

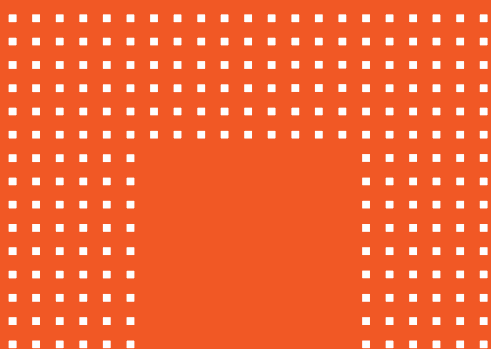
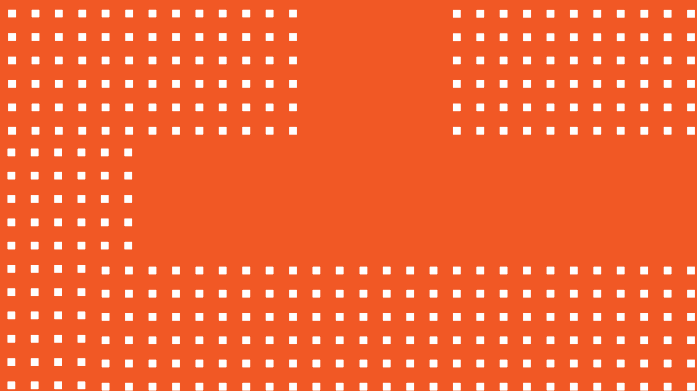
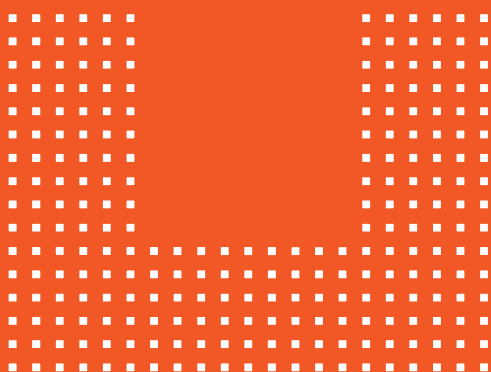
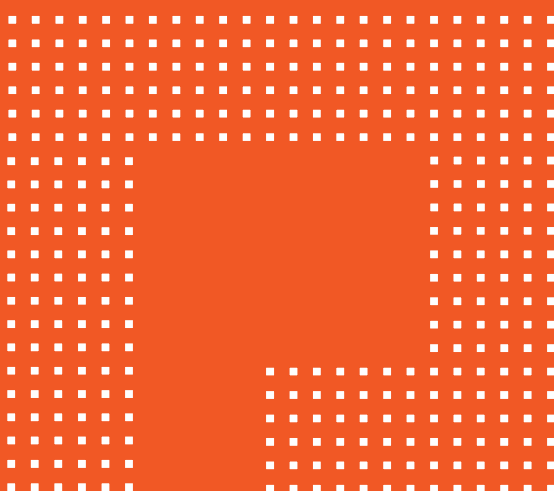
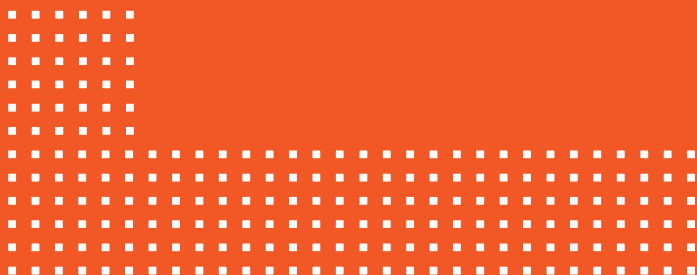
# habitat planning

## Development Plan

**Benetook Avenue, Twenty-First Street &  
Dal Farra Road, Koorlong**

Koorlong Development Plan – Stage 2

February 2019





Prepared for  
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Member – NSW Consulting Planner

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# Attachments

- A. Development Plan
- B. Road Design
- C. Drainage Plan
- D. Community Engagement Plan and Project Timeline
- E. Copies of Correspondence with Local Authorities

# 1. Introduction

## 1.1 Overview

This is a Development Plan relating to the future development and use of land bordered by Twenty-First Street, Benetook Avenue and Dal Farra Road, Koorlong (“the subject land”) for low density residential purposes. It forms the second stage of a Development Plan previously approved for Koorlong.

The subject land is zoned Low Density Residential (LDRZ) within the Mildura Planning Scheme (“the planning scheme”) and is subject to Development Plan Overlay – Schedule 2 (DPO2). DPO2 specifically applies to low density residential areas.

## 1.2 Need for a Development Plan

The need to prepare a Development Plan is triggered by the Development Plan Overlay (DPO) applicable to the subject land.

In accordance with Clause 43.04-1 of the Mildura Planning Scheme (“the Planning Scheme”), a Development Plan must be prepared to the satisfaction of the responsible authority (Council) before a planning permit for development (including subdivision) can be considered.

The structure and content of this Development Plan has been prepared based on the general requirements of Clause 43.04-3 and specific requirements of Schedule 2 of the DPO.

In accordance with Clause 43.04-3, the purpose of a Development Plan 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 that require the form and conditions of future use and development to be shown on a plan before a permit can be granted to use or develop the land; and
- to exempt a planning permit application from notice and review if it is generally in accordance with an approved development plan.

## 1.3 Intent and Purpose of the Development Plan

The Koorlong Development Plan (Stages 1 and 2) will become the key strategic planning documents that will provide the long-term vision for the future planning and development of this low density residential area. The plan will coordinate development and provide a framework for the future development of this area and will also:

- identify and address opportunities and constraints that will affect the development of the land;
- provide direction about the preferred development outcomes and form of development; and
- provide certainty to Council, landowners and the general public alike about the form of the future development of this area.

The Plan will guide both short and longer term planning and development within the area, following the strong demand for lots as part of the recently completed stage 1. Implementation of this Development Plan is expected to begin to develop in the immediate term following endorsement of the Development Plan so as to maintain a continued supply of low density residential land for Mildura into the future.

The principles of the Development Plan support the Planning Scheme and guidelines that are relevant to the planning and development of a low density residential area.

The principles of the Development Plan support the State Planning Policy Framework, Local Planning Policy Framework, Mildura Planning Scheme including the Municipal Strategic Statement and local planning policies and will ensure that any future development is required to be undertaken 'generally in accordance' with the approved Development Plan.

#### **1.4 Vision and Objectives**

The vision for the Koorlong Development Plan is to achieve:

*A high quality low density residential development that meets the demands for dwellings on larger lots that are reflective of their rural setting and supports local schools and facilities whilst not detracting from the existing rural character or bush setting of the area.*

In order to achieve this vision, the following key objectives apply to the Development Plan:

- To provide for low density residential development opportunities that are consistent with the rural and environmental character of the area;
- To ensure that the future development of land for residential purposes is consistent with the context and setting of the area in terms of building heights, materials, fencing, landscaping etc;
- To promote residential development that creates neighbourhoods that foster a sense of safety, inclusion and amenity;
- To provide a road hierarchy and structure that improves connectivity to the existing road network and is highly accessible for motorists, pedestrians and cyclists alike and that encourages other forms of alternative transport;
- To limit the number of new driveway access points that directly connect onto the arterial road network in Benetook Avenue and Twenty-First Street to ensure the continued efficient operation of these roadways;
- To create an attractive environment with a strong sense of place through well-designed and coordinated landscaping of open space areas and road reserves;
- To encourage landscaping treatments within the public realm which can act to minimise the impact of Mildura's hot climate;
- To provide for the orderly and efficient delivery of infrastructure, including the staging of residential development;
- To ensure that there is ample capacity available within the existing infrastructure network (namely sewer) in order to service the development of the area; and
- To manage stormwater quality and quantity generated from the subject land and ensure that it does not pollute downstream waterways or Koorlong Lake.

## **1.5 Residential Design Guidelines**

In order to ensure that the vision and objectives of the Koorlong Development Plan are achieved and that any future development of this land is consistent with the context and setting of the area, the following residential design guidelines apply to future development:

### ***Building Heights & Roof Form***

- Dwellings shall be single storey in height consistent with the existing low-density character of Koorlong;
- Where a two-storey development is proposed, the second storey shall be setback from the main building line or recessed to reduce the building's bulk and scale;
- Roofs shall be pitched, hipped or gabled.

### ***Building Setbacks & Appearance***

- Dwellings must be setback a minimum of 10 metres from the front property boundary;
- Garages and carports shall be located 0.5 metres behind the forward most wall of the dwelling;
- Garages and carports shall not exceed 40% of the building frontage;
- Dwellings forming the front building line are to address the public road and shall include as a minimum windows and front entry doors so as to provide passive surveillance;
- Dwellings are encouraged to provide covered entry ways such as portico's and verandahs. These building elements may extend into the front setback area;
- Sheds and other outbuildings are not permitted within the front setback area and should be located in the rear and side setback areas.

### ***Fencing & Landscaping***

- Fencing forward of the building line is discouraged. Where front fencing is proposed, it shall be a maximum of 1 metre in height and shall be constructed of post and wire;
- Solid fencing such as Colorbond fencing is permitted behind the building line where it does not exceed 1.8 metres in height;
- Where solid fencing is provided to a secondary street frontage or main road, it shall be constructed of timber or screened with dense landscape screening trees;
- Each property shall be provided with a minimum of 2 canopy shade trees.

## 2. Site and Context Description

### 2.1 Plan Area

#### ***Subject Land***

The land to which this Development Plan applies is described in **Table 1** below, being land generally bordered by Twenty-First Street, Benetook Avenue and Dal Farra Road, Koorlong (see **Figure 1**).

**Table 1:** Land to which this plan applies

Lot and Plan Number	Property Number	Street Address	Suburb
Lot 2 in PS 607512*	31802	3564 Benetook Avenue	Irymple
Lot 1 in PS603874	31678	3602 Benetook Avenue	Irymple
Part Lot 1 PS740926	412364	3608 Benetook Avenue	Irymple
Part Lot D, PS740926	19318	Twenty First Street	Irymple
Lots 1 & 2, PS743786	26330	3620 Benetook Avenue	Irymple
Lots 1 & 2 in LP141300	19321	3644 Benetook Avenue	Irymple
Lot 1 in PS743787	411500	8 Dal Farra Road	Irymple
Lot 1 in PS623600	19325	12 Dal Farra Road	Irymple

\* this land has been included as part of this Development Plan unless a separate Development Plan has already been prepared for this site by the individual landowner.

It is noted that this Development Plan covers the remainder of the DPO2 area that was previously approved as part of the first Development Plan for Koorlong.

Whilst requests to include additional land (13 Dal Farra Road Irymple) within this Development Plan are acknowledged, they have not been included for the following reasons:

- The land is currently within the Farming Zone and located outside of the boundaries of the DPO and Schedule 2, which apply to 'Low Density Residential Areas'.
- Given the peripheral location of the land and the fact that it already has access to multiple road frontages, it can be separately developed without the need to coordinate infrastructure and services as part of this Development Plan, including the appropriate management of stormwater, which is required to be addressed with each development site.
- Whilst it is acknowledged that the subject land was recommended for inclusion by the landowner and Council within the LDRZ as part of the Amendment C89 Planning Report, it is clarified that the Panel did not support the post-exhibition proposal by Council to rezone this land to LDRZ as it would be a 'transformative amendment'.

Instead, the Panel recommended that:

*Council consider further work to review the suitability of the Stewart land for possible inclusion in the LDRZ, especially given it immediately abuts land zoned Public Conservation and Resource Zone (PCRZ).*

In response, Council have advised that this land will be further investigated as part of the forthcoming Amendment C94.



To date, Amendment C94 has not yet been publicly exhibited or finalised and therefore the land is still classified as Farming Zone. To apply a Development Plan intended for low density residential development over land that currently cannot be developed for this purpose, is premature and inconsistent with the Planning Scheme.

- There is no strategic justification to include the land within the subject Development Plan, especially given that it was not recommended for rural living or low density residential purposes as part of the Mildura Housing and Settlement Strategy; and
- It is unreasonable for Council to expect the proponent to prepare a Development Plan at no cost to adjoining landowners within the Farming Zone who will benefit from it.

Accordingly, the abovementioned land has not been included within the subject Development Plan as it is outside of the scope of the DPO and is pre-emptive and speculative in the absence of the preparation and finalisation of Amendment C94.

It is recommended that once this land has been rezoned from Farming Zone (FZ) to LDRZ and the DPO has been applied to the land, then a subsequent Development Plan will need to be prepared by this landowner.

### ***Site Context and Surrounds***

The subject land is located approximately 7 kilometres to the south-west of the Mildura Central Business District in the suburb of Koorlong and has frontage to both the unsealed Twenty-First Street to the east and the sealed Benetook Avenue to the west (see **Figures 1-2**).

The land has an area of approximately 21 hectares and historically been used for agricultural purposes and in the past was planted with vines, which have since been cleared for some time.

