking trails, sporting fields). It is not provided as a credit against public open space requirements. However, regard is taken to the availability of encumbered land when determining the open space requirement.

### • Net Developable Area

Is land within the precinct available for development. This excludes encumbered land, arterial roads, railway corridors, schools and community facilities and public open space. It includes lots, local roads and connector streets. Net Developable Area may be expressed in terms of hectare units (NDHa).

	HECTARE	% OF SITE
TOTAL DEVELOPMENT PLAN AREA	21.05	100
ENCUMBERED LAND	2.585	12.28
Land that is subject to inundation from Eaglehawk Creek, a drainage overland path or a 60 metre wide watercourse buffer, or land that contains a registered Aboriginal heritage place requiring permanent protection		
GROSS DEVELOPABLE AREA	18.465	87.72
OPEN SPACE	1.052	5.0
NET DEVELOPABLE AREA	17.413	82.72
Roads	3.629	17.2
Residential allotment areas		
Standard residential	11.611	55.16
Low density residential	2.173	10.32

**TABLE 1** Land Budget – Glengarry East Development Plan (Areas are approximate)



## **6 LAND USE FRAMEWORK**

# 6.1 Housing density

The GEDP aims to provide two new residential neighbourhoods that respond to the site features and complement the existing residential character of the town, whilst achieving efficient usage of the available developable land.

The GEDP has been designed in accordance with the requirements of the DPO5 and the Latrobe Planning Scheme, by providing a range of lot sizes for housing diversity and choice as detailed in *Table 2* below.

LOTS	Average Size	No. of Lots
Standard Residential	900m²	129
Low Density Residential	2.173 hectares	1

**TABLE 2** Lot Summary – Glengarry East Development Plan

## 6.2 Housing diversity

The Latrobe Planning Scheme provides objectives and strategies for the town of Glengarry, which are articulated through the Glengarry Structure Plan at **Clause 21.06-8** of the Municipal Strategic Statement. The structure plan identifies the GEDP land within an area where residential development that is sensitive to the Eaglehawk Creek environment and floodplain is specifically encouraged. The General Residential Zone provisions also encourage housing diversity and consideration of existing neighbourhood character in the development of land. The GEDP achieves these objectives by accommodating a range of lot sizes that will suit a variety of household types.

Indicative subdivision plans have been prepared for both 100 and 101 Cairnbrook Road in order to inform the various technical assessments. The plans indicate that the GEDP area has the potential to accommodate the following range of lots:

- Standard density residential lots these lots will range in size from approximately 750m<sup>2</sup> to 1,824m<sup>2</sup> and can accommodate single dwellings, ancillary buildings and associated services.
- A low density residential lot this lot will be approximately 2.173 hectares and has been designed to encompass predominantly flood-prone land that Latrobe City Council does not want included within the drainage reserve. The lot has been designed with adequate flood-free land to accommodate a single dwelling, ancillary buildings and associated services with access from the proposed internal road network.

The VPA Precinct Structure Planning Guidelines defines Net Housing Density as the *number of houses divided by the net developable area*.

Excluding the low density lot, the GEDP is anticipated to yield approximately 129 standard residential lots, representing an overall housing density of **8.5 lots per hectare**. The State Planning Policy Framework seeks to achieve a minimum housing density of 15 dwellings per net developable hectare in metropolitan growth areas, however Latrobe City Council has an adopted preferred density of 11 dwellings per hectare for the growth areas of its main towns.

Glengarry is a small town within the municipality and is not expected to achieve the higher residential densities that are required in the main towns. The lot sizes proposed within the GEDP are consistent with the existing range provided within Glengarry's established residential areas and are considered appropriate given the site context, surrounding neighbourhood character and expected market demand for serviced vacant residential lots within the town boundary.

