

TALBOT STRUCTURE PLAN TECHNICAL ASSESSMENTS

Prepared by **Hansen Partnership**
for **Shire of Central Goldfields**

February 2023

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PROJECT OVERVIEW



Introduction

Central Goldfields Shire Council has engaged Hansen Partnership and their project partners (SGS Planning & Economics and Hello City) to undertake a structure planning process for Talbot. Numerous council strategies and reports have highlighted the provision of sewerage infrastructure to Talbot as a key priority.

However, Talbot is a unique and historic township that has not seen any significant development over the previous decades, and so any proposal that might fundamentally alter the character of the township must be carefully considered.

As such, alongside more technical studies related to the physical and economic parameters for developing a sewerage system for the township, a structure plan is being prepared. The intention and objectives of preparing such a plan is to identify any planned future subdivision and development zones to inform considerations of any sewerage scheme, and to ensure future development is managed in accordance with Council and community objectives for the township.

What is a structure plan?

A Structure Plan is a strategic planning document which has the aim of giving effect to the policies and objectives set out for use and development of land in the Planning Policy Framework to provide effectively for community needs. Structure Plans should provide the framework for the long term development of a place by defining the preferred nature of future growth and how this growth will be managed. Structure Plans will guide the major change to land use, built form and public spaces that together can achieve social economic and environmental objectives for a place.

A coordinated plan allows a wide range of stakeholders, service authorities, State government departments and internal Central Goldfields internal departments to all 'read from the same page' to produce a coherent outcome and certainty for both residents and the Council, as the Responsible Authority.

A Structure Plan also provides the framework for statutory planning controls which will be implemented through the Central Goldfields Planning Scheme. Structure Plans are informed by extensive public consultation and discussion. While everyone may not agree on every aspect of the plan, it should reflect broad community consensus.

How will the Talbot Structure Plan be prepared?

This document is one of three key outputs that essentially form the basis for considering options for the township's development. These three outputs are:

- The Talbot Technical Assessments (this document, prepared by Hansen partnership): this essentially documents the existing conditions which will inform any plan, including the physical and policy context. This covers everything from climate risks to heritage to development capacity,
- Talbot demographic and growth assessment: prepared by SGS Planning & Economics, this document looks at all the factors which have influenced growth in Talbot in the past, and what might influence growth in the future. It provides growth scenarios which can help understand how much land may be required for development should the town be seweraged
- Talbot Futures community engagement: the thoughts and knowledge of the Talbot community are the other key input to this project. While the existing community plan will be reviewed it's important to zoom in on the communities understanding of place (through the walking audit) and to confirm what values the team will need to ensure are protected should the township grow. Hello City who are highly experienced in working with communities to establish their priorities.

Following this first stage of work in understanding Talbot, the team will start to develop some options for how and where the town might grow. These will be refined and considered alongside the vision for Talbot that will start to emerge from the first stages of the project. These will be documented and will be available for the community and other stakeholders to review and confirm prior to the structure plan being prepared.

Once the vision and preferred growth scenarios have been finalised, the team will work to flesh out the structure plan. This will guide not only the controls which apply to private land (through the Central Goldfields Planning Scheme) but also provide a holistic understanding of where council and investment for other partners is needed to support preferred growth scenarios.

The study area

The Talbot locality is much wider than just the core township area. The structure plan will be focussed primarily on the area zoned Township Zone under planning policy. It will however, consider land immediately around the township, and connections to key sites such as the Recreation Reserve. However, it is recognised that both from an economic and social perspective who relates to the township is just as important as who lives within township zoned areas. As such, input will be sought from those around this core area, noting many residents live on larger lots outside the township through any engagement processes. The contribution of these residents to the settlements catchment for services and facilities will also be considered, the key study area is shown by the red outline on Figure 1 but the broader area shown is being considered as well.



Legend

- Existing Township Boundary
- Historic Core
- Scandinavian Crescent Precinct

Project Ref: 22.0403
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Scale: 8,000 @A4
Date: 11.10.22
Revision: A

Figure 1: study area aerial

STRATEGIC CONTEXT



Talbot

Talbot is located approximately 130 kilometres north-west of Melbourne between Maryborough and Clunes. Talbot sits on the Maryborough to Melbourne railway line while the Ballarat to Maryborough Road provides the main access to Talbot, from Maryborough to the north, and Clunes/ Creswick and Ballarat to the south. Talbot is situated within a broadly agricultural and forested public open space landscape setting. Volcanic rises are a significant landscape feature within Talbot's broader landscape context.

Goldfields were opened in the Talbot district in 1852 and Talbot rapidly grew to become one of Victoria's most significant gold rush townships. In 1865 Bailliere's *Victorian Gazetteer* recorded Talbot as having two breweries, a soap and candle works, a hospital, a mechanics' institute, a county and other courts, 19 hotels, private schools and a National school. While much of this heritage fabric is no longer present Talbot retains an incredibly intact and rich heritage. It is graced with fine civic buildings and charming cottages, while the main street of Talbot is amongst the most intact heritage streetscapes in the Goldfields region.

Talbot's central 'core' is centred around Scandinavian Crescent and Camp Street, but the township has no defined commercial or social 'heart'. Key focal points for commercial and social activity include the London House Café, the adjoining community garden and the market square, where the Talbot Farmers Market is held every month, alongside the Town Hall Market, attracting thousands of visitors. Talbot's central 'core' was laid out before the motor vehicle meaning the urban form is walkable, legible and on a human scale. Talbot's town square, museum, local pub, book stores, library and train station are all within comfortable walking distance of each other. The Talbot railway station, located on the north-east edge of the township, is within a five-minute walking distance of the central 'core'.

Most existing urban development within Talbot is located to the east of the Ballarat-Maryborough Road and Back Creek, which runs parallel to the road and separates the main township area from Hard Hill Reserve and the towns Recreation Reserve. The central township area is surrounded by lower density lots in the Rural Living Zone, particularly to the south and west.

There are also numerous vacant lots within the township itself, particularly to the western and northern edges. Except for reticulated sewer, Talbot is currently connected to all urban services. Established vegetation is a key characteristic of the township, including significant trees and several very beautiful and carefully managed private gardens. Existing community facilities are dispersed throughout Talbot rather than clustered and the Talbot Recreation Reserve is located on the west side of the Ballarat-Maryborough Road, disconnected from the township.



Market Square



Vacant land within Talbot



Historic observatory



Garden character

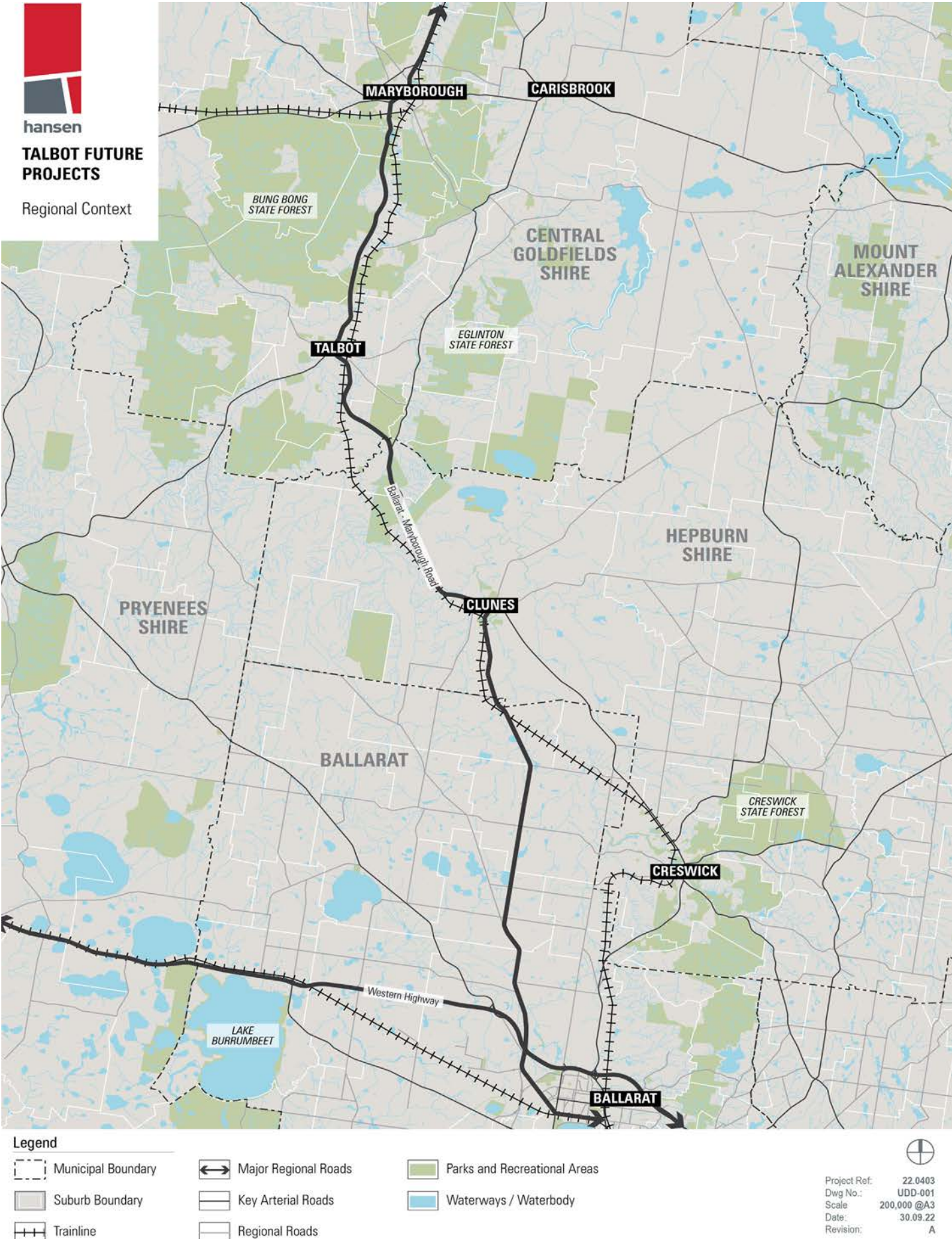


Figure 2: Regional context

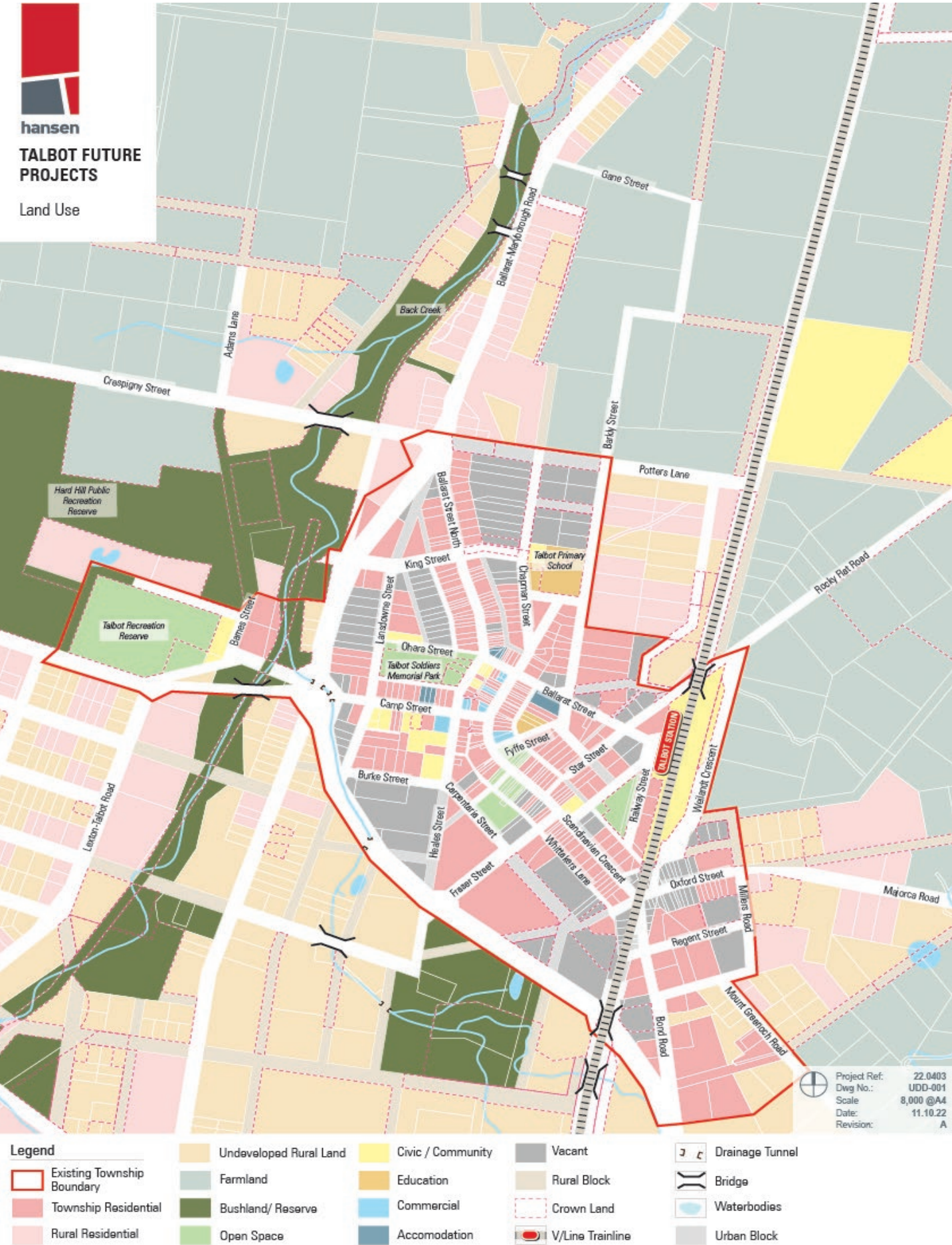


Figure 3: Existing land use

Existing Policy Context

Existing planning policy in Talbot is guided by a range of documents. Key among these are the 2021-2025 Council Plan (which represents the overarching ambitions of the current Council) and the Central Goldfields Planning Scheme, which consists of the Municipal Strategic Statement (the vision and strategic directions), Local Policy (which is used by planners to guide discretionary decisions) as well as Zone and Overlay controls.

Council Plan

The 2021-2025 Council Plan sets out the following Community Vision Statement, which is an articulation of the long-term aspirations of the community for what the community would like the Central Goldfields to be like ten years from now.

"In 2031, we are an inspiring, thriving and prosperous community of choice, we've taken bold steps towards growing our economy and our community is full of optimism and opportunities.

We are kind, connected and inclusive and we nurture creativity, leadership and innovation.

We value and invest in our young people and our health and wellbeing is high.

We live sustainably, cherish and protect our environment and heritage and we have access to outstanding jobs, education, health, community services, infrastructure, and affordable housing".

