

159 Mortlake Road

Is approved in accordance with the requirements
under Development Plan Overlay - Schedule 7
WARRNAMBOOL CITY COUNCIL

Delegate:

Date:

27 June 2019



iPlanning



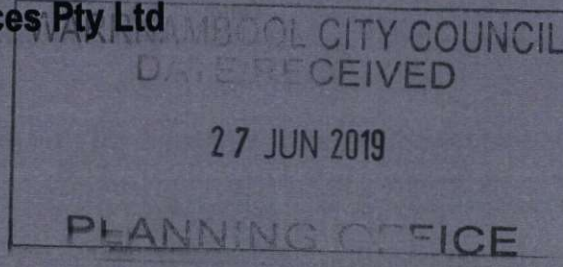
159 Mortlake Road Development Plan

Address: 159 Mortlake Road, Warrnambool

Reference: P-00464

Prepared by:

iPlanning Services Pty Ltd



Date: October 2018 (revised June 2019)

159 Mortlake Road Development Plan
159 Mortlake Road, Warrnambool



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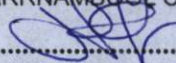
Quality Information

Document	159 Mortlake Road Development Plan
Reference No.	P-00464
Date	October 2018 (revised June 2019)
Prepared by	James Iles

WARRNAMBOOL PLANNING SCHEME
Development Plan for:

159 Mortlake Road

Is approved in accordance with the requirements
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WARRNAMBOOL CITY COUNCIL

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Development Plan Overview

Introduction

The 159 Mortlake Road Development Plan consists of a proposed layout and this written document. This layout is to be read in conjunction with the remainder of this report.

The purpose of the development plan is to provide a framework to guide future development of the land within the 'Cell A' growth area. The development sets out the main objectives that should be achieved and outlines the intentions for this residential precinct.

The Warrnambool Planning Scheme requires that a development plan be prepared prior to the subdivision or development of the land.

The 159 Mortlake Road Development Plan has been formulated based upon the principles of the North East Warrnambool Structure Plan.

The development plan provides for a greater level of detail than that the structure plan but still allows some degree of flexibility in the design detail of future development.

The 159 Mortlake Road Development applies to the land parcel known as Lot 1 on TP917656V and Lot 1 on PS092431. While the Cell A in the Development Plan Overlay Schedule 7 includes a wider area, this development plan report will focus on both of these lots, as agreed by Warrnambool City Council.

Planning Policy Context

The site is located within the General Residential Zone – Schedule 1 (GRZ1) and is partially located within the Urban Floodway Zone (UFZ). The site is covered by the Development Plan Overlay – Schedule 7 (DPO7) which refers to the North East Warrnambool Growth Area. The site abuts onto a Road Zone Category 1 (RDZ1) which is Mortlake Road.

The development plan report will address the Zone requirements as well as the Development Plan Overlay provisions.

The North East Warrnambool Structure Plan report outlines the planning policies applicable to the subject area.

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Area Characteristics

The development plan area has an area of approximately 2.35 hectares. There is an existing dwelling located towards the western end of the site and access is via a long gravel driveway from Mortlake Road.

Along the northern boundary of the site is a similar sized parcel of land which has yet to be developed, and is subject to a development plan due to its coverage by the DPO7.

To the south is developed residential land that comprises existing dwellings and a road network that has access via Mortlake Road. Leo Francis Drive provides a north access to the subject site.

The western boundary borders the Merri River environs where the western most section of the site has a sloping gradient to the banks of the river.

Vegetation is generally exotic surrounding the existing dwelling with some planted native trees planted outside the perimeter of the house site (Attachment A – Existing Vegetation Schedule).

The land is relatively flat with a slight rise from the Mortlake Road frontage to the rear of the existing dwelling and then falls quite steeply to the river bank of Merri River.

There are views to the west over the banks of Merri River to the rural land on the western side.

The site is contained in 2 separate titles which are described as Lot 1 on Title Plan 917656V and Lot 1 on Plan of Subdivision 92431.

The land to the south is developed for residential purposes. This development, including Turner Drive and Veronica Court, is of a curvilinear design and reflective of 1980/1990s design principles. Typical development of this period, there are few road or open space connections except for the north-south link (Leo Francis Drive).



The development south of the site that fronts Mortlake Road is provided access via a service road and a footpath is also provide along the frontage.

Land east of Mortlake Road is also developed for residential purposes. The development is rectilinear in shape with roads and lots running north-south/east-west. Areas of public open space that are accessible by footpaths and wider road reserves provide better accessibility and liveability for residents.

The site is close to many community facilities such as Kings College, St Joseph's Primary School, Botanical Gardens, and Albert Park Reserve. The Warrnambool Hospital and Railway Station are a 5 minute drive.



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Planning Context

Planning Policy Framework

The Planning Policy Framework comprises general principles for land use and development in Victoria.

The following Clauses of the Planning Policy Framework (PPF) are relevant to this development plans:

- Clause 11 Settlement
- Clause 12 Environmental and Landscape values
- Clause 13 Environmental Risks and Amenity
- Clause 15 Built Environment and Heritage
- Clause 16 Housing
- Clause 18 Transport
- Clause 19 Infrastructure

The above policies seek to ensure future development is responsive to the site's natural features, adjacent land uses and proposed development. Policy also seeks to ensure development promotes the efficient and sustainable provisions of infrastructure.

The Great South Coast Regional Plan provides broad direction for land use and development across the south west coast. The North East Warrnambool Structure Plan is identified as a key residential growth area within the plan.

Local Planning Policy Framework

In addition to the Planning Policy Framework, the Local Planning policy Framework (LPPF) sets the local and regional strategic policy context for Warrnambool. It comprises the Municipal Strategic Statement (MSS) and specific local planning policies.

The following clauses of the Local Planning Policy are relevant to this development plan:

- Clause 21.01 Municipal Profile, Council Vision and Strategic Directions
- Clause 21.02 Settlement
- Clause 21.03 Environment and Landscape Values
- Clause 21.06 Built Environment and Heritage
- Clause 21.07 Housing
- Clause 21.09 Transport
- Clause 21.10 Infrastructure
- Clause 21.11 Local Areas

The above policies direct urban growth to Warrnambool's greenfield growth areas (in addition to urban infill opportunities). The policies also identify future development inn growth areas for opportunity to deliver a variety of dwelling types with varying development densities.

Local Strategies

North East Warrnambool Structure Plan (2008)

The Structure Plan outlines the planning and development framework for the north east growth area of Warrnambool. The structure plan defines a vision and broad structure for the movement network within the growth area. Key elements from this structure plan that are relevant to this development plan include:

- A conventional residential density;
- An efficient road network which responds to topography, provides connections between planned neighbourhoods;
- Provide a network of public open spaces through various linear parklands for pedestrians and cyclists;
- Provision of infrastructure that can sustain an increase in the development of the area.

Warrnambool City-Wide Housing Strategy (2013)

The Housing Strategy provides for guidance on housing densities and dwelling types in Warrnambool. The strategy identifies the need to develop a variety of dwelling types with varying development densities within greenfield growth areas. A target of 12 dwellings per developable hectare, with higher densities near open space and transport corridors, is encouraged in the strategy.

Warrnambool Open Space Strategy (2014)

The Open Space Strategy provides an overarching framework to direct open space planning and management in Warrnambool to the year 2026. The Strategy identifies large areas of land within the growth area will be set-aside for open space (Warrnambool North Merri). The strategy identifies the area within Cell A of the North East Warrnambool Structure Plan, as the

area is to be developed south of Grange Road, ensure an adequate biodiversity and open space buffer is provided to complete the link between Grange Road and Wollaston Road.

Zoning

The development plan is subject to three planning zones:

General Residential Zone (GRZ1)

The purpose of the General Residential Zone is:

- 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 implement neighbourhood character policy and adopted neighbourhood character guidelines.
- To provide a diversity of housing types and moderate housing growth in locations offering good access to services and transport.

A planning permit is required to subdivide land. Subdivision must occur in accordance with the requirements of Clause 56 (Residential Subdivision) of the Planning Scheme. These requirements have been considered in the preparation of this development plan.

Urban Floodway Zone (UFZ)

The purpose of the Urban Floodway Zone 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 waterways, major floodpaths, drainage depressions and high hazard areas within urban areas which have the greatest risk and frequency of being affected by flooding.
- To ensure that any development maintains the free passage and temporary storage of floodwater, minimises flood damage and is compatible with flood hazard, local drainage conditions and the minimisation of soil erosion, sedimentation and silting.

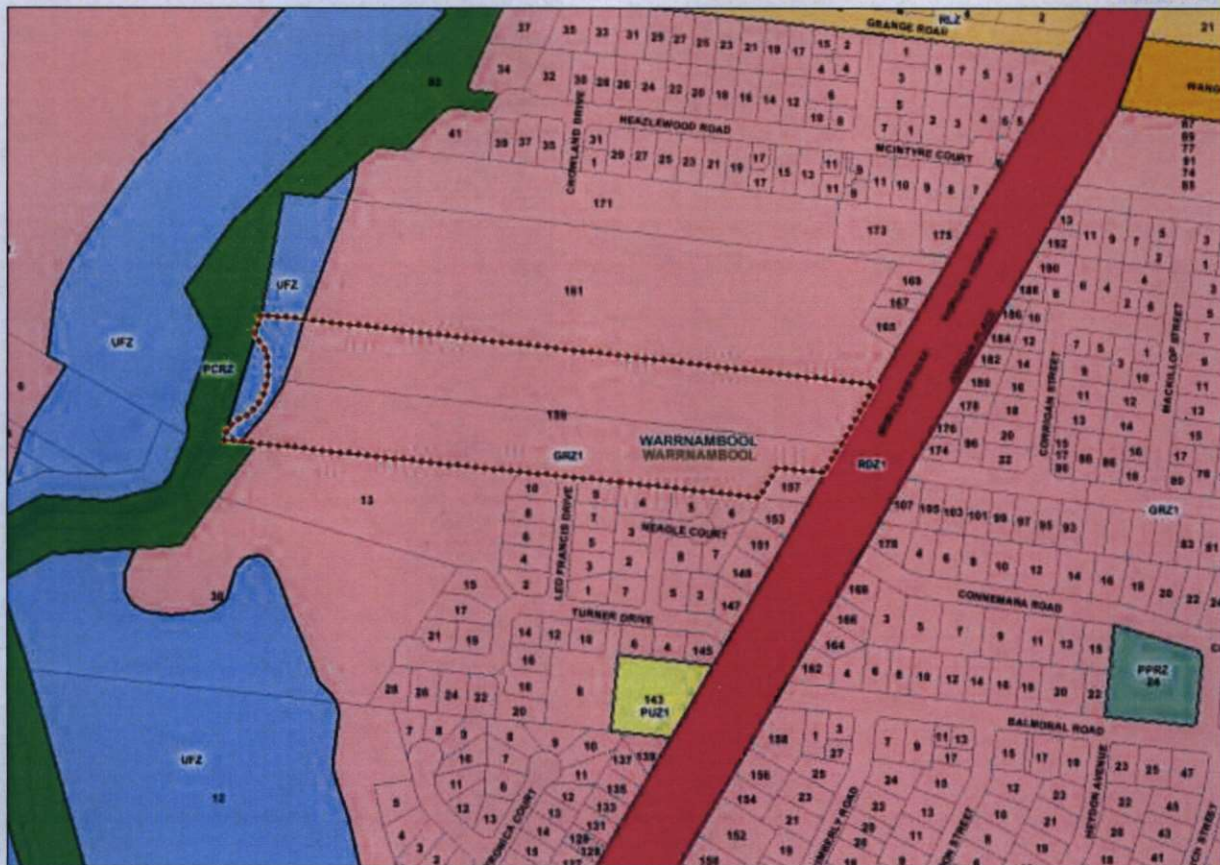
To reflect any declarations under Division 4 of Part 10 of the Water Act, 1989.

To protect water quality and waterways as natural resources in accordance with the provisions of relevant State Environment Protection Policies, and particularly in accordance with Clauses 33 and 35 of the State Environment Protection Policy (Waters of Victoria).

A permit is required to develop land. This includes the construction of fences, road works, pathways and play facilities. Also a planning permit is required to subdivide land.

Road Zone Category 1 (RDZ1)

The Mortlake Road reserve is subject to the Road Zone Category 1. The relevant purpose of the Road Zone is to identify significant existing roads. A permit is required to subdivide land that is adjacent to a road in a Road Zone Category 1.



Overlays

The entire development plan is subject to Schedule 7 of the Development Plan Overlay.

The purpose of the Development Plan Overlay is:

- To implement the 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.

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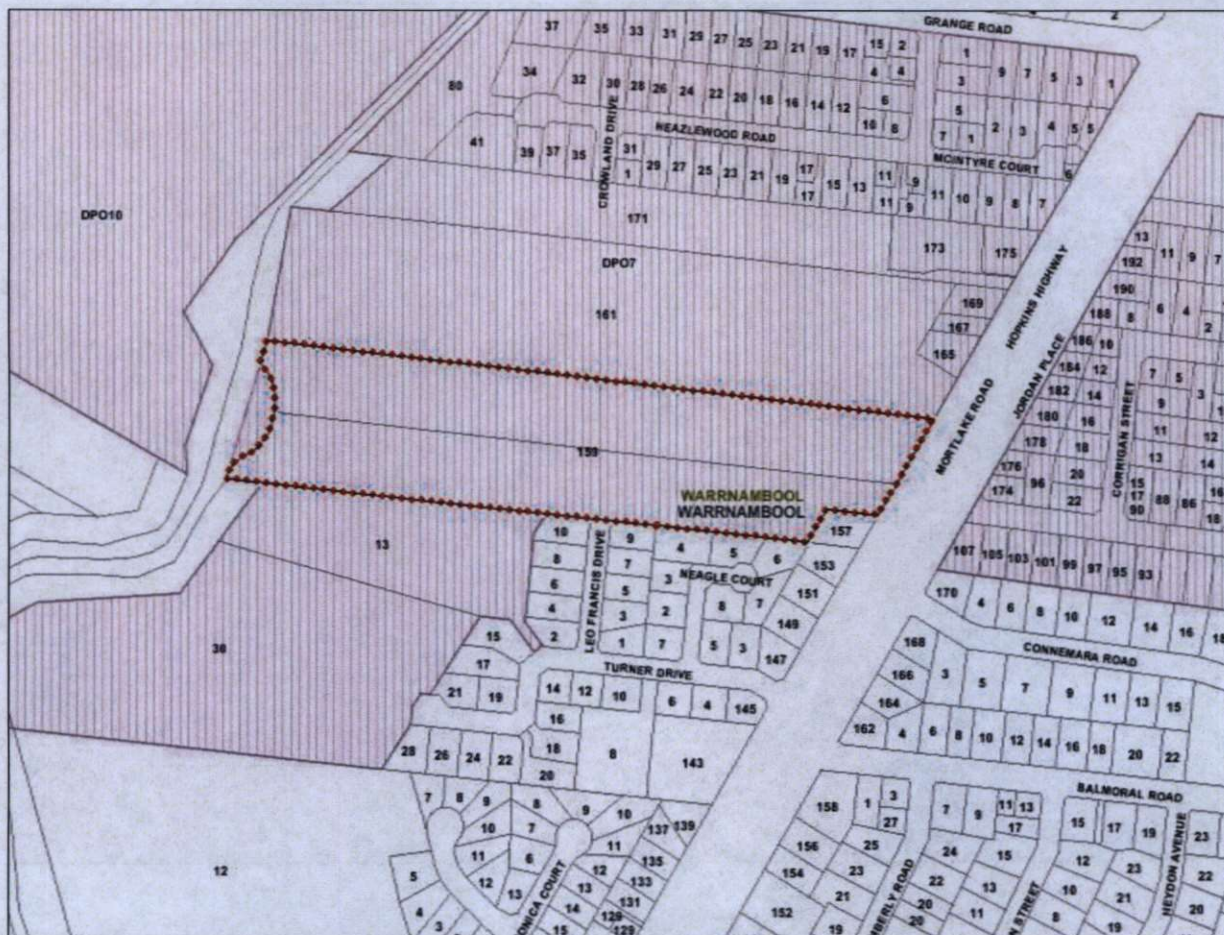
A development plan must be prepared to the satisfaction of the Responsible Authority before a permit can be granted to use or subdivide land, or construct a building or construct or carry out works.