The land gently undulates across the property with no defined topographical features such as significant ridgelines or valleys. With minimal slope, there is no erosion risk. The land is generally cleared of vegetation with the exception of a number of scattered paddock trees in the south-west corner, as well as a patch of vegetation of approximately 4,500m<sup>2</sup> in size to the south-east, which provides limited habitat value given its isolated location.

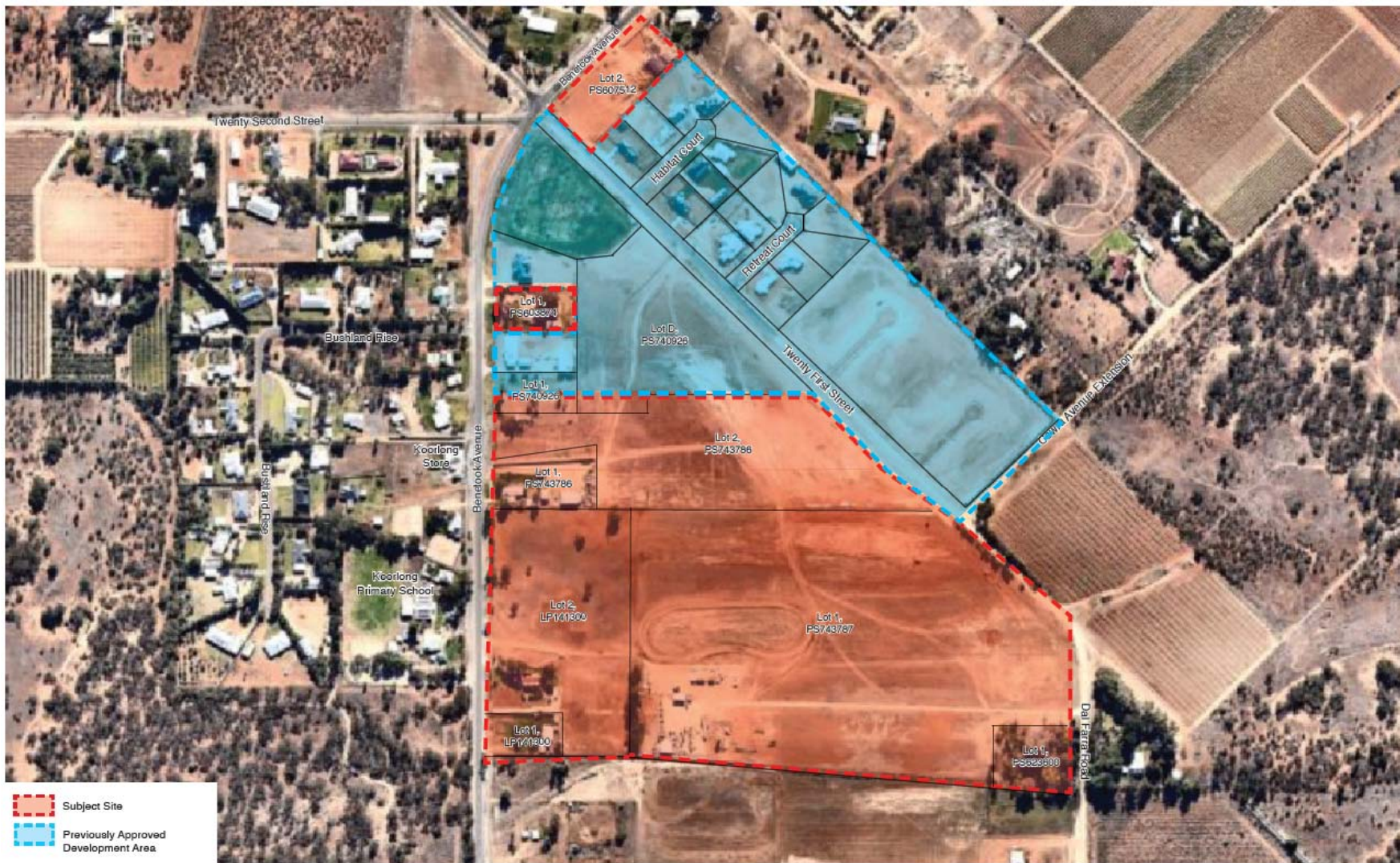
The land contains a number of established dwellings and associated outbuildings such as farm sheds and the like, which have been erected on the individual allotments. For the most part however, the land is unimproved and former agricultural lands. Reticulated potable water is available to the land and reticulated sewer has recently been extended to the area as part of the first stage of the development in accordance with relevant Lower Murray Water requirements.

Land to the north of the subject land is being developed for low density residential purposes, as part of the Mallee Ridge Estate. This land was the subject of a previously approved Development Plan and a subsequent planning permit application for subdivision. The current Development Plan represents the second stage of this low density residential estate.

To the east of the subject land is the unsealed Twenty-First Street and further east again is land contained within the Farm Zone (FZ), as well as the Public Conservation and Resources Zone (PCRZ). Also located to the north-east of the subject land on the opposite side of Twenty-First Street is the first stage of the Mallee Ridge low density residential estate.

To the south of the subject land is an unmade road reserve, as well as land contained within the FZ. This land is currently agricultural/rural in nature and primarily used for horticulture and viticulture. To the south east is the unsealed Dal Farra Road, which intersects with Twenty First Street.

To the west of the subject land is the sealed Benetook Avenue, whilst further west is land zoned PCRZ and FZ. To the north-west is an existing low density residential subdivision ("Bushland Rise Estate"), as well as a small rural village including the Koorlong Primary School and Koorlong General Store.



proposal  
**Koorlong Development Plan**  
 Benetook Avenue, Twenty-First Street & Dal Farra Road,  
 Koorlong

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 Site Plan

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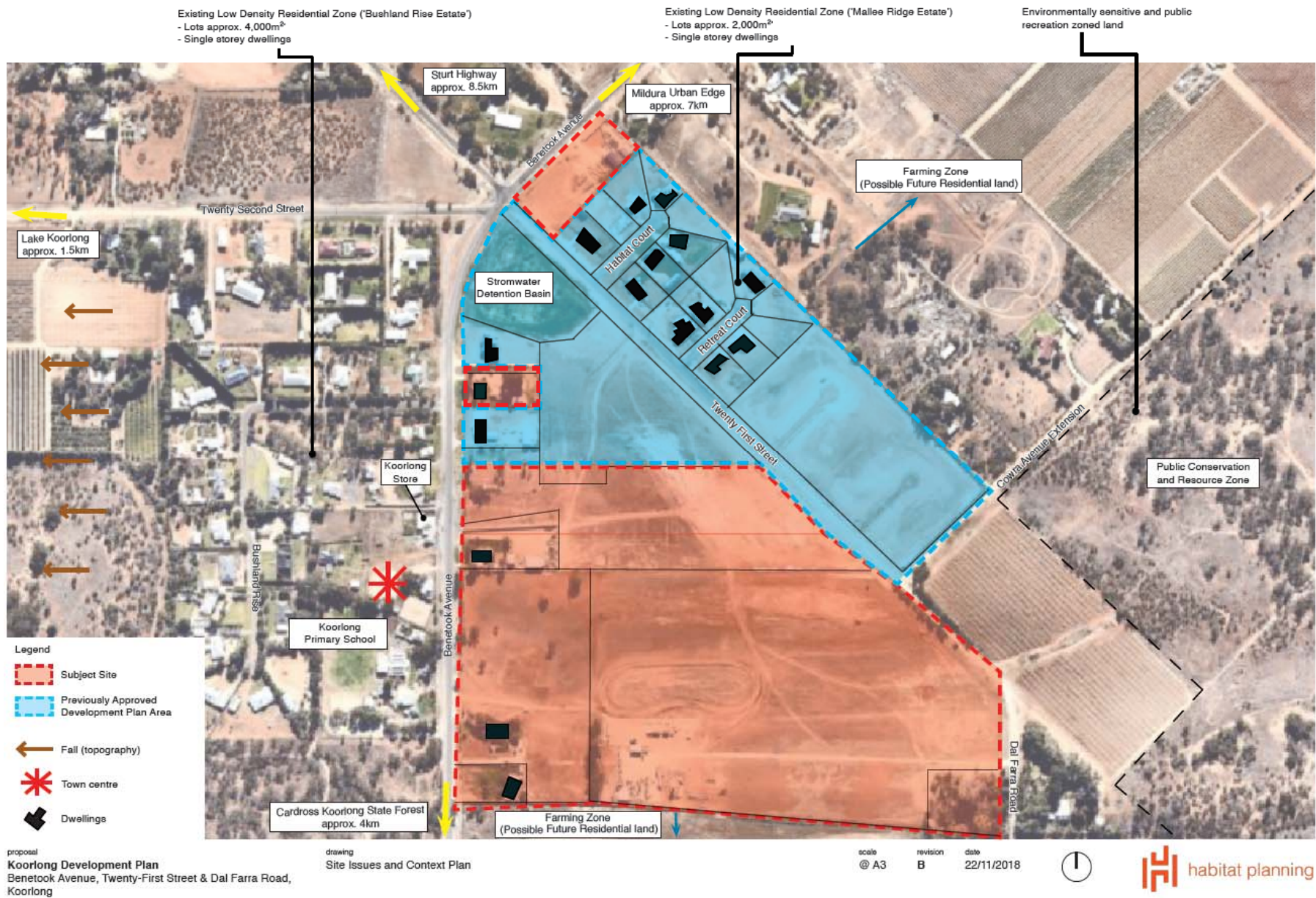
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**Figure 1** Site plan showing the land subject to this Development Plan (red outline)





**Figure 2** Site Issues and Context Plan

## 3. Background & Planning Context

### 3.1 Planning Policy Framework

The Development Plan needs to ensure that it is consistent with established State and Local policies and guidelines. Some of the key elements of planning policy that have informed the preparation of this Development Plan are outlined below:

- **State Planning Policy Framework (SPPF)**

All planning schemes in Victoria include the State Planning Policy Framework (SPPF) which has been developed by the State Government. Councils must take these policies into account and give effect to them when making planning decisions. State planning policies aim to provide for the fair, orderly, economic and sustainable use and development of land.

- **Local Planning Policy Framework (LPPF)**

Clause 21 of the Mildura Planning Scheme contains the Municipal Strategic Statement and outlines the key strategic planning, land use and development objectives for the Mildura Rural City Council area, and the strategies and actions for achieving the objectives. It includes statements about a wide range of areas and issues and outlines key issues and trends and includes the following policies of relevance to Koorlong and its development.

#### 3.1.1 Clause 11.01-1 Settlement Networks

The objective of clause 11.01-1 is:

*To promote the sustainable growth and development of Victoria and deliver choice and opportunity for all Victorians through a network of settlements.*

In order to achieve this objective, the strategy seeks to focus investment and growth in places of state significance including, amongst other places, major regional cities such as Mildura.

The proposed development responds to this strategy and seeks to provide for low density residential opportunities that are generally consistent with the local area and that are located within a designated small township.

#### 3.1.2 Clause 11.02-1 Supply of urban land

The objective of clause 11.02-1 is:

*To ensure a sufficient supply of land is available for residential, commercial, retail, industrial, recreational, institutional and other community uses.*

In order to achieve this objective, a number of strategies are relevant to the development of this area:

- *Ensure the ongoing provision of land and supporting infrastructure to support sustainable urban development.*
- *Ensure that sufficient land is available to meet forecast demand.*
- *Plan to accommodate projected population growth over at least a 15 year period and provide clear direction on locations where growth should occur. Residential land supply will be considered on a municipal basis, rather than a town-by-town basis.*
- *Planning for urban growth should consider:*

- *Opportunities for the consolidation, redevelopment and intensification of existing urban areas.*
- *Neighbourhood character and landscape considerations.*
- *The limits of land capability and natural hazards and environmental quality.*
- *Service limitations and the costs of providing infrastructure*
- *Restrict low-density rural residential development that would compromise future development at higher densities.*

The proposed development responds to the objective and strategies of this clause as:

- It will ensure an ongoing supply of urban land (low density residential) to meet forecast demand and population growth in the short to medium term;
- It seeks to achieve urban development (0.2ha-0.4ha) that is generally consistent with the established and emerging neighbourhood character of the area, including adjoining residential land located to the north and north east, which was developed as part of Stage 1 of the Koorlong Development Plan, which has a minimum lot size of 0.2 hectares.

In recognition of the established low density residential character of the area that exists within the area, particularly to the north west of the subject land, the development proposes larger lot sizes (0.4ha) along the Benetook Avenue road frontage. This is consistent with the existing lots that have been created within the adjoining 'Bushland Rise Estate', which have a minimum lot size of 0.4ha and will ensure that the development maintains a rural and low density residential character.

- The development will not have an adverse impact with regards to the environment and the land has access to reticulated services, which were established as part of the first stage of the development; and
- The development does not compromise future higher density development as the land has been identified and zoned for low density residential purposes.