## 6.3 Community, Commercial and Retail Facilities

The GEDP is consistent with the Glengarry Structure Plan contained in Clause 21.06-8 of the Latrobe Planning Scheme, which identifies the entire area of land for residential purposes with no requirement for new commercial or community facilities. The Glengarry Structure Plan does not identify a need to expand the town's existing commercial precinct or provide for additional community and educational facilities to cater for the anticipated population growth within the town. It is considered that the existing facilities will adequately cater for the additional population within the GEDP precinct and are likely to benefit significantly from the anticipated increased usage. The future need for additional or upgraded facilities is outside the scope of the Development Plan process and can be assessed in the future as the precinct is developed over time and increased usage of the existing facilities can be accurately measured.

The Mobility Plan provided in *Appendix P* demonstrates that the GEDP has been designed to encourage open space linkages and improve connectivity between open space areas and destination points, through the provision of pedestrian and cyclist linkages to the Gippsland Plains Rail Trail, commercial precinct and Apex Park. This will facilitate and encourage walking and cycling as an alternative to motor vehicle usage and is therefore expected to minimise any impact on existing public car parking areas within the town. The need for additional or upgraded public car parking facilities can be assessed in the future as the precinct is developed.

## 6.4 Open space

Glengarry is well serviced by existing active open space reserves, being the Glengarry Recreation Reserve, Apex Park and Gippsland Plains Rail Trail. There is no demonstrable need to provide any additional reserves of this size and type within the GEDP. It is also noted that neither the Latrobe City Public Open Space Strategy 2013, nor the Glengarry Structure Plan, suggest that there should be additional active recreation reserves or facilities provided within the GEDP area. It is considered that these documents provide an appropriate, and current, assessment of the current and future open space needs for the town.

The Latrobe Planning Scheme seeks to encourage open space linkages and improve connectivity between open space areas and destination points. The GEDP achieves this by providing pedestrian and cyclist linkages to the Gippsland Plains Rail Trail, commercial precinct and Apex Park.

In addition to the existing public open space available within the town, the GEDP seeks to create a public reserve of approximately 3.46 hectares in area within 101 Cairnbrook Road. The majority of this reserve is subject to inundation from the nearby Eaglehawk Creek and has been designed to accommodate an existing watercourse, a 60 metre wide watercourse buffer, stormwater management and a registered Aboriginal heritage site. Notwithstanding this, four linear sections of unencumbered land with a combined area of approximately 0.88 hectare have been incorporated on both sides of the reserve. This land could accommodate a shared pedestrian/cyclist path and seating to provide for passive recreational use. Furthermore, an additional portion of unencumbered land with an area of approximately 0.17 hectare can be accommodated in the northern portion of 100 Cairnbrook Road. The provision of this combined area of open space



generally meets the requirement stipulated in the Public Open Space Strategy that public open space with a minimum area of 0.5 hectare should be provided within a 500 metre radius of all residential lots.

Clause 52.01 of the Latrobe Planning Scheme requires that public open space for greenfield residential subdivisions be provided at the rate of 8% per Net Development Area. This land must be unencumbered. Given that the proposed drainage reserve will form a passive recreational function and incorporate some unencumbered land above the 1 in 100 year flood level, it is suggested that the unencumbered portion of land on either side of it be considered as contributing towards the 8% open space requirement (i.e. approximately 4% of the 8%). An additional 1% of unencumbered land can be provided elsewhere within the GEDP precinct. A cash contribution will be provided at the time the land is subdivided to cover any shortfall in the provision of public open space. This contribution will be used to fund improvements to open space facilities within the town, in consultation with the Glengarry community.

Landscaping of the drainage reserve is detailed in the Landscape Concept Plan provided at **Appendix O**. It is intended that the landscaping will reflect the function of the land, i.e. suitable aquatic vegetation will be used to improve the quality of water passing through it, in addition to a mixture of trees and shrubs planted in such a way that sightlines throughout the reserve are maintained and no unsafe spaces are created. The road network has been designed so that maximum abuttal to the reserve is provided to encourage passive surveillance of the public realm.