This does not apply if the schedule to the DPO specifically states that a permit may be granted before a development plan has been prepared to the satisfaction of the Responsible Authority.

A permit granted must:

- Be generally in accordance with the development plan.
- Include any conditions or requirements specified in a schedule to this overlay.

Schedule 7 of the DPO applies to the North east Warrnambool Structure Plan area. A permit may be granted for use, subdivision or development if it is generally in accordance with an approved development plan.



A proposed use, development or subdivision that is not in accordance with an approved development plan can be considered by Council as long as it is prepared in accordance with the provisions of the overlay.

Schedule 7 to the DPO sets out the requirements that development plans must address. The 159 Mortlake Road Development Plan has been formulated based upon the requirements listed in Schedule 7 and the principles identified in the North East Warrnambool Structure Plan.

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Site Analysis and Design Response

The key development plan influences have been generated following analysis of the site area (see Attachment B – Site Analysis Plan and Attachment C – Development Plan), including:

Site slope – The site slopes from approximately 5 metres at its lowest point to a plateau of approximately 30 metres. The remainder of the site varies between 27 metres and 29 metres though generally has a flat appearance.

The slope requires consideration of lot layout and sizes in particular to ensure appropriate building envelopes are available on each. This generally necessitates larger lots in areas of slope.

Areas of slope in excess of 15% are identified as single dwelling river view lots. It is anticipated that these lots will be in excess of 1000m² in area (further explanation on residential densities in later sections).

The slope also impacts on the road orientation with the need to consider their safe construction, minimising fill and flow of stormwater drainage.

A court bowl has been used in the area of steep slope as it is not practical to run roads along the contour lines. This presents a challenge in terms of ensuring good outcomes for the public open space (i.e. avoid orientation to back fences). Design guidelines should be considered for lots that are adjacent to areas of open space to ensure they address both the street and open space.

The design of dwellings adjacent to public open space and/or the river corridor should address the river corridor and incorporate open and semi-transparent fences to allow for passive visual surveillance. Areas along the river will undoubtedly become neighbourhood local points and help create a sense of local character and identify for the development, when viewed from the river environs.

Existing Vegetation occurs around the existing dwelling and sheds, with pockets along southern boundary as well as along the western boundary within the floodplain area of the subject site. This area in the floodplain has been designated for drainage purposes and open space.

It is anticipated that the existing vegetation will be removed as it comprises mainly exotic and non-indigenous native vegetation to allow for the clear residential lots to be constructed on. The vegetation along the western boundary will be retained

Floodplain. These is some area of land that is parallel to the Merri River which is below the 1 in 100 year flood line (Urban Floodway Zone). The proposed use for this area of land and the best ownership or management of this land needs to be considered to ensure that dwellings are not located in this area.

Existing residential development occurs to the south and east of the development plan site. The subject site provides a road connection to this existing development. Existing lots to the south of the site are residential in nature and contain existing dwellings. The subject site allows for the future layout to be sympathetic with the existing residential development to the south and east which will ensure complementary building design can be achieved.

Site of conservation or heritage significance – a Cultural Heritage Management Plan (CHMP) has been approved for the future subdivision of the land (Attachment D - Approved CHMP prepared by Insight Heritage).

The proposed development layout provides an east-west road that links to the first stage of subdivision that occurs immediately to the east of the development plan area. Connection to the site is via Leo-Francis Drive which is the existing subdivision to the south of the development plan. It provides opportunity for residential development with a lot layout in the order of forty three lots ranging in from 700 to greater than 1000m² with these larger lots utilising the Merri River views.

Open space is to be provided within the west portion of the site adjoining the creek corridor and will form part of the open space link that continues to the north and south along the Merri River.

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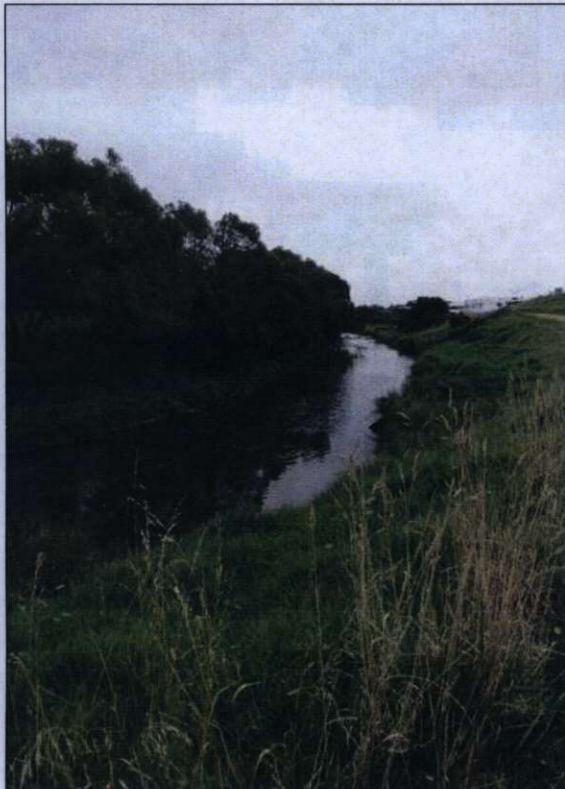
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Access to the Merri River – Providing public access to the Merri Creek is a key Planning Policy objective which needs to be balanced with developer objectives and the equitable provision of public open space. An open space objective is to create continuous links along the Merri River. The subject site provides open space which is linked to open space areas to the north and south. Pedestrian access to this open space is provided via the link from the court bowl to the creek.



Community interaction, safety and surveillance can be achieved through the development layout of the site. River view lots have been designated on the development plan, which will overlook the river corridor, due to the natural slope of the land. Future dwelling designs in these locations should address the river and open space areas to encourage passive surveillance.

Fencing treatments along the interface with the public open space should be encouraged to maintain passive surveillance of these areas, whilst also providing adequate security for the private land.

Single dwelling development is identified on the development plan along the river corridor and on areas with steeper slopes. These areas may also be suitable for higher residential densities, if it can be demonstrated

that additional dwellings can be accommodated on the site.

Areas within the development plan that are identified for single dwelling development should not necessarily be prevented from medium density development, if desired in the future. An application for further subdivision and/or the construction of additional dwellings on these lots, can be considered by Council. It should be demonstrated that the proposal will not prejudice the future development of the area, to the satisfaction of Council.

Applications for medium density development on sites that are identified on the development plans for single dwelling development, may be notified to adjoining and/or nearby landholders, as they do not meet the notification exemptions listed under Clause 43.04-2 of the Development Plan Overlay.

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Open Space and Landscape Master Plan

Open space is provided within the subject site along the Merri River and will provide good connection to future public open spaces along the Merri River to the south. Additionally the public open space will help provide for a range of activities with river recreation opportunities. Furthermore it will help to ensure the existing view lines to and from the Merri River are maintained and protected.

The river corridor should be landscaped appropriately to create safe environments that encourage frequent usage and offer both active and passive recreation opportunities.

The public open space along Merri River will provide for passive uses, generally walking and bicycle path.

A consistent landscaping theme is to be established within the development plan, with a focus on the inclusion of indigenous and native species. Existing vegetation will be retained, where possible, and incorporated into the public open space area.

A landscape plan details a concept design for the street tree plantings along the internal roads as well as the bio-retention/detention basin located within the river corridor. The concept landscape design lists the proposed species to be used within the particular zones (Attachment E – Landscape Plan prepared by Thomson Hay Landscape Architects).

The provision of detailed landscape plan should be a condition requirement of any future planning permit for the subdivision of the land.


Additional landscaping works may be warranted by other authorities along the riparian corridor, as part of the future construction of public open space linkages and walking trails.



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Environmental Report

Merri River is a degraded creek corridor due to past farming practices. It has been designated as an open space area within the proposed development plan. It is envisaged that the biodiversity of this corridor will be improved through being designated as an open space corridor and through any improvement works that Council carry out,

The remaining area of the subject site is devoid of any significant vegetation and consists of pasture grasses.

Stormwater drainage is proposed to be collected via underground drainage. It will be collected and piped to the Merri River through a bio-retention swale to a detention basin site at the south-western corner of the site. The stormwater will be treated as it passes through the bio-retention swale, before being discharged into the outfall point into the river.

The final drainage design will need to be approved by Warrnambool City Council and the Glenelg Hopkins Catchment Management Authority (GHCMA).

The opportunities for 'Third Pipe' stormwater are currently limited as there is no existing trunk main in close proximity to the site. However, it is proposed that a third pipe be installed at development stage and will be provided in any proposed easement that contains sewer and/or stormwater.

The Merri River corridor as it abuts the site benefits from commanding views to the west and south to the opposite farmland and the river environs. Due to the natural fall of the land down to the river's edge, the future dwelling design on the river view lots should be sensitive in the their scale, bulk, materials and colouring to ensure that there is no adverse interruption to the landscape amenity along the corridor.

Muted tones and non-reflective surfaces should be encouraged. The scale and bulk of future dwellings should respect the constraints of the site, especially the slope of the land.

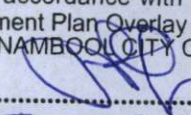
Building height should respect the character of the surrounding built form and not create an adverse impact or interrupt the landscape amenity along the Merri River corridor.



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Infrastructure Report

An Infrastructure Report has been prepared for the subject site (Attachment F – Infrastructure Report prepared by Wright Civil Engineering).

Essential Services

Electricity, gas, water, sewerage and telecommunications connections can be provided to the subject site through extensions from the existing networks in the surrounding neighbourhoods. These services are to be provided as per the relevant authority's requirements and as part of the subdivision development. Provision of water for the subject site will be from the existing water mains located in Leo Francis Drive and Mortlake Road.

Existing sewerage main runs through the western portion of the development plan which will service the lots in the development plan. Minor extensions from this existing sewerage is needed to service the lots. The proposed residential land directly abutting the Merri River cannot be serviced using gravity sewerage. There will be building envelopes placed on the lots that overlook the river that will restrict development to the east side of the existing sewerage easement. Wannon Region Water Authority will have to approve the proposed reticulated sewerage system.

Drainage

Warrnambool City Council (WCC) is the local authority responsible for stormwater drainage facilities.

Underground piped drainage will direct the stormwater from the roads and dwellings, placing a reticulated pipe network within easements and road reserves. Provision will need to be made for a drainage outfall point to the Merri River. It is proposed that the stormwater will be directed through a bio-retention swale to a detention basin in the south-western corner of the site, before discharging to the Merri River (Attachment F – proposed stormwater discharge arrangement). The final drainage design will need to be approved by Council.

Road/Streets

All roads within the development plan are to be fully constructed to Warrnambool City Council standards.

Connection will be provided from Leo Francis Drive with a connection provided to the north for future development. An east/west road will provide access to all lots with a court bowl located at both ends. There will be no vehicular access from the Development Plan to Mortlake Road (Attachment F – Infrastructure Plan contains concept drawings of the proposed road layout of the development plan).

A Traffic Impact Assessment has been prepared by Driscoll Engineering Services Pty Ltd which recommends a number of measures that are required to be met as part of the development (Attachment G – Traffic Impact Assessment).

Staging

The development of the subject site will comprise two (2) stages with the necessary infrastructure provided in each stage. A Staging Plan prepared by Steele Surveying details the two (2) stage development (Attachment H – Staging Plan).


There is no development contributions plan or other agreement for the subject land. The physical infrastructure will be funded by the land developer. As part of the subdivision of the land, a public open space contribution is required to be made to the Warrnambool City Council of 5% either in land or monetary contribution or a combination of both.



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Review of Development Plan Overlay

A review of the Development Plan Overlay should be conducted periodically by the Council. As a minimum, this should be included as part of a three year review process of the Warrnambool Planning Scheme.

However, it may be suitable to conduct an annual review of all development plans within the municipality. This will ensure that once the objectives of the development plans are deemed to have been implemented, the removal of the DPO can occur to reinstate the notice and review rights to the affected land holdings.

The removal of the overlay from affected land parcels will be at the discretion of the Council and will be delivered through a planning scheme amendment process.

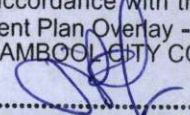
The objectives of the DPO should be deemed to be implemented when:

- The conditions of a planning permit for subdivision have been met (i.e. Issue of Statement of Compliance) and/or;
- A building permit approval is issued on a lot.

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Attachment A – Existing Vegetation Schedule

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REVISIONS
27.06.19 Rev A - Updated as per council comment

LEGEND

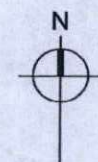
- Title boundary
- Existing dwelling / shed
- Existing garden extent
- Existing vegetation
- Existing driveway
- Waterway

EXISTING VEGETATION SCHEDULE

SYMBOL	DESCRIPTION
1	<i>Salix</i> sp. / Willow <i>Populus</i> sp. / Poplar
2	<i>Cupressus</i> sp. / Cypress <i>Lycium</i> sp. / Boxthorn
3	<i>Eucalyptus cladocalyx</i> / Sugar Gum
4	<i>Acacia mearnsii</i> / Black Wattle
5	<i>Rubus</i> sp. / Blackberry
6	<i>Lycium</i> sp. / Boxthorn
7	<i>Cupressus</i> sp. / Cypress
8	Mixed <i>Eucalyptus</i> sp. (adjoining property)
9	<i>Araucaria heterophylla</i> / Norfolk Island Pine <i>Eucalyptus cladocalyx</i> / Sugar Gum
10	<i>Crataegus</i> sp. / Hawthorn
11	<i>Corymbia ficifolia</i> / Red Flowering Gum
12	<i>Coprosma repens</i> / Mirror Bush
13	<i>Eucalyptus</i> sp. / Unidentified non-indigenous Eucalypt

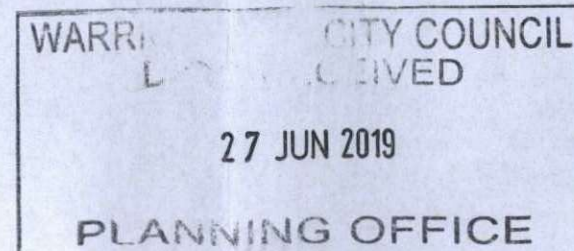
NOTE:

Dwelling, outbuildings, fencing, garden and vegetation are generally in a poor - average condition, with minimal property maintenance having been carried out over recent years.