### **3.1.3 Clause 11.04-1 Open Space Planning**

The objective of clause 11.04-1 is:

*To assist creation of a diverse and integrated network of public open space commensurate with the needs of the community*

In order to achieve this objective, a number of strategies are relevant to the development of this area:

- *Plan for regional and local open space networks for both recreation and conservation of natural and cultural environments.*
- *Ensure that land is set aside and developed in residential areas for local recreational use and to create pedestrian and bicycle links to commercial and community facilities*
- *Ensure that open space networks:*
  - *Are linked through the provision of walking and cycle trails and rights of way.*
  - *Are integrated with open space from abutting subdivisions.*
  - *Incorporate, where possible, links between major parks and activity areas, along waterways and natural drainage corridors, connecting places of natural and cultural*



*interest, as well as maintaining public accessibility on public land immediately adjoining waterways and coasts.*

- *Ensure open space is designed to accommodate people of all abilities, ages and cultures.*

The proposed development is generally consistent with the strategies of this clause as the development will provide a public open space area that comprises both a drainage reserve and informal/passive outdoor recreation area, which will serve this low density residential estate.

Whilst it is acknowledged that this drainage reserve and open space area will not be available for active open space purposes (sportsground etc), it will provide for passive/informal recreation purposes (walking/cycle tracks, benches etc), which is consistent with the requirements of this clause. This is considered appropriate in this instance and is consistent with the recommendations of the *Mildura Rural City Council Public Open Space Strategy*.

### **3.1.4 Clause 11.07-1 Regional Planning**

The objective of clause 11.07-1 is:

*To develop regions and settlements which have a strong identity, are prosperous and are environmentally sustainable.*

In order to achieve this objective, a number of strategies are relevant to the development of this area:

- *Identify and assess the spatial and land use planning implications of a region's strategic directions in Regional Strategic Plans.*
- *Ensure regions and their settlements are planned in accordance with any relevant regional growth plan.*
- *Apply the following principles to settlement planning in Victoria's regions, including the peri-urban areas:*

A network of integrated and prosperous regional settlements:

- *Directing growth to locations where utility, transport, commercial and social infrastructure and services are available or can be provided in the most efficient and sustainable manner.*
- *Ensuring there is a sufficient supply of appropriately located residential, commercial, and industrial land across a region to meet the needs identified at regional level.*

Environmental health and productivity:

- *Managing the impacts of settlement growth and development to deliver positive land-use and natural resource management outcomes.*
- *Avoiding development impacts on land that contains high biodiversity values, landscape amenity, water conservation values, food production and energy production capacity, extractable resources and minerals, cultural heritage and recreation values, assets and recognised uses.*

Regional Victoria's competitive advantages:

- *Providing adequate and competitive land supply, including urban regeneration, redevelopment and greenfield sites, to meet future housing and urban needs and to ensure effective utilisation of land.*

Climate change, natural hazards and community safety:

- *Siting and designing new dwellings, subdivisions and other development to minimise risk to life, property, the natural environment and community infrastructure from natural hazards, such as bushfire and flood.*

Distinct and diverse regional settlements:

- *Encouraging high-quality urban and architectural design which respects the heritage, character and identity of each settlement.*
- *Ensuring development respects and enhances the scenic amenity, landscape features and view corridors of each settlement.*
- *Ensuring that the potential of land that may be required for future urban expansion is not compromised.*

Liveable settlements and healthy communities:

- *Encouraging the development of compact urban areas which are based around existing or planned activity centres to maximise accessibility to facilities and services.*

The proposed development responds to the objective and strategies of this clause as:

- It proposes residential development on land identified for low density residential purposes (0.2ha and 0.4ha), which will increase land supply and support population and housing growth for the settlement of Koorlong;
- The subject land is well serviced and has access to relevant infrastructure and services, including reticulated water, sewerage, roads, electricity and telecommunication, which will be extended from the adjoining first stage of the Koorlong Development Plan area;
- The land does not have a high conservation value, is highly disturbed and contains little vegetation or trees;
- The subject land is not identified as being bushfire prone. A small portion of the subject land has previously been the subject of flooding and in response the development proposes to construct a drainage reserve in this area;
- The development will respect the existing scenic amenity, landscape features and established and emerging low density residential characteristics of the area, which includes residential lots with a minimum lot size of 0.2-0.4ha. In particular, the development proposes larger lots (0.4ha) along the western edge of the subject land consistent with the adjoining Bushland Rise Estate, whilst it proposes 0.2ha lots for the remainder of the subdivision consistent with the adjoining Mallee Ridge Estate and the requirements of the planning scheme.
- The subject land is zoned Low Density Residential (LDRZ) with a 0.2 hectare minimum lot size as identified in the planning scheme and the development of this land will not compromise future urban expansion opportunities.



### 3.1.5 Clause 13.03-1 Use of contaminated and potentially contaminated land

The objective of clause 13.03-1 is:

*To ensure that potentially contaminated land is suitable for its intended future use and development, and that contaminated land is used safely.*

In order to achieve this objective, clause 13.03-1 contains the following strategy:

- *Require applicants to provide adequate information on the potential for contamination to have adverse effects on the future land use, where the subject land is known to have been used for industry, mining or the storage of chemicals, gas, wastes or liquid fuel*

It is acknowledged that the subject land has been historically used for horticultural (viticulture) activities and therefore consideration of land contamination is considered necessary.

Notwithstanding the above, the likelihood of land contamination being present on-site is considered low given the previous use of the site (horticulture in the production of grapes) and the fact that no hazardous chemicals, liquids or gas were stored on-site. Furthermore, it is also noted that the subject land was previously considered appropriate for residential purposes and was zoned LDRZ.

### 3.1.6 Clause 15.01-1 Urban design

The objective of clause 15.01-1 is:

*To create urban environments that are safe, functional and provide good quality environments with a sense of place and cultural identity.*

In order to achieve this objective, a number of strategies are relevant to the development of this area:

- *Promote good urban design to make the environment more liveable and attractive.*
- *Ensure new development or redevelopment contributes to community and cultural life by improving safety, diversity and choice, the quality of living and working environments, accessibility and inclusiveness and environmental sustainability.*
- *Require development to respond to its context in terms of urban character, cultural heritage, natural features, surrounding landscape and climate.*
- *Require development to include a site analysis and descriptive statement explaining how the proposed development responds to the site and its context.*
- *Ensure transport corridors integrate land use planning, urban design and transport planning and are developed and managed with particular attention to urban design aspects.*
- *Encourage retention of existing vegetation or revegetation as part of subdivision and development proposals.*

The proposed development is consistent with these strategies as:

- The proposed development generally responds to the context and setting of the area and proposes a subdivision layout and density that is consistent with the planning scheme and adjoining low density residential development that has been established to the north (0.2ha) and west (0.4ha);
- This development plan provides details of how the proposed development responds to the site and its context;

- The development seeks to integrate with the existing transport network, namely Benetook Avenue and Twenty First Street and encourages walking and cycling through the provision of off road footpaths/access tracks;
- Limited vegetation needs to be removed and the future residential lots will be landscaped.

### **3.1.7 Clause 15.01-3 Neighbourhood and subdivision design**

The objective of clause 15.01-3 is:

*To ensure the design of subdivisions achieves attractive, liveable, walkable, cyclable, diverse and sustainable neighbourhoods.*

In order to achieve this objective, a number of strategies are relevant to the development of this area:

- *Creating a range of open spaces to meet a variety of needs with links to open space networks and regional parks where possible.*
- *Providing a range of lot sizes to suit a variety of dwelling and household types to meet the needs and aspirations of different groups of people.*
- *Creating a strong sense of place because neighbourhood development emphasises existing cultural heritage values, well designed and attractive built form, and landscape character.*
- *Protecting and enhancing native habitat.*
- *Environmentally friendly development that includes improved energy efficiency, water conservation, local management of stormwater and waste water treatment, less waste and reduced air pollution*

The proposed development is consistent with these strategies as:

- The proposed development adds to the variety of lot sizes across the city and provides larger lifestyle type properties with close proximity to infrastructure and services consistent with adjoining development;
- The development is consistent with the surrounding area in terms of lot sizes, in particular the low density residential development created as part of Mallee Ridge Estate;
- The development will not have any adverse environmental impacts, including any impacts on the threatened flora, fauna or areas of Aboriginal Cultural Heritage;
- The development provides a stormwater drainage and informal/passive outdoor recreation area, which will serve the needs of this estate.

### **3.1.8 Clause 16.01-1 Integrated Housing**

The objective of clause 16.01-1 is:

*To promote a housing market that meets community needs.*

In order to achieve this objective, a number of strategies are relevant to the development of this area:

- *Increase the supply of housing in existing urban areas by facilitating increased housing yield in appropriate locations, including under-utilised urban land.*
- *Ensure housing developments are integrated with infrastructure and services, whether they are located in existing suburbs, growth areas or regional towns.*

The proposed development is consistent with these strategies as it will increase the supply of developed residential zoned land to satisfy demands in the short to medium term and the development will integrate with infrastructure and services available within the general area that were established as part of the initial stages of the Mallee Ridge Estate.

### **3.1.9 Clause 16.01-4 Housing Diversity**

The objective of clause 16.01-4 is:

*To provide for a range of housing types to meet increasingly diverse needs.*

In order to achieve this objective, a number of strategies are relevant to the development of this area:

- *Ensure housing stock matches changing demand by widening housing choice, particularly in the middle and outer suburbs*
- *Support opportunities for a wide range of income groups to choose housing in well-serviced locations.*
- *Ensure planning for growth areas provides for a mix of housing types and higher housing densities in and around activity centres.*

The proposed development is consistent with these strategies as it will provide for a variety of residential lots and housing types and the subject land has access to infrastructure and services. It is noted that most of the lots created as part of the initial stages of the Mallee Ridge Estate have now either been sold or developed for residential purposes and the subject Development Plan seeks to facilitate the future development of additional low density residential land to satisfy market demand.

### **3.1.10 Clause 19.03-2 Water Supply, Sewerage and Drainage**

The objective of clause 19.03-2 is:

*To plan for the provision of water supply, sewerage and drainage services that efficiently and effectively meet State and community needs and protect the environment.*

In order to achieve this objective, a number of strategies are relevant to the development of this area:

- *Provide for sewerage at the time of subdivision, or ensure lots created by the subdivision are capable of adequately treating and retaining all domestic wastewater within the boundaries of each lot*
- *Plan urban stormwater drainage systems to:*
  - *Coordinate with adjacent municipalities and take into account the catchment context.*
  - *Include measures to reduce peak flows and assist screening, filtering and treatment of stormwater, to enhance flood protection and minimise impacts on water quality in receiving waters.*
  - *Prevent, where practicable, the intrusion of litter.*

The proposed development is consistent with these strategies as:

- Reticulated water and sewerage is available to the subject land and will be extended from the adjoining Mallee Ridge Estate. It is confirmed that there is ample capacity available in these systems to accommodate the future development of this land;
- An integrated public open space and stormwater management area is proposed to service the development, which will also be available for passive/informal recreation purposes. Roadside

swales will also be incorporated within the road reserve. These drainage swales will be landscaped to help treat and slow down stormwater discharges and will improve the aesthetic appearance and character of the neighbourhood.

### **3.1.11 Clause 21.03-1 Vision**

Council has adopted a Vision for the year 2025 that includes:

*Making this the most liveable, people friendly community in Australia.*

In order to achieve this vision, a number of land use planning visions have been adopted to complement the more broad vision for the municipality. Of particular relevance to the development of Koorlong for low density residential purposes include:

*Land Uses:*

- *Low density development will be provided in clearly defined areas where this does not compromise long term growth, and with appropriate minimum subdivision sizes to respond to environmental or infrastructure constraints or to existing neighbourhood character.*
- *Residents will be living in a variety of housing styles and environments. They will range from attractive and consolidated medium density clusters in the major towns, to rural living in low density allotments in clearly defined rural settings that are in harmony with the environment and that are not inhibiting the productivity of agricultural and horticulture activities*

*Built Form and Amenity:*

- *The design of neighbourhoods will facilitate and support healthy lifestyle choices and social interaction.*
- *Development of new low density estates will support a distinct local character in Koorlong, Cabarita and Nichols Point.*
- *Land use conflicts will be minimised.*

### **3.1.12 Clause 21.04-1 Settlement Hierarchy**

The objective of this clause is to:

*recognise the different roles and functions of settlements within the Rural City of Mildura.*

In order to achieve this objective, Strategy 1.3 of this clause recognises the role of lower density settlements in supporting the Main Urban Area.

### **3.1.13 Clause 21.04-5 Rural Residential and Low Density Development**

Clause 21.04-5 outlines that rural residential and low density residential housing remains a popular choice in Mildura. It is critical to the continued economic development of the region that this type of housing is accommodated in areas where it will not compromise long term agricultural production. It is also important that opportunities for living on larger lots are provided in a range of settings to increase housing choice. The *Mildura Housing and Settlement Strategy 2013* identifies a number of existing areas where low density residential development is occurring, as well as new areas where low density residential and rural living opportunities should be provided in both the short and medium term.