## 7 INFRASTRUCTURE FRAMEWORK

Beveridge Williams has prepared a Land Servicing Feasibility Report that details the current location and capacity of existing infrastructure assets to service the GEDP area. This report is included in **Appendix E**.

Beveridge Williams has also prepared separate preliminary Stormwater Management Plans for 100 and 101 Cairnbrook Road to demonstrate that development of both sites can meet the Urban Stormwater Best Practice Environmental Management Guidelines and to provide supporting evidence that the predicted stormwater discharges will meet the requirements of the West Gippsland Catchment Management Authority (WGCMA) and Latrobe City Council. The reports are provided in *Appendix G*.

Detailed design of the proposed infrastructure will be undertaken at the subdivision stage in accordance with the applicable authorities' requirements.

## 7.1 Stormwater management

The responsible authorities for local drainage are the WGCMA and Latrobe City Council. The preliminary Stormwater Management Plans prepared for each of the two separate land parcels within the GEDP area propose different drainage regimes, which are summarised as follows:

#### 101 Cairnbrook Road

- Construction of drainage to meet the likely requirements of Council, including 1 in 100 year ARI capacity road reserves and underground drainage for the 1 in 5 year ARI storm event as needed;
- The 1 in 100 year ARI post-development flow from the site is proposed to discharge to the existing drainage channel;
- No detention is proposed within the drainage reserve as agreed to by the West Gippsland CMA and Council;
- A section of the existing unnamed channel will be designed and utilised as a bypass channel adjacent to the wetland and sediment basin; and,
- Stormwater quality treatment required to meet BPMEG standard will comprise a sediment basin and a wetland located in the drainage reserve, as well as rainwater tanks in each individual residential lot.

In addition to the above drainage requirements, all land liable to inundation in a 1 in 100 flood event has been excluded from development and a 30 metre wide buffer has been provided on either side of the designated waterway. Inclusion of all this land within a drainage reserve is expected to yield significant environmental benefits.

## 100 Cairnbrook Road

- Construction of drainage to meet the likely requirements of Council, including 1 in 100 year ARI capacity road reserves and underground drainage for the 1 in 5 year ARI storm event as needed;
- The 1 in 100 year ARI post-development flow from the site is proposed to discharge to the creek without detention as agreed to by the West Gippsland CMA and Council; and,

• Stormwater quality treatment required to meet BPMEG standard in each individual residential lot and a 30 metre long 10 metre wide swale.

# 7.2 Sewerage

Gippsland Water is the relevant service authority for reticulated sewer in the area. Gippsland Water has advised that they expect the GEDP to discharge into the existing sewer pumping station that services the town of Glengarry, which is located approximately 1.7 kilometres to the south in Black Tank Road. Other alternatives include discharging into existing sewer infrastructure in Kyne Street or Glen Elwyn Avenue. All costs associated with sewer extension works to the designated outfall will be borne by the developer/s.

Both 100 and 101 Cairnbrook Road are proposed to be serviced via a gravity sewer mains extension from an existing sewer pump station (SPS) located in Railway Avenue at the southern end of town. Preliminary gradings undertaken allow for full lot control of all residential lots when serviced in this manner.

Figure 13 demonstrates the proposed sewer strategy.



FIGURE 13 Sewer Strategy

### 7.3 Reticulated water

Gippsland Water is the relevant service authority for reticulated potable water in the area. Advice received from this authority confirms that a reticulated water supply is readily available and can be provided to the GEDP area via extensions to the existing water mains.

There are no reticulated recycled water sources within Glengarry but rainwater tanks on individual lots can be utilised for capture and re-use.

## 7.4 Electricity

AusNet Services is the electricity supplier for this area. Advice received from this authority confirms that the current electricity supply in the area will be sufficient to support the development. AusNet Services has advised that, depending on the density of the development, the developer will be required to pay for the cost of low voltage and/or high voltage works, with AusNet contributing an amount towards the cost of the works depending on the number of lots.