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Project:
159 Mortlake Road,
WARRNAMBOOL

Drawing Title: Existing Site Condition
and Vegetation Assessment Plan

Prepared for: Gull Group

Date: June 27, 2019
Scale: 1:750 @A1
Drawn: YL
Check: DH
Drawing No: 1854-LMP01 Rev A
Planning Permit No: N/A

THOMSON HAY
LANDSCAPE ARCHITECTS


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WARRNAMBOOL PLANNING SCHEME
Development Plan for:

159 Mortlake Road

Is approved in accordance with the requirements
under Development Plan Overlay - Schedule
WARRNAMBOOL CITY COUNCIL

Delegate: 

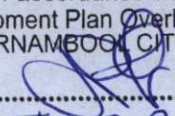
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Attachment B – Site Analysis Plan

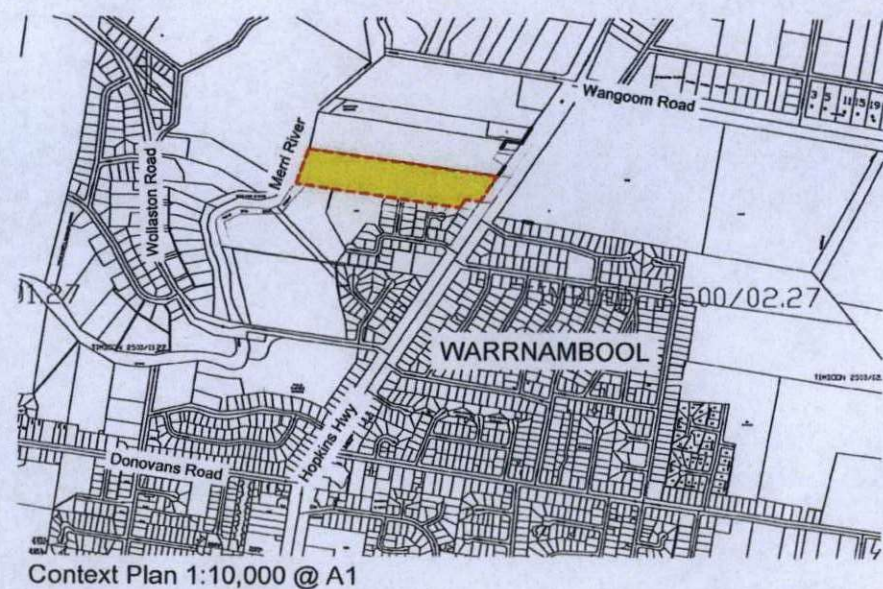
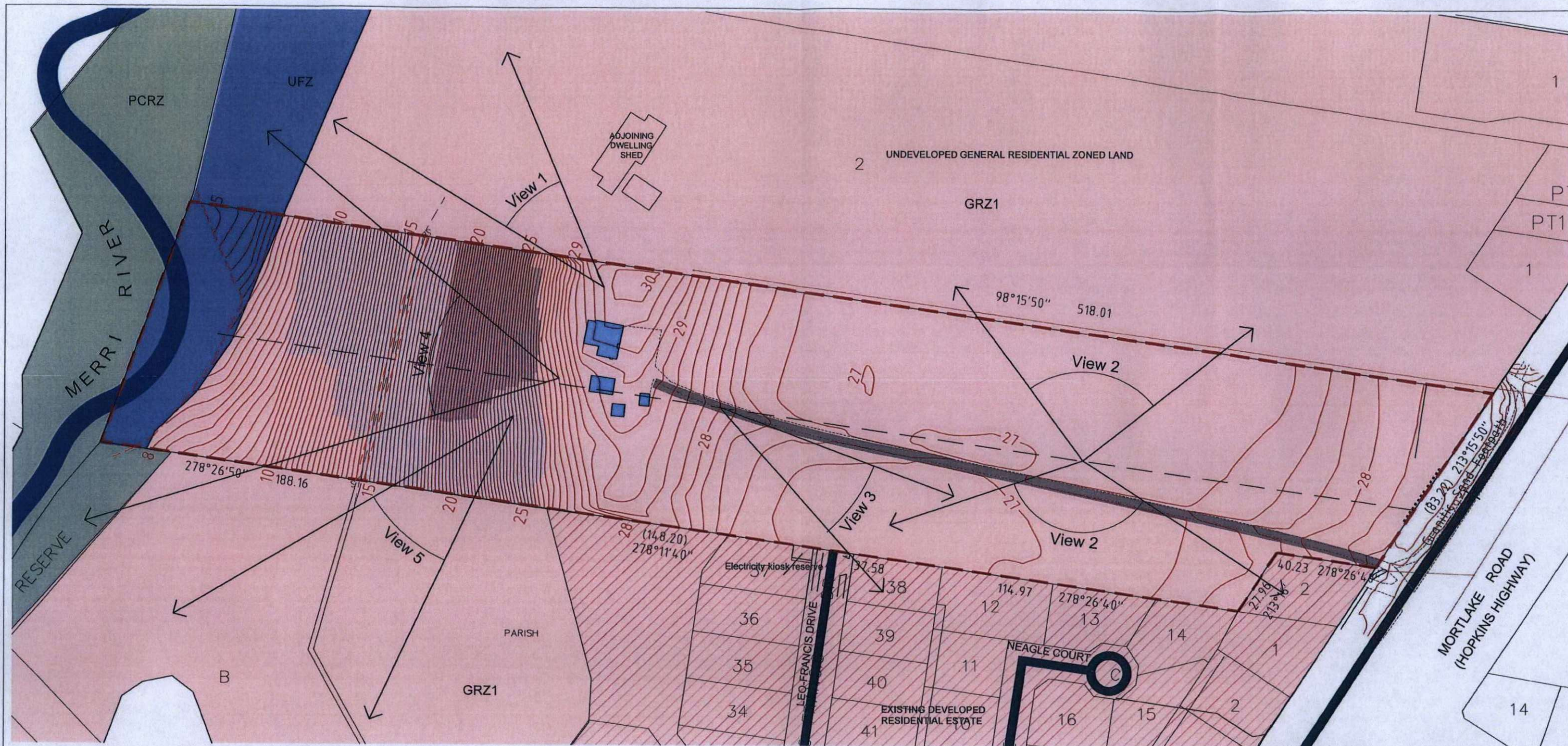
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Date: 27 June 2019



LEGEND

- Title boundary
- Existing building / shed
- Existing driveway
- Existing road network
- Contours at 250mm interval
- Urban Floodway Zone (UFZ)
- General Residential Zone (GRZ 1)
- Public Conservation and Resource Zone (PCRZ)
- Existing developed residential estate
- Waterway
- Slope Analysis
- > 20% Slope
- 15-20% Slope

VIEW ANALYSIS SCHEDULE

- View to north-west over Merri River escarpment (rural landscape)
- View over paddocks to residential estates.
- View to elevated water tower.
- View into / along Merri River valley (predominantly a rural landscape)
- View over farm land to Warrnambool CBD.

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WARRNAMBOOL CITY COUNCIL
DATE RECEIVED

27 JUN 2019

PLANNING OFFICE

0 7.5m 18.75m 37.5m 75m
SCALE: 1: 750

REVISIONS

27.06.19 Rev A - Updated as per council comment

Project:
159 Mortlake Road,
WARRNAMBOOL

Drawing Title: Site Analysis Plan

Prepared for: Gull Group

Date: June 27, 2019
Scale: 1:750 @A1
Drawn: YL
Check: DH
Drawing No: 1854-LMP02 Rev A
Planning Permit No: N/A

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Date:

27 June 2019

Attachment C – 159 Mortlake Road Development Plan

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Development Plan for:

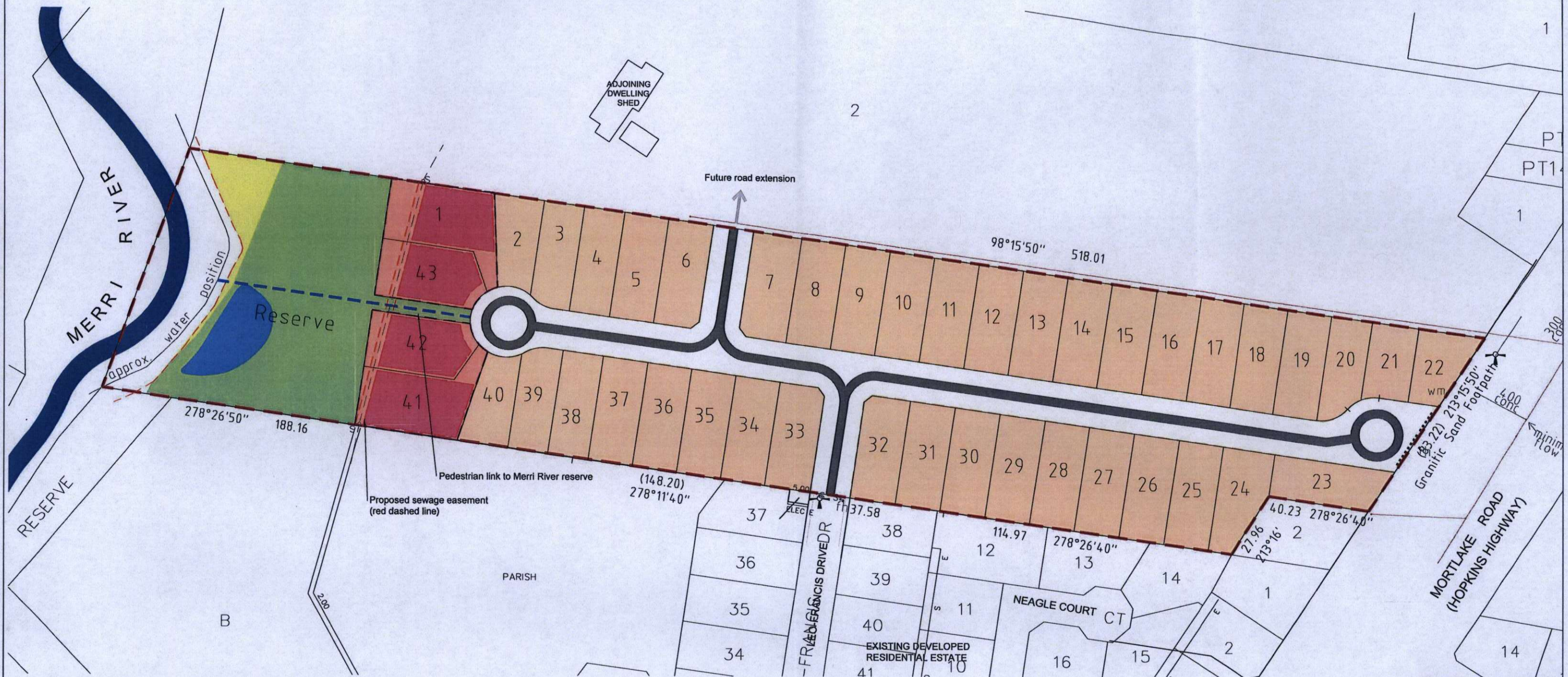
159 Mortlake Road

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Date:

27 June 2019

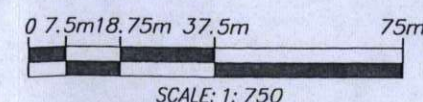
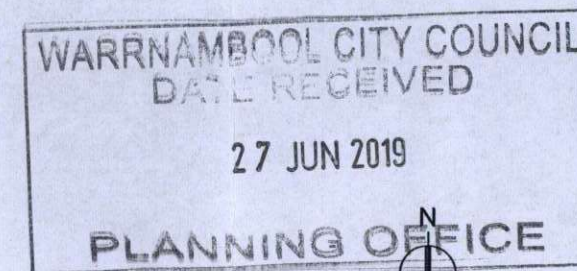


LEGEND

- Title boundary
- Open space within UFZ (714.5 m²)
- Open space above UFZ (3822.5 m²) - including bioretention basin
- Urban Floodway Zone (UFZ)
- Proposed road alignment / court bowl
- Designated stormwater overland flow path
- Waterway
- Proposed 3m sewerage easement
- Residential - Single dwelling river view lots
- Residential - Potential for one or more dwellings per lot
- Residential - Proposed building envelope
- Indicative location, size and form of bioretention basin (nom. 300m³ capacity)
- Future road extension

WARRNAMBOOL PLANNING SCHEME Development Plan for:

159 Mortlake Road
Is approved in accordance with the requirements
under Development Plan Overlay - Schedule 1
WARRNAMBOOL CITY COUNCIL
Delegate: [Signature]
Date: 27 June 2019



REVISIONS
27.06.19 Rev A - Updated as per council comment



Project:
159 Mortlake Road,
WARRNAMBOOL
Drawing Title: Development Plan
Prepared for: Gull Group
Date: June 27, 2019
Amendment Date: June 21, 2019
Scale: 1:750 @A1
Drawn: YL
Check: DH
Drawing No: 1854-LMP03 Rev B
Planning Permit No: N/A

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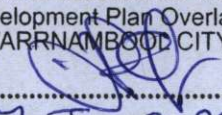
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Attachment D – Approved Cultural Heritage Management Plan

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Development Plan for:

159 mortlake road


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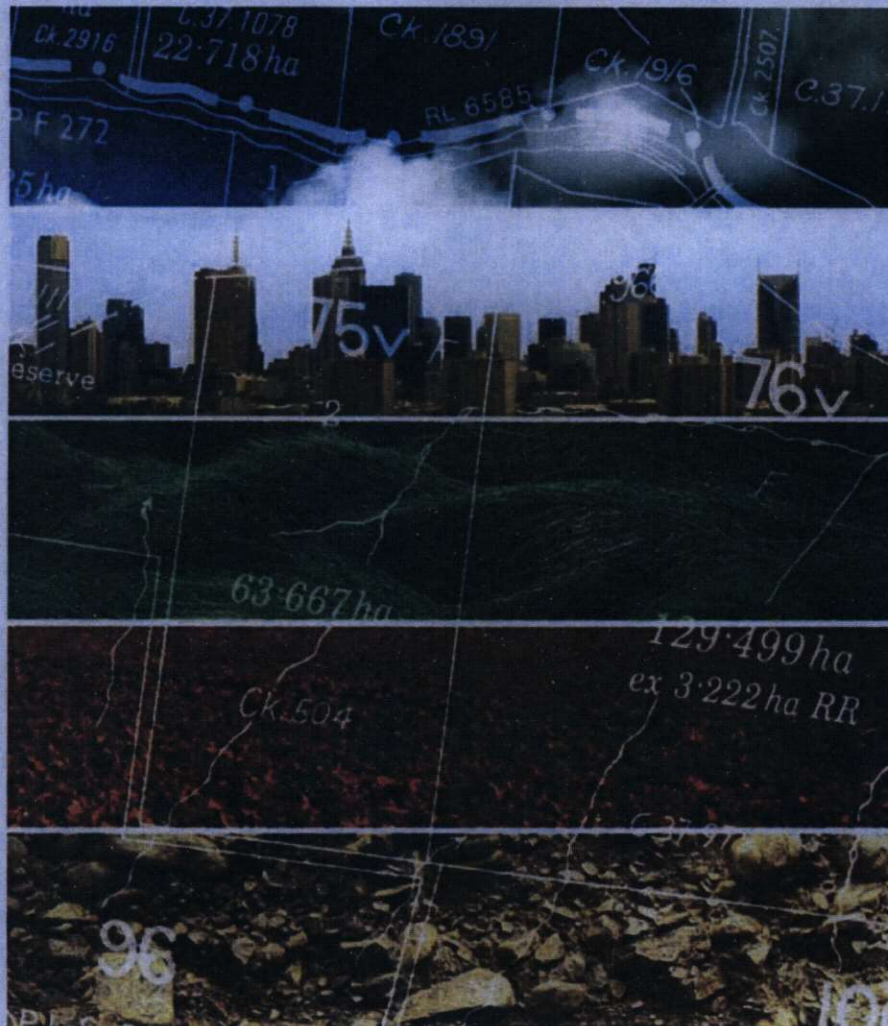
EXTRACT ONLY.