The objective of this clause is to:

*Accommodate the planned provision of future rural residential opportunities in appropriate locations.*

In order to achieve this objective, a number of strategies are relevant to the development of this area:

- *Strategy 7.7 – Recognise Koorlong's role as a discrete low density residential settlement close to Mildura;*
- *Strategy 7.8 – Ensure future development in Koorlong is consistent with the existing neighbourhood character, particularly in relation to public realm treatments, and is guided by a development plan to ensure integration between estates;*
- *Strategy 7.9 – Require any future development in Koorlong to provide a vehicular connection from Twenty-First Street to Benetook Avenue.*

The proposed development responds to these strategies and seeks to provide for low density residential opportunities within Koorlong that are consistent with the local area and that are located close to the main urban centre of Mildura. Furthermore, the proposed Development Plan seeks to connect Twenty-First Street and Benetook Avenue via the construction of a new local connector road.

#### **3.1.14 Clause 21.07-4 New Residential Development**

Clause 21.07-4 outlines that the growth of new residential areas within Mildura, in particular the development of the built environment, plays a key role not only in defining a 'sense of place' or character, but also contributes to the municipality's environmental performance and the physical and mental health of Mildura's current and future residents. Ensuring that new residential development considers the longer term impacts of how the built environment evolves will support the long term sustainability of the municipality

Objective number 9 of this clause outlines:

*To recognise the distinct neighbourhood character that defines many of Mildura's low density residential estates.*

In order to achieve this objective, Strategy 9.2 seeks to: encourage the design of new low density residential estates to employ 'non-urban' treatments in the provision of infrastructure, such as swale drains and post and wire fencing.

The proposed development achieves this strategy as it will incorporate swale/table drains and will contain building controls (as part of the planning permit application) around the development of individual allotments.

#### **3.1.15 Clause 32.03 Low Density Residential Zone (LDRZ)**

Clause 32.03-3 of the Mildura Planning Scheme sets out the minimum subdivision lot size requirements and requires that each lot created must be at least 0.2 hectares. This is consistent with the previously approved Development Plan for Stage 1 and a previous Victoria Planning Provisions Amendment VC100.

### 3.1.16 Zoning and Overlays

The subject land is zoned Low Density Residential Zone (“LDRZ”) in accordance with the Mildura Planning Scheme and Schedule 1 of the LDRZ, which applies to the subject land. It is noted that no minimum subdivision area size applies to the land in accordance with this schedule.

As outlined above, the subject land is also subject to Schedule 2 of the Development Plan Overlay (DPO2), which requires the preparation of a Development Plan prior to a Planning Permit being granted to use or subdivide land, construct a building or construct or carry out works.

### 3.1.17 Mildura Housing and Settlement Strategy

The *Mildura Housing and Settlement Strategy* (MHSS) was prepared on behalf of the Rural City of Mildura in 2013 to create a strategic framework and associated guidelines for the long term growth of Mildura so as to ensure that there was an appropriate level of land available for development.

In particular, the MHSS Background Report identified that:

*While Mildura has sufficient land available for conventional residential development, there is a need for additional land to be provided to meet the anticipated demand for dwellings on larger lots. Through the MHSS, growth in rural living and low density development will be accommodated in clearly defined nodes where they can support a local community. These will primarily be areas where there is access to both a local shop and school, and where they will not compromise ongoing agricultural development.*

Accordingly, the subject land was identified within the MHSS for low density residential purposes (see **Figure 3** extract below) as follows:

Koorlong:

*The small settlement of Koorlong, with its school, recreation facilities and shop has seen recent quality low density development at the Bushland Rise estate. Given the presence of these facilities and the take-up of almost all available land in the area, additional rezoning of land to facilitate further low density development in this settlement is proposed by the MHSS...*

*The preferred area for rezoning is the triangle of land between the school and shop and Twenty-First Street closest to existing development, which would provide an additional 26ha of low density land. However, an additional area to the north of Twenty-First Street proposed through Amendment C84 should also be included... taking the area to approximately 34ha. The land beyond this parcel is not used for agricultural purposes so no conflict is anticipated.*

*Development in this area should facilitate both the construction of Twenty First Street but also a clear through-block link from Benetook Avenue to Twenty-First Street. It is also important that future low density residential development in this settlement is in keeping with existing character, particularly in regard to fencing and public realm treatments and both the design treatments and key linkages should be required through any subdivision process. This character should also be recognised by Council in any streetscape or facility upgrades to assist in developing a distinctive identity for the settlement.*

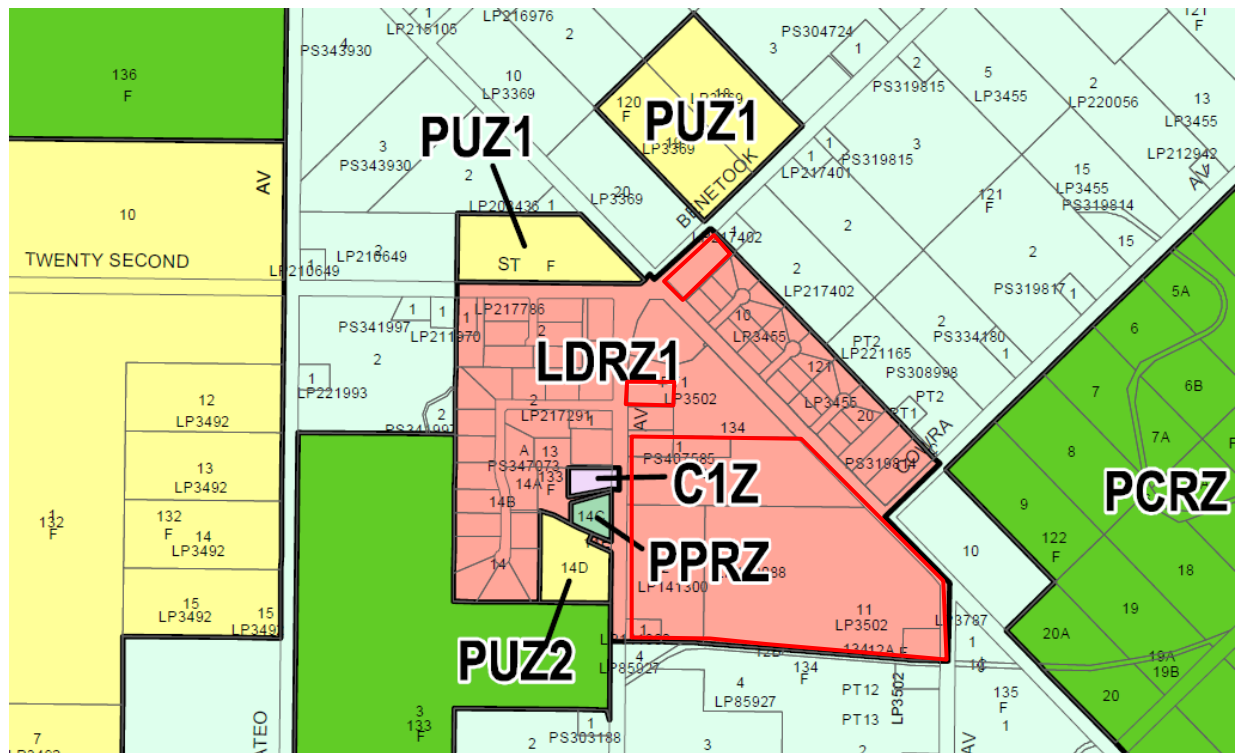
The subject land was subsequently rezoned Low Density Residential (LDRZ) and a Development Plan Overlay (Schedule 2) was placed over the subject land to guide the future development of this area (see **Figures 4-5**).

Accordingly, the subject Development Plan has been prepared to satisfy the recommendations of the MHSS and the requirements of the Mildura Planning Scheme. The Plan represents the second stage of the development of the Koorlong low density residential area following a previously approved Development Plan for Stage 1, which is currently under construction ("Mallee Ridge Estate").

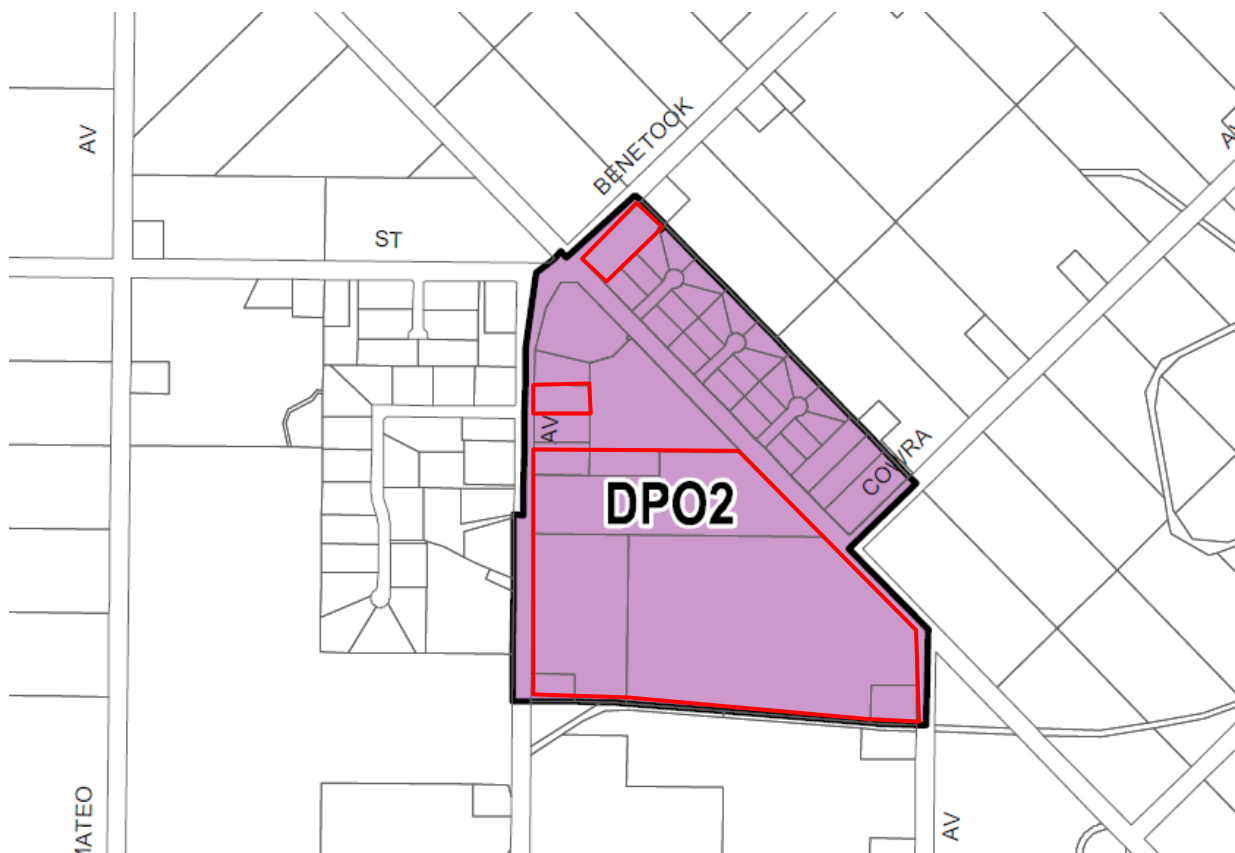


**Figure 3** Extract of the Mildura Housing and Settlement Strategy showing the proposed rezoning area for Koorlong (34ha)





**Figure 4** Extract of the Land Zoning Map indicating the land the subject of this Development Plan (red outline)



**Figure 5** Extract of Development Plan Overlay (Schedule 2) indicating the land the subject of this Development Plan (outlined in red)



## 4. Development Plan Preparation

This section addresses the general preparation requirements for a Development Plan set out in Clause 43.04-3 of the DPO.

### 4.1 The land to which the plan applies

The land to which this Development Plan applies is described in **Table 1** of Section 2.1 of this report, being land generally bordered by Twenty-First Street, Benetook Avenue and Dal Farra Road, Koorlong (see **Figure 1**).

For further details regarding the subject land and its surrounds, please see Section 2 of this Development Plan.

### 4.2 The proposed use and development of each part of the land

The proposed use of all of the subject land is for low density residential (0.2-0.4ha) and stormwater retention purposes (see Attachment A) consistent with the recommendations of the *Mildura Housing and Settlement Strategy*, 2013 and the low density residential zoning of the land.

### 4.3 Any other requirements specified for the plan in a schedule to this overlay

Each of the specific requirements in Development Plan Overlay Schedule 2 (DPO2) is addressed in the following section and the Development Plan contained at Attachment A.

## 5. Development Plan Requirements

This section addresses the specific requirements for a Development Plan set out in Section 3.0 of Schedule 2 to the Development Plan Overlay (DPO2).

### 5.1 A clearly distinguishable road hierarchy with the differences in road function reflected in the road width, design layout and road reserve treatments

The Development Plan at Attachment A shows an indicative road layout for the subject land.

The subdivision concept layout shows an indicative road alignment of internal roads, which provides both connectivity and legibility, as well as details how this stage of the development will link with the land immediately to the north that was previously approved as part of Stage 1 of this development.