### 7.5 Natural Gas

Envestra/APA Group is the gas authority for the area. Advice received from this authority is that a reticulated natural gas supply is not available in Glengarry.

## 7.6 Telecommunications

Telecommunications can be provided to the GEDP area by NBN Co. The area is currently within NBN's wireless servicing footprint only. The current infrastructure will, however, need to be upgraded to adequately service the number of lots proposed for the development.

Fibre Optic service can also be provided to the development; however, this will also require extension of existing infrastructure for a length of approximately 7.5 kilometres from the outskirts of Traralgon (Marshalls Road).

In each instance, the upgrade/extension works will be at the cost of the developer/s.

Alternatively, the developer/s may wish to supply telecommunications via another provider. This is a commercial decision to be made by the developer/s at the subdivision stage.

## 7.7 Road network & traffic generation

The GEDP seeks to create safe and accessible neighbourhoods with logical and easily traversable street networks that allow for linkages to adjoining roads and vehicular movements through each development.

A Mobility Plan has been prepared and is included in *Appendix P* which displays the proposed vehicular and pedestrian links both within and external to the GEDP area. The proposed road and path networks have been designed to comply with the Latrobe City Healthy Urban Design Good Practice Guideline through the creation of a permeable layout that provides multiple connections to the existing road network and town centre.

Latrobe City Council is the road management authority for both Main Street and Cairnbrook Road, which are the closest roads to the GEDP area and will be required to provide access to and egress from the development.

The Development Plan proposes a functional road network to provide for safe and efficient vehicular access, as detailed in the Traffic and Transport Assessment provided in *Appendix H*. 101 Cairnbrook Road will accommodate a 20 metre wide road reserve for the north-south aligned access street, with the remainder being 16 metre wide reserves except the abuttal to the drainage reserve which will be 14.5 metres in width. 100 Cairnbrook Road will be provided with a single access road with a reserve width of 16 metres. Cross sections of the proposed roads are provided in the Cross Sections Plan at *Appendix Q*.

The GEDP area will be accessed from Cairnbrook Road and Main Street at three locations:

- At Cairnbrook Road approximately 36 metres east of the western boundary of 101 Cairnbrook Road;
- At Cairnbrook Road approximately 35 metres east of the western boundary of 100 Cairnbrook Road; and,
- At Main Street, crossing the Gippsland Plains Rail Trail, approximately 40 metres south of the northern boundary of 101 Cairnbrook Road.

The road layout within 101 Cairnbrook Road has been designed to maximise the area of developable land and ensure that it does not 'turn its back' on the town by integrating with the Gippsland Plains Rail Trail and existing residential area on the west side of Main Street. The Traffic and Transport Assessment confirms that the additional traffic expected to the generated from development within 101 Cairnbrook Road can be adequately accommodated within Cairnbrook Road, Traralgon-Maffra Road, Main Street and Glen Elwyn Avenue. The plan allows for a future road linkage to adjacent land to the north, which has been designated for long term residential expansion.

The road within 100 Cairnbrook Road has been designed as a single access road in order to maximise the area of developable land within the constraints of the irregular shape of the site and the adjacent drainage channel. The Traffic and Transport Assessment confirms that the additional traffic expected to be generated from development within 100 Cairnbrook Road can be adequately accommodated within Cairnbrook Road and Traralgon-Maffra Road. The plan allows for a potential future road linkage to adjacent land to the south, which has been designated for long term residential expansion.

Detailed road design will be required at the planning permit application/s stage and will need to comply with Latrobe City Council's Infrastructure Design Manual. However, the Traffic and Transport Assessment confirms that the proposed internal road network and reserve widths are appropriate to cater for the safe and efficient movement of the anticipated traffic levels generated by the development.