Delegate: 

Date: 27 June 2019

Proposed Residential Subdivision: 159 Mortlake Road, Warrnambool

Cultural Heritage Management Plan



Aboriginal Victoria Management Plan Identifier: 15446

Sponsor: Cameron Gull

Heritage Advisor/Author: Renee McAlister

May17, 2018

Heritage
Insight
Pty Ltd



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6 Jennings Street Kyneton VIC 3444 T: +61 3 8578 3779

FAX: +61 3 9376 6526

INQUIRIES: archaeology@heritageinsight.com
WEB: www.heritageinsight.com

Title Page

TITLE:	Proposed Residential Subdivision: 159 Mortlake Road, Warrnambool
ACTIVITY:	Residential subdivision
LOCATION:	159 Mortlake Road, Warrnambool
LEVEL OF ASSESSMENT:	Desktop, standard, complex
SIZE OF ACTIVITY:	Medium
AV PLAN IDENTIFIER:	15446
DATE OF COMPLETION:	May 17, 2018
SPONSOR:	Cameron Gull
HERITAGE ADVISOR:	Renee McAlister
AUTHOR:	Renee McAlister

Acknowledgements

Heritage Insight Pty Ltd would like to acknowledge and thank the following people for their assistance and participation in this study:

EMAC

Field representative: Caleb Clarke

GMTOAC

Field representative: Brad Williams

Heritage Insight Staff

GIS mapping:	Katarina Audy
Background research:	Ian Edmundson
Fieldwork Assistance:	Margaret Reith
Data compilation:	Jessica Hardy
Report editing:	Jennifer Porter

The Sponsor

Cameron Gull
Gull & Company Pty Ltd

The Client

Tim Wright
Wright Civil Engineering

WARRNAMBOOL PLANNING SCHEME
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.....159 Mortlake Road.....
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Aboriginal Heritage Act 2006
Section 65

Cultural Heritage Management Plan – Notice of Approval

CHMP Name: Proposed Residential Subdivision: 159 Mortlake Road, Warrnambool	
CHMP Number: 15446	
Sponsor: Cameron Gull	ABN:
Heritage Advisor(s): Renee McAlister	
Author(s): Renee McAlister (Heritage Insight)	
Cover date: 17 May 2018	Pages: viii + 135

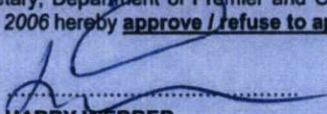
Received for approval: 26 April 2018

Clock stopped: 7 May 2018

Clock started: 9 May 2018

Clock stopped: 17 May 2018

Clock started: 17 May 2018


TO BE COMPLETED BY THE SECRETARY (OR DELEGATE)	Yes	No
I have considered the Evaluation Report for this CHMP and:		
I am satisfied that the CHMP has been prepared in accordance with the standards prescribed for the purposes of section 53 (in the Aboriginal Heritage Regulations 2007 and the Approved Form).	<input checked="" type="checkbox"/>	
I am satisfied that the CHMP adequately addresses the matters set out in section 61.	<input checked="" type="checkbox"/>	
In considering this application, I consulted with and considered the views of Aboriginal persons or bodies I considered relevant to the application.	<input checked="" type="checkbox"/>	
I have given proper consideration to any relevant human rights	<input checked="" type="checkbox"/>	
I, Harry Webber, Director Heritage Services Aboriginal Victoria, acting under authority delegated to me by the Secretary, Department of Premier and Cabinet, and pursuant to section 65(2) of the Aboriginal Heritage Act 2006 hereby <u>approve / refuse to approve</u> this cultural heritage management plan:		
Signed: 		
HARRY WEBBER		
Dated: 24 May 2018		
<small>• This notice of approval should be inserted after the title page and bound with the body of the management plan. • The recommendations in this management plan are now compliance requirements. Officers from the Department of Premier and Cabinet may attend the subject land to monitor compliance with the recommendations.</small>		

WARRNAMBOOL PLANNING SCHEME
Development Plan for:

159 Mortlake Road

Is approved in accordance with the requirements
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Delegate: 

Date: 27 June 2019

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Disclaimer

The information contained in this Cultural Heritage Management Plan (CHMP) has been compiled from the standard heritage database sources and is accurate as far as Heritage Insight Pty Ltd is aware. However, within the timeframes available for technical heritage reporting, it is not possible to carry out comprehensive research of all published or unpublished manuscripts, journals, maps or oral history which may pertain to the study area. No responsibility can be taken for errors or omissions in primary and secondary source material cited in this report. Any opinions expressed in this report are those of Heritage Insight Pty Ltd and do not necessarily represent those of the Sponsor. Heritage Insight has endeavoured to actively consult with representatives of the Traditional Owners who are, to the best of our knowledge and advice, the legal and proper representatives of the local Aboriginal community. The consultants cannot, however, be held responsible for opinions or actions which may be expressed by dissenting persons or organisations. This CHMP has been prepared to comply with the Approved Form under Clause 1.64 of the *Aboriginal Heritage Regulations 2007* "Aboriginal Cultural Heritage Management Plan for the Purposes of the *Aboriginal Heritage Act 2006*". However, Heritage Insight Pty Ltd cannot be responsible for any changes in policy on the part of the Victorian Government, its agencies, or Registered Aboriginal Parties in the period since lodging a Notice of Intent to Prepare a CHMP.

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WARRNAMBOOL PLANNING SCHEME
Development Plan for:

159 Mortlake Road

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Delegate:

Date:

27 June 2019

Executive Summary

Introduction

This Cultural Heritage Management Plan (CHMP) has been undertaken at the request of the Cameron Gull, for a proposed residential subdivision at 159 Mortlake Road, Warrnambool. A Cultural Heritage Management Plan is a mandatory requirement for the proposed activity because:

- all or part of the activity area is an area of cultural heritage sensitivity (*Aboriginal Heritage Regulations 2007*, Division 1, 6(a)); and
- the proposed activity is a high impact activity (*Aboriginal Heritage Regulations 2007*, Division 1, 6(b)).

The activity area is located within 200 m of a named waterway, Merri River (*Aboriginal Heritage Regulations 2007*, Regulation 23(1)):

- (1) Subject to subregulation (2), a waterway or land within 200 metres of a waterway is an area of cultural heritage sensitivity.

The proposed activity is subdivision of land and construction of a residential development.

The subdivision of land into three or more lots is also considered to be a high impact activity as defined by the *Aboriginal Heritage Regulations 2007* r. 46(1)(a) (Subdivision of Land):

- (1) The subdivision of land into three or more lots is a high impact activity if—
 - (a) the planning scheme that applies to the activity area in which the land to be subdivided is located provides that at least three of the lots may be used for a dwelling or may be used for a dwelling subject to the grant of a permit; and
 - (b) the area of at least three of the lots is less than eight hectares.

This CHMP has a medium sized activity area and has been conducted to the level of complex assessment.

Results of the Assessment

Desktop Assessment

The desktop assessment for the activity area has allowed a site prediction model to be developed. A site prediction model is intended for use as an indication of the types of Aboriginal archaeological sites that may occur in a given area. The site prediction model can later be tested against the results of the field survey and/or subsurface testing.

A review of the environmental data relevant to human settlement and the ethnographic and archaeological data relevant to the local area has indicated that:

- the activity area is located adjacent to Merri River. Merri River would have been a key waterway used as a source of a wide range of resources, fresh water and a route through the landscape;
- the activity area is located on the geomorphic unit known as the Undulating Plain – Western District. These are basalt plains created through volcanic activity. Soils in these areas are characterised by shallow deposits of silty clay over a clay base;

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Development Plan for:

159 Mortlake Road

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- two third tier geomorphological units are located within the activity area, the western edge of the activity area is located on geomorphological unit 6.1.5 (Terraces, floodplains and lakes, swamps and lunettes), while the majority of the activity area is located on geomorphological unit 6.1.3 (Plains with poorly developed drainage and shallow regolith) (Map 4);
- three landforms have been identified in the activity area, these comprise, a steep escarpment adjacent Merri River, an elevated ridgeline and the open plain;
- the bulk of the activity area would have been characterised by Plains Grassy Woodland prior to European settlement. Plains grassland species provided food, fibre and medicine and are a key cultural resource to Aboriginal people;
- there are 20 registered Aboriginal Places within the geographic region, comprising 23 components. These Places comprise artefact scatters (70%), low density artefact distributions (22%), earth features (5%) and object collections (4%). The majority of these Places are located in association with the flood plains, alluvial terraces and elevated ridgelines along Merri River, Russel Creek and Hopkins River;
- the most commonly located cultural heritage material in the geographic region is stone artefact scatters, these are primarily low density sites with a few exceptions;
- artefact scatters are generally located adjacent to waterways and on rises and elevated ridgelines. Very few stone artefact scatters are located on the open undulating plains landform and no stone artefact scatters are recorded on steep slopes in the region;
- there are no registered Aboriginal Places within the activity area and the activity area has not been subject to previous archaeological survey;
- the activity area has been subject to previous ground disturbance in the form of vegetation clearance and use of the area for agricultural/pastoral purpose, basalt quarrying. A dwelling and associated farm structures have also been constructed;
- the activity area contains an open plain landform, previous archaeological research on the open plain landform suggests it contains low archaeological potential for the discovery of low densities of stone artefacts in disturbed contexts;
- the activity area contains an elevated ridgeline which provides an excellent vantage point over the Merri River valley and views across the surrounding landscape, it would also provide a dry spot in wet seasons when the open plain would likely be waterlogged. This area would generally be considered to contain moderate to high archaeological potential, however it has undergone substantial disturbance through construction of a dwelling and associated farm buildings along with installation of underground services and basalt quarrying, as such, the archaeological potential of this landform should be considered to be low;
- the activity area contains a steep escarpment down to Merri River. This escarpment has undergone some disturbance through basalt quarrying, installation of a sewer/drainage easement and likely through some flood activity. The steepness of the slope would make it vulnerable to topsoil erosion. In addition, Aboriginal places are rarely located on steep slopes as level ground is preferred areas for camping/occupation sites, the steepness of the slope also makes it unlikely that it would be regularly traversed, as easier routes from the elevated ridgeline to water are available to the north of the activity area through the Merri Flats; as such, this landform should be considered to contain little to no archaeological potential and

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- the most likely site type within the activity area is low densities of stone artefact in a disturbed context.. A total clearance of native vegetation means that there is no potential for the discovery of culturally scarred trees.

Standard Assessment

No Aboriginal cultural heritage was identified during the field survey. There were no culturally scarred trees, caves, cave entrances or rock shelters identified within the activity area.

The desktop and standard assessment has identified the archaeological potential of the activity area as low. While the elevated ridgeline would likely have been an appealing location for Aboriginal people due to its vantage over the surrounding landscape, this area has been significantly impacted through construction of a dwelling and associated farm buildings and infrastructure, such as underground services.

The steep river escarpment does not contain any identifiable alluvial terraces or floodplain which would be considered areas of archaeological potential. The steepness of the slope indicates that it is highly unlikely Aboriginal cultural material would be located there.

Excellent ground surface visibility enabled effective survey of the open plain landform which also confirmed substantial disturbance through ploughing. As such, it is considered that the activity area contains low potential for the discovery of Aboriginal cultural material, and any cultural material would likely comprise low densities of stone artefacts in a disturbed context.

A complex assessment will be required to fully test the site prediction model.

Complex Assessment

No Aboriginal cultural heritage material was identified during testing.

Subsurface testing comprised the excavation of two 1m² test pits and eight machine trenches.

Subsurface testing on the open plain landform has shown that the paddocks have undergone disturbance through ploughing overtime, this is indicated by large quantities of modern rubbish such as broken glass, ceramic etc. that was located in the test pits and noted on the ground surface, along with visible plough marks. As these paddocks have extremely shallow topsoil deposits, there is no chance that *in situ* deposits of Aboriginal cultural material will be located in this area. In addition, as the eastern paddocks are low-lying, frequently waterlogged and over 200 m from the Merri River, they are considered unlikely to contain deposits of Aboriginal cultural material. There is extremely low potential that low densities of Aboriginal cultural material may be located in disturbed contexts.

Subsurface testing conducted on the elevated ridgeline has shown that the ridgeline is characterised by shallow deposits of topsoil overlaying a basalt layer, also confirmed by geotechnical testing that has occurred on the elevated ridgeline. The elevated ridgeline has also been subject to substantial soil disturbance through the installation of underground services, construction of a dwelling and associated structures, along with basalt quarrying in the north. As such, it is considered highly unlikely that in-situ deposits Aboriginal cultural material will be located in this area. There is low potential that low densities of Aboriginal cultural material may be located in disturbed contexts.

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The steep river escarpment is considered unlikely to contain Aboriginal cultural material due to the steepness of the slope.

The results of the CHMP assessment have shown that the proposed activity is unlikely to impact on deposits of Aboriginal cultural material.

Cultural Heritage Management Conditions

Note: These conditions become compliance requirements once this Cultural Heritage Management Plan is approved. Failure to comply with an approved Cultural Heritage Management Plan condition is an offence under section 67A of the *Aboriginal Heritage Act 2006*.

General Cultural Heritage Management Requirements

General Condition: Requirement that Contingency Plans must be incorporated into any development/management plan.

Section 9 of this CHMP presents a set of contingency plans that make provisions for the discovery of unexpected deposits of Aboriginal cultural heritage material within the activity area, along with mechanisms for compliance with the CHMP. These contingency plans must be incorporated into any development or Environmental Management Plan (EMP) for the proposed activity.


General Condition: A Copy of the CHMP must be kept on site at all times

A copy of the CHMP must be kept on site at all times and site workers must be informed about procedures to follow in the event that unexpected deposits of Aboriginal cultural heritage material are located during works.

WARRNAMBOOL PLANNING SCHEME
Development Plan for:

159 Mortlake Road

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159 Mortlake Road
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Abbreviations

AAG – Activity Advisory Group
ACHRIS – Aboriginal Cultural Heritage Register and Information System
ASL – Above Sea Level
AV – Aboriginal Victoria
BT – Backhoe Transect
CBD – Central Business District
CHMP – Cultural Heritage Management Plan
DBYD – Dial Before You Dig
dGPS or differential GPS – Differential Global Positioning System
DPC – Department of Premier and Cabinet
Eastern Maar – Eastern Maar Aboriginal Corporation
EMP – Environmental Management Plan
EVC – Ecological Vegetation Class
GDA94 – Geocentric Datum of Australia 1994
GMTOAC - Gunditj Mirring Tradition Owners Aboriginal Corporation
LDAD – Low Density Artefact Distribution
LGM – Last Glacial Maximum
MGA – Map Grid of Australia
MMBW – Melbourne & Metropolitan Board of Works
MT – Machine Transect
NDA – Net Developable Area
NOI – Notice of Intent to Prepare a CHMP
OHS – Occupational Health and Safety
PAD – Potential Archaeological Deposit
PAS – Potential Archaeological Sensitivity
PSP – Precinct Structure Plan
RAP – Registered Aboriginal Party
RTP – Radial Shovel Test Pit
STP – Shovel Test Pit
T – Transect
TO – Traditional Owner
TP – Test Pit
VAHC – Victorian Aboriginal Heritage Council
VAHR – Victorian Aboriginal Heritage Register

Please note that all maps and plans in this CHMP are prepared using Victorian Government Standard GDA94 MGA coordinates (Zone 54).