Whilst it is acknowledged that the development does identify a single court bowl, this is considered acceptable in this instance due to the physical size and shape of the land, which limits the opportunity to create a through road, as well as the fact that this court bowl is short and will only serve approximately 4 lots.

As a consequence of the road layout and design, this will provide legibility and connectivity for persons wishing to access the primary school and the Koorlong Store located on the western side of the development, but also provides a road layout that avoids 'rat running' and speeding throughout this low density residential estate.

The road hierarchy has been clearly identified, which identifies proposed through roads (standard roads) with an overall 21 metre wide road reserve width and a local court with a 19 metre wide road reserve width, which is consistent with council's requirements. A cross section of these road designs is provided in Attachment B for information purposes.

These cross sections also provide details of the road reserve treatment, which will include swale drains, landscaping and a 2 metre wide shared footpath on all roads with the exception of the one minor court head. The road cross-sections also detail the treatment of the road reserve for drainage, landscaping and footpaths in Twenty-First Street and Benetook Avenue.

The concept layout plan also identifies how this stage of the development will link with the land immediately to the north that was approved as part of Stage 1 of this development, as well as identifying the approximate location of access points from the proposed internal road network to the existing local collector road network, including the sealed Benetook Avenue and the unsealed Twenty-First Street and Dal Farra Road.

This plan also illustrates a new vehicle connection point that will be established as part of the future development of this land that will connect Benetook Avenue and the unsealed Twenty-First Street/Dal Farra Road. This is consistent with Strategy 7.9 of Clause 21.04-5 of the Planning Scheme.

The location of this new intersection with Twenty First Street and Dal Farra Road has been chosen, as it is assumed that the majority of traffic entering the subdivision will be doing so via Twenty First Street (Right Turn) and not Dal Farra Road. The majority of vehicles exiting the subdivision are also expected to be via Twenty First Street (Left Turn) rather than Dal Farra Road.

Upon completion of the subdivision, it is expected that the majority of vehicles will enter and exit the estate via the internal road network and typically exit via Benetook Avenue or the northern access road

onto Twenty First Street given their more direct route and access to community facilities and services (school, shop etc).

A Safe Intersection Sight Design (SISD) for the proposed development intersection has been calculated as 223m (80/h) or 148m (60km/h)(see sight distance plan contained in Attachment B). Given the area is residential and the road is unsealed, the speed limit in Twenty First Street and Dal Farra Road should be 60km/h and therefore the intersection location provides appropriate sight distances in both directions.

The SISD has also been calculated based on a 'worst case' scenario, assuming Twenty First Street and Dal Farra Road being unsealed roads, and with a reaction time for unaltered drivers given the existing low traffic flow along Dal Farra Road.

The location of the proposed road, although located on a bend is the best location given that sight distances/lines are available in both directions. By shifting the intersection either side of this bend, it would restrict sight distances and generally limit views to a single direction.

As can be seen by the intersection diagram, the SISD generally aligns with the natural surface ridges in both directions and the area has good sight distances due to a lack of roadside vegetation.

Notwithstanding, should a road safety audit for the subdivision require any specific intersection treatment (such as a Basic Right Turn (BAR) intersection), given the condition and speed limit of the road, this can be addressed at the Planning Permit stage.

Further details regarding the proposed road intersection points with these higher order roads will be provided at the time of lodging future planning permit applications and will be undertaken in consultation and agreement with council's engineering and traffic departments.

## **5.2 Innovative design of all proposed public open spaces incorporating pedestrian and cycle paths and linking open space networks with community facilities and local neighbourhood activity centres with the surrounding residential precinct**

The Development Plan provides a low density residential environment and consequently the provision of public open space within the subject land is not required and generally limited to urban environments, as identified within the *Mildura Rural City Council Public Open Space Strategy*.

Notwithstanding, the proposed development will incorporate an integrated public open space and stormwater management area, which will perform a dual function and will act as both a retarding basin during high rainfall events, but will also be available for passive/informal recreation, when this basin is not required for stormwater retention purposes.

The area (approximately 1ha in size) will be grassed and appropriately battered, will be connected to an irrigation system and will be maintained ongoing (by council) as a drainage reserve. The area will also be embellished with walking/cycle tracks and benches that will be available for use by residents for passive/informal recreation purposes.

The location of this integrated public open space and stormwater management area is located on the main access road throughout this estate, which will ensure that it is within walking distance to all future residents, which can access this area via the constriction of designated off road shared paths.

The development of this open space area will be similar to the integrated public open space and stormwater management area constructed as part of the initial stages of Mallee Ridge Estate, which has been maintained for informal/passive outdoor recreation purposes.

Pedestrian and cycle movements generated by the future development of the subject land will be undertaken within the road reserves of Twenty-First Street, Benetook Avenue and Dal Farra Road. Local community facilities include the Koorlong Primary School and general store, which are readily accessible and located immediately north-west of the subject land and will be easily accessible by the construction of a number of new internal access roads and footpaths on all roads with the exception of one small court head.

The provision of pedestrian and cycle path networks is discussed within the *Mildura Track and Trails Strategy, July 2012*, which aims to identify, develop, upgrade, manage and maintain a network of linked and shared on and off road cycling and walking paths suitable for commuting and recreation purposes.

Although there are no formal on-road cycle or pedestrian paths contained within the Koorlong area, Benetook Avenue is identified as an 'Off Road Trail'. This off-road trail links to the broader Mildura environment and eventually connects with the main urbanised area of Mildura to the north-east. The future development of this land will therefore provide opportunities to connect to this off road trail and allow future residents to access nearby services or the Mildura CBD.

The development will also be consistent with the low density character of the area via the installation of rural 'post and wire' fencing, which will be utilised on all lot boundaries (including those adjoining open space and drainage reserves) to reflect the low density nature of the residential development.

### **5.3 The means of servicing to lots including the provision of reticulated water and sewer to all residential lots or alternative EPA approved effluent disposal systems**

The subject land will be serviced with all necessary infrastructure and services as required by Council.

More specifically, the subject land will be serviced by a reticulated potable water supply from Mildura's existing reticulated water supply system. Lower Murray Water have confirmed via letter dated 17 December 2014 (see Attachment E) that there is ample capacity available within this infrastructure network in order to service the future development of this land for low density residential purposes.

Reticulated sewer is also available to the area and was extended as part of the first stage of the development of Mallee Ridge Estate located immediately to the north, which included the construction of a new sewer pump station.

Following discussions with Lower Murray Water, it is confirmed that there is ample capacity available within the recently extended reticulated sewerage network to service up to 80 additional lots on top of those previously approved and/or constructed. Should additional capacity be required, Lower Murray Water has also confirmed that there is an ability to augment and upgrade this facility in order to accommodate the future development of this area, consistent with the development staging plan prepared for the area (see Attachment A).

It is acknowledged that the *Mildura Housing and Settlement Strategy* originally envisaged the development of this area for low density residential purposes with a 4,000m<sup>2</sup> minimum lot size, which allowed for the disposal of effluent on-site. Notwithstanding, following the introduction of the Victorian Planning Provisions Amendment VC100 an opportunity became available for the development of LDRZ zoned land with a minimum lot size of 2,000m<sup>2</sup>, where it was connected to reticulated sewerage.

Accordingly, the subject landowner extended the reticulated sewerage network (at their own cost) and developed a portion of the subject land included as part of the first Development Plan for LDRZ purposes with a 2,000m<sup>2</sup> minimum lot size. Consequently, the landowner is now seeking to continue to develop this area consistent with the first stage of the development.

There is no on-site effluent disposal proposed, but should this occur or continue to occur as is the case for several existing dwellings, it will be via an approved EPA effluent disposal system.

#### **5.4 Identification of the means of draining the land**

Drainage of any future development on the land will be controlled and directed to an appropriate point of discharge and/or retained within the site in recognition of the gentle undulating topography of the land and as per Council requirements. An indicative drainage plan (with contours) for the subject land, as well as stormwater drainage calculations is provided at Attachment C.

This plan will be prepared in accordance with relevant council requirements of the relevant local authority, whilst consultation will also be undertaken with the Mallee Catchment Management Authority who is the relevant authority for Koorlong Lake.

The area highlighted by the Mallee Catchment Management Authority as impacted by the 2011 flooding event (see **Figure 6**) is ideally suited for a stormwater detention system or for larger allotments with a minimum floor level for proposed dwellings.

The area of the proposed stormwater drainage system is a localised depression and for this reason has been identified for stormwater detention purposes given the natural terrain and topography of the land. This system will be connected to the drainage system during the final design.

In addition, drainage modelling works have been undertaken to ensure that this basin has been appropriately designed and sized to accommodate the expected stormwater flows resulting from the development of this land. Stormwater drainage modelling has also been undertaken and designed to include pre-development outcomes for the catchment (including the adjoining road reserve), as well as post-development outcomes for the future development of this land.

Following the completion of these storm water drainage calculations, the future development of this land requires the provision of a drainage basin of approximately 4744m<sup>3</sup>. This volume has been provided in the area shown with a design water depth of approximately 1.0m. The maximum volume available within this area has been calculated to be 6,460m<sup>3</sup> (including the 300mm freeboard).

The Development Plan has therefore been adjusted to include a reserve that will be large enough to accommodate an integrated public open space and stormwater management area that will hold the water until such time that it is discharged downstream to a second integrated basin that was constructed as part of the initial stages of Mallee Ridge estate where it is then discharged into Koorlong Lake.

Stormwater from the proposed development will be collected on-site and directed via gravity feed or via the internal access roads into the proposed integrated public open space and stormwater management area. From there, stormwater runoff will then be collected and directed along Twenty First Street via already constructed roadside drainage channels into the existing integrated basin constructed as part of stage 1 of the development.

It is noted that Lower Murray Water has previously agreed that the maintenance and operation of the channel will remain their responsibility (see attached correspondence at Attachment E).





**Figure 6** Extract of 2011 flood event showing the location of the subject land (red outline)

Roadside swales will also be incorporated within the road reserve. These drainage swales will be landscaped to help treat and slow down stormwater discharges and will improve the aesthetic appearance and character of the neighbourhood. More specifically, these swales will be grassed (or similar) to help prevent issues of erosion and help improve their visual appearance.

As a consequence, this will retain and maintain pre-development flows prior to discharging stormwater runoff into the Koorlong Lake system, which is located appropriately 1.1 kilometres to the east of the proposed development.

The low density of development will ensure that the quality of stormwater is of a standard that will not be detrimental to the downstream catchment and the impact from stormwater will be significantly less than a standard urban subdivision that would have a much higher proportion of hardstand areas.

Furthermore, the proposed stormwater basin has been designed to provide a dual function of both stormwater collection and passive open space identical to the integrated public open space and stormwater management area constructed as part of the previously approved & constructed stage 1.

## **5.5 The need for open space and any other community infrastructure as considered necessary by the responsible authority**

Due to the rural residential and low density residential nature of the proposed development, it is not considered necessary to provide any areas of active open space as the lots themselves will provide substantial opportunity for these elements.

Furthermore, the local area is already serviced by an existing local park and is within walking distance of a number of recreation areas zoned Public Conservation and Resource Zone (PCRZ).

Therefore, the proposed development does not require the provision of any additional active open space areas, which is consistent with the recommendations of the *Mildura Rural City Council Public Open Space Strategy*, which outlines that public open space is not required for a low-density subdivision and is generally limited to urban environments.

Notwithstanding the above, the development does still propose to provide an area of passive/informal open space as part of the proposed drainage basin that will be available for use by local residents.

The provision of this informal/passive outdoor recreation area will be similar to the drainage basin and public recreation reserve constructed as part of stage 1 of the development, which has a total area of approximately 1 hectare.

Given the nature of the proposed stormwater basin (being a 'dry basin'), which only intermittently holds water during high rainfall events, this area will remain available for passive open space and recreational opportunities. Similar to the previous basin constructed as part of stage 1, this area will be a similar size (approximately 1ha), grassed and irrigated to ensure that it can be used for recreational opportunities. The area will also be embellished with an off road pedestrian footpath (gravel hardstand) and bench seating.

The location and position of this passive/informal open space area, as well as, the previous open space area constructed within stage 1 will ensure that all residents living within this future low-density residential estate will have access to a passive/informal open space area within a 400 metre walking distance.

Matters regarding community infrastructure have also been considered, which due to the relatively small scale nature of the development and the low density residential environment of Koorlong do not warrant the provision of additional community infrastructure.

In particular, the subject land already has direct access to the local primary school, community hall and convenience store, which are all located within walking distance of the subject land on the opposite side of Benetook Avenue.

## **5.6 The impact of the development on any sites of flora and fauna significance, archaeological significance or significant views that may affect the land**

The subject land exists on the fringe of Mildura and has been highly modified through historical agricultural activities (viticulture), including land clearing, irrigation and soil cultivation. Consequently there are no sites of significance for flora or fauna, archaeology or views.

In particular, the land is generally cleared of vegetation with the exception of a small number of scattered paddock trees in the south-east and south-west corners of the subject land surrounding several existing dwellings. These trees are generally scattered and provide limited habitat value given their isolated location and proximity to existing buildings and structures.