Each proposed residential lot has been designed with adequate frontage to its respective street abuttal to encourage passive surveillance of the public realm.

The single road crossing over the rail trail will incorporate an appropriate level of safety features to protect trail users, in accordance with Austroads guidelines and following consultation with DELWP and the Gippsland Plains Rail Trail Committee. As per Council's resolution of 5 November 2018, further consideration will be given at the detailed design stage to the most appropriate location for the access/egress point onto Main Street. Particular attention will be given to appropriate treatments to ensure any impact to residents in the immediate proximity is kept to a minimum.

Interface treatments for residential lots with side or rear boundaries that are shared with reserves can be dealt with at the subdivision stage.

# 7.8 Pedestrian connectivity

The GEDP is provided with a shared pathway network, as detailed in the Mobility Plan at Appendix P.

Paths are provided on each side of the internal roads and have been designed to link to the rail trail, Main Street and Apex Park.

The Development Plan recommends a proposed off road shared path along the south side of Cairnbrook Road between 100 Cairnbrook Road and Railway Avenue, to facilitate access to both the rail trail and town centre.

# 7.9 Public transport

It is considered that the existing public transport infrastructure servicing Glengarry will be capable of accommodating any additional demand generated by future residents within the GEDP area. Notwithstanding this, the proposed carriageway widths can sufficiently accommodate future bus routes if ever required in the future.

### 8 NATURAL ENVIRONMENT FRAMEWORK

### 8.1 Flora and fauna

The GEDP area comprises two properties that have been used primarily for agricultural purposes over a long period of time and, as such, present similar landscape characteristics. Both properties have been largely cleared of original native vegetation and are dominated by pasture that is extensively grazed by cattle or horses.

A full site-based flora and fauna assessment has been completed for 101 Cairnbrook Road, whilst a desk-top assessment has been undertaken for 100 Cairnbrook Road. A Habitat Assessment and Targeted Survey for Matted Flax-lily, Targeted Surveys for the endangered Growling Grass Frog and Green & Golden Bell Frog and a Targeted Survey for the Dwarf Galaxia were also completed for 101 Cairnbrook Road. The key findings of these reports have been considered in the design of the GEDP area. A copy of each of the reports is provided in *Appendices I* to *L*.

The various assessments have identified that there are several large and very large sparsely scattered remnant canopy trees within 101 Cairnbrook Road. The GEDP proposes to retain all bar one of these trees within the drainage reserve. The single large old tree to be removed is required to allow construction of the internal road network. Removal of this vegetation will fall within 'Location A (Low risk-based pathway)' as defined by the Native Vegetation guidelines, which indicates that its removal is unlikely to impact on native vegetation deemed to make a significant contribution to Victoria's biodiversity. Pursuant to **Clause 52.17** of the Latrobe Planning Scheme, a permit will be required to remove the vegetation as part of the subdivision works.

Various stands of planted exotic and non-indigenous shelterbelt vegetation will also require removal from 101 Cairnbrook Road, but this is exempt from requiring a planning permit.

Best practice stormwater management design and construction should be incorporated into the development of the site to ensure there are no negative impacts downstream in Eaglehawk Creek where suitable frog and fish habitat has been identified. The Stormwater Management Plans detail how this can be achieved.

The Gippsland Plains Rail Trail adjacent to the site contains vegetation species and structure consistent with *Plains Grassy Woodland*, a preferred Ecological Vegetation Class for the Matted Flax-lily. Targeted surveys also located a number of Matted Flax-lily patches within the Crown land and adjacent Main Street road reserve adjacent to the western boundary of the GEDP area. The GEDP requires two road connections to Main Street across the Crown land and adjacent road reserve in order to effectively distribute traffic flows and avoid the potential health and safety risk to the community if a single access point is blocked due to an accident or other reason. The proposed road connections have been sited to minimise the extent of native vegetation requiring removal and inprinciple agreement to locate the roads as shown on the Development Plan has been provided by both DELWP and Latrobe City Council (refer to section 4 of this report). It is likely that separate permits will be required to remove the vegetation under the provisions of the *Flora and Fauna Guarantee Act 1988* and the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999*.