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Attachment E – Landscape Plan

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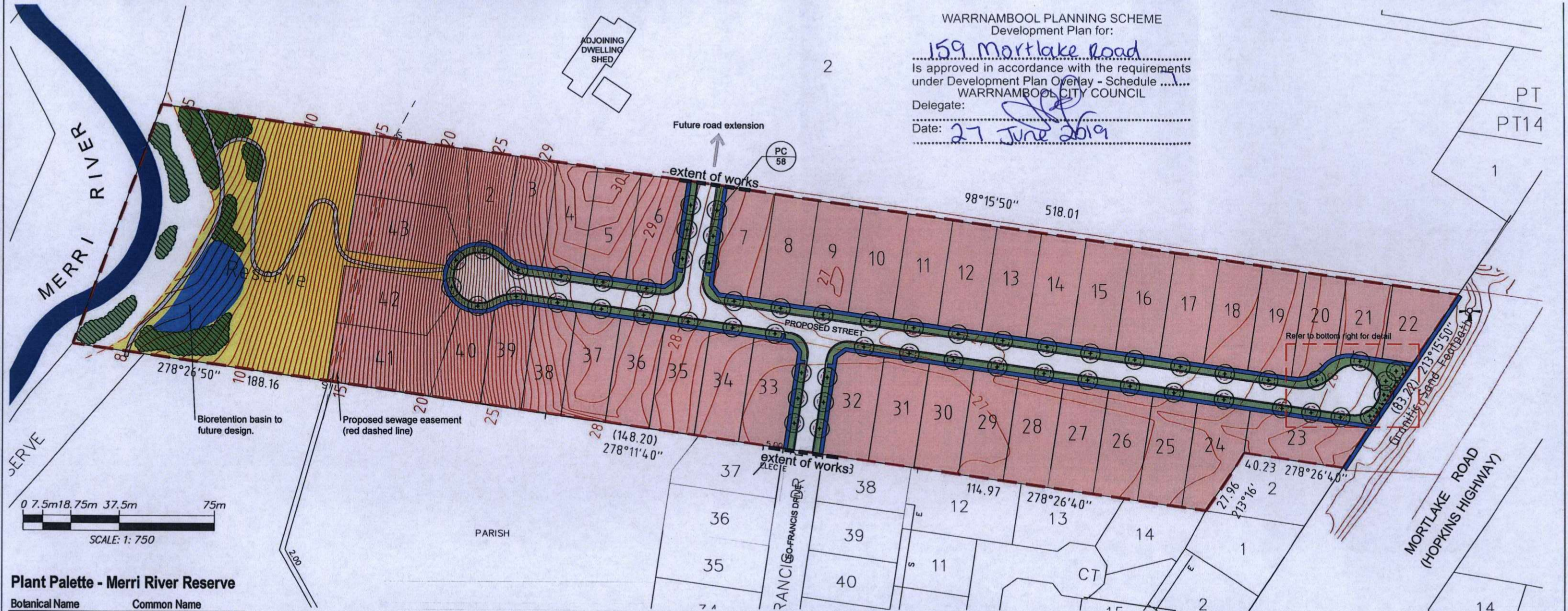
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Plant Palette - Merri River Reserve

Botanical Name Common Name

Trees

<i>Acacia melanoxylon</i>	Blackwood
<i>Eucalyptus ovata</i>	Swamp Gum
<i>Eucalyptus viminalis</i>	Manna Gum

Shrubs

<i>Acacia myrtifolia</i>	Myrtle Wattle
<i>Acacia stricta</i>	Hop Wattle
<i>Acacia verticillata</i>	Prickly Moses
<i>Banksia marginata</i>	Silver Banksia
<i>Bursaria spinosa</i>	Sweet Bursaria
<i>Cassinia aculeata</i>	Common Dogwood
<i>Correa reflexa</i>	Common Correa
<i>Leptospermum continentale</i>	Prickly Tea-tree
<i>Leptospermum lanigerum</i>	Woolly Tea-tree
<i>Ozothamnus ferrugineus</i>	Tree Everlasting
<i>Pomaderris aspera</i>	Hazel Pomaderris
<i>Solanum laciniatum</i>	Kangaroo Apple

Grasses

<i>Carex appressa</i>	Tall Sedge
<i>Carex tereticaulis</i>	Hollow Sedge
<i>Eleocharis acuta</i>	Common Spike-rush
<i>Ficinia nodosa</i>	Knobby Club-rush
<i>Gahnia sieberiana</i>	Red-fruit Saw-sedge
<i>Juncus pallidus</i>	Pale Rush
<i>Lomandra filiformis</i>	Wattle Mat-rush
<i>Lomandra longifolia</i>	Spiny-headed Mat-rush
<i>Poa labillardieri</i>	Common Tussock-grass
<i>Schoenoplectus pungens</i>	Sharp Club-sedge

PLANT SCHEDULE DRAWING - STREETSCAPE

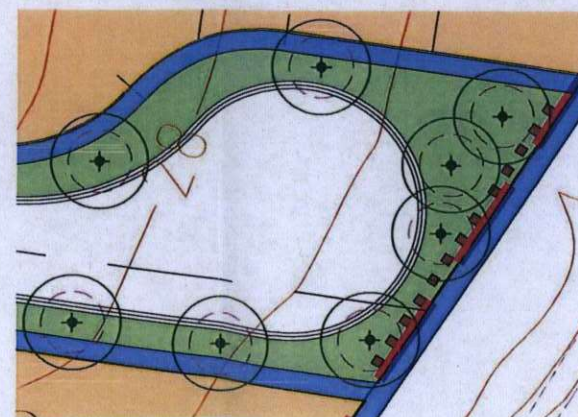
TREES	BOTANICAL NAME	COMMON NAME	MATURE SIZE	INSTALLATION SIZE	DENSITY	QTY
PC	<i>Pyrus calleryana</i> 'Cleveland Select'	Cleveland Select Pear	9 x 4m	45L, 1.5m high, 30mm cal.	As shown	58

STREET TREES - MINIMUM OFFSET DISTANCES TO SERVICES
The contractor shall ensure the following distances are complied with in relation to street trees and underground services / streetscape assets:

- 1.2 metres from pedestrian pathways;
- 2.0 metres from pedestrian pathways in reserves;
- 3 metres from driveways;
- 4 metres from power poles;
- 4 metres from light poles;
- 2 metres from service assets, including junction boxes, pits etc;
- 2 metres from service conduit crossing;
- 0.75 metres from high voltage electrical conduits as per Powercor construction standards;
- 3 metres from fire plugs;
- 2 metres from domestic service tapping points; and
- 2 metres from storm water outlet points.

Where these distances are not attainable, root barriers may be appropriate in some instances and on the advice of the Warrnambool City Council arborist.

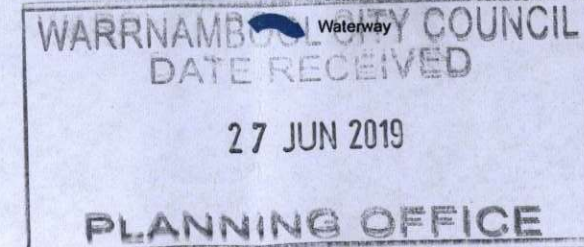
NOTE: Services pits / infrastructure and driveways may not all be shown on this plan. It is the contractors responsibility to locate and identify all services infrastructure and driveways on site and position the trees accordingly.



TYPICAL DETAIL SHOWING HARDWOOD BOLLARD LOCATIONS
SCALE 1:300 @ A1

LEGEND

- Title boundary
- Extent of works
- Proposed street tree (dashed line indicates 5m tree zone)
- Freehold allotment
- Grassed nature strip
- Managed exotic grass (reserve)
- Proposed indigenous vegetation (reserve)
- Proposed pedestrian path
- Proposed compacted gravel path
- Future road extension
- Indicative location, size and form of bioretention basin (nom. 300m³ capacity)
- 200x200x900mm selected hardwood bollards at 1600mm centres



REVISIONS
27.06.19 Rev A - Updated as per council comment



Project:
159 Mortlake Road,
WARRNAMBOOL
Drawing Title: Landscape Plan
Prepared for: Gull Group
Date: June 27, 2019
Amendment Date: June 21, 2019
Scale: 1:750 @A1
Drawn: YL
Check: DH
Drawing No: 1854-LMP04 Rev B
Planning Permit No: N/A

THOMSON HAY
LANDSCAPE ARCHITECTS


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Attachment F – Infrastructure Report and Drainage/Road Layout Plan

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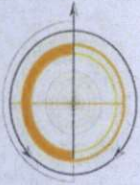
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Date: 27 June 2019



**WRIGHT CIVIL
ENGINEERING**

10/5/2018

159 Mortlake Rd, Warrnambool

Provision of Infrastructure Report

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Development Plan for:

159 Mortlake Road

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Delegate:

Date: 27 June 2019

Tim Wright

WRIGHT CIVIL ENGINEERING

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Delegate: [Signature]
Date: 27 June 2019

PROVISION OF INFRASTRUCTURE: 159 Mortlake Rd, Warrnambool

This Infrastructure Services Report has been completed by Wright Civil Engineering to assist in determining infrastructure required to service 159 Mortlake Rd Warrnambool.

1. Site Details:

159 Mortlake Rd Warrnambool is bounded by the Merri River to the west, and Mortlake Rd (a VicRoads managed road) to the east, consisting of 2; Lot 1 TP917656 and Lot 1 LP2432, Parish of Wangoon, Warrnambool Shire.

The land has been farmed with recent activities being cropping and grazing.

The site generally falls to the west towards the Merrie River, with low and high points through the center of the site.

2. Servicing Plan;

Please refer to the attached the proposed servicing plan for 159 Mortlake Rd.

3. Summary of Services;

3.1. Road Access:

Road access will be via Leo Francis Drive from the east. The traffic impact assessment recommends an upgrade to the intersection of Turner Street on Mortlake Rd to cater for the increased traffic volume using this intersection.

We understand that Mortlake Rd is managed by VicRoads and have had preliminary discussions with Peter Gstrein of VicRoads regarding the upgrades required.

3.2. Drainage:

The intention of civil design will be to endeavor to drain the whole site to the west, which will require some cut and fill of the site.

Pending the Engineering conditions of the planning permit a detention basin or bioretention basin (with stormwater treatment ability) will be constructed towards the western end of the site, just above the 1:100 year flood level of the Merri River. At this location the surface flattens out, is more suitable for construction and will pick up the developed portion of the site.

A works on Waterway application will be applied for with the Corangamite Catchment Management Authority, which will also request WSUD treatment of stormwater and possibly also request that pre-development flows are maintained for a variety of storm intensities.


3.3. Sewer:

Wannon Water assets plans show that there is existing sewer traversing through the site. The sewer is deep enough to command all lots. The lots backing on to the Merri River will require building envelopes (or similar as required) to define the portion of land serviceable by sewer.

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By Tim Wright

3.4. Water:

The Wannon Water water main asset plan shows the site to be fronted by an existing 150mm diameter PVC water main in Mortlake Rd. There is also a 150mm diameter PVC water main in Leo Francis Drive linking the southern boundary of the site. We propose to construct reticulated water main along all internal roads, linking to both the Morlake Rd and Leo Francis Drive mains.

3.5. Third Pipe (Roof water drainage):

Currently there is no point of connection to Wannon Water's 'Third Pipe' system. In the future Wannon Water may decide to run a Third Pipe trunk drainage line along the Merri River, possibly within the same easement that currently protects their sewer. A Third Pipe system can be constructed to service each lot and terminate at the sewer easement towards the western boundary of the site.

3.6. Telecommunications:

The site is fronted by Telecommunications assets owned by both Telstra and NBN. Telstra is located on the near and far side of Mortlake Rd and NBN is on the near side. An application will be made to NBN for a servicing agreement for the site. The NBN telecommunications service will be designed and constructed to service each lot in the development.

3.7. Power:

Powercor Australia is the responsible Authority for power supply. There are existing Powercor Assets in both Mortlake Rd and Leo Francis Drive.

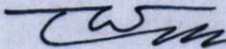
Overhead high and low voltage power is located on the east side of Mortlake Road. There is also a Power kiosk (transforming high voltage power to low voltage power for residential use) located in Leo Francis Drive, on the southern boundary of the site.

Low voltage power supply will be available to site either via the Leo Francis power kiosk (pending capacity) or Mortlake Rd, with the addition of a new transformer.

3.8. Gas:

Ausnet Gas Service assets front the site with a 50mm gas main on the near side of Morlake Rd and a 63mm main on the opposite side. Pending capacity of the 50mm main, a new bore under the road may provide access for the site to be serviced off the 63mm main on the opposite side of Mortlake Rd.

The above information is provided as a guide, specific servicing details and requirements may be changed by the service authority at their discretion.