**Figure 7** provides an aerial photograph of the site taken on 17 September 2018, which identifies that the land has been largely cleared.





**Figure 7:** Aerial photograph of the subject land dated 17 September 2018 (**Source:** Nearmap, 2018)

Similarly, the subject land is not expected to contain any areas or items of archaeological significance given the fact that the land does not contain any natural features or landforms such as ridgelines, waterways or the like that would indicate occupation or habitation by historical or locally indigenous landowners and groups.

The development of the subject land for low density residential purposes will also not adversely affect or restrict any significant views as the land is only gently undulating and does not contain any significant ridgelines or hilltops as the area is primarily flat.

#### **5.7 Retention of any existing tree stands of value and an appropriate landscaping theme for nature strips and public open space including the use of salt tolerant plants**

There are no existing stands of trees within the subject land only several areas of scattered patches or 'clumps' of paddock trees, which are generally surrounding several existing dwellings (see Figure 7).

Notwithstanding, given the size of the proposed allotments sought as part of this Development Plan (2,000m<sup>2</sup> and 4,000m<sup>2</sup>) there are still ample opportunities to develop these lots and retain some of this vegetation currently contained on-site.

Street landscaping will be undertaken in accordance with Council requirements for new low density residential subdivisions and it is reiterated that the development does not propose any active public open space areas given the low density residential nature of the development and the proximity of the subject land to existing recreational facilities.

#### **5.8 Identification of common trenching of compatible services**

It is noted that it is common practice in the Mildura area for electricity and telephone services to share a trench, and the same for water and gas.

Accordingly, common trenching shall be undertaken where the opportunity exists.



## **5.9 The application of water sensitive urban design principles**

The proposed development will incorporate water sensitive urban design principles throughout the subdivision via the construction of a number of roadside drainage swales, which will be incorporated within the road reserves consistent with what has been constructed in stage 1.

These drainage swales will be landscaped to help treat and slow down stormwater discharges and will improve the aesthetic appearance and character of the neighbourhood. More specifically, these swales will be grassed (with natives or similar) to help prevent issues of erosion.

The construction of future dwellings on-site will also ensure that water sensitive urban design principles are adopted.

## **5.10 The comments of Lower Murray Water**

Consultation has already previously been undertaken with Lower Murray Water in relation to the first stage of the Development, which is still applicable to the current proposal (see Attachment E).

This Authority has advised that reticulated water and sewer services can be provided to the subject land and will need to meet the authority's *Standard Conditions for the Provision of Water Supply and Sewerage Infrastructure in Subdivisions*.

If lots less than 4,000m<sup>2</sup> are proposed (which is the case), then they will need to be connected to the reticulated sewerage network, which was extended as part of stage 1 of the development in accordance with the requirements of Lower Murray Water.

As outlined above, there is ample capacity available in the reticulated water network to service the future development of this land. Likewise, there is also capacity within the recently extended sewerage network for an additional 80 lots. Should any further development occur beyond this requiring connection to the reticulated sewerage network, Lower Murray Water have also confirmed that the existing system can be augmented and upgraded to accommodate this future growth.

Further details of service provision will be provided with the planning permit application for subdivision.

## **5.11 The comments of the Mallee Catchment Management Authority**

Consultation has already previously been undertaken with the Mallee Catchment Management Authority in relation to the first stage of the Development, which is still applicable to the current proposal (see Attachment E).

More specifically, the Mallee Catchment Management Authority did not object to the development of the subject land and specifically to:

- include retention basins to initially collect stormwater;
- connect the retention basins to existing stormwater drains which flow into Koorlong Lake; and
- upgrade existing stormwater pipes to cater for increased flows.

The Authority has no specific requirements for the Development Plan other than the need to protect the quality of stormwater discharge via the installation of a gross pollutant trap on any proposed stormwater retention basins.

In addition, this Authority actually identified that increased flows to Koorlong Lake as a result of the development will be beneficial to the Murray Hardyhead fish population as it will help to maintain water levels in the lake.

Details regarding stormwater management and discharge have been discussed earlier in this Development Plan and are contained in Attachment C.

## 6. Conclusion

This document and attached plans set out the intended development outcomes and subdivision character that will guide the future development of the land and ensure a high quality low density residential neighbourhood at land bordered by Twenty-First Street, Benetook Avenue and Dal Farra Road, Koorlong.

The commitments and outcomes set out by this Development Plan recognise the primary objective for the development to provide a high quality low density subdivision that recognises its fringe urban/rural location that does not detract from the rural character or environmental attributes of the area.

Within this report, the proposal has been considered against the relevant matters of the State Planning Policy Framework, Local Planning Policy Framework and Mildura Planning Scheme, including Schedule 2 of the Development Plan Overlay and it is considered to be consistent with the relevant controls and requirements.

It is considered that this Development Plan and accompanying details provides an appropriate future development framework for the land and should be supported by Council.

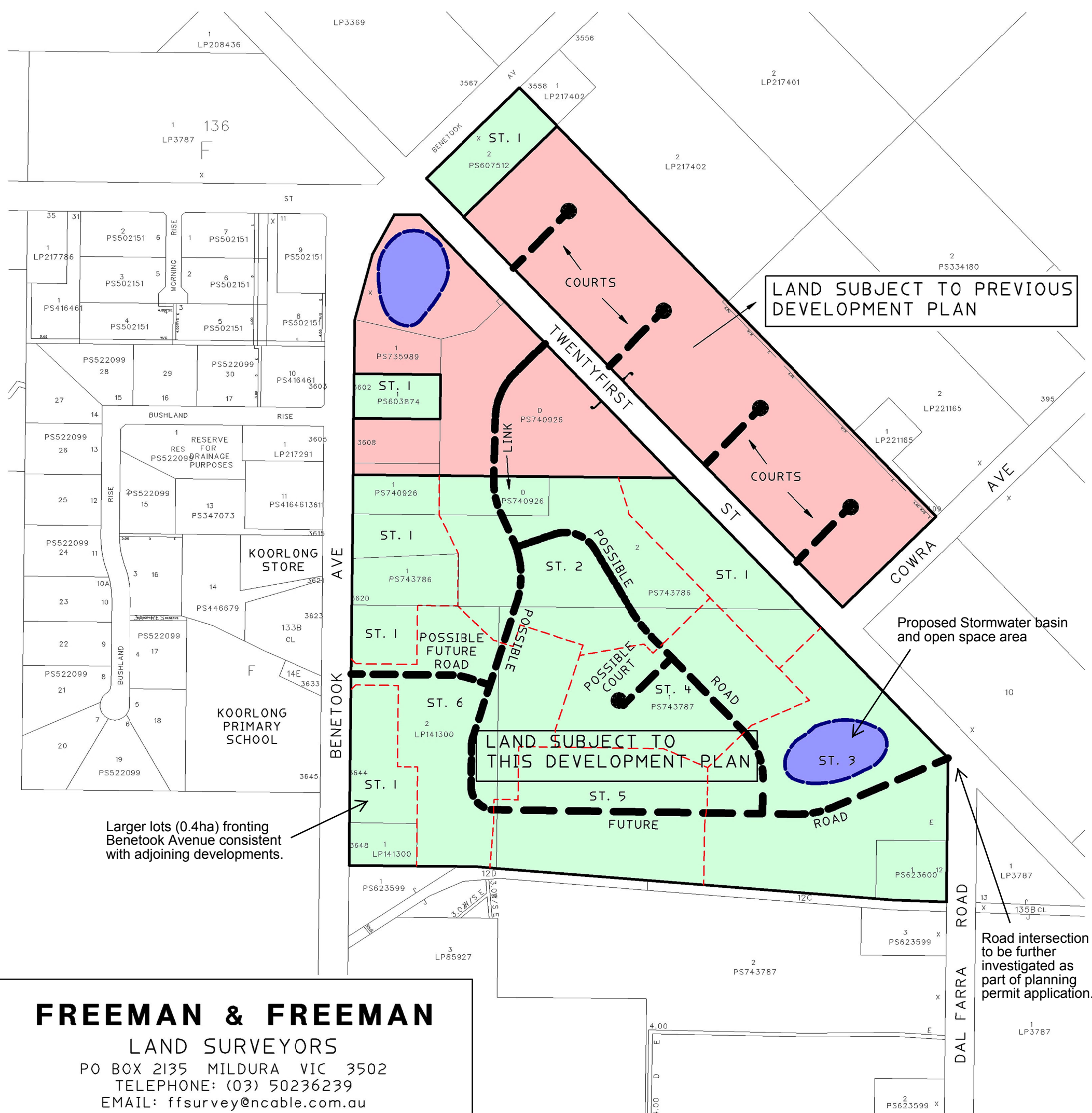
# Attachment A

## Development Plan

PART LOT D ON PS 740926P,  
LOT 2 ON PS 743786M,  
LOT 1 ON PS 743787K AND  
ADJOINING SMALLER LOTS

A3 PLAN

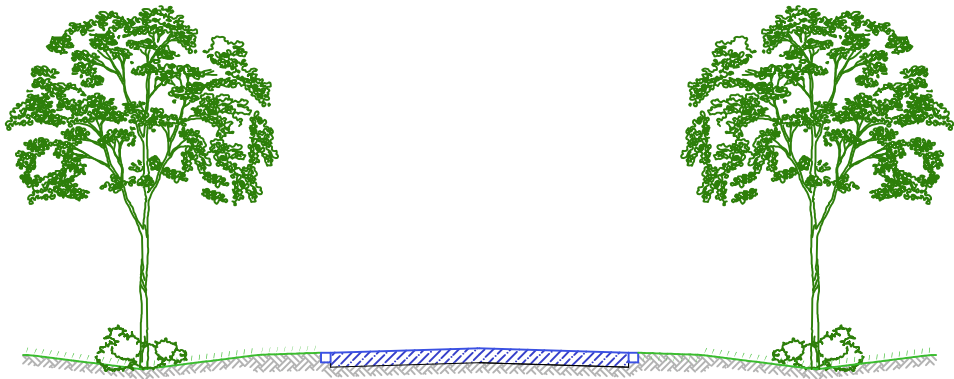
APPROX. NORTH



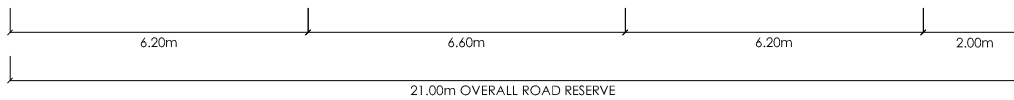
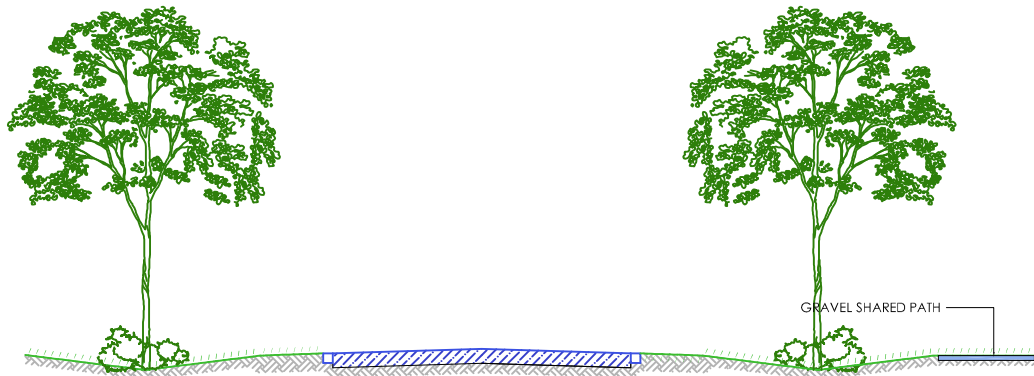
EMAIL: ffsurvey@ncable.com.au

# Attachment B

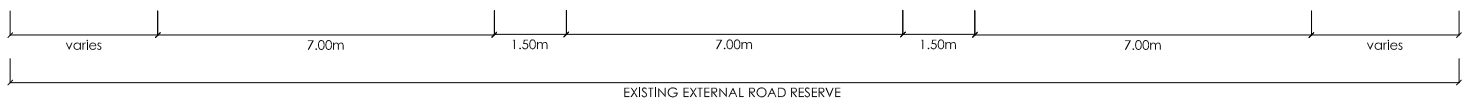
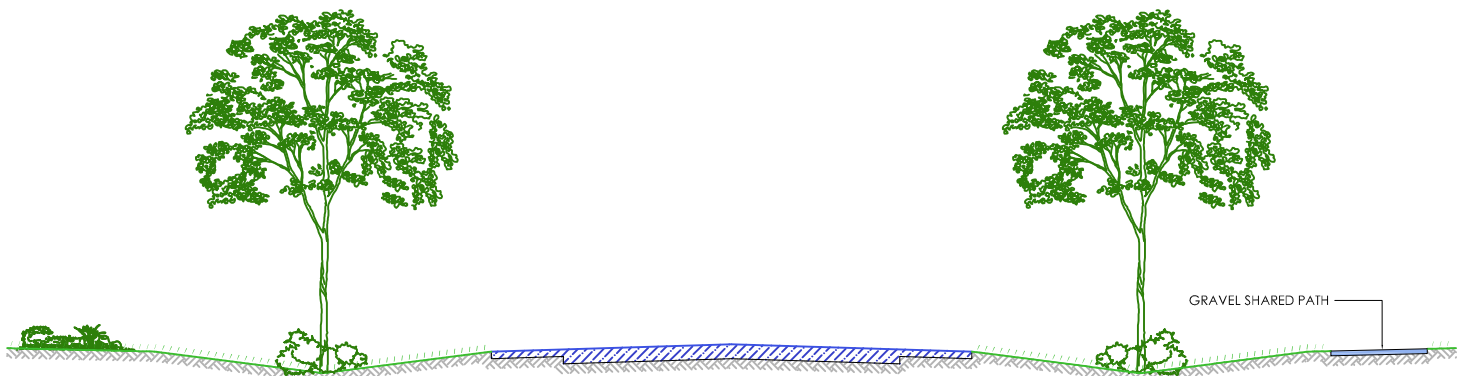
## Road Design



PROPOSED COURTS



PROPOSED THROUGH ROADS



PROPOSED TWENTY FIRST STREET







It can be assumed that the majority of traffic entering the subdivision will be doing so via Twenty First Street (Right Turn) and not Dal Farra Road.