It is expected that appropriate offsets commensurate with the value of the vegetation to be removed will be required. Furthermore, the future landscaping works throughout the GEDP area will contribute to the quantity and variety of native vegetation currently available, which will subsequently improve biodiversity in the area.

## 8.2 Cultural heritage

Extent Heritage Advisors were engaged to provide advice in relation to Aboriginal Cultural Heritage matters. This has confirmed that a Cultural Heritage Management Plan (CHMP) will be required prior to residential subdivision within the GEDP area.

A CHMP has been prepared and approved for the land at 101 Cairnbrook Road. A copy of the Notice of Approval of the plan under the *Aboriginal Heritage Act 2006* is provided in *Appendix D*. The CHMP contains specific impact mitigation and long-term protection recommendations relating to registered cultural heritage site 'Cairnbrook Road 2 VAHR 8221-0027', in addition to management recommendations relating to three other registered sites. The Development Plan design excludes the registered site from residential development and retains it within the drainage reserve where it will be fenced off from the works area during construction. Following completion of the works, the extent of the Aboriginal Place will be retained as passive open space and the only permitted activity within the affected area will be vegetation management.

A CHMP will need to be prepared for 100 Cairnbrook Road prior to approval of a planning permit to subdivide the land in accordance with the GEDP.

## 8.3 Landscape

The predominant vegetation type throughout the GEDP area is open pasture that has been extensively grazed over a long period of time. The GEDP presents the opportunity to enhance the landscape values of the precinct, whilst creating a sense of place and its own neighbourhood character. A Landscape Concept Plan for the precinct has been prepared and is attached at *Appendix O*.

The internal road network is used to separate the majority of the residential lots from the drainage reserve. The absence of buildings and property boundary fences immediately surrounding the majority of the reserve allows for passive surveillance of the public realm and will assist to create a safer, more permeable neighbourhood.

Future landscaping of the street and public open space areas will be site responsive to the function of the land. The drainage reserve and wetland area will be landscaped with appropriate aquatic vegetation to improve water quality, whilst allowing for passive recreational use and ease of ongoing maintenance for the Latrobe City Council. The road network will accommodate a selection of appropriate trees to create an aesthetically pleasing urban environment whilst also ensuring that sight lines are retained.

## 8.4 Bushfire

The GEDP area is not affected by a Bushfire Management Overlay and therefore no bushfire planning requirements are applicable under the provisions of the Latrobe Planning Scheme.

However, all of the land is within a designated Bushfire Prone Area (refer to *Figure 10*) and therefore bushfire construction standards will apply to any future building constructed on the land in accordance with the *Building Regulations 2006*.

As confirmed in the preliminary advice provided by the CFA, the GEDP area does not present as a high fire risk landscape. The most likely form of bushfire attack would be from grassfire spreading across grazing land to the north, east and south of the site. Due to its proximity to the Glengarry township, this grassland vegetation is expected to be managed via the Municipal Fire Prevention Management Plan.



Any new landscaping within the GEDP area will not be of a scale or type likely to result in a bushfire hazard to either land within the site or surrounding properties. Particular consideration will be given to the species of vegetation selected for both street tree planting and open space landscaping works within the drainage reserve.

Existing vegetation within the adjacent Gippsland Plains Rail Trail is linear in configuration and not of a scale likely to generate a high bushfire risk. Nevertheless, the GEDP proposes a perimeter road and drainage reserve along the entire length of the site's abuttal to the rail trail, providing a physical buffer to proposed residential lots and therefore mitigating any potential fire risk.

As indicated by the CFA in its preliminary advice, it is likely that the Bushfire Prone Area will be removed from the GEDP area as the land is developed and mapping updates occur.