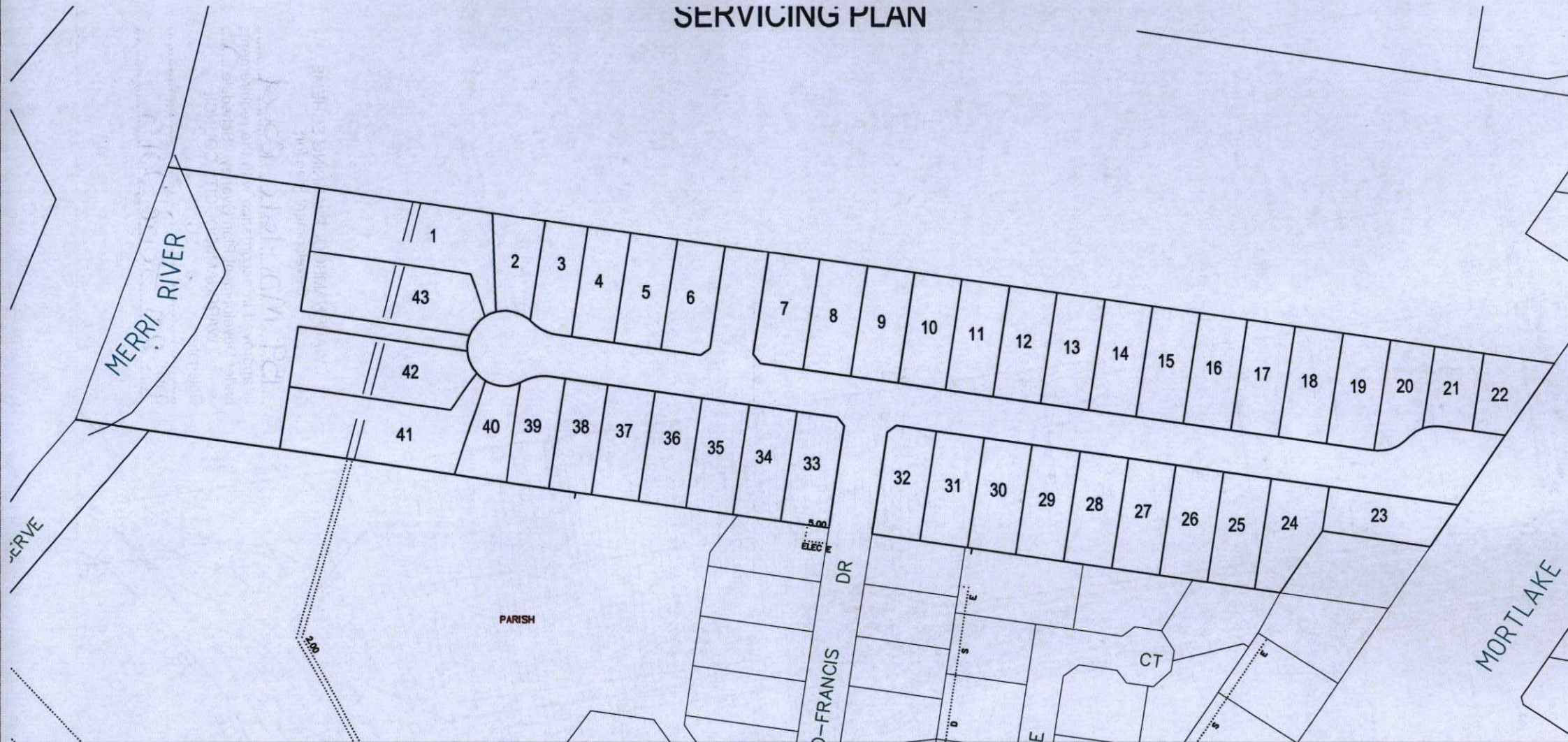


Tim Wright
Wright Civil Engineering Pty Ltd
MIEAust CPEng
Ph. 0457 064 000

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SERVICING PLAN



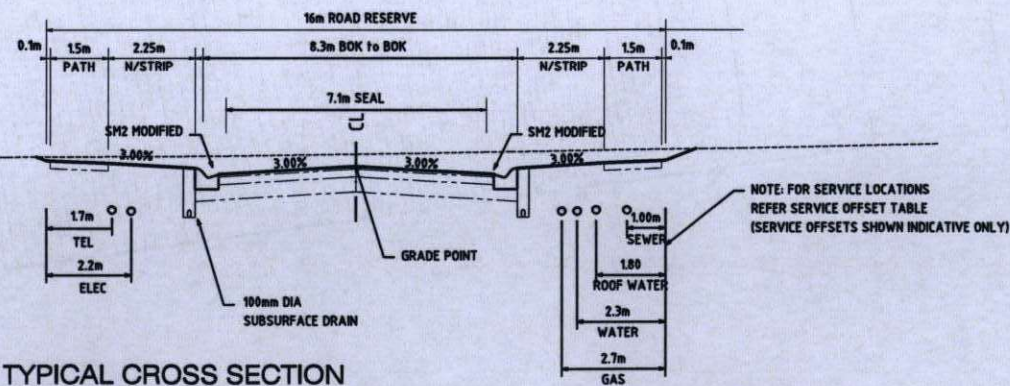
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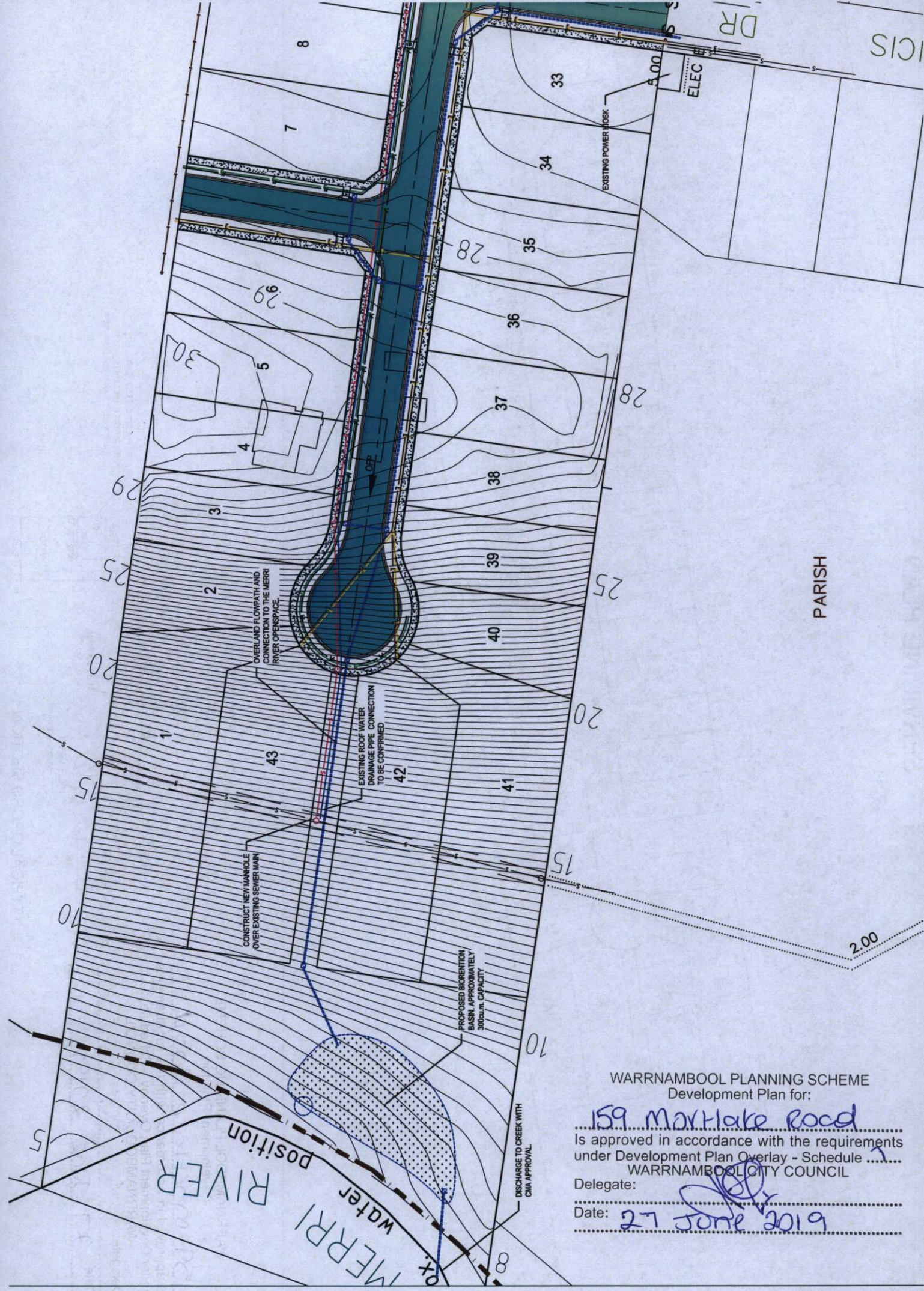
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TYPICAL CROSS SECTION



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Attachment G – Traffic Impact Assessment

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Date: 27 June 2019

Traffic Impact Assessment Proposed Residential Subdivision 159 Mortlake Road, Warrnambool

prepared for

The Gull Group

prepared by



Driscoll Engineering Services P/L

*Consulting Civil, Traffic
and Municipal Engineers*

**69 Humffray St Nth
Ballarat
Ph 5333 1771**

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Date:

27 June 2019

29 June 2018

1. INTRODUCTION

Driscoll Engineering Services Pty Ltd has been engaged to undertake a Traffic Impact Assessment of a proposed 40 lot residential subdivision at 159 Mortlake Road, Warrnambool and prepare a report on the findings and determinations of that assessment.

This report shall form part of the submission to support the Planning Permit Application for the development.

A Locality Plan showing the site is included in Appendix 1.

2. PROPOSED SITE DEVELOPMENT

The proposed development of 159 Mortlake Road shall consist of the creation of 40 residential lots with lot sizes ranging from 727m² to 2,235m², associated internal subdivisional road reserves and a drainage reserve at the western end of the site.

The subject site is located within the "North East Warrnambool Growth Area Structure Plan 2008"; the Structure Plan confirms there is to be no direct access to Mortlake Road from the subject site. Access from/to Mortlake Road is to be via a series of internal subdivisional roads both north and south of the subject site.

A map of the North East Warrnambool Growth Area Structure Plan 2008 showing the location of the subject site is included in Appendix 1.

The proposed site development plan identifies that the 40 lot subdivision will access the existing road network to the south via Leo Francis Drive and Turner Drive.

The proposed site development plan includes provision for a connection to neighbouring sites to the north. Ultimately, this will allow for a secondary point of access/egress to the existing road network.

A copy of the proposed development plan is included in Appendix 2.

3. EXISTING CONDITIONS

3.1 Site Conditions

The site is located on the west side of Mortlake Road between Turner Drive and Grange Road. The site is bounded by Mortlake Road to the east and the Merri River to the west.

The majority of the site is zoned General Residential Zone (GRZ1); there is a small section at the western end of the site that is zoned Urban Floodway Zone (UFZ).

The majority of the site is vacant land; there is an existing house and associated shedding situated approximately 140m from the western boundary which are surrounded by established trees.

All land adjoining the subject site is also zoned General Residential Zone (GRZ1).

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Driscoll Engineering Services Pty Ltd Delegate:

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Traffic Impact Assessment
159 Mortlake Road, Warrnambool

Delegate:

Date:

27 June 2019

3.2 Road Network

Mortlake Road is the local road name for that section of the Hopkins Highway. Mortlake Road is classified as a B Class Arterial Road (B120) on the VicRoads Road Hierarchy. VicRoads is the road authority responsible Mortlake Rd.

At the frontage of the subject site, Mortlake Road has a typical seal width of 9.6m with centreline linemarking, sealed shoulders (2x 3.6m lanes and 2x 1.2m sealed shoulders) and open table drains. The speed zone on Mortlake Road changes from 60km/h to 80km/h across the middle of the subject site. The sealed pavement also provides for a north-bound bike lane that commences just north of the Turner Drive intersection.

Turner Drive and Leo Francis Drive are both classified as a "Local Access Roads" on the Warrnambool City Council Road Hierarchy. Warrnambool City Council is the road authority responsible for both Turner Drive and Leo Francis Drive.

Turner Drive and Leo Francis Drive both have a typical seal width of 7.0m with kerb & channel on both sides of the street; no centreline or edgeline markings are present on either street. Both streets have a concrete footpath on both sides of the road pavement.

There is a one-way (north-bound traffic only) service road on the western side of Mortlake Road, north of the intersection with Turner Drive. There is no direct exit from Turner Drive to Mortlake Road, i.e. traffic utilising Leo Francis Drive and Turner Drive access Mortlake Road via the one-way Service Road. The one-way Service Road has a typical seal width of 6.0m with kerb & channel on both sides of the street. There is a concrete footpath on the western side of the Service Road.

3.3 Existing Intersection Configuration

The intersection of Turner Drive with Mortlake Road is in close proximity to the intersection of Balmoral Road with Mortlake Road, i.e. Balmoral Road and Turner Drive intersect with Mortlake Road <30m from each other. This can be seen in the below aerial photo.



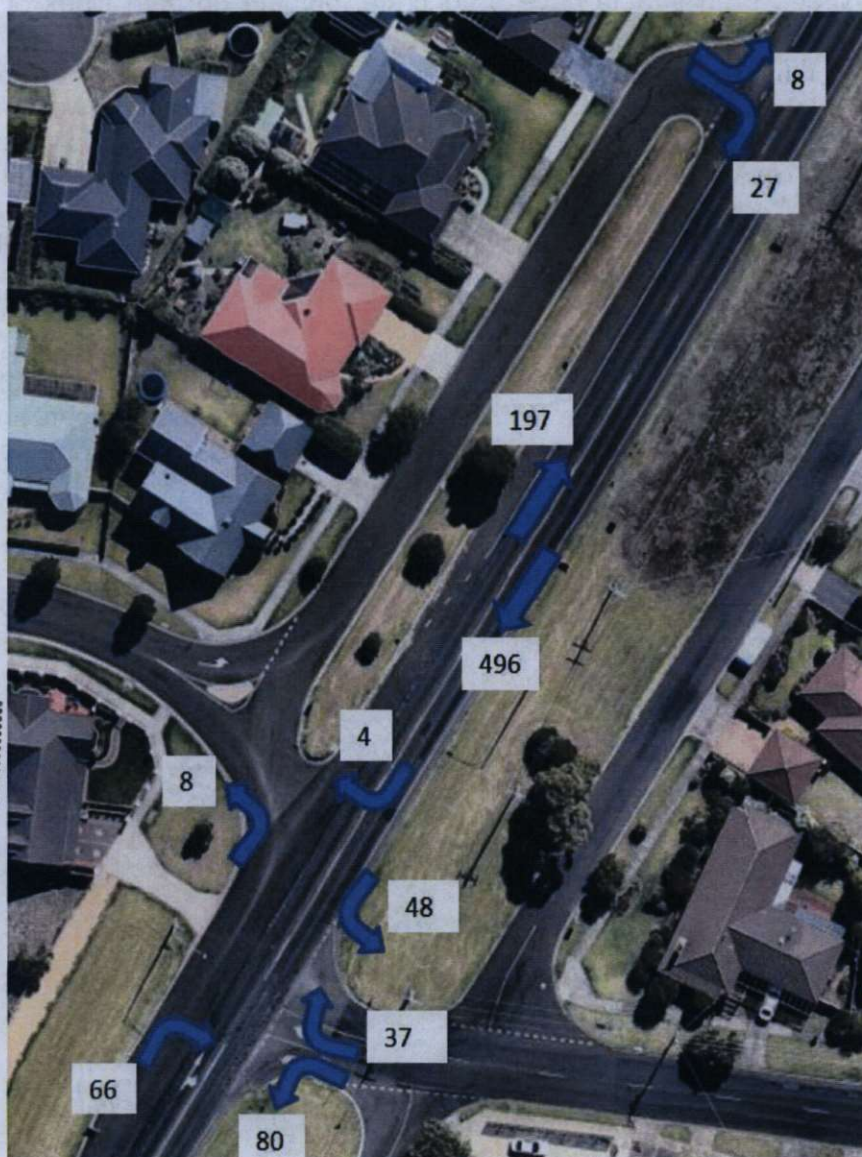
As can be seen from the aerial photo, the existing intersection of Mortlake Road, Turner Drive and Balmoral Road can best be described as chaotic. Currently there is a marked centreline on Mortlake Road with a combined right turn and straight ahead arrows painted, albeit very faded adjacent to the centreline. There is approx. 9.7m of sealed pavement on the western side of the centreline with no formal linemarking to define lanes.

3.4 Traffic Volumes

Traffic data collected in late March 2018 during the AM peak hour confirmed Mortlake Road carries 693 vehicles per hour in both directions; 197 vehicles (approximately 28%) are north-bound while the remaining 496 vehicles (approximately 72%) are south-bound, i.e. towards Warrnambool city centre.

Traffic data collected during the AM peak hour confirmed Turner Drive carries 47 vehicles per hour in both directions; 12 vehicles (approximately 25%) are west-bound while the remaining 35 vehicles (approximately 75%) are east-bound.

The existing traffic volumes during the AM peak period at the intersection of Mortlake Road, Turner Drive and Balmoral Road can be seen in the following figure:



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4. TRAFFIC DISTRIBUTION AND GENERATION

4.1 Traffic Generation

"Conventional density" residential lots typically generate 10 vehicle trips per day per dwelling. This equates to 400 vehicle movements per day utilising the internal subdivisional roads and connecting to the existing road network via Leo Francis Drive and Turner Drive.

It is reasonable to assume that 10% of the daily traffic shall be generated in both the AM and PM peak periods.