The majority of vehicles exiting the subdivision would also be via Twenty First Street (Left Turn) rather than Dal Farra Road.

Upon completion of the subdivision it would be expected that the majority of vehicle access would be via the internal road network and typically exit via Benetook Ave given its more direct route.

The Safe Intersection Sight Distance (SISD) for the proposed intersection location has been calculated at 223m(80km/h) or 148m(60km/h)

Given the area is zoned residential the speed restriction in Twenty First Street and Dal Farra Road should be 60 km/h.

The SISD has also been calculated based on 'worst case' with assuming Twenty First Street and Dal Farra Road being an unsealed road, and with a reaction time for unaltered drivers given the existing low traffic flow along Dal Farra Road.

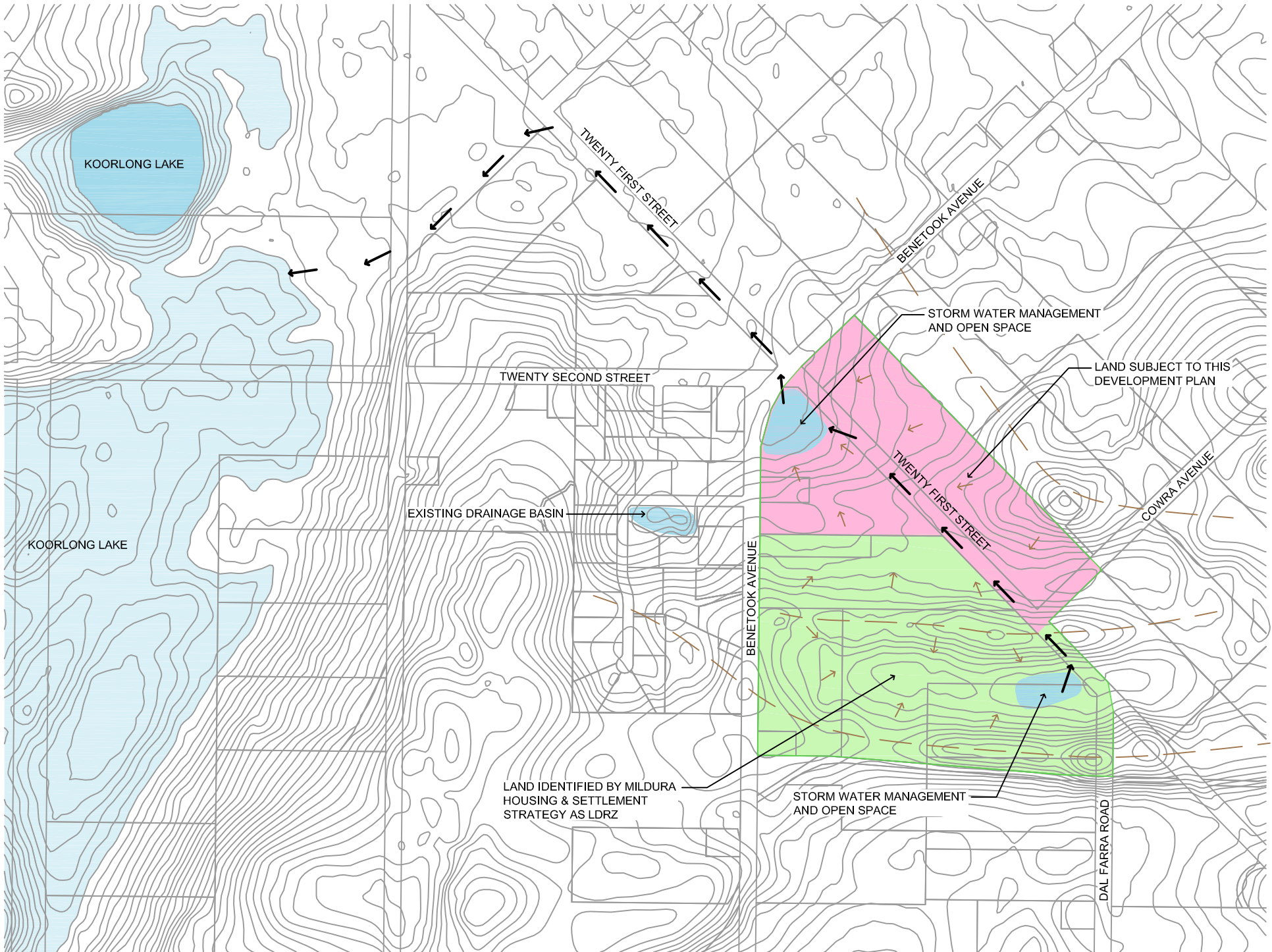
The location of the proposed road (although not ideal) is the best location given the sight distance available in both directions.

As can be seen by the intersection diagram, the SISD generally aligns with the natural surface ridges in both directions.

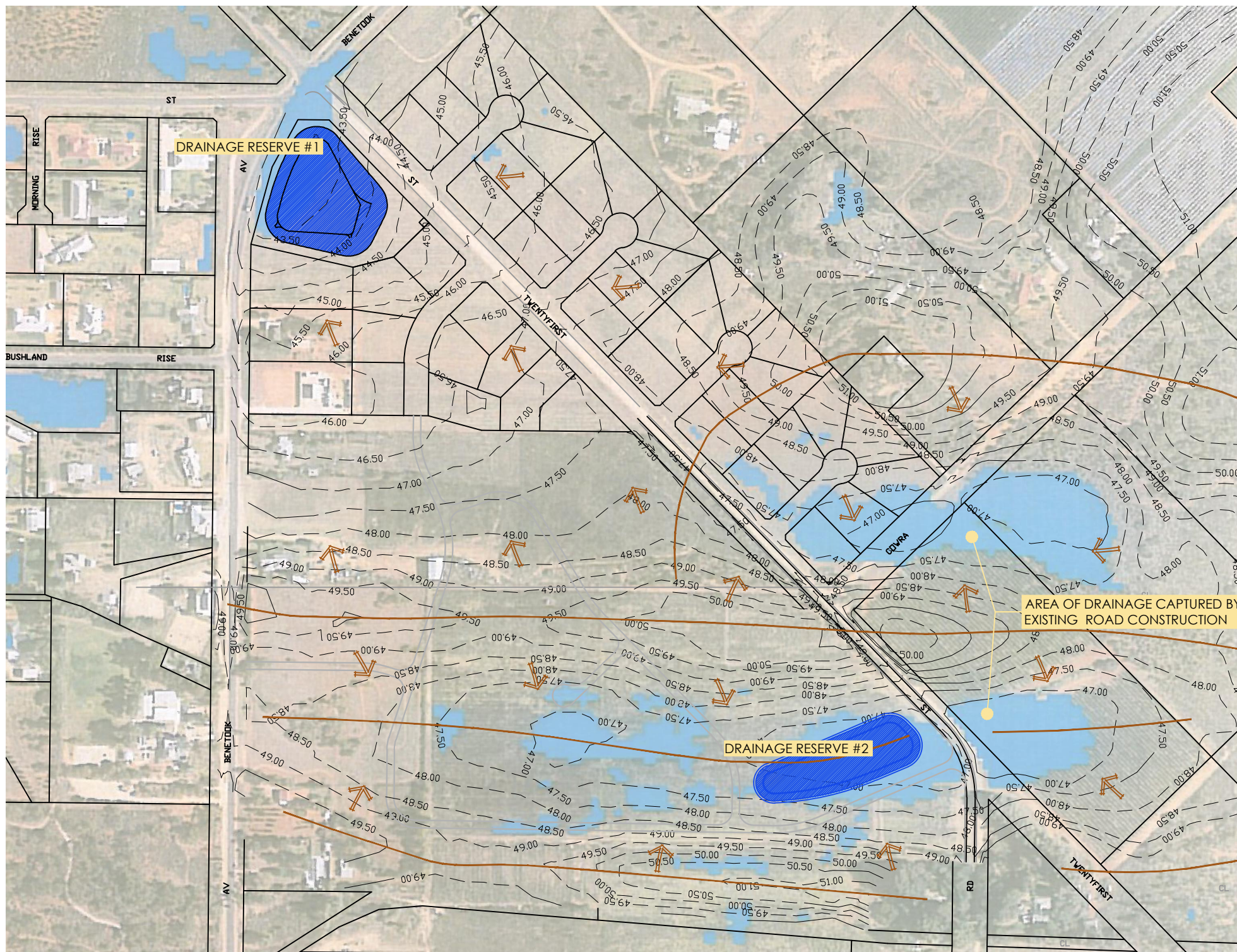
Should the Road Safety Audit for the subdivision require any specific treatment at the intersection this would be dealt with at the Planning Permit Stage.

# Attachment C

## Drainage Plan











The Mallee Catchment Management Authority (MCMA) 2011 Flooding Aerial photograph of Koorlong clearly shows that the storm water run-off from the adjacent land is retained onsite at two locations matching the aerial contours.

The photograph also clearly shows that there is no water ponding over Twenty First Street hence Twenty First Street is acting as a levee between the two sides of the road.

It can be assumed that no storm water from the adjacent land will cross Twenty First Street and enter the proposed drainage reserve without a piped system being installed up to a storm event as experienced in 2011.

Should a piped system be installed to drain the adjacent land, the areas shown on the MCMA photograph will still be flooded by means of the existing runoff produced and surcharge from the Drainage Reserve #2 given the areas shown appear to have the same natural surface level.

As part of the civil works for Stage 3 of the Mallee Ridge Estate subdivision, the lots backing onto Cowra Avenue were raised to reduce inundation from Cowra Avenue. A small private gravity drain was also installed along the rear these lots which will help remove excessive surface runoff in Cowra Avenue but have not been designed to do so.

As part of the original Development Plan for the "Madari Rural Residential Estate", the drainage system was designed to cater for the additional area as shown. The drainage from this area was designed to be directed to the proposed Reserve #2 with a restricted gravity discharge based on the ability to drain the site above a certain level given the pipe grade and diameter.

Should the internal drainage system for the proposed ODP area require a deeper system, a pumped discharge would also be required to empty the Reserve #2 after the storm event.

Based on the existing gravity storm water system, the approximate volume within the Reserve #2 available to be drained via gravity is approximately 4830m<sup>3</sup> (6460m<sup>3</sup> including the 300mm freeboard).

Should the adjacent land be developed at a later date a drainage basin and pumped discharge system would need to be provided within this lot to prevent it being inundated by the Mallee Ridge Estate drainage reserve No. 2.





MALLEE RIDGE ESTATE

EXISTING STORM WATER SYSTEM AT END OF STAGE 3 (21<sup>ST</sup> STREET)

$\phi 375$  RCP @ 0.10% 14 45.37

APPROXIMATE LENGTH REQUIRED TO PROPOSED RESERVE #2 = 145m

145 @ 0.10% + PITS

ASSUME 250mm FALL

APPROXIMATE PIPE INVERT AT RESERVE #2 = 45.62m

AREA TO RESERVE #2 ~ 130.580m<sup>2</sup>

BASED ON GRAVITY DISCHARGE = 60 l/s

$V_{100} = 4744m^3$

EXISTING NATURAL SURFACE LEVEL @ LOW POINT ~ RL 47.00

MAXIMUM DEPTH OF RESERVE FOR GRAVITY DISCHARGE = 1.38m

MAXIMUM DESIGN WATER DEPTH = 1.08m

RESERVE AS SHOWN AREA TOTOP 6425m<sup>2</sup>

VOLUME AVAILABLE TO DESIGN WATER LEVEL  $\Rightarrow$  4830m<sup>3</sup> (1.0m DEEP)

VOLUME AVAILABLE TO TOP OF BASIN = 6460m<sup>3</sup>

CHECKED

## Attachment D

### Community Engagement Plan & Project Timeline

# Community Engagement Plan

## 1. Purpose of the Community Engagement Plan

A fundamental component of preparing the Development Plan for the second Stage of Koorlong will be consultation and engagement with the local community, key stakeholders, government agencies and public authorities.