The 2021-2025 Council Plan details the actions that Council will take to help achieve this vision. Some of those actions pertain to / influence land use and development directions, including:

- Support improved health and wellbeing outcomes guided by the priorities of the Municipal Public Health and Wellbeing Plan.
- Increase the quality and number of walking and cycling paths and trails.
- Advocate for affordable and suitable housing to meet community needs.
- Build community resilience to the impact of climate change by facilitating a collaborative approach to climate action, in partnership with the community.
- Support a diversity of housing stock.
- Support the provision of affordable housing.
- Improve and maintain our townships 'high streets' to be attractive, engaging, inclusive and safe.

- Provide and maintain open spaces, parks, green spaces, playgrounds and reserves.
- Increase natural shade in open and key public spaces.
- Increase the quality and number of walking and cycling paths and trails.
- Beautify and maintain open spaces and places, encouraging pride of place.
- Plan for age friendly infrastructure such as footpaths, seating with a focus on main streets, near schools, aged care facilities, key services and high pedestrian routes.
- Actively plan and seek funding opportunities to develop infrastructure including recreation facilities and incorporate CPTED (crime prevention through environmental design) principles to meet community needs.
- Plan for growth that is low impact and sensitive to Central Goldfields heritage.
- Protect, maintain, and preserve cultural and heritage assets.

The development of a Structure Plan for Talbot can strongly assist in the implementation of such actions.

Central Goldfields Planning Scheme Summary

The full complement of relevant local policy directions from within the Central Goldfields Planning Scheme can be found at Appendix 1. The relevant local policy directions can be summarised in the following key aspirations guiding the townships' future:

- Protect Talbot's established identity, which is significantly defined by its heritage character including:
 - Scandinavian Crescent and Camp Street; and
 - The townships' historic urban form, heritage buildings and streetscapes.
- Implement a range of liveability, infrastructure and urban design initiatives to make Talbot a great place to live.
- Ensure Talbot continues to meet the mainly day to day convenience shopping needs of residents.
- Encourage a more compact urban form, including through the development of infill lots that are suitable for development.

- Support the provision of low density and rural living opportunities around the periphery of Talbot where they do not conflict with environmental and agricultural objectives and where infrastructure can be supplied in a cost-effective way.
- Ensure that future growth and development does not detrimentally impact upon the districts' volcanic rises.
- Support investment in and diversification of Talbot's economy including through emerging and potential growth sectors such as tourism (particularly near heritage places and natural environments), renewable energy, resource recovery and other green industries, new manufacturing and food processing industries, and flexible zoning provisions.

Zones and Overlays

A range of Zone and Overlay controls already affect the township (see Figures 5 and 6). These are also outlined in more detail at Appendix 1.

However, in planning for the future existing zone and overlay controls are perhaps of less relevance than the key directions local policy and the aspirations of the community, as this Structure Plan is likely to lead to changes to both existing zone and overlay controls.

That said, some existing planning overlays will have a more significant influence on future planning for the township, in particular overlays associated with fire, erosion, inundation and salinity management will need to be carefully considered in determining appropriate areas for growth.

The Heritage Overlay will also impact on the potential for growth and development within parts of the township, including potentially influencing future built form.

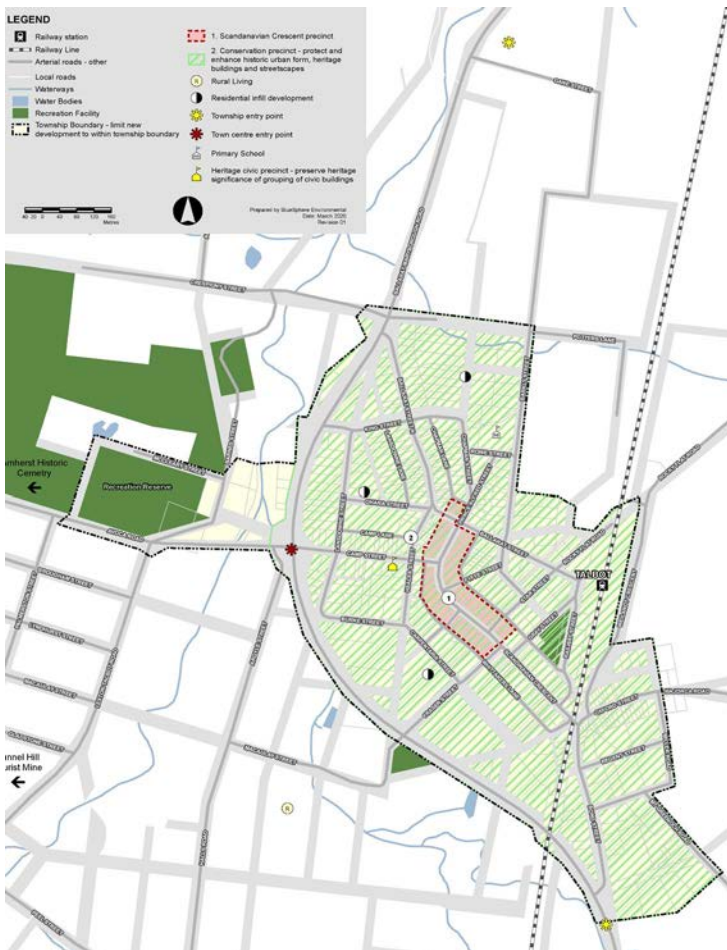


Figure 4: Existing Talbot Structure Plan

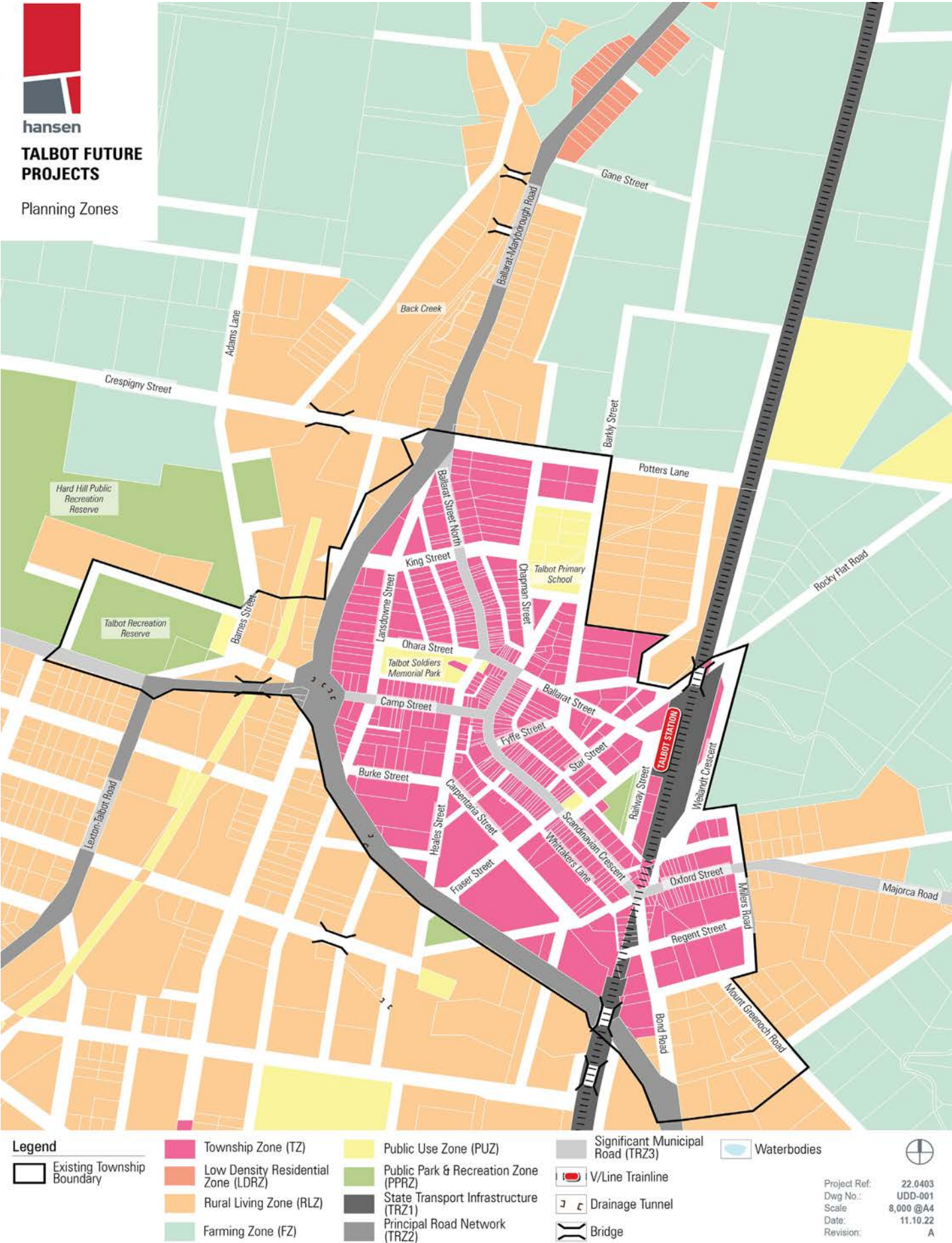


Figure 5: Existing Zoning

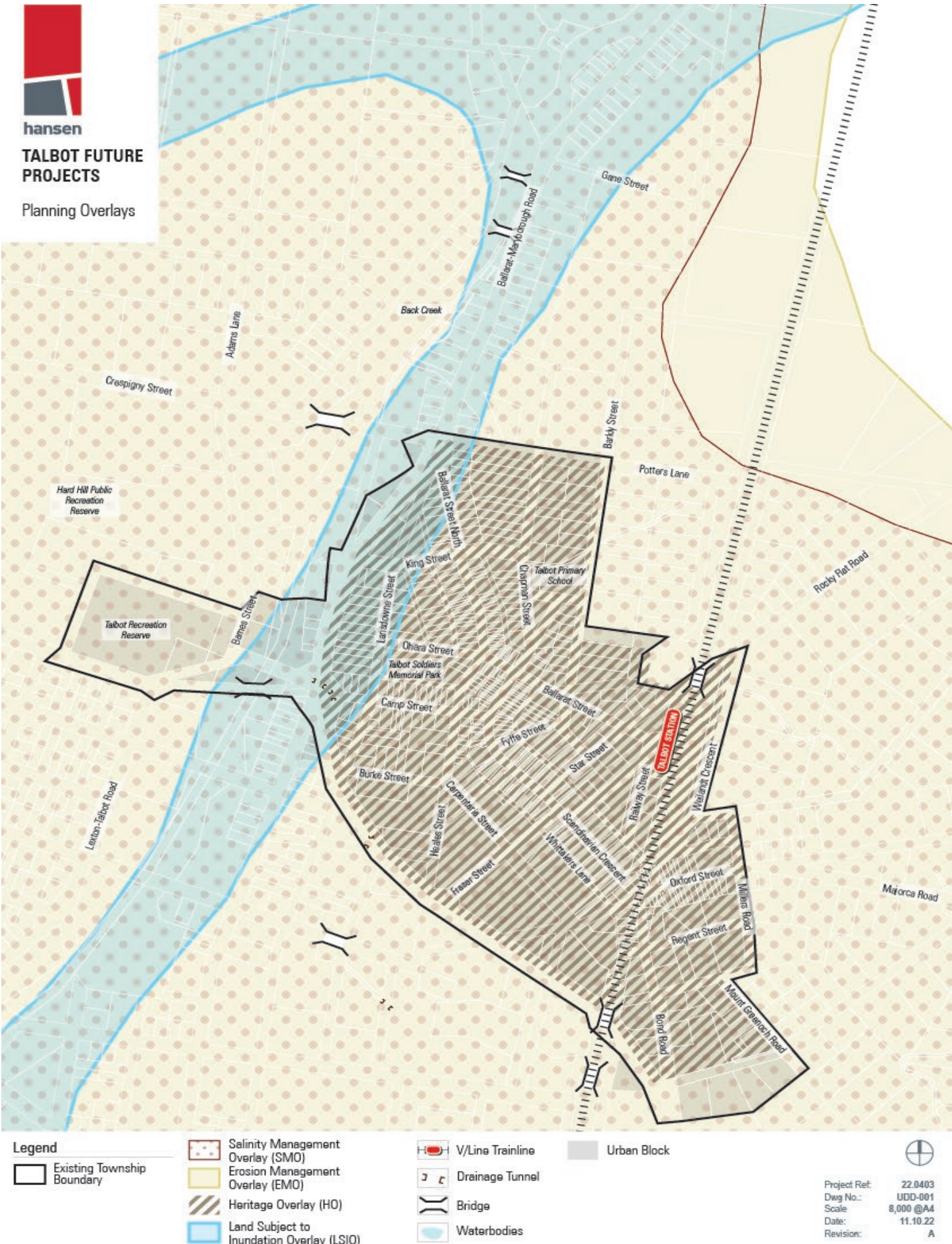


Figure 6: Existing Overlays

Other Strategic Documents

Regional Documents

Loddon Mallee South Regional Growth Plan

The strategic land use plan for the Loddon Mallee South region, to guide growth and change for the next 30 years (see Figure X opposite). The plan covers the local government areas of the Central Goldfields Shire, the City of Greater Bendigo, Loddon Shire, Macedon Ranges Shire and Mount Alexander Shire. The Central Highlands Regional Growth Plan provides broad direction for regional land use and development in the region and more detailed planning frameworks for key regional centres.

Talbot is identified as a 'small town' in the Regional Growth Plan and future directions for such small towns include:

- Support the ongoing role of the region's small towns and settlements.
- Invest in liveability, infrastructure and urban design initiatives to make the region's small towns great places to live.
- Support the sustainability of small towns through investment and diversification of their economies and appropriate flexible zoning provisions.

In relation to Talbot, the Plan includes a future regional land use settlement action to *"investigate the sewerage of some townships, including Talbot and Newbridge"*.

Loddon Mallee Climate Ready Plan

The Plan prioritises climate change actions to be taken at the regional level that centre on the needs people most disproportionately impacted by climate change. Amongst other matters the Plan encourages alternative housing models (especially for the most disproportionately impacted) that better protect from the impacts of climate change.

The plan suggests the need to:

- Create climate ready guidelines for developers and incentives for new builds to be more climate resilient
- Encourage green space such as green roofs and walls in our cities and towns
- Investigate innovative water systems such as rainwater harvest through porous surfaces
- Increase community resilience to disaster through microgrids with energy storage
- Create more walking, cycling and electric vehicle transport infrastructure
- Upgrading affordable public transport between towns to include more sustainable and frequent bus and train services

- Support regional councils to update, repurpose and retire outdated community infrastructure
- Support climate ready planting to provide urban cooling and connect residents with community spaces
- Establish programs that support the development and linking of native flora and fauna wildlife corridors and refugia on both public and private land
- Prioritise permanent protection of areas that serve as native wildlife corridors
- Build and support programs that aim to create permanent bio links around wetlands and along natural watercourses
- Plan for and build more green-blue infrastructure in urban developments that support native flora and fauna populations

North Central Regional Catchment Strategy 2021 - 2027

The overarching strategy for land, water and biodiversity management within the north central region. The Strategy provides a roadmap for all stakeholders to care for the regions' catchments over the next six years. Identifies Talbot as falling within the "Western Goldfields" local area.

There are no core catchment assets located in proximity to Talbot. Talbot does however, sit in the broader Maryborough - Paddy Ranges region which has been identified as a Key Area for action on Biodiversity as part of climate change responses.

The Regional Catchment Strategy is also a key source, along with the Dja Dja Wurrung Country Plan, for the documented cultural Values of the land on which Talbot has developed.

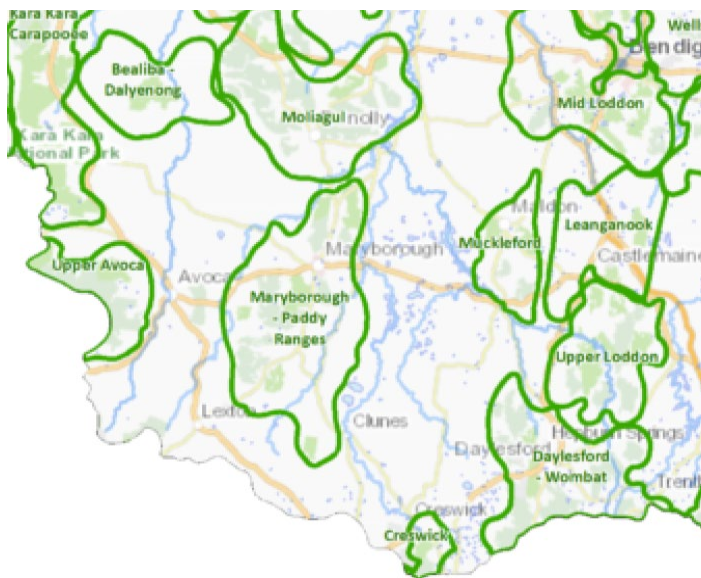


Figure 7: Regional Catchment Strategy Biodiversity Assets

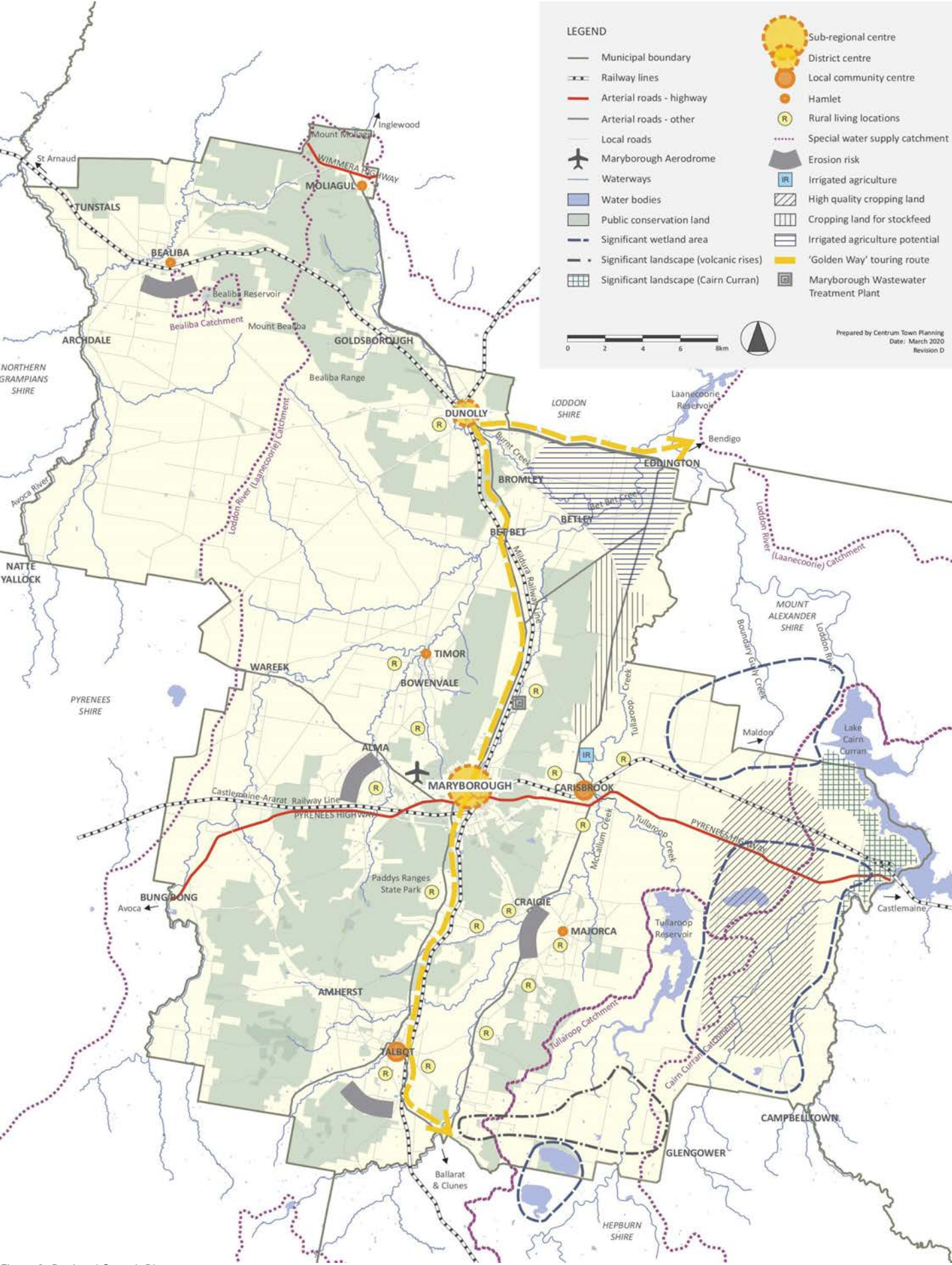


Figure 8: Regional Growth Plan

Municipal Documents

Central Goldfields Shire Community Vision 2031

Under the Victorian Local Government Act 2020, all councils across Victoria are required to prepare a ten-year Community Vision using deliberative engagement practices. The Community Vision frames the long-term aspirations of the community.

Talbot & District Community Plan 2030

Sets out the communities' vision for Talbot for the next 10 years and the key actions through which the vision will be realised. Key actions include (amongst others) actions pertaining to economy, natural environment, built environment. The development of the Structure Plan should be cognisant of, and where feasible seek to give effect to, the relevant key actions detailed in the Community Plan. Where relevant, these are referenced within the Technical Assessments. Of key relevance to this project are the following:

Key aspirations of the community expressed in that document will need to be tested and confirmed through this process where they are relevant to spatial planning, and are noted in relevant sections, but the overarching ambitions are that Talbot will have / be:

- sewerage
- a growing and sustainable population / well-attended primary school and pre-school /
- well maintained and protected
- heritage and community buildings
- a vibrant economy
- access to local health and wellbeing services
- an arts and culture precinct

Central Goldfields Shire Council Plan 2021–2025

The Council Plan is the key strategic document that guides Council decision-making and resource allocation over the next four years and provides strategic direction for the delivery of the Central Goldfields Community Vision. Sets out a series of strategic priorities and associated actions by which Council seeks to deliver the vision. It includes strategic priorities and actions that are relevant to the development of a Structure Plan. Of key relevance to this project are the following:

- Advocate for the Ballarat – Maryborough Growth Corridor to drive prosperity (population growth and investment) into Central Goldfields Shire (*Talbot is located within this corridor*)

- Promote World Heritage Listing of the Central Victorian Goldfields (*would suggest that protection of Talbot's heritage building stock will be of increased importance*)

In considering how 'places' within the Shire develop the following aspirations of the Council Plan are of relevance to this project:

- Improve and maintain our townships 'high streets' to be attractive, engaging, inclusive and safe.
- Provide and maintain open spaces, parks, green spaces, playgrounds and reserves. / Beautify and maintain open spaces and places, encouraging pride of place. Increase natural shade in open and key public spaces.
- Increase the quality and number of walking and cycling paths and trails. / Plan for age friendly infrastructure such as footpaths, seating with a focus on main streets, near schools, aged care facilities, key services and high pedestrian routes.
- Utilise planning process to facilitate/encourage appropriate development.
- Plan for growth that is low impact and sensitive to Central Goldfields heritage. / Protect, maintain, and preserve cultural and heritage assets.
- Partner with Council's to advocate to UNESCO World Heritage Listing for the Central Victorian Goldfields Region.
- Provide diverse waste collection and recovery points.

Central Goldfields Shire Population, Housing and Residential Strategy 2020

This strategy reviewed population trends and population forecasts for the Shire, estimated likely future housing requirements, assessed the adequacy of the Shire's supply of zoned residential land to meet future housing requirements, reviewed the current planning framework for future residential development and identified the key residential planning issues that Council will need to address going forward. In relation to Talbot, the Strategy contains the following relevant recommendations:

- Not designate additional land or support any proposal for rezoning additional land for housing (Recommendation 21).
- Explore options for cost-effective waste-water management technologies that might enable further residential development. (Recommendation 24)
- Until such time as a wastewater treatment solution is obtained, take no action to vary the existing zoning in and potential residential land supply. (Recommendation 25)

Central Goldfields Shire Council Integrated Transport Strategy 2020 - 2030

Sets out a strategy to address the challenges and opportunities that the Shire's transport network currently faces, with a view to ensuring the network helps to achieve Council's overall vision for the Shire 'to be a vibrant, thriving and inclusive community'. Through the implementation of this Strategy, Council aims to provide greater transport choice to our community by making low-cost and healthy transport options safer and more desirable. Key recommendations for Talbot are included in the relevant Technical Assessment.

Central Goldfields Shire Walking And Cycling Strategy 2017-2026

Provides a strategic framework to guide Council in relation to walking and cycling opportunities such as paths / trails, infrastructure, events, programs and services for the next ten years. The aim of the strategy is to ensure that the Central Goldfields Shire is best positioned to create a walking and cycling friendly community, within its resource capacities.

The Strategy contains a Small Towns Trail Framework (applicable to Talbot) which details recommended paths / trails for the township. The aim of the Small Towns Trail Framework is to ensure that walking and cycling become the easy and safe choice for transport for both residents and visitors to the settlement. This is discussed further in the relevant Technical Assessment.

Talbot Urban Design Guidelines Report

The guidelines establish the principles and planning provisions which, when followed, will ensure that new development within the township of Talbot protects and enhances the character of Talbot, in particular its core township heritage precinct. The guidelines are designed to serve as a primary reference guide for future capital works and private investment in Talbot. These are discussed further in the Urban Design Assessment, While their findings should be reflected in the growth planning of the township they will need to be subject to their own implementation program if they have not yet been implemented into the Central Goldfields Planning Scheme.

Active Central Goldfields Recreation and Open Space Strategy 2020 To 2029

Establishes Council's direction for the provision of high-quality open spaces and sports and recreation facilities with a view to increasing the community's opportunities to be healthier and more active more often. Includes criteria for assessing any future proposals for land to be used as open space, and strategies and actions for open space provision. The Structure Plan should

provide broad guidance on open space provision that are consistent with the criteria, strategies and actions detailed in the Recreation and Open Space Strategy, discussed further in the relevant Technical Assessment.

Sustainability Action Plan 2012-2020

The Sustainability Action Plan provides a framework for sustainability planning, decision-making and action within the Shire to achieve improved environmental sustainability for the Central Goldfields Shire council and the community. Establishes key priority areas for environmental sustainability action (Energy Security, Transport, Human Water Use, Food Quality and Security, Built Environment and Land Use, Waste Management, Ecosystem Enhancement) and defines outcomes, strategies and targets for each key priority area.

Neighbourhood Safer Places Plan

The 2009 Victorian Bushfires Royal Commission recommended that neighbourhood safer places (NSP's) be identified and established to provide persons in bushfire affected areas with a place of last resort during a bushfire. This Plan contains guidelines to assist the Council in identifying, designating, establishing, maintaining and decommissioning NSP's. Under the criteria Talbot's NSP is likely to be sufficient, even with growth, but is discussed further in the Bushfire Assessment which informs this Structure Plan.

Tree Management Plan 2020-2024

The Tree Management Plan defines Council's approach to the management of tree assets, sets out priorities for tree programs and works, and is designed to support and complement Council's focus on a greening approach and achieving urban cooling. The Structure Plan should provide broad guidance on future species selection for streets and open spaces to assist achieve Council's greening and urban cooling objectives (noting some guidance is provided through both the Urban Design Guidelines report and climate resilience plans.

Positive Ageing Strategy 2021-2026

The aim of this Strategy is to ensure an appropriate Council response when planning, developing and implementing policies, programs and services that address changing needs within the community. Through this Strategy Council seeks to promote positive ageing by becoming an Age Friendly Shire. The Structure Plan will need to ensure its key land use and development directions are consistent with the goals and objectives of the Positive Ageing Strategy.

Central Goldfields Shire Priority Projects Plan

Identifies Council's top priorities for future development and investment. Notes that Talbot is well placed to accommodate some of the renewed regional growth, and to take advantage of economic opportunities, but is currently constrained by a lack of wastewater infrastructure. Accordingly, one of Council's top priorities is *"Detailed design and costings for a sewerage system to connect Talbot to a reticulated sewerage system and Planning Scheme Amendment to implement a Structure Plan to plan for future land use, population and housing growth"*. Also noted that a priority of the current planning process is *"retaining the charm and heritage character that is valued by the Talbot community"*.

Climate Action Plan 2022-2030

Sets out the actions that Council has committed to, to address the impacts of climate change. Details six priority areas for mitigation and adaptation (Education, collaboration, mobilisation, Health and wellbeing, Renewable energy & energy efficiency, Built enviro and transport, Waste and the circular economy, Land and water) and associated actions that Council will undertake in each priority area. Key implications for the Structure Plan are:

- Our energy is renewable, equitable and secure
- Our Council and community transition off natural gas
- Our Council and community adopt energy efficient behaviour and technologies
- Our built environment incorporates environmentally sustainable and resilient design
- Our built environment has more green spaces and canopy cover
- Our transport is low emissions and accessible to all
- Our community has the knowledge and opportunity to recycle right
- Our natural environment and cultural assets are protected, enhanced and enjoyed
- Our water systems are healthy, resilient, and secure
- Our land use industries are adaptive, innovative and sustainable

Economic Development Strategy 2020 - 2025

The Strategy considers the economic and demographic trends and macroeconomic influences that are impacting the local and regional economy, highlights the issues that should be addressed and the opportunities that could be unlocked to achieve positive outcomes for the Shire's economy and community. In relation to Talbot, the Strategy advocates for funding to support investment in reticulated sewerage infrastructure to allow for further investment, development and growth.

Health And Wellbeing Plan 2021–2025

Required under the Public Health Act 2008, this plan sets the strategic intention of Council to undertake a range of actions aimed at improving overall community health and wellbeing. The Plan details six health and wellbeing priorities that Council will work towards over the next four years.

Planning Scheme Review 2020

Documents the findings of a review of the Central Goldfields Planning Scheme, carried out in accordance with Section 12B of the Planning & Environment Act. In relation to Talbot, the Review recommended the implementation of a flood study for Talbot as a high priority action, based upon a 'rapid' flood study that was being pursued by NCCMA in 2020. More details around the flood risk to the township are included in the Climate Change & Environmental Risk Assessment

Tourism & Events Strategy 2020 - 2025

Establishes a vision and action plan aimed at growing the Central Goldfields tourism industry. The Strategy focuses on the existing and potential tourism and product strengths of the region and seeks to address known gaps and barriers to visitor economy growth. Notes that:

- Talbot is currently a leader in terms of "signature food and wine experiences, and
- The Talbot Farmers Market attracts significant visitation year-round and transforms the township during the event.

Township Tree Management Plan And Agreement Central Goldfields Shire Council And Powercor Australia

This plan is a documented agreement between Powercor and Council that outlines the responsibilities, agreed actions and future tree/powerline management for the significant trees, Private trees and other Council Trees within town boundaries, including within Talbot. Amongst other matters, the plan binds Council to only plant trees under/adjacent to powerlines that, at mature height, cannot encroach the clearance space applicable at the time of planting (unless the tree planting is required to maintain an existing Avenue of honour).

TECHNICAL ASSESSMENTS



CLIMATE CHANGE & ENVIRONMENTAL RISK ASSESSMENT

The key impacts that are likely to be felt in Talbot under climate change scenarios revolve around increased heat and bushfire risk, as well as changing patterns of rainfall, and therefore flood risk. There are also likely to be impacts on agriculture, but those are of less relevance to this project.

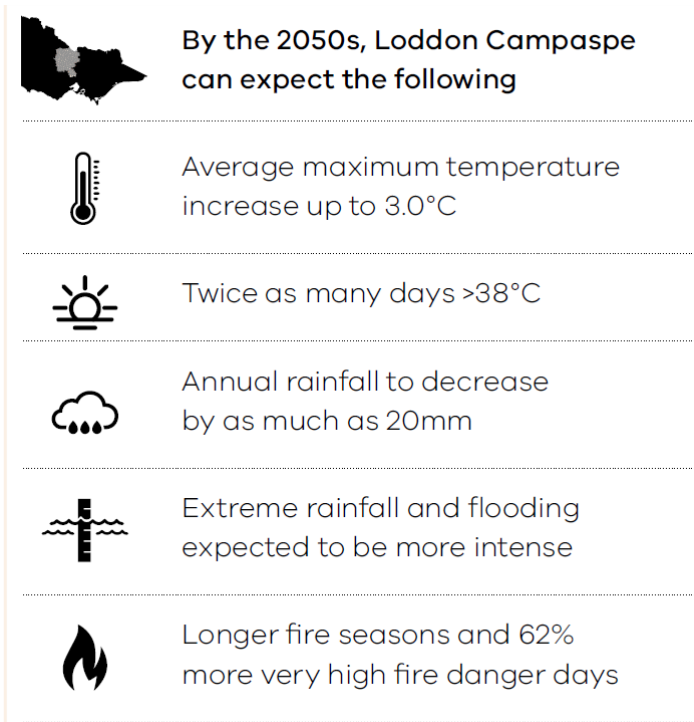


Figure 9: Loddon Mallee Climate Ready Plan

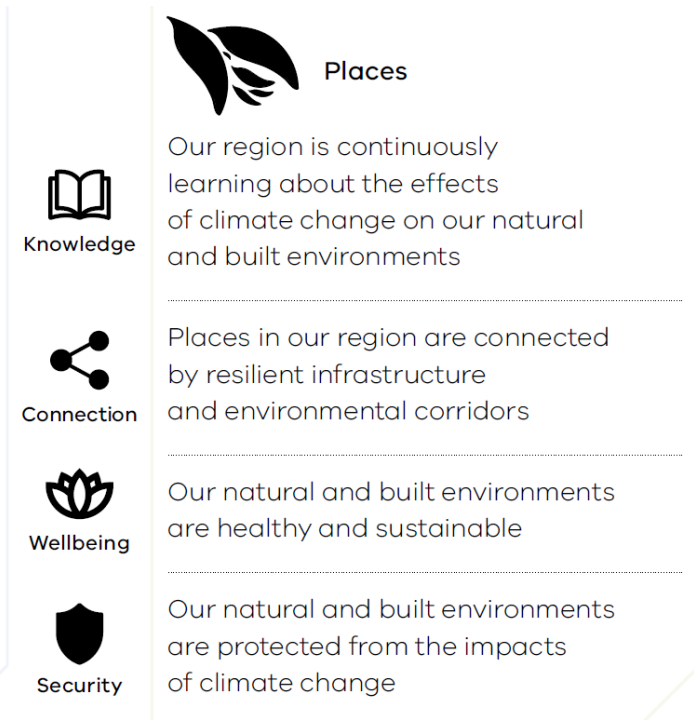


Figure 10: Loddon Mallee Climate Ready Plan - ‘place’ based objectives

Temperature / Urban Heat

Victoria’s climate will continue to warm, with maximum and minimum temperatures increasing over this century. By the 2030s average temperatures in Victoria are projected to increase by between 0.55°C and 1.3°C when compared to 1986 – 2005 (Victoria’s Climate Science Report 2019).

The projected increase in average temperatures also translates to an increase in extreme temperatures and more frequent hot days.

Projections show that in the 2050’s under high emissions, the 1-in-20-year hottest summer day is likely to increase by a median value of 2.7°C compared to 1986-2005. While the Central Highlands Region experienced 5.2 days per year where the temperature exceeded 35°C degrees, by 2050 under high emissions this is expected to increase to between 9 and 17 days. Minimum temperatures are also projected to increase (Central Highlands Climate Projections 2019).

In comparison to other parts of the State, the impacts of urban heat are likely to be less severe, but nonetheless amenity of residents and visitors is likely to be improved by additional shade provision.

Impacts on biodiversity due to changing temperatures will also be felt in the area and ensuring that any future growth of the township supports, rather than negatively impacts on local flora and fauna is an important consideration. Higher temperatures and increased fire risk also need to inform considerations around vegetation choices within the settlement.

Fire danger / Bushfire

Under current climate change projections, the number of high fire danger days in Victoria is expected to increase in the future. **By the 2050’s, the Central Highlands Region shows a 68% increase in the projected number of high fire danger days compared to 1986-2005.** (Central Highlands Climate Projections 2019).

The township of Talbot is identified as being entirely within an area designed as Bushfire Prone. However, none of the land which contains existing development within the main township, nor on the immediate periphery is covered by a Bushfire Management Overlay, which is generally the indicator of more serious bushfire risk.

The identification of the area as Bushfire Prone however, does mean that consideration of how any new built form will respond to a bushfire will form part of any building approval process, even if a permit is not triggered under a BMO. The fire risk of different

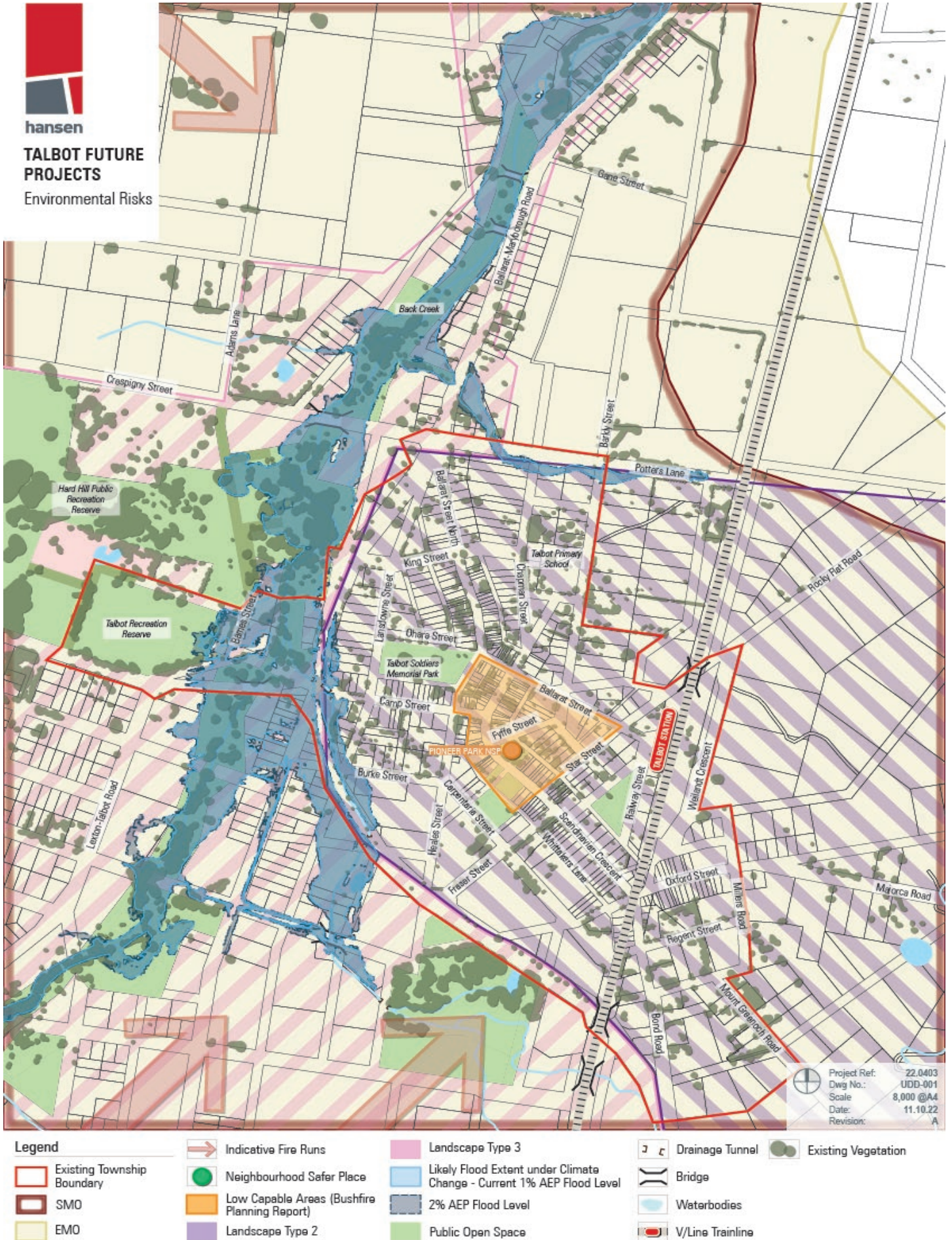


Figure 11: Environmental Risks

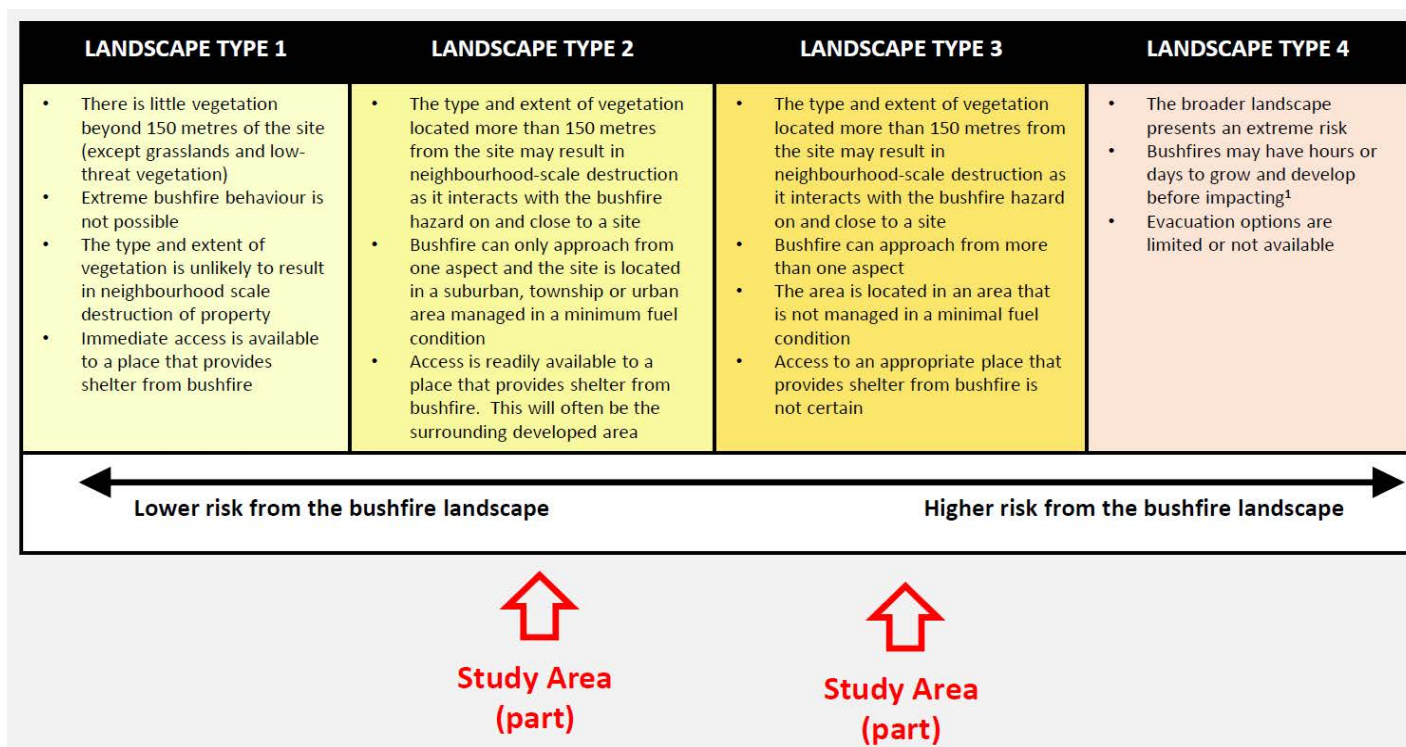


Figure 12: Landscape Types and fire risk (Bushfire Risk Assessment, Hazelwood)

parts of the township will inform what is known as a Bushfire Attack Level (BAL) which then informs how structures can be built and materials that can be used (of particular relevance given the heritage character of the settlement).

The closest currently identified area covered by a Bushfire Management Overlay is to the west of the township beyond the recreation reserve, although some peripheral areas of the Rural Living Zone which adjoins Talbot to the west and south west is covered by a BMO.

A targeted Bushfire Assessment has been prepared to inform the Talbot Structure Plan (Kevin Hazel Bushfire Planning, 23 August 2022) and provides some more detailed directions around the fire threat and appropriate responses. Ensuring this bushfire risk is considered in settlement planning becomes increasingly important in light of climate change which will considerably increase risks associated with the hazards around Talbot, as elsewhere.

The assessment found that:

- Talbot is within a broader bushfire landscape that comprises extensive areas of forest hazards.
- Long fire runs (up to 10-15km) are available in the surrounding landscape, with fire runs to the north-west and south-west of the Study Area, aspects where prevailing bushfire weather in Victoria is likely to move a bushfire towards the Study Area.
- Based on the extent of vegetation and some areas of steeper terrain, the hazard has the potential to enable bushfires to grow large and to generate elements of extreme fire behaviour.
- The Study area itself interfaces with forest vegetation to the west and south/south-west. On other interfaces, grassland hazards are present.

- Low risk areas (BAL: Low) are present in the central core of Talbot, oriented around Scandinavian Crescent. A designated neighbourhood safer place is located at Talbot (Pioneer Reserve). This is within the same area assessed as being BAL: Low. These low-fuel areas in the central core of Talbot should be maintained, and not compromised over time.

- The lack of defined edges and the amount of undeveloped land within Talbot means much of the existing Township zoned land cannot be identified as low risk.

The Bushfire Assessment considers likely bushfire scenarios, having regard to the above, including the potential for neighbourhood scale destruction and the availability and access to low fuel areas, and identifies Landscape Types.

The following landscape types have been applied to the Study Area:

- Landscape Type 2 aligns with the central part of Talbot and its immediate surrounds. Mitigating the landscape impact of grassfire in Landscape Type 2 areas is highly achievable through the separation of development from unmanaged grasslands and the planning of development to be low fuel, preventing grassfire from penetrating urban areas and providing the ability for people to move away from the hazard interface.
- Landscape Type 3 aligns with the landscape around the Study Area and land to the west of Ballarat-Maryborough Road. These areas are at the middle to higher end of bushfire risk in Victoria using the landscape typologies approach. Due to the elevated level of bushfire risk new growth and development should be directed away from these areas.

The Bushfire Assessment recommends that areas identified as being Landscape Type 3 are not areas where growth and development are facilitated, containing growth to the east of the Ballarat-Maryborough Road. It also recommends avoiding any further fragmentation of land to the west of the Ballarat-Maryborough Road that may occur through any introduction of the Low Density Residential Zone to those areas

The Bushfire Assessment identifies that new lots for Accommodation smaller than 1,200sqm mostly avoid hazards being introduced due to the lot size itself and supports lots of less than 1200sqm being pursued as part of any growth strategy.

The following mitigation measures are recommended by the Bushfire Assessment to be included in the Talbot Structure Plan to support the effective consideration of bushfire in future planning applications:

- Requiring future development to achieving the c13.02-1S Bushfire Planning exposure requirement. There is no other mechanism in the planning scheme that will deliver this outcome. This may necessitate a bushfire hazard site assessment being prepared to support any specific development proposal enabled by the Structure Plan, including rezoning of land or a development proposal.
- Perimeter roads be provided on grassland interfaces / permanent hazard edges. This outcome is now typical in grassland areas, including in Melbourne's growth areas and arising from precinct structure plans and CFA requirements. It will support preventing a moving grassfire from entering developed areas. The report recommends ensuring there is a 'strategic fire break area' to assist in the management of fire risk from grasslands. A setback of 19m from any grassland interface is recommended.
- If the Structure Plan supports the creation of lot sizes for Accommodation that are larger than 1,200sqm, the Assessment identifies that c53.02 Bushfire, Table 6 Vegetation management requirements should be applied. This will provide for a low fuel outcome and not enable hazards to increase over time. Other bespoke approaches to hazard management in areas proposed for larger lots can be investigated and determined at subsequent stages and to the satisfaction of the relevant fire authority.

Rainfall / Flooding

Victoria is likely to continue to get dryer in the long term in all seasons except summer. Within the Central Highlands Region, the greatest drying is projected to occur in spring and by late century under high emissions, a median reduction in rainfall of 24% in annual totals is projected, larger (31%) in spring (*Central Highlands Climate Projections 2019*).

Despite the overall reduction in projected rainfall, Victoria is still anticipated to experience some very wet years due to natural variability. A warmer climate is expected to bring more heavy rainfall events, with **20-year return period events in the Central Highlands Region projected to increase in frequency by up to 17% by 2050 under high emissions, with extreme rainfall events expected to become more intense** (Central Highlands Climate Projections 2019).

Parts of the Study Area are affected by the Land Subject to Inundation Overlay (LSIO) which applies to areas that are subject to mainstream flooding in both rural and urban areas but where the level of potential risk is lower than in Urban Floodway Zone or Floodway Overlay areas.

Flooding in Talbot is generally associated with the corridor of Back Creek to the west of the Ballarat-Maryborough Road, but the extent of flood risk does extend to parcels along the townships north-western interface with this road (see figure 11).

While the current overlay in the Central Goldfields Planning Scheme relating to flooding (shown on Figure 6, page 13) is reasonably high level, the CMA has undertaken more recent modelling which allows for an understanding of the level of risk using the current 1% AEP benchmark, but also a 2% AEP benchmark which more closely aligns with the increased risk of flooding under climate change. In the case of Talbot, there are only very minor differences between the extent of flooding under the two scenarios (this can be seen in the two layers on Figure 11).

While flooding is most extensive along the Back Creek corridor, it does extend into some private property to the west of the Ballarat-Maryborough Road, and some minor areas to the east (although most flooding impacts to the east are contained within the road reserve). To the north, the drainage line which runs along the unformed Potters Lane is more clearly identified through the modelling.

Salinity & Erosion

The whole area of the existing township and surrounding areas are also affected by the Salinity Management Overlay (SMO) and the Erosion Management Overlay.

The SMO applies to areas which are subject to saline ground water discharge or high ground water recharge, and which may pose a threat to a variety of assets. There are no locally specific considerations or permit requirements identified.

The EMO applies to areas where there is the potential for landslip or other disturbances that may need to be considered as part of any application for a permit. While there are no local considerations identified, the scheme does include a requirement that all applications in Talbot would need to include a report prepared by a professionally qualified engineering geologist or geotechnical engineer with experience in slope stability problems. The report is to provide one of three conclusions:

- That there are no slope problems and that a permit should therefore be issued without specific guidelines for development of the site;
- That identified slope problems can be overcome by defined means giving guidelines for development of the site allowing the granting of a conditional permit; or
- That slope problems are so serious that a permit should not be issued.

The EMO and SMO were both introduced at the time New Format Planning Schemes were introduced and the rationale for their inclusion is not known, although it is presumed to be linked to the areas history as a goldfield. CGSC has an agreement with DELWP regarding the application of standard conditions in place of individual reporting requirements contained in the Overlays.

Biodiversity protection

Another key area is climate change adaptation relates to consideration of how growth will impact on existing stressed biodiversity assets and how development may, in fact, be able to support positive local biodiversity outcomes. Of particular note in Talbot is the back Creek corridor and this and other relevant matters are discussed in the Biodiversity Technical Assessment.

Energy & Climate Change Mitigation

Talbot, as with many other small regional townships is vulnerable during major hazard events to losses in grid connectivity. Many small townships are beginning to explore opportunities to generate renewable energy locally and support this generation with community batteries. These community batteries provide a level of self-sufficiency which improves the resilience of the community in times of hazard.

As with other parts of the state, the individual take up of solar panels can also support climate change mitigation. There are currently no larger scale solar or wind generation proposals associated with Talbot. The ongoing tension between the installation of solar panels to support renewable energy generation and the protection of heritage values is of relevance to Talbot. The 2016 design guidelines which apply to the township suggest that

- Solar panels must not overhang the roof edge
- Panels should be in simple rectangular banks, not staggered
- Solar panels discouraged on frontage of heritage buildings visible from the street or along significant viewlines.

This last dot point may compromise the ability for properties to generate energy and should be treated discretionary, depending on the ability of the property to accommodate generation elsewhere. Recent changes to the Heritage Overlay allow councils to 'schedule out' solar panels in order to support renewable generation, and associated emissions reduction.

URBAN DESIGN ASSESSMENT

Talbot's urban design is inextricably linked to the heritage of the township. The entire township is covered by a Heritage Overlay, and even the surrounding rural living areas retain heritage assets from the settlements significance in Victoria's gold rush era. While the townships subdivision pattern was established during that era, subsequent changes meant that the development potential of the settlement were never fully realised, and today, many of the lots within the township, including within the core, remain vacant.

The township's heritage was documented comprehensively in the Aitkins study of 1988 which looked at both Clunes and Talbot. A 2005 update on heritage supported that work. In 2016 a set of Urban Design Guidelines (UDGs) were developed to provide more detailed guidance on appropriate built form responses to the township's heritage character.

The key aims of the UDGs were to:

- Manage infill development and consolidation of the township in a manner which was compatible with the heritage character
- Maintain key view corridors and visual permeability
- Improve pedestrian amenity, particularly in the Scandinavian Crescent area
- Support further economic development
- Improve presentation from three main entrances

The key urban design attributes of the township that are drawn out in the UDGs and which are of relevance to considerations around how the growth of Talbot may be managed, include:

- Development is characterised by wide front and side setbacks, with little to no encroachment, meaning that views to trees and surrounding countryside are maintained
- These large setbacks as support a degree of informality and a prominence of landscape within the town.
- While the setbacks are large they do vary. For example, in the town core, buildings are built to the front lot line, but in this context there are also significant breaks between the buildings which accommodate the prominent landscape aspect
- The laneways and unformed roads within the township also support both the sense of informality but also the heritage character of the town
- The streetscape character plays an important role in perceptions of the township's character and materials such as bluestone and brickwork alongside signage, vegetation, lighting, furniture and picket and woven wire fences are important considerations in regard to built form
- Fencing within the town is diverse but generally permeable, supporting that visual permeability and prominence of heritage built form



Two storey form on the corner of Camp Street & Scandinavian Crescent



Historic Station precinct



Figure 12: Built form & significant buildings

While the UDGs call for the planting of additional trees, careful species selection is highlighted in order to ensure the retention of views, and indeed, a list of preferred species (see Appendix X) is included.

A number of important corners and views are also identified in the UDGs which are defined by not only the significant buildings that are located on these corners, but their relationship to each other and to the vistas within the township (see Figure X). Of particular note are the corners of Heales Street with both Ballarat Road and Camp Streets.

In addition to these key corners, the sweep of Scandinavian Crescent, and in particular the ten buildings across London House are of key importance to the township

The UDGs identify a number of key buildings within the township (shown on Figure 12). However, these do not correspond completely with the buildings identified as significant through the underlying heritage work. This, and other issues relating more specifically to the protection of the towns heritage are discussed further below.

To support the above the UDGs propose a series of principles and performance criteria, which should be applied in a discretionary fashion provided the overall contribution is positive. This includes ensuring protection of key vistas identified as important to the townships character. The UDF provides detailed guidance around the following

- Development density. This is currently varied across the town but influenced primarily by the number of undeveloped lots within the township (see Development Capacity Assessment for further details regarding lot sizes and vacant land parcels)
- Height (primarily single storey, but with taller heritage forms in key locations (see Figure 12 for building heights and key landmarks)
- Roof form, Eaves and verandahs
- Materials including Wall materials
- Window forms
- Design details, including retention of chimneys, management of signage and fencing details

Some of these aspects may need to be explicitly drawn out and incorporated into any planning controls as growth of the township occurs in order to ensure robust protection of this existing character, while other, more detailed guidance (for example, around materials) is more likely to inform considerations under the existing Heritage Overlay.



The Post Office - community centre and historic core



Informal streetscapes and garden character



Remaining historic hotel



Figure 13: Landscape & Public Realm

The Public Realm

The UDGs identified two areas as key public open spaces – the core part of Scandinavian Crescent and the forecourt of the post office.

There has been some recent investment in Scandinavian Crescent, mostly focused around market square and the community garden. Further opportunities exist around Pioneer Park and along the streetscape. The vibrancy and activity on Scandinavian Crescent has been significantly impacted by a lack of retail and commercial activity with most buildings used for residential or accommodation purposes. This is likely to be partially a result of the level of demand for non-residential uses by a small population base, and partly a result of the zoning of the township, which does not differentiate between commercial and residential areas.

The post office forecourt and the public buildings along Camp Street, such as the library and observatory in many ways rival Scandinavian Crescent but have seen much less investment in the public realm. Importantly, for residents, the post office and its forecourt are possibly even more important than the market area, which is primarily focused on intermittent tourist and economic activity, rather than day-to-day life.

Key Views

One of the critical aspects of how Talbot is perceived is the views that are present within the township to some of the key heritage assets. The UDGs identify an number of key areas that will need to be considered as part of any growth of the township.

The town gateways area identified, along with some key view cones from the Ballarat-Maryborough Road. However, it is noted that some of these, particularly to the south, do not necessarily reflect the conditions of the ground and should be revisited. For example, the key gateway for visitors from Melbourne (at the intersection of Bond Street) is not identified.

Views from the Ballarat-Maryborough Road are currently across large parcels of vacant land. If the township is sewerred, these parcels may develop and the impact of this on the township will need to be carefully considered. These parcels slope gently up to the township, which can be seen in the distance, although no notable heritage forms can be seen south of Fraser Street.

Within the township there are a number of key areas identified. Some of these are what can be characterised as key views with important terminate vistas. Examples of these include the view up Prince Alfred Street to the Primary School (see Figure X).



Example of kerbside dining opportunities



Example of kerbside dining opportunities



Example of kerbside dining opportunities



Example of kerbside dining opportunities



Figure 14: Key views

Also of critical importance are the impressions gained of the township's character from key vantage points. Managing the impacts of any infill development on these key areas will be vitally important to retaining the towns character and preserving its heritage. The key areas identified by the UDGs include:

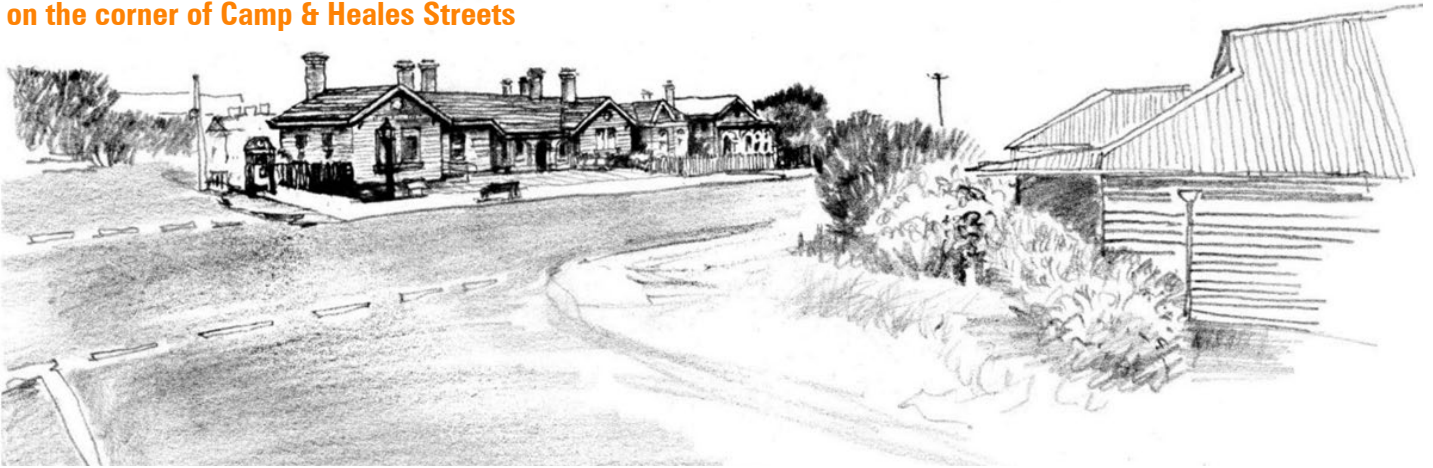
The curve of Scandinavian Crescent



Views from both east and west to the ANA Hall & former Town Hall on the corner of Ballarat and Heales Street, including across the Soldiers Memorial Park



Views of the Court house & Post Office and forecourt on the corner of Camp & Heales Streets



The openness of the space to the rear of the Pioneer Park and views along Scandinavian Lane and from Fyffe Street to the rear of London House and Scandinavian Crescent



Views of key buildings along Ballarat Street North will also be important to consider should any infill be proposed.



Views to St Michaels Church and to Chatsworth House across open space at the corner of Lansdowne & O'Hara Streets (the undeveloped portion of Soldiers Memorial Park). It is noted the recently reinstated Avenue of Honour eventually moderate at least the first of these views.



In addition to the above the views from the town gateway and all along Camp Street to Scandinavian Crescent, particularly from the Lansdowne Lane intersection are of critical importance. Views south along Heales Street of the Post Office are also important. While these currently terminate in open paddocks, zoning of the land currently provides for these areas to develop as part of the township.



Example of kerbside dining opportunities



Example of kerbside dining opportunities

Vegetation

Vegetation is a key characteristic of the township, and is also important to the overarching resilience and amenity of the settlement. However, there are a number of matters which need to be considered.

Current large lots and generous setbacks have produced, particularly in the central part of the town, a number of very beautiful and carefully managed private gardens. Indeed, these are celebrated as part of a local festival. The community garden at London House is demonstrative of the character of these gardens. Care will need to be taken to ensure that opportunities to support ongoing development of private gardens. However, it must also be recognised that, should the demographic profile of Talbot shift, that time pressures associated with working age residents may reduce the prominence of these private gardens over time. This may increase the prominence of the public realm which, to date, has seen little investment.

While the UDGs, and broader responses to increased temperatures support additional tree plantings within the public realm, care will need to be taken to balance these outcomes with directions to manage increases in vegetation carefully to support reduction in bushfire risk for the settlement.

The UDGs also include suggestions around development controls that may be needed in support of vegetation outcomes in the private realm. These will need to be considered carefully in terms of their implications for the towns growth and the ability for some vacant lots to develop but include:

- Retention of significant trees (although the definition of 'significant' is not clear)
- That an area of around 40sqm be included as an 'envelope to support canopy growth
- That clearance distances between trees and built form be mandated
- Replanting of peppercorn trees (noting that these are considered an environmental weed in many areas)

Heritage

The heritage qualities of Talbot were assessed in 1988 as part of a heritage study that encompassed both Talbot, and Clunes to the south, on behalf of the Shire of Talbot & Clunes by Richard Aitkins. That report identified hundreds of buildings of local significance, and around fifty of state and / or national significance, with the period of 1860-75 as the period of major significance. It is the major source of heritage information for the settlement and contains the individual citations for Talbot's key buildings.

The report provides recommendations for the future conservation of the Talbot area. General recommendations for individual buildings and sites, as well as the significant areas. In relation to Talbot, the following specific policies were included:

- That significant buildings and sites be appropriately protected by individual listing in the IDO (Interim Development Order) and that their conservation be encouraged.
- That conservation of contributory buildings, sites and works be encouraged.
- That areas of architectural and historical significance be appropriately protected by way of amendment to the Interim Development Order.
- That buildings and sites of major significance be endorsed by the Shire of Talbot and Clunes for addition or retention on the Register of Historic Buildings [now known as the Victorian Heritage Register], Register of Government Buildings [this register has been abolished and some places transferred to the Victorian Heritage Register] and the Register of the National Estate [this register is also no longer current] in accordance with the criteria laid down by the relevant body.
- That conservation of surrounding mining sites be encouraged.
- That new developments, especially new buildings, streetworks, landscaping and street tree planting respect the period c.1860-1930 with emphasis on the period c.1860-1875.
- That in the core of the conservation precinct (Camp Street, Heales Street, the northern section of Scandinavian Crescent and the southern and eastern sections of Ballarat Street), new developments which are consistent in scale, massing and siting to development of the period c.1860-75 be encouraged.

In 2005, Central Goldfields Shire conducted a heritage review which made a number of recommendations and findings, as follows:

- Recommended that the existing HO (discussed below) be retained but that more locally specific policy be developed as a medium priority. It is presumed that the 2016 UDGs represents the implementation of this recommendation, despite not having yet been translated into specific planning policy. This translation and embedding of content in controls will need to be considered by this current project
- Recommended that the 62 places recommended and/or nominated for the Victorian Heritage Register be reviewed and assessed by Heritage Victoria and that the Central Goldfields Shire should advise Heritage Victoria of the list of potential places for the Register and seek a formal response as a high priority.
- Recommended that the Schedule to the Heritage Overlay be amended to reflect the changes to the existing heritage areas and the addition of new heritage areas and individual heritage places. This would suggest that additional buildings such have similar listings, as per the police lock up (listed individually as H0125).



Example of kerbside dining opportunities

The Heritage Overlay

The Talbot Heritage Area H0208 covers the central core of the Talbot township, together with its immediate outskirts that form important landscape areas. The 2005 Heritage Review states that the *"Talbot Heritage Area H0208 is a combination of the proposed Talbot Conservation Precinct and surrounding "Areas of Special Significance" as outlined in the Talbot and Clunes Conservation Study (Map 19) (the Aikens Report)." Note: this statement does not appear to be correct upon review of the content of the Aitkins report.*

The Talbot and Clunes Conservation Study outlines the significance of the Talbot area as follows:

Talbot is significant as one of the most intact small goldmining towns in Victoria and Australia. The town contains a significant number of buildings, sites and works relating to the period c.1860- 1930 which form the major attributes of the area. The significance of the area is especially enhanced by the relatively high number of buildings from the period c.1860-75. The government block contains the most complete collection of buildings of any small gold rush town in Victoria and one of the best precincts of modest government buildings in Australia. Talbot is significant for the manner in which geological factors influencing mining are reflected in the street pattern, still used as the major streets in the town. The setting of the town is enhanced by the proximity of mining areas on Back Creek, Rocky Flat, Mount Greenock and the Amherst area. All these areas have a significant part in the development of different phases of the town's history.

Key precincts

The Aitkins report also identifies an existing and proposed Conservation Precinct identified in that document, as well as a 'Township Entry Zone' are shown below. The report identifies the 'core' of the conservation precinct as Camp Street, Heales Street, the northern section of Scandinavian Crescent and the southern and eastern sections of Ballarat Street. It is notable that this area differs from that in the Urban Design Guidelines of 2016. As future development scenarios are explored, the appropriate boundary for any 'core conservation area' and areas which require protection as contributing areas may need further investigation.

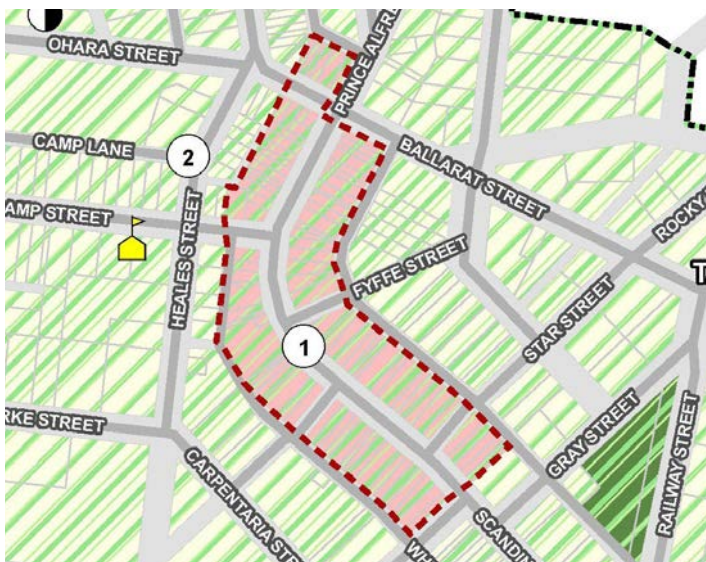


Figure 15: Existing Talbot Structure Plan: "

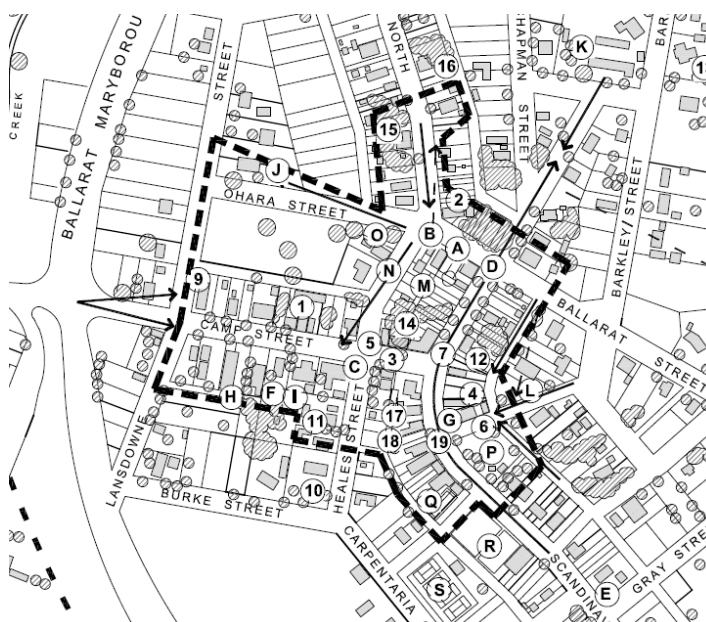


Figure 16; 2016 Urban Design Guidelines: "



Figure 17:1988 Conservation Study:

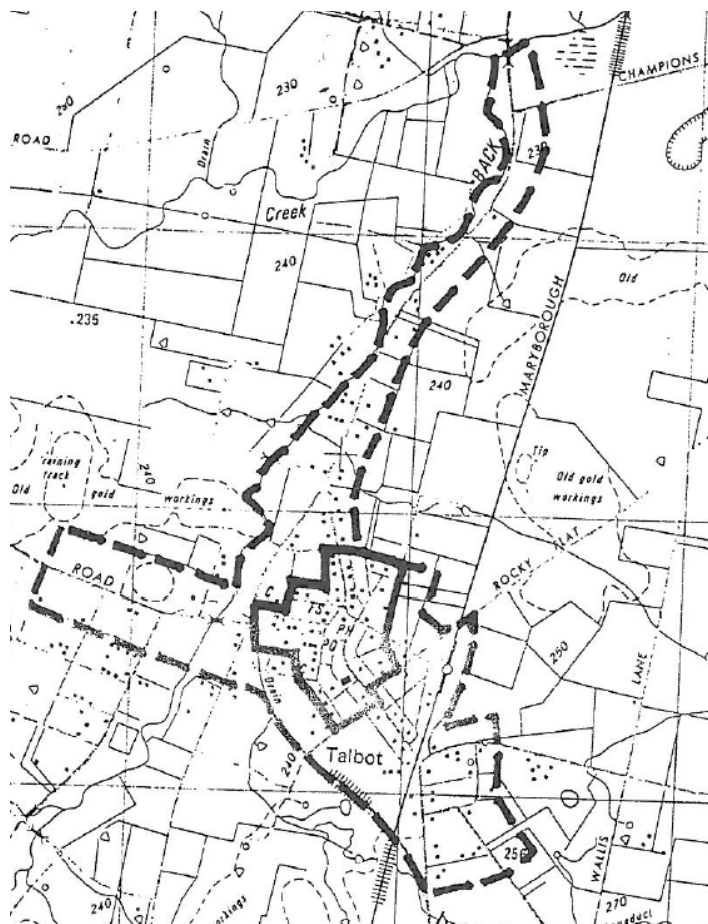


Figure 18: 1988 Conservation Study:

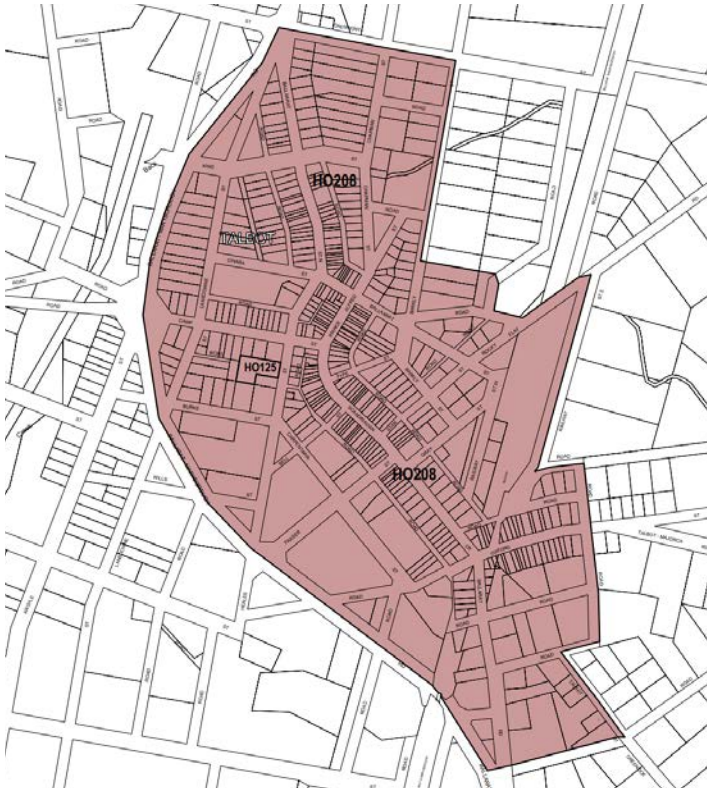


Figure 19: Current Heritage Overlay extent

The proposed boundaries included in the Aitkins report do not align exactly with the boundary of the Heritage Overlay however, the minor adjustments are presumed to have occurred during any application of the Overlay via changes to the planning scheme (HO208).

While the Heritage Overlay has been applied to the whole township, the heritage characteristics and importance of different parts of the settlement do vary widely, and the overlay covers many areas which are merely vacant lots. While these lots may be important where they impact on a key view or are proximate to significant buildings, there is currently no distinction between a vacant lot on the outskirts of town and an individually significant building in Scandinavian Crescent under the controls applied. This should be considered as more nuanced controls for the township are developed as part of any growth strategy, having regard for any findings re key precincts or significant buildings.

Individually significant buildings

The Aitkins report made a number of recommendations regarding buildings of significance including that a number of them be listed as of state significance or registered as part of the National estate (the original list of individually significant buildings can be found at Appendix 2, plus those recommended for listing as of State or National significance).

Notably, these recommendations do not appear to have been progressed in the intervening years, other than the listing on the Victoria Heritage Register of the Former Talbot Police Residence and Lock Up (protected individually under HO 125). It will be critically important that, as any strategy for growth is developed for the township, that additional protection is provided for these buildings of state or national significance. These buildings recommended for Victorian Heritage Register listing (Original recommendation for Register of Historic Buildings and listing as part of the National Estate) are listed below:

- Former Talbot Borough Hall, Ballaarat Street
- A.N.A. Hall, Ballaarat Street, corner Heales Street
- Ramsay shop and residence, Ballaarat Street North
- Former Bull and Mouth Hotel, Ballaarat Street
- Former Burdess Residence, Barkly Street
- Former Presbyterian Manse, Bond Street (see former Presbyterian Church, Heales Street)
- Former Willox Residence, Bond Street, corner Mount Greenock Road
- Former Church of England vicarage, Brougham Street, corner Russell Street (see St Michael's Church of England, Lansdowne Street)
- Former Hoskins Residence, Camp Street, corner Heales Street
- Post and Telegraph Office, Camp Street, corner Heales Street
Former Court House, Camp Street
- Free Library (Former Court of Petty Sessions), Camp Street
- Former Dowling Residence, Camp Street
- Former Primitive Methodist Church, Camp Street
- Shops and residence, Camp Street, corner Scandinavian Crescent
- Former Elder residence, Camp Street
- Former Camp Hotel, Camp Street, corner Heales Street

- Former Wesleyan Church, Camp Street
- Fire Brigade Engine House, Heales Street
- Former Police quarters, lock-up and stables, Heales Street (note: has been listed on VHR)
- Former Sub-Treasury, Heales Street
- Former Presbyterian Church, Heales Manse, Bond Street
- Former London Chartered Bank Coach House and Stables, Heales Street (see Former London Chartered Bank, Scandinavian Crescent)
- St Michael's Church of England, Lansdowne Street, corner O'Hara Street and former Vicarage, Brougham Street, corner Russell Street
- Talbot Railway Station, Railway Street
- Prince Alfred State School No.954 and former Common School, Rowe Street
- Former Commercial Hotel, Scandinavian Crescent and Fyfe Street
- Shop, Scandinavian Crescent (see Shops and residence, Camp Street, corner Scandinavian Crescent)
- Former London Chartered Bank, Scandinavian Crescent and former Coach House and Stables, Heales Street
- Former Talbot Gas Works, Whittakers Lane



Example of kerbside dining opportunities



Example of kerbside dining opportunities



Example of kerbside dining opportunities



Example of kerbside dining opportunities

MOVEMENT ASSESSMENT

Existing Conditions

Train Services

Talbot sits on the Maryborough to Melbourne line which runs via Ballarat (Talbot Train Station). The train service takes about 15 minutes to get to Maryborough, about 1 hour to get to Ballarat and 2 - 2.25hrs to get to Melbourne. However, currently services only run twice a day on weekdays and once a day on the weekend, with only a coach service available to Melbourne on a Sunday.

Talbot station has recently been upgraded and has a small car parking area in its forecourt. However, the environs are not particularly amenable and the area is very secluded and disconnected from the township core.



Talbot Station forecourt

Bus Services

Two separate bus routes run through Talbot. One provides access to Maryborough and Ballarat. The Mildura to Melbourne service also runs through Talbot and is accessible to residents.

Stops are provided on Ballarat Street, between Heales Street and Scandinavia Crescent, and near the railway station.

Key Road Access & Gateways

The Ballarat to Maryborough Road provides the main access to Talbot, from Maryborough to the north, and Clunes/ Creswick and Ballarat to the south.

Access to the township is also possible via the Lexton to Talbot Road which runs past the Recreation Reserve and connects to Camp Street and from outlying settlements to the east via Majorca Road and Mt. Greenoch Road.

While Majorca Road provides access to the township from Red Lion and Majorca, this is not a major gateway to the township and the road, while sealed, is a single lane.

Rather there are three key gateways which are notable, all of which are located along the Ballarat-Maryborough Road:

- Ballarat Street North - which provides entry to the township when travelling from Maryborough. There has been intersection changes to ensure the junction is a T junction, which has led to some interim road blockages at the entry point



Northern township entry

Camp Street - which connects to the Talbot Recreation Reserve and beyond that to Lexton and other smaller settlements to the west.

Bond Street - the main entry to Talbot from Ballarat and Melbourne, and which leads directly onto Scandinavian Crescent north of the railway line.



Northern township entry

Key Destinations

Key destinations that should be considered in relation to movement within the township include:

- The Primary School
- Post Office / Court House Hotel on Camp Street
- The Recreation Reserve
- The train station
- Facilities and Businesses on Scandinavian Crescent, in particular Market Square and London House Cafe

Footpaths

The township has limited formed footpaths, and those that exist are not always connected to other paths. Existing footpaths are present in the following locations

- Camp Street between Landsdowne Street and Prince Alfred Street/Scandinavian Crescent
- West side of Scandinavian Crescent from Ballarat Street to southern extent of Bowls Club
- East side of Scandinavian Crescent from Ballarat Road to Market Square
- South side of Ballarat Street between Heale Railway Streets
- East side of Heale Street between Ballarat and Camp Streets, as well as the section of road in front of the Soldiers Memorial
- A footpath is also provided adjacent to Market Square and the southern and eastern frontages of the Primary School
- Small sections of footpath are also provided connecting the railway station to the adjoining bus stop and to Ballarat Street,

The footpaths within the township are generally constructed light grey concrete, other than the newer path along the east side of the Primary School which has been constructed of black asphalt. Paths along Scandinavian Crescent seem fairly new and in good condition. Some other paths are in slightly less optimal condition and there are gaps (such as at intersections)

No footpaths are provided to the Recreation Reserve or connecting to the Primary School, other than along Prince Alfred Street.

Many of the existing verges in residential areas of Talbot are also characterised by large swale drains, which may inhibit the construction of footpaths in the future.

No on-road cycle lanes or off-road shared paths or any bicycle facilities are observed across the township, other than some bike hoops at the train station.



Heale Street footpath



Scandinavia Crescent footpath (outside core area)



Disconnected paths (Camp Street)



New footpath outside Talbot Primary School



Figure 20: Access & Movement

Directions and Findings from Council Documents

Talbot and District Community Plan - Our Community 2030

Issues, ideas and actions related to access outlined in this document include:

- Increasing passenger rail services to Talbot, especially on weekends.
- Better maintenance of unsealed roads.
- Delivery of more walking and cycling paths, and improvements to footpaths. Planning for future footpaths is also needed.

Walking and Cycling Strategy 2017-2026

The following directions and findings within Council's Walking and Cycling Strategy 2017-2026 are noted in relation to Talbot:

- The Maryborough to Talbot on-road route is well utilised by cyclists.
- The Ballarat to Maryborough Heritage Trail will pass through Talbot.
- In broad terms the report suggests that the following paths are needed in Talbot
 - Inner town all abilities footpath / shared path that is sealed and provides linkages to shops, transport hubs, parks and recreational facilities wherever possible. This would require some expansion to the existing footpath network, particularly across the Ballarat-Maryborough Road to the recreation reserve.
 - Inner town on road cycle lane that is clearly marked and sign posted and provides linkages to shops, transport, hubs, parks and recreational facilities wherever possible. Given Talbot currently has no inner town bike lanes there is some question as to whether any would be needed in the future.
 - Safe schools route that is clearly marked and provides on and off road access to schools as well as pre-schools and early learning centres wherever possible. Talbot has one School and one Kindergarten
 - Outer town off road recreational walking / cycling path or trail that provides local residents and visitors with the opportunity to walk / cycle to key local attractions such as waterways for a distance of approximately 2.5km in length, i.e. a 5km round trip. This would suggest the need for a trail along Back Creek however

- The following relevant actions (works) in the Action plan specifically relating to Talbot are noted:
 - On-Road path (1,750m) nominated as a high priority: Ballarat North St / Heales St between Crespigny St and Camp St, then Camp St between Heales St Scandinavian Cres, then Scandinavian Cr / Bond St from Camp St to Ballarat Maryborough Rd.
 - Shared off road path (550m) nominated as a medium priority: Camp St between Scandinavian Cres and Barnes St.
 - Footpath (50m) nominated as a high priority: Ballarat St between Star St to Railway St (south side) (*constructed*)
 - Footpath (upgrade 160m) nominated as a high priority: Prince Alfred St from Ballarat North St to Rowe St
 - Footpath (200m) nominated as a low priority: Ballarat St North (west side) from O'Hara St to King St
 - Footpath (250m) at a cost of \$37,500, nominated as a low priority: King St from Ballarat St North to Ballarat – Maryborough Rd

Integrated Transport Strategy 2020-2030

The following directions and findings within Council's Integrated Transport Strategy 2020-2030 (adopted September 2020), are noted in relation to Talbot:

- Build a shared path with priority access roads along Prince Alfred Street to Talbot Primary School.
- Investigate potential to run community transport services to Talbot on a Saturday.
- Work with Talbot Farmers Markets to provide services on the second and third Sundays of each month (respectively) to improve access and attract more drivers using existing assets.
- Engage with the community to close small sections of roadway to improve public open space and make pedestrian links safer: The intersection of Chapman Street and Prince Alfred Street is identified as an example of an intersection that could be simplified.
- Completion of the footpath along Rowe Street was highlighted as important
- Advocacy to deliver an improved pedestrian crossing point at Camp Street / Ballarat-Maryborough Road is also highlighted.
- Improved wayfinding and amenity along the footpath connecting Market Square and the train station is highlighted as important for tourism.
- The planting of street trees, particularly close to town centre is again highlighted as important to improve pedestrian amenity.

The “Cool It” Summary and Recommendations Report (2018) makes recommendations for improving existing tree cover along key pedestrian routes in order to curb heating effects and make walking and cycling more comfortable, with Talbot highlighted.

The town is also traversed by a regional cycling trail (the Ballarat to Maryborough Heritage Trail / Talbot Heritage Trail which comes from Avoca Road, passing through the centre of the town and up Barkly Street to Ballarat-Maryborough Road. There does not appear to be any signage or line markings denoting this regional trail within the township.



Many of the township's roads remain unpaved

Implications for Talbot Structure Plan

- Existing strategic documents recommend a number of actions to improve pedestrian and cycling movement throughout the township. The status of the various actions, including whether they reflect current Council thinking, will need to be confirmed with Council.
- Facilitating improved pedestrian movement between key destinations across the township, through the construction of footpaths or other interventions (e.g wayfinding), is supported.
- Pedestrian connectivity to the township from both west of the Ballarat-Maryborough Road and east of the Railway Line appears to be relatively poor.
- Improving pedestrian access across the Ballarat- Maryborough Road, as identified in the Integrated Transport Strategy, is supported. This may assist in facilitating better pedestrian access to the Recreation Reserve from the centre of the township, however the lack of separated pedestrian crossing over Back Creek remains an issue.



Pedestrian and / or cycle connections to the Recreation Reserve are difficult

COMMUNITY FACILITIES ASSESSMENT

The following open spaces and recreation facilities are present in Talbot:

Open Space/ Facility	M5/P3, M5/P4
Talbot Recreation Reserve, Avoca Road	Located on Avoca Road. Zoned PPRZ. Includes the following facilities. <ul style="list-style-type: none"> Football/ Cricket Oval with Pavilion/ social rooms Netball Courts Basketball Stadium, also used for Gymnastics
Talbot Bowling Club	Located on Scandinavian Crescent. Zoned Township Zone (TZ). Comprises 2 greens (1 small, 1 large) and Club Facilities.
Talbot Outdoor Swimming Pool, Scandinavian Crescent	Located on Scandinavian Crescent. Zoned Township Zone (TZ). 25m pool and small toddler pool.
Talbot Tennis Club	Located at 1 Bell Street. Zoned Township Zone (TZ). Four Tennis Courts.
Talbot Golf Club, Lexton Road	Located on Lexton Road. Zoned PPRZ. 18 hole course with 'sandscape' greens
Pioneer Park	Located on Scandinavian Crescent, and zoned Township Zone (TZ). The park comprises: <ul style="list-style-type: none"> A Playground (Pioneers Memorial Playground) Public Toilets Covered Seating Outdoor Gym Equipment (installed 2021)
Talbot Soldiers Memorial Park	Located at 29 Heales Street, and zoned Public Use Zone (PUZ3). The park comprises: <ul style="list-style-type: none"> Seating Public Toilets (on adjoining lot) Recent Avenue of Honour planting
Hard Hill Public Recreation Reserve	Relatively large reserve located on Avoca Road. Zoned PPRZ.
Municipal Purposes Reserve	Located between Barnes Street and Back Creek. No formal identification as park. Zoned PPRZ. Noting this forms part of a wider area of publicly owned land not zoned for purpose.
Talbot Ornamental Plantation	Partly fenced triangular shaped space between Gray Street, Scandinavian Lane and Railway Street. No formal identification as park. Zoned PPRZ.

In addition, the following reserves, parcels and areas in Talbot and surrounds are noted:

- Part of 15 Fraser Street (part of 1\TP160125) - Fenced Parcel on the south-western side of Ballarat-Maryborough Road. No formal identification as park. Zoned PPRZ. Public accessibility unknown.
- Various Bushland Reserves, including, but not limited to: Amherst Bushland Reserve, Tunnel Hill Bushland Reserve, Tunnel Hill north Bushland Reserve, and Talbot Bushland Reserve. Public accessibility unknown.
- Uncategorised Public Land at the eastern end of Macaulay Street, within the Rural Living Zone (largely) and PUZ7. Public accessibility unknown.
- Goodwoman's Hill, a parcel east of Halls Road within PUZ7. Public accessibility unknown.
- Back Creek and environs, to the west of Ballarat- Maryborough Road, and running generally north to south/west. Unclear if public accessibility is available to the creek corridor. Generally within the RLZ or PUZ1 when passing to the west of the township.



Talbot Recreation Reserve



Pioneer Park with public toilet and new gym equipment



Figure 21: Social Infrastructure

Facility/ Service	Recommended Provision level	Current Provision	Comment on existing provision
Low-order Passive Open Space Reserves	0.7 to 1ha of passive open space per 1,000 people	Over 1ha in Soliders Reserve and Pioneer Reserve	Population is below threshold.
Active Open Space Reserves	2.0ha of active open space (excluding golf courses) per 1,000 people.	2.7ha approx (Talbot Recreation Reserve)	Meets Benchmark
Tennis Courts	1 x 2 courts (free to public) facility (no pavilion) per 25,000 to 35,000 people	4 Courts	Meets Benchmark
Netball Courts	1 x 2 courts outdoor netball facility per 16,000 people	1 Court provided in Recreation Reserve	Population is below threshold.
Lawn Bowls	1 lawn bowls facility (4 greens) per 40,000 people	1 bowls facility (2 greens)	Population is below threshold.
Multi- Purpose Aquatic Leisure Centre	1x Council Aquatic Leisure Centre per 30,000 – 60,000 people	1 Outdoor Pool	Population is below threshold.

Quantitative Assessment

Benchmark ratios for the provision of recreation facilities are outlined within precinct planning guidelines (*Planning for Community Infrastructure in Growth Areas*) prepared by Australian Social & Recreation Research in 2008. These benchmarks are intended for application in Melbourne's growth areas but provide an indication of the types of facilities that should be provided per population numbers and can be used to provide a basic assessment of 'gaps' within the provision of recreation facilities.

The analysis is based on the 2021 census estimate of population for Talbot of 452.

It is highlighted that these benchmarks provide a high-level assessment only. It does not assess the adequacy, acceptability or accessibility of the current service provision nor incorporate specific local requirements. It should be used as a general guide only.

Although relating to PSP areas, the Victorian Planning Authority's new Precinct Structure Planning Guidelines (2021) also provides useful guidance when considering the provision of open space.

Some potentially relevant performance targets include:

- *T11 – the open space network should seek to meet the following minimum targets:*
 - *Within residential areas (including activity centres):*
 - *10% of net developable area for local parks and sports field reserves.*
 - *3-5% of net developable area set aside for local parks.*
 - *5-7% net developable area set aside for sports field reserves.*

- *T12 – Open Space and Sports reserves should be located to meet the following distribution targets:*

- *A sports reserve should be located to meet the following distribution targets:*
- *A sports reserve or open space larger than 1 hectare within an 800m safe walkable distance of each dwelling.*
- *A local park within a 400m safe walkable distance of each dwelling.*

Importantly, the guidelines direct that adaptation to regional settings may be required in relation to the performance targets of T11 and T12 above. The guidelines suggest that adaptations should offer a high-quality public realm and open space. The quantum and distribution of open space should consider the structure and capacity of existing open space, and opportunities for further investment and connections to existing open space.

Clause 56.05-2 'Public open space provision objectives' of the Central Goldfields Shire Planning Scheme includes a number of requirements at Standard C13 for the provision of open space. Quantitative elements of those standards includes:

- *Local parks within 400 metres safe walking distance of at least 95 percent of all dwellings. Where not designed to include active open space, local parks should be generally 1 hectare in area and [...]*
- *Active open space of at least 8 hectares in area within 1 kilometre of 95 percent of all dwelling that is [...]*
- *Linear parks and trails along waterways, vegetation corridors and road reserves within 1 kilometre of 95 percent of all dwellings.*

The Infrastructure Design Manual also includes for public open space provision at clause 24.3.4. The standards set out at this clause of the manual link back to the planning scheme.

Directions and Findings from Council Documents

Recreation and Open Space Strategy 2020 to 2029

Main findings specifically for Talbot on future needs, improvements and opportunities for facilities from the key stakeholder consultations were:

- Linking paths; footpath provision and seating.
- Facility upgrades (football)
- Stadium – alternative uses (non-compliant for netball)

Participants selected the best future improvements/opportunities for youth. In Talbot, they were a gym, heated pool with a water slide. The strategy suggested that R J Pryor Stadium and Talbot Recreation Reserve could be investigated for future options including as a community gym and/or physical activity hub

The strategy also suggested a revised Masterplan for the site would be of benefit

Talbot and District Community Plan 2030

Strategic directions and key actions relating to open space and recreation from this community-developed plan, include:

- Seek funding for the development of a community gym for Talbot and district residents. *(This could be linked to redevelopment of the township's Recreation Reserve)*
- Broadly promote recreation facilities that are available in Talbot e.g. pool, tennis courts, etc and review ways to increase usage of the existing pool.
- Upgrades to the Netball courts also was also highlighted and ties in with the above directions.
- Upgrades to the township's pool, including shade was highlighted
- The extension of walking and bicycle tracks in Talbot and district as well as water fountains etc was also prominent and consistent with directions in various other strategies such as those related to Ageing and Climate Adaptation.

Implications for Talbot Futures

- The need to provide any new open space or active open space reserves should be assessed against finalised population growth scenarios.
- The single recreation reserve (active open space) providing for football and cricket, is likely to be sufficient across the anticipated range of population growth scenarios but upgrades should be considered.
- A new low-order passive open space/ reserve could be necessary, subject to review against the population growth scenarios.
- With respect to the walkable catchments and existing open space, the existing situation is considered to be generally acceptable in the context of a small rural township.
- The need for the provision of a new local park/ low order passive open space on the northern side of the township under certain population growth scenarios/ growth area designations, could be explored.
- Existing open space assets such as the Talbot Soldiers Memorial Park and the Talbot Ornamental Plantation could potentially better serve the township as a passive open space if it was upgraded or received improvements.
- The Back Creek Corridor is a potentially underutilised asset which could provide a passive open space benefit to the township. There would be a need to further explore access and land tenure conditions to understand the potential for the creek corridor to be utilised.



Publicly owned land adjoining Back Creek

BIODIVERSITY & GREEN INFRASTRUCTURE ASSESSMENT

Landscape setting

Talbot is located on the lands of the Dja Dja Wurring people, who have shaped the landscape for thousands of years. It sits within the broader landscape of the Maryborough – Paddy Hills region which identified as being regionally significant for its biodiversity. That landscape extends primarily to the northwest of Talbot.

Talbot is within the 'Goldfields' bioregion, although the bioregion moves to the Victorian Volcanic Plain to the immediate east of the township. It's identified as being part of the Box Ironbark Northern Plains and Slopes landscape.

The Goldfields bioregion is described as follows:

Goldfields, located in central Victoria, is dominated by dissected uplands (predominantly a northerly aspect) of Lower Palaeozoic deposits. Metamorphic rocks have formed steeply sloped peaks and ridges. A variety of relatively poor soils are dominant with yellow, grey and brown texture contrast soils (Chromosols and Sodosols) and minor occurrences of friable earths (Dermosols and Ferrosols).

The climate is temperate with uncertain rainfall varying from 400 to 700 mm per annum, usually higher in winter. Maximum temperatures range from 12 to 32 degrees Celcius, daily minima range from 2 - 15 degrees. Box Ironbark Forest, Heathy Dry Forest and Grassy Dry Forest ecosystems dominate the lower slopes or poorer soils. The granitic and sedimentary (with Tertiary colluvial aprons) terrain is dominated by Grassy Woodlands much of which has been cleared. Occasional low-lying corridors of alluvial valleys between the uplands are dominated by Low Rises Grassy Woodland and Alluvial Terraces Herb-rich Woodland ecosystems.

A number of regionally important rivers transect the bioregion, mostly from south to north flowing into the Murray, and include the Wimmera, Avoca, Loddon, Campaspe and Goulburn Rivers. The Hopkins River is an exception, in that it drains south to Bass Strait.

Ecological Vegetation Classes

The Talbot area is covered mainly by the Lower Slopes / Hills Woodlands (Grassy) ecological vegetation class. The area around Back Creek is identified as Creekline Grassy Woodlands

These classes are as follows:

EVC68 Creekline Grassy Woodland

Group: Riverine Grassy Woodlands or Forests

Subgroup: Creekline and/or swampy

This EVC is identified as Endangered and is described as follows:

Eucalypt-dominated woodland to 15 m tall with occasional scattered shrub layer over a mostly grassy/sedgy to herbaceous ground-layer. Occurs on low-gradient ephemeral to intermittent drainage lines, typically on fertile colluvial/alluvial soils, on a wide range of suitably fertile geological substrates. These minor drainage lines can include a range of graminoid and herbaceous species tolerant of waterlogged soils, and are presumed to have sometimes resembled a linear wetland or system of interconnected small ponds.

Common species within the EVC are: River Red-gum Grey Box Yellow Box Golden Wattle Gorse Bitter-pea Drooping Cassinia Common Rice-flower Twiggy Bush-pea Cranberry Heath Slender Fireweed Shiny Everlasting Common Raspwort Small St John's Wort Stinking Pennywort Veined Spear-grass Rush Sedge Common Tussock-grass Common Wheat-grass Bristly Wallaby-grass Diffuse Rush Tall Sedge Weeping Grass and Twining Fringe-lily

EVC175 Grassy Woodland

Group: Lower Slopes or Hills Woodlands (_61)

Subgroup: Grassy

This EVC is identified as Vulnerable and is described as follows:

A variable open eucalypt woodland to 15 m tall over a diverse ground layer of grasses and herbs. The shrub component is usually diverse but sparse in cover. In the Goldfields bioregion, Grassy Woodland occurs on sedimentary soils on the lowest slopes at the interface between the plains and the infertile woodlands of the sedimentary hills.

Common species within the EVC are Grey Box Yellow Gum Common Name Drooping Cassinia Golden Wattle Gold-dust Wattle Wedge-leaf Hop-bush Cranberry Heath Twiggy Bush-pea Common Rice-flower Common Eutaxia Cranberry Heath Shiny Everlasting Clustered Everlasting Bronze Bluebell Slender Fireweed Trailing Speedwell Australian Carrot Nodding Saltbush Fuzzy New Holland Daisy Sieber Crassula Stinking Pennywort Supple Spear-

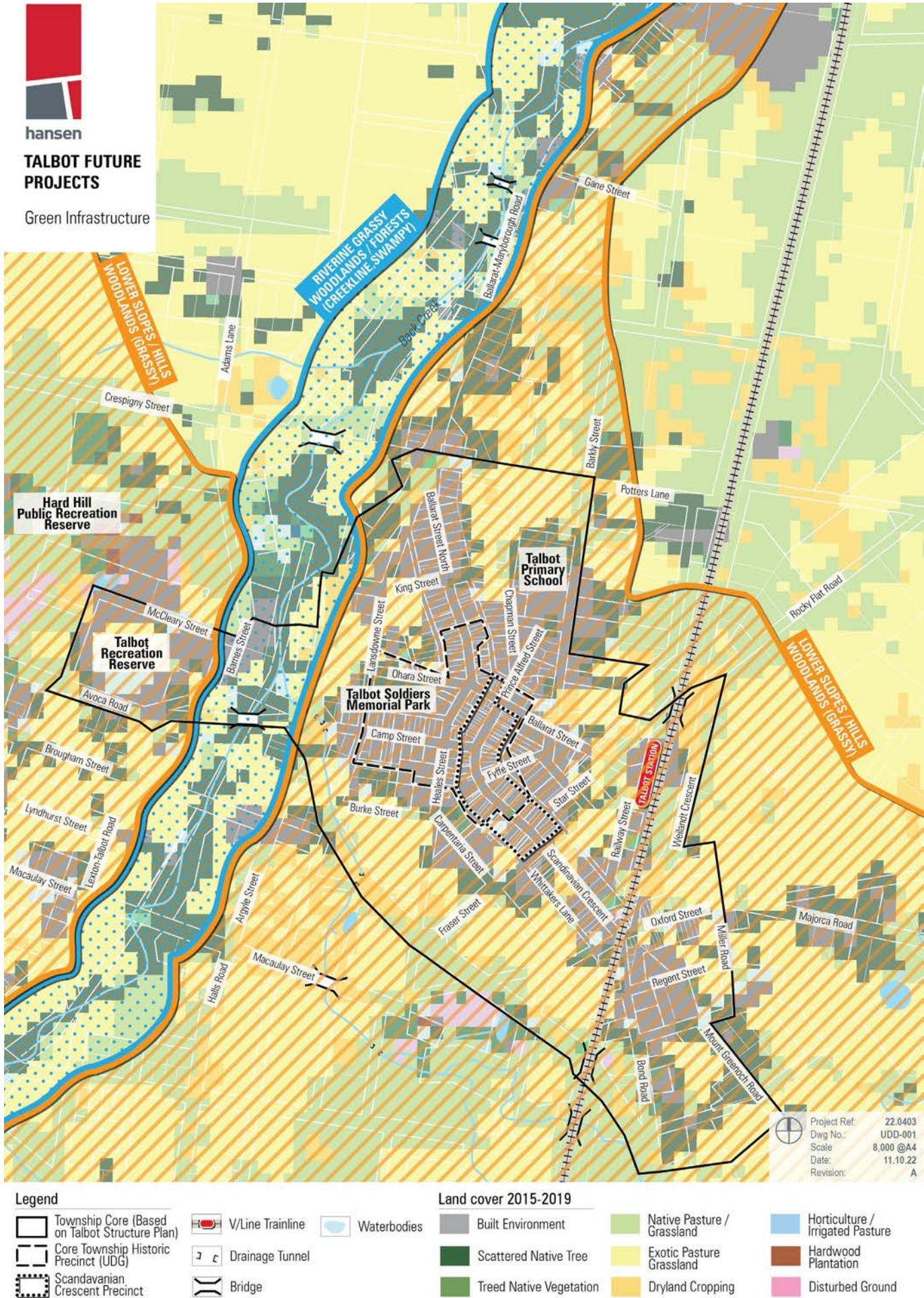


Figure 22: Biodiversity & Green Infrastructure

grass Common Wheat-grass Rough Spear-grass Grey Tussock-grass Bristly Wallaby-grass Feather Spear-grass Twining Fringe-lily and Pink Bindweed

2005 records show remaining vegetation associated with this EVC are now limited. Small patches of Creekline Grassy Woodland remains in areas along Back Creek, with a larger extent of Grassy Woodland around Hard Hill. Records of vegetation pre settlement show the same vegetation classes but much more widespread (as per Figure 22)

Endangered species

The only record for endangered or threatened species