4.2 Traffic Distribution

The existing traffic data at the intersection of Mortlake Road, Turner Drive and Balmoral Road collected during late March 2018 confirmed that 70% of existing traffic was to/from the south, i.e. most direct route towards the Warrnambool city centre. The remaining 30% was to/from the north, i.e. towards/from Mortlake. It is reasonable to assume that the traffic generated by the subject site will typically match this distribution.

The existing traffic data collected at the intersection of Mortlake Road and Turner Drive confirmed that 75% of traffic was outbound and 25% inbound in the AM peak hour. The data at the intersection of Mortlake Road and Balmoral Road did not typically match this profile; there was a higher percentage of outbound vehicles; this could be largely attributed to the school (King's College) that is located off Balmoral Road, i.e. parents utilising Balmoral Road from the south to drop children at school and then heading west on Balmoral Road to access Mortlake Road.

It is reasonable to assume that the traffic generated by the subject site will typically match the distribution of existing traffic at the intersection of Mortlake Road and Turner Drive; all existing traffic utilising this intersection are from a purely residential area which is the purpose of the subject site.


Given the varying times of the peak period in the PM, it is reasonable to adopt the peak period for the day will be during the AM peak hour, i.e. heaviest traffic volume will be during the AM peak hour.

The estimated traffic volumes (existing + traffic generated from the subject site) during the peak daily period for the existing intersection of Mortlake Road and Turner Drive at the completion of the proposed development can be seen in the following figure.

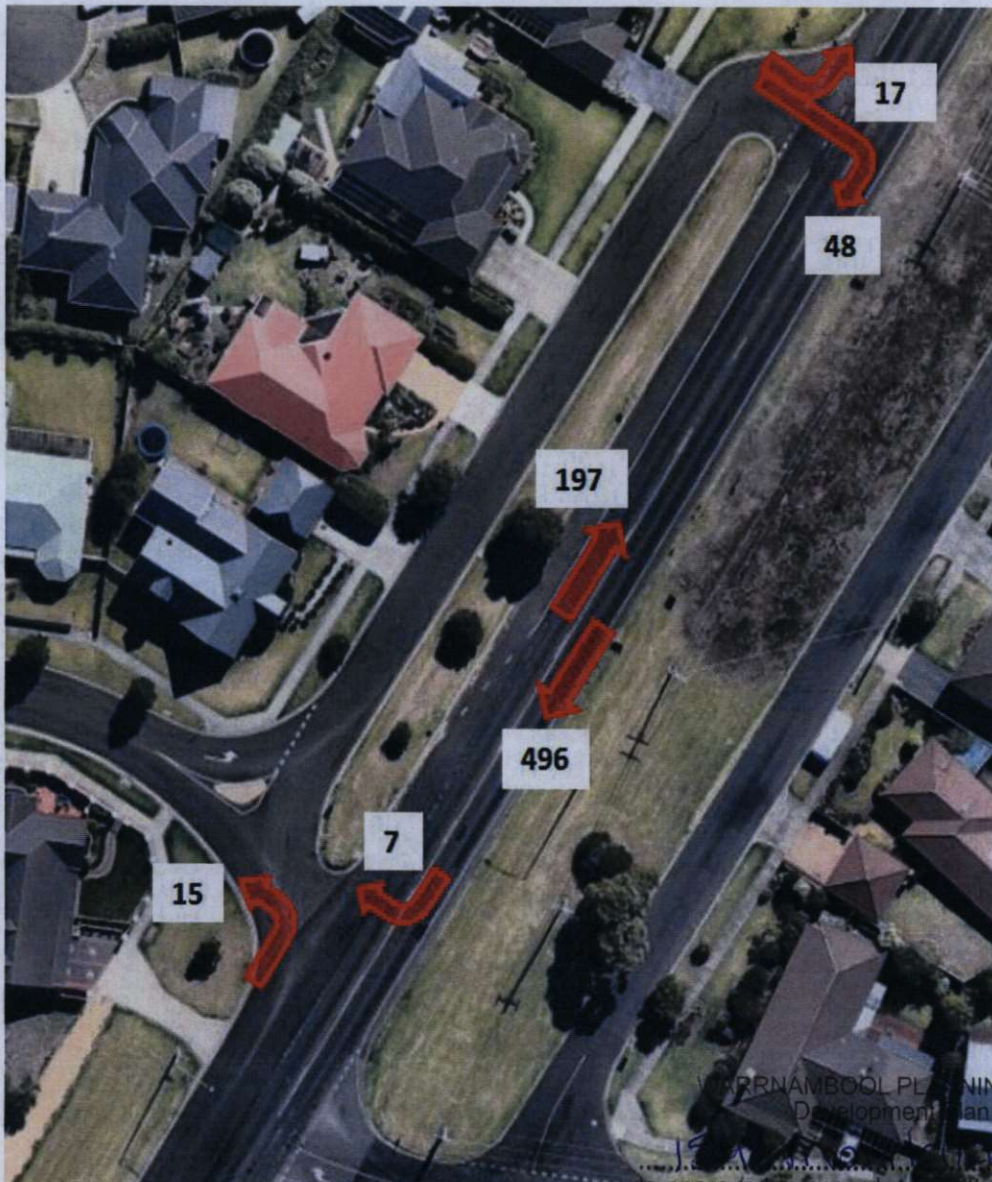
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5. DESIGN CONSIDERATIONS

5.1 Intersection Infrastructure

Warrants for turn treatments on the major road at an unsignalised intersection are set out in Figure 4.9 of *Austrroads Guide to Road Design, Part 4A: Unsignalised and Signalised Intersections*.

In accordance with Figure 4.9 (b) of the *Austrroads Guide* and based on the AM peak hour traffic volumes shown in the figure in Section 4.2 above, the following treatment is required:

- A short channelised right turn treatment (CHR(S)) at the existing intersection of Turner Drive and Mortlake Road; and
- A basic left turn treatment (BAL) at the existing intersection of Turner Drive and Mortlake Road to provide sufficient pavement width for the design vehicle to turn left clear of the through traffic lane.

Given the existing intersection configuration of Mortlake Road and Turner Drive and Balmoral Road, the right turn movement from Mortlake Road into Balmoral Road

should be formalised to provide clear traffic lanes for through and turning traffic. It would be considered prudent to allow for a CHR from Mortlake Road into Balmoral Road to further maximise the safety of this intersection.

Although the traffic volumes only warrant a BAL from Mortlake Road into Turner Drive, consideration should be given to providing a formalised left turn lane to ensure there is minimal chance of conflict with through traffic and left turning traffic; a short auxiliary left turn lane (AUL(S)) would provide a higher level of safety than a basic left turn lane.

A signed north-bound bike lane (typically 1.2m wide at the frontage of the subject site) on Mortlake Road commences just north of the intersection with Turner Drive; the new intersection configuration will need to provide allowance for this bike lane.

A typical intersection configuration is shown in Appendix 3.

5.2 Internal Subdivisional Roads

The development plan includes a road reserve width of 16m with kerb & channel on both sides; this is typically in line with the standards of the Infrastructure Design Manual (IDM) for residential streets that carry 1,000-2,500 vehicles per day, i.e. "Access Street". The typical cross section of the proposed internal subdivisional roads should include provision for a concrete footpath on both sides of the street and street lighting.

Further to this, the proposed road reserve and pavement width typically match the pavement width on Leo Francis Drive and Turner Drive.

6. CONCLUSION

Based on the existing road infrastructure, projected traffic volumes and the proposed development of 159 Mortlake Road, Warrnambool the following works are recommended:

- Formalise the existing intersection of Mortlake Road, Turner Drive and Balmoral Road to provide the following:
 - A short channelised right turn lane (CHR(S)) from Mortlake Road into Turner Drive;
 - A channelised right turn lane (CHR) from Mortlake Road into Balmoral Road;
 - A short auxiliary left turn lane (AUL(S)) from Mortlake Road into Turner Drive; and
 - North-bound bicycle lane;
- Construct internal subdivisional roads in accordance with the "Access Street" as identified in the Infrastructure Design Manual; and
- Construct street lighting along the internal subdivisional roads in accordance with the Code.

Adam Sewell

29 June 2018

WARRNAMBOOL PLANNING SCHEME
Development Plan for:

159 Mortlake Road
Is approved in accordance with the requirements
under Development Plan Overlay - Schedule 7
WARRNAMBOOL CITY COUNCIL
Delegate: 
Date: 27 June 2019

Appendices:

Appendix 1 – Locality Maps

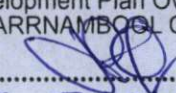
Appendix 2 – Proposed Development Plan

Appendix 3 – Proposed Intersection Configuration

WARRNAMBOOL PLANNING SCHEME
Development Plan for:

159 mortlake road

Is approved in accordance with the requirements
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Delegate: 

Date: 27 June 2019

Appendix 1 - Locality Map

WARRNAMBOOL PLANNING SCHEME
Development Plan for:

159 Mortlake Road

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Delegate:

Date:

27 June 2019

159 mortlake road

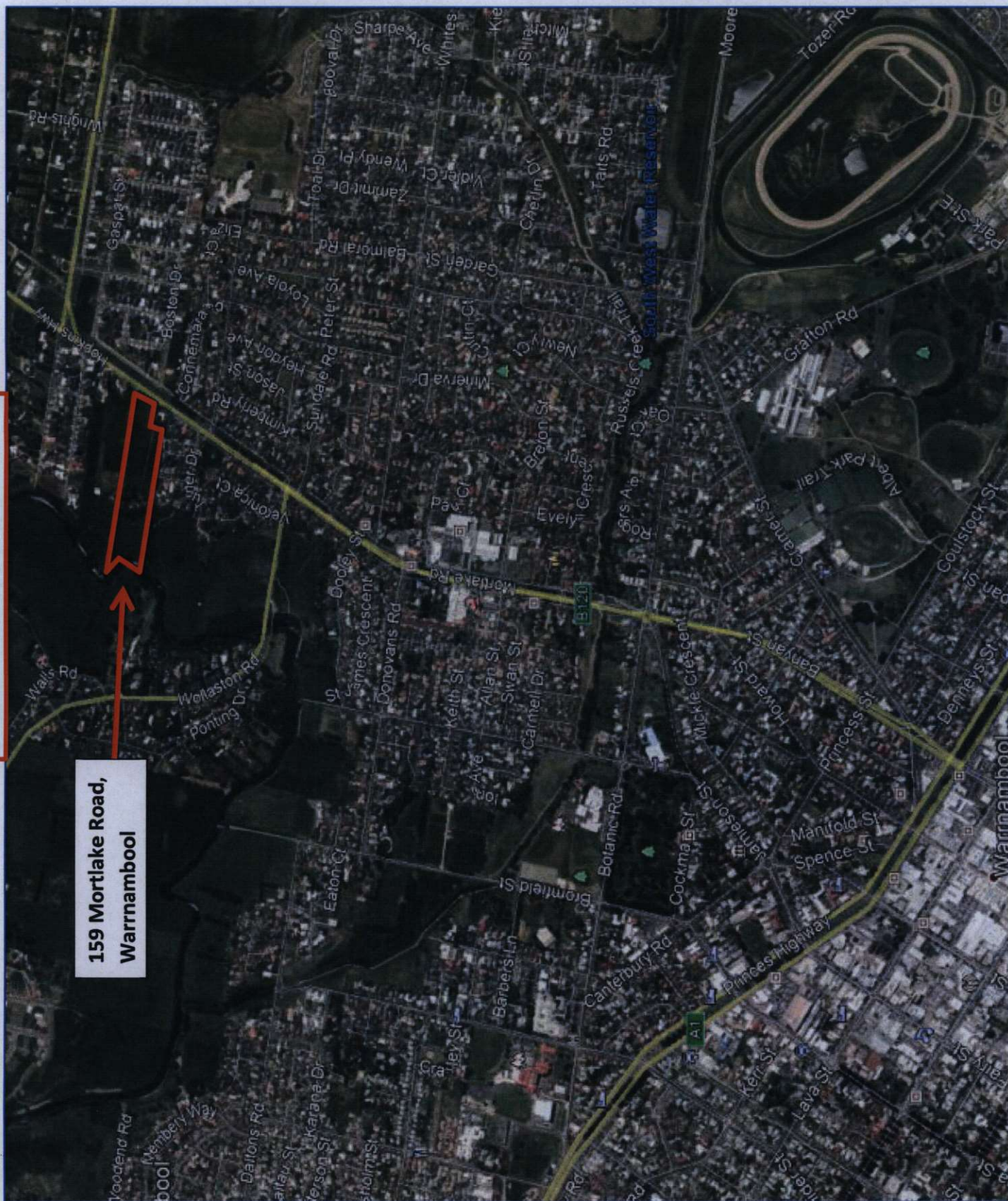
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under Development Plan Overlay - Schedule
WARRNAMBOOL CITY COUNCIL

Delegate:

Date: 27 June 2019

Locality Plan

159 Mortlake Road,
Warrnambool



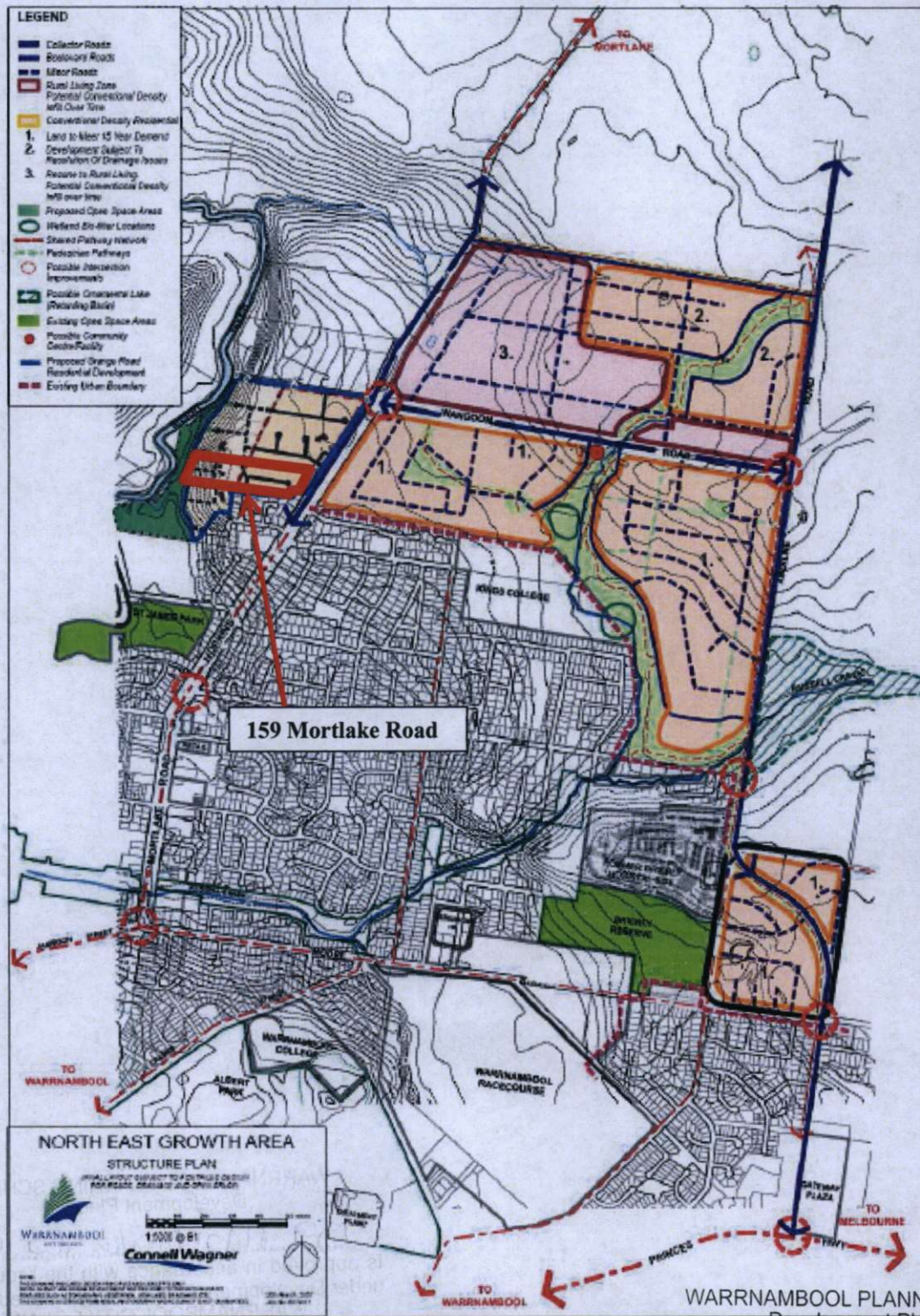


Figure 9.1 North East Warrnambool Structure Plan

159 Mortlake Road
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WARRNAMBOOL CITY COUNCIL
Delegate:
Date: 27 June 2019