An appropriate level of community consultation is necessary to ensure that the Development Plan appropriately identifies and responds to the primary issues for the area and ensures transparency in the decision making process for the future of Koorlong and this plan seeks to achieve this.

## 2. Project Overview & Background

The current Development Plan forms the second stage of the Koorlong Development Plan area and will build on the previous consultation and community engagement undertaken as part of the first stage of the development.

It is noted that significant community consultation has already been undertaken as part of the preparation of the previous Development Plan prepared for the site, as well as during the preparation of the *Mildura Housing and Settlement Strategy* (MHSS) in 2013 which identified the subject land for Low Density Residential (LDRZ) purposes.

Notwithstanding, the subject Development Plan has been prepared in consultation with relevant landowners and service providers and will be exhibited for a period of 28 days in accordance with the *Planning and Environment Act 1987* so as to allow the general public, Council, relevant public authorities, as well as other relevant/interested parties the opportunity to comment on the draft Development Plan.

## 3. Key Stakeholders

This Community Engagement Plan has been prepared to identify and consult the key individuals, community groups, industry stakeholders and government agencies which will need to be engaged during the project.

The key stakeholders to be engaged as part of the project include:

- Council (including council officers and Councillors);
- Community (including affected and adjoining owners and the general public);
- Government Agencies/Public Authorities (including Vic Roads, Lower Murray Water and Mallee Catchment Management Authority);
- Any other stakeholders not identified by this plan.

## 4. Community Engagement Methods

Written notification of the community consultation will be provided in a local newspaper and on Councils' website. In addition to this, any affected landowner/s will be notified in writing, as well as any Public Authorities, Government Agencies and other key stakeholders as determined by Council.

The written notice will contain:

- a brief description of the intended outcomes of the Development Plan;
- an indication of the land which is affected by the Development Plan;
- information on where and when the Development Plan can be inspected;
- the name and address of Council for the receipt of submissions; and
- the closing date for submissions.

During the public exhibition period the following documents will be placed on public exhibition:

- the Development Plan inclusive of any maps and figures;
- any technical information relied upon by the Development Plan; and
- relevant council reports.

An electronic copy of all of the above information to be placed on public exhibition will also be made available upon request.

## **5. Response to Submissions Received**

Following the completion of the formal public exhibition period, an assessment of all submissions received and issues raised will be undertaken. Where relevant, the draft Development Plan will be amended to address matters raised in submissions.

A copy of the final draft Development Plan will then be presented to council, including a response to all submissions received during the public exhibition process.

## **6. Project Finalisation**

Upon endorsement of the final Development Plan, Council will notify all submitters so as to 'close the feedback loop'.

# Project Timeline

The project timeline for the Development Plan is outlined in **Table 1**.

It is noted however, that there are many factors that influence compliance with the timeframe including, Council staffing resources, the cycle of council meetings and submissions received and issues raised. Consequently, the timeframe should be regarded as indicative only.

**Table 1** – Project Timeline (Indicative)

Project Milestone	Task Commencement	Task Completion
<b>Lodgement with Council</b> Lodge draft Development Plan with Council including undertaking any required amendments.	Early April 2018	December 2018
<b>Report to Council</b> Report to Council Meeting seeking endorsement to place the draft Development Plan on public exhibition.	Early February 2019	Late February 2019
<b>Public Exhibition</b> Undertake public exhibition of the draft Development Plan in accordance with any requirements of Council.	Early March 2019	Early April 2019
<b>Consider Submissions &amp; Finalise Document</b> Council to consider, respond and report on submissions received and issues raised (if any) and where necessary, recommend relevant changes to the Development Plan.	Early April 2019	Late April 2019
<b>Finalisation</b> Council adopt the final Development Plan.	May 2019	May 2019



# Attachment E

## Copies of Correspondence with Local Authorities

11 June 2014

SN12/005632  
AO'R

**Mildura (Head Office)**

Telephone 03 5051 3400  
Facsimile 03 5051 3480  
741-759 Fourteenth Street  
Mildura Vic 3500  
PO Box 1438  
Mildura Vic 3502  
AUSDOC DX 50023

**Swan Hill (Area Office)**

Telephone 03 5036 2150  
Facsimile 03 5036 2180  
73 Beveridge Street  
Swan Hill Vic 3585  
PO Box 1447  
Swan Hill Vic 3585  
AUSDOC DX 30164

**Kerang (Area Office)**

Telephone 03 5450 3960  
Facsimile 03 5450 3967  
56 Wellington Street  
Kerang Vic 3579  
PO Box 547  
Kerang Vic 3579  
AUSDOC DX 57908

All Emergencies  
1800 808 830

[www.lmw.vic.gov.au](http://www.lmw.vic.gov.au)

ABN 18 475 808 828



Michael Freeman  
Freeman & Freeman  
PO Box 2135  
Mildura Vic 3502

Dear Michael

**Mildura Planning Scheme Amendment C84  
Benetook Avenue & Twenty First Street, Koorlong  
Your Ref: 8251**

I refer to your letter dated 12 May 2014 advising that you are proceeding to prepare the necessary Development Plan over your clients land.

As previously advised, I confirm that urban water supply and sewerage services can be provided to the development subject to the developer meeting LMW's 'Standard Conditions for the Provision of Water Supply & Sewerage Infrastructure in Subdivisions'.

I also advise that if lot sizes within the development area are reduced below 4,000m<sup>2</sup>, LMW will evaluate the sewerage servicing options as a conventional gravity system with a central pumping station may be more preferable than a low pressure sewerage system.

Further consultation and investigations into servicing the additional 22Ha of adjoining land identified in the Housing & Settlement Strategy will be required prior to any further rezoning.

Please contact Anne O'Rourke on 5051 3446 should you require further information.

Yours sincerely



**KEVIN MURPHY**  
GENERAL MANAGER TECHNICAL SERVICES

Powercor Australia Ltd  
ABN 89 064 651 109

General Enquiries 132 206  
Service Difficulties 132 412

Mildura Business Centre  
148 Eleventh Street Mildura  
Address all correspondence to  
P.O. Box 544  
Mildura Victoria 3502  
Facsimile (03) 54495012

[www.powercor.com.au](http://www.powercor.com.au)



16 May 2014

Mr Michael Freeman  
Freeman & Freeman  
PO Box 2135  
MILDURA VIC 3502

Dear Michael,

**MILDURA PLANNING SCHEME AMENDMENT C84  
At Benetook Avenue & Twenty-First Street, Koorlong**

Thank you for your letter ref: 8251 dated 12<sup>th</sup> May 2014 in which you seek Powercor's response concerning Mildura planning scheme amendment C84 to rezone lands from Farming (FZ) to Low Density Residential (LDRZ) and the inclusion of a Development Plan Overlay by the MRCC.

Powercor augment and extend its electrical network on the basis of reliability improvement, load growth or customer initiated works. The proposed rezoning of these lands would have no impact on our existing assets or create any impediment to future works that may be necessary in servicing our current customers or the future development of the lands.

Yours sincerely

A handwritten signature in blue ink, appearing to be "John Hardie", with a stylized flourish at the end.

John Hardie  
Regional Asset Manager



Application No (CMA Ref): F-2014-34  
Document No: 1  
OC No: 2014356  
Your Ref No: 8251  
Date: 10 June 2014

Michael Freeman  
Freeman & Freeman  
Po Box 2135  
Mildura, Victoria 3502



Dear Michael,

**Application Number (CMA Ref): F-2014-34**

**Location**

**Street:** *Benetook Avenue & Twenty-First Street  
Koorlong, Victoria 3501*

**Cadastral:** *Lot 1, PS712037, Parish of MILDURA*

**Regarding: Mildura Planning Scheme Amendment C84**

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Thank you for your enquiry received at the Mallee Catchment Management Authority (CMA) on 16 May 201 in regard to the preparation of the Development Plan to be included as part of the Mildura Planning Scheme Amendment C84.

This letter is to confirm that the authority has no other particular matters over and above what has been detailed by council for the preparation of the Development Plan.

As you would be aware, the Mallee CMA's submission to this amendment highlighted that some sections of the above land proposed for rezoning were impacted by stormwater flooding in 2011. The Mallee CMA included this in its submission in order to ensure any potential issues associated with future storm events, are addressed.

If you have any specific questions in regard to Mallee CMA's submission on land impacted by the stormwater flooding in 2011, or you have any other queries, please do not hesitate to contact me on **(03) 5051 4360**. To assist the CMA in handling any enquiries please quote **F-2014-34** in your correspondence.

Yours sincerely

A handwritten signature in blue ink, appearing to read "Darren Wilson", with a long horizontal stroke extending to the right.

Darren Wilson  
**Planning and Reporting Officer**

Information contained in this correspondence is subject to the definitions and disclaimers below.

### **Definitions and Disclaimers**

1. The area referred to in this letter as the 'proposed development location' is the land parcel(s) that, according to the Authority's assessment, represent(s) the location identified by the applicant. The identification of the 'proposed development location' on the Authority's GIS has been done in good faith and in accordance with the information given to the Authority by the applicant(s) and/or local government authority.
2. While every endeavour has been made by the Authority to identify the proposed development location on its GIS using VicMap Parcel and Address data, the Authority accepts no responsibility for or makes no warranty with regard to the accuracy or naming of this proposed development location according to its official land title description.
3. **AEP** as Annual Exceedance Probability – is the likelihood of occurrence of a flood of given size or larger occurring in any one year. AEP is expressed as a percentage (%) risk and may be expressed as the reciprocal of ARI (Average Recurrence Interval).
4. **ARI** as Average Recurrence Interval - is the likelihood of occurrence, expressed in terms of the long-term average number of years, between flood events as large as or larger than the design flood event. For example, floods with a discharge as large as or larger than the 100-year ARI flood will occur on average once every 100 years.
5. **AHD** as Australian Height Datum - is the adopted national height datum that generally relates to height above mean sea level. Elevation is in metres.
6. No warranty is made as to the accuracy or liability of any studies, estimates, calculations, opinions, conclusions, recommendations (which may change without notice) or other information contained in this letter and, to the maximum extent permitted by law, the Authority disclaims all liability and responsibility for any direct or indirect loss or damage which may be suffered by any recipient or other person through relying on anything contained in or omitted from this letter.
7. This letter has been prepared at the request of the local government authority for the purpose of a Section 55 referral under the Planning and Environment Act 1987, for a proposed **Other Planning Scheme Amendment** and is for the use only of the party to whom it is addressed and no responsibility is accepted to any third party for the whole or any part of its contents. Neither the whole nor any part of this letter or any reference thereto may be included in any document, circular or statement without the Authority's written approval of the form and context in which it will appear.
8. The flood information provided represents the best estimates based on currently available information. This information is subject to change as new information becomes available and as further studies are carried out.
9. ***The responsible authority may use this information within 90 days of this letter.***



Application No (CMA Ref): F-2014-34  
Document No: 2  
OC No: 2014381  
Your Ref: 8251  
File No: 1634-2-101  
Date: 10 June 2014

Michael Freeman  
Freeman & Freeman  
Po Box 2135  
Mildura, Victoria 3502

Dear Michael,



**Application Number (CMA Ref): F-2014-34**

**Location**

**Street:** *Benetook Avenue & Twenty-First Street  
Koorlong, Victoria 3501*  
**Cadastral:** *Lot 1, PS712037, Parish of MILDURA*

**Regarding: Mildura Planning Scheme Amendment C84**

---

Thank you for your enquiry received at the Mallee Catchment Management Authority (CMA) on 11 June 2014 in regard to the preparation of the Development Plan to be included as part of the Mildura Planning Scheme Amendment C84.

The following information is based on advice provided to Jason Rivett in an email on 30 October 2013. As stated in the email, the Mallee CMA has no issues with the proposal for the Low Density Residential subdivision to:

- Include retention basins to initially collect stormwater;
- Connect the retention basins to existing stormwater drains which flow to Koorlong Lake; and
- Upgrade existing stormwater pipes to cater for increased flows.

The increased flows to Koorlong Lakes as a result of the above, will be beneficial to the Murray Hardyhead fish population as it will help to maintain water levels in the lake. However, the only addition the Mallee CMA would require to the above is the installation of a gross pollutant trap on the retention basin. This will capture rubbish preventing it from reaching Koorlong Lake.

Should you have any queries, please do not hesitate to contact Darren Wilson, Planning and Reporting Officer, on (03) 5051 4360. To assist the CMA in handling any enquiries please quote **F-2014-34** in your correspondence.

Yours sincerely

A handwritten signature in blue ink, appearing to be "Jo Latta".

Jo Latta  
**Acting Chief Executive Officer**