Appendix 2 – Proposed Development Plans

WARRNAMBOOL PLANNING SCHEME
Development Plan for:

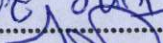
159 Mortlake Road

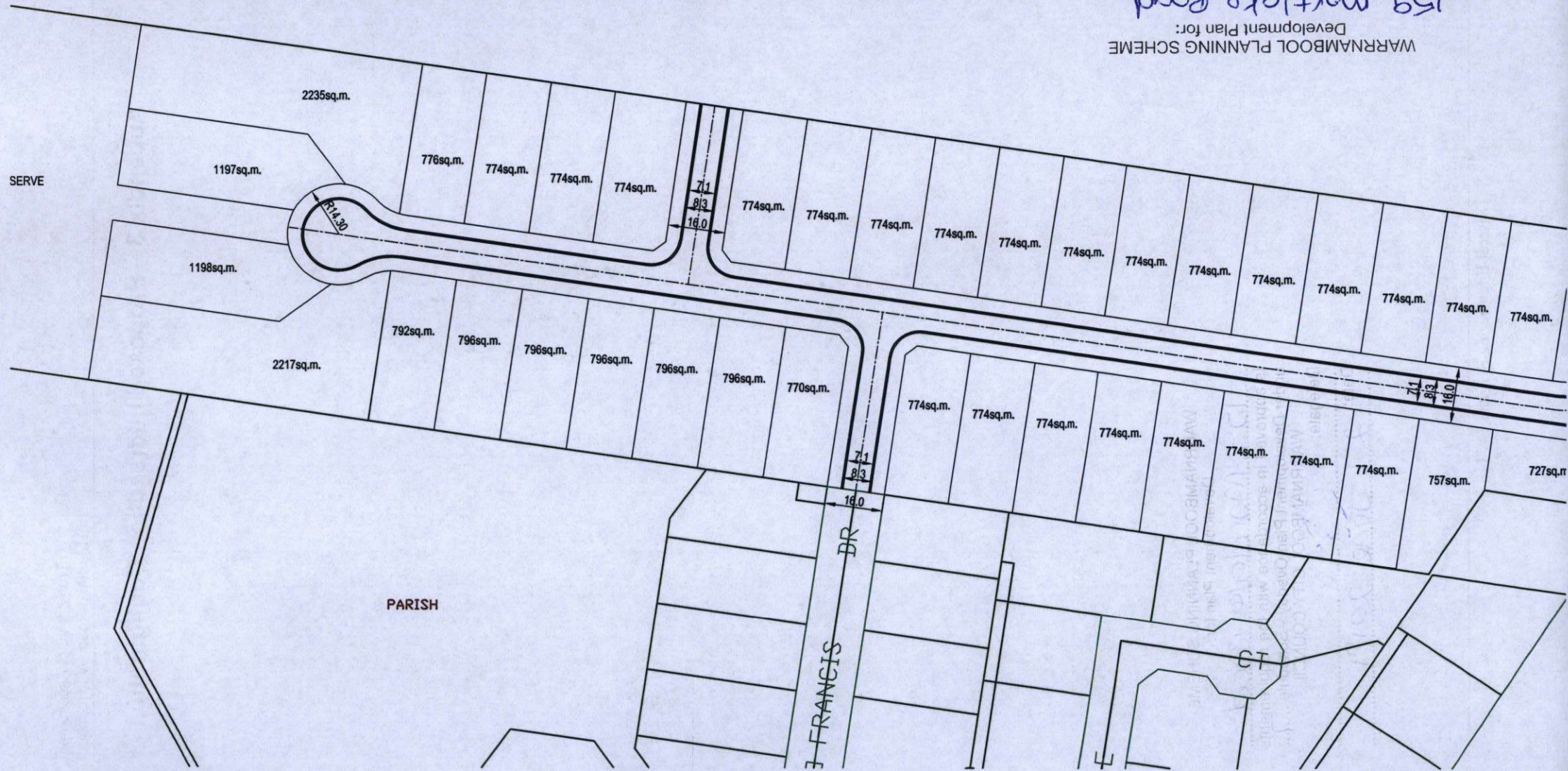
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WARRNAMBOOL CITY COUNCIL

Delegate:

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27 June 2019

WARWAMBOOL PLANNING SCHEME
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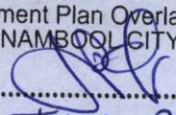


Appendix 3 – Proposed Intersection Configuration

WARRNAMBOOL PLANNING SCHEME
Development Plan for:

159 Mortlake Road

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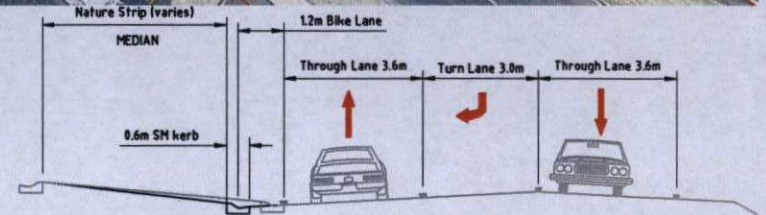
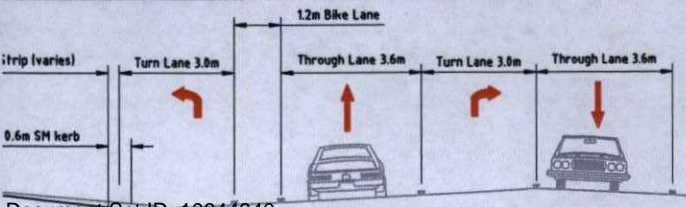
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Date: 27 June 2019



159 Mortlake Road
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under Development Plan Overlay - Schedule
WARRNAMBOOL CITY COUNCIL
Delegate: 
Date: 27 June 2019

From: James Iles <james.ips@ncable.net.au>
Sent: Monday, 20 May 2019 10:33 AM
To: James Phillips <JPhillips@warrnambool.vic.gov.au>
Cc: 'Cameron Gull' <cameron@Gullco.com.au>
Subject: FW: 159 Mortlake Road, Warrnambool.

Hi James,

I provide you with the updated information as required by your email to have the Development Plan endorsed.

Please see attached:

- Updated Development Plan;
- Proposed Plan of Subdivision; and
- Below a response from our Traffic consultant regarding the issues around the intersection of Mortlake Road and Turner Drive.

We will be proceeding with the revised subdivision application, but we would request the Development plan be endorsed first.

If there is anything else you require, please give me a call on 0408 577 880.

Thanks.

James Iles
Town Planner/Director
iPlanning Services Pty Ltd

ABN 45 160 262 000
PO Box 1401
BAKERY HILL VIC 3354
M: 0408 577 880
E: james.ips@ncable.net.au

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New mobile contact availability is between 9am-11.30am and 3pm -5pm. Please leave a message if you call out of these hours and I will get back to you within the available hours.

From: Adam Sewell [<mailto:adams@driscolleng.com.au>]
Sent: Thursday, 6 December, 2018 11:27 AM
To: James Iles <james.ips@ncable.net.au>
Cc: 'Cameron Gull' <cameron@Gullco.com.au>
Subject: RE: 159 Mortlake Road, Warrnambool.

James

Section 3.4 of the Traffic Impact Assessment (TIA) report dated 29 June 2018 includes reference to the existing traffic entering/exiting Turner Drive during the AM peak hour. The AM peak hour is considered to be the highest volume hour per day given the often varying times of the peak hour in

the PM, i.e. end of school day vs. end of working day, etc. Section 3.4 of the TIA confirms the following:

- 12 vehicles per hour enter Turner Drive from Mortlake Road; and
- 35 vehicles per hour exit Turner Drive back onto Mortlake Road via the one-way Service Road.

As Turner Drive is a No Through Road, this traffic data takes into account all traffic from Turner Drive, Leo Francis Drive and Neagle Court.

Based on this information, I believe the TIA dated 29 June 2018 captures the existing traffic data from Turner Drive and Leo Francis Drive during the daily peak traffic period.

Can you please advise if there is any more specific traffic data that is required to be assessed and provided as part of Item c below.

Regards

Adam Sewell
Driscoll Engineering Services Pty Ltd
69 Humffray St Nth
Ballarat 3350
Ph 5333 1771
Fax 5333 1881
Mob 0407 898 372


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WARRNAMBOOL PLANNING SCHEME
Development Plan for:

159 Mortlake Road

Is approved in accordance with the requirements
under Development Plan Overlay - Schedule 7
WARRNAMBOOL CITY COUNCIL

Delegate: 


Date: 27 June 2019

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WARRNAMBOOL PLANNING SCHEME
Development Plan for:

159 Mortlake Road

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Delegate: 

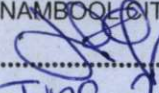
Date: 27 June 2019

Attachment H – Staging Plan

WARRNAMBOOL PLANNING SCHEME
Development Plan for:

159 mortlake Road

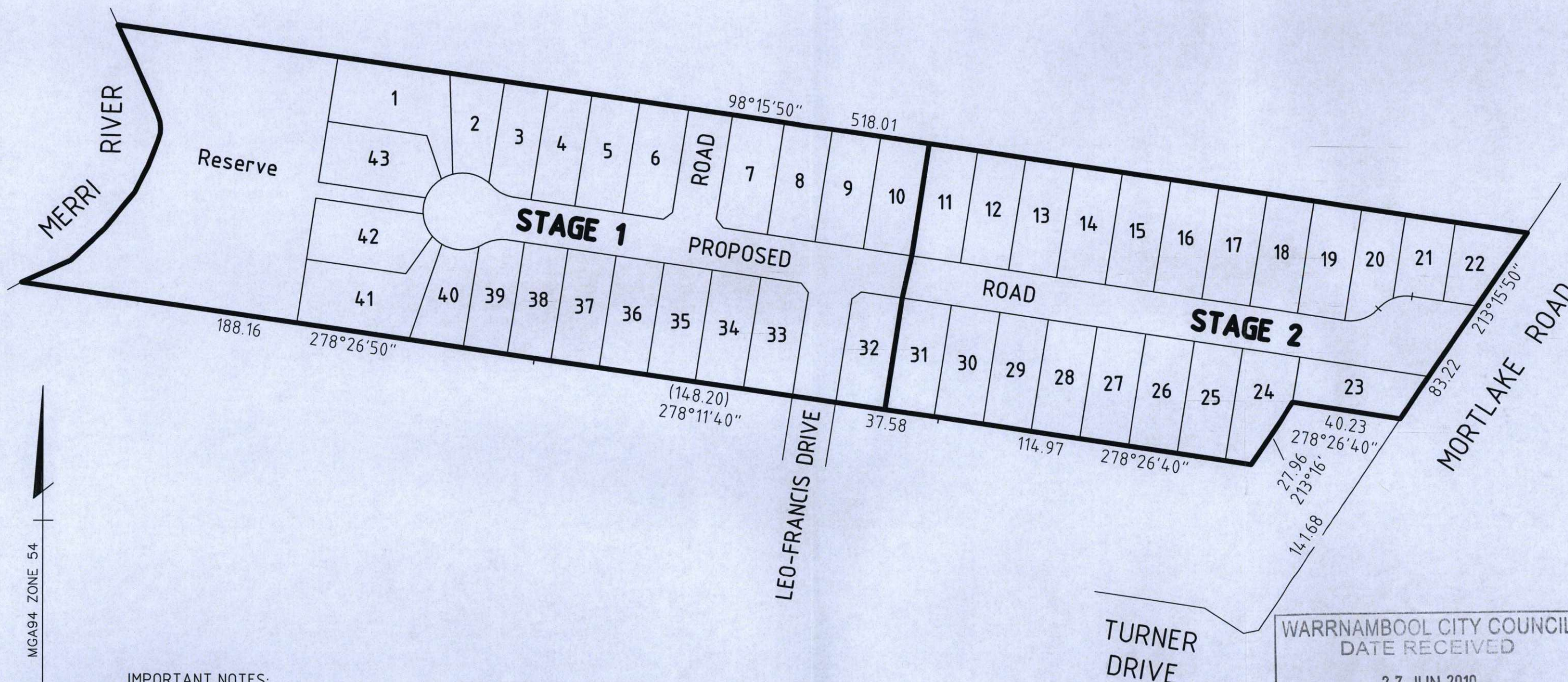
Is approved in accordance with the requirements
under Development Plan Overlay - Schedule
WARRNAMBOOL CITY COUNCIL

Delegate: 

Date: 27 June 2019

STAGING PLAN FOR PROPOSED SUBDIVISION AT 159 MORTLAKE ROAD, WARRNAMBOOL

PART OF CROWN PORTION 145, PARISH OF WANGOOM, C/T VOL.2467 FOL.203 & C/T VOL.8897 FOL.005



IMPORTANT NOTES:

- > STAGE 1 - 22 LOTS AND RESERVE
- > STAGE 2 - 21 LOTS

WARRNAMBOOL PLANNING SCHEME
Development Plan for:

159 mortlake road
Is approved in accordance with the requirements
under Development Plan Overlay - Schedule 1
WARRNAMBOOL CITY COUNCIL
Delegate: [Signature]
Date: 27 June 2019

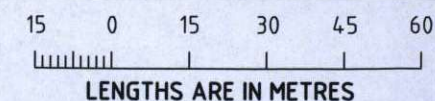
STEELE SURVEYING PTY LTD

Land Surveyors

12A Webster Street, Ballarat Central 3350

Phone (03) 5333 2699

SCALE
1:1500



ORIGINAL SHEET
SIZE: A3

SURVEYORS FILE REF : 3075

RICHARD JOHN STEELE, VERSION 4

Date of this Plan : 26-6-2019


WARRNAMBOOL CITY COUNCIL
DATE RECEIVED
27 JUN 2019
PLANNING OFFICE

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WARRNAMBOOL PLANNING SCHEME
Development Plan for:

159 Mortlake Road

Is approved in accordance with the requirements
under Development Plan Overlay - Schedule
WARRNAMBOOL CITY COUNCIL

Delegate: 

Date: 27 June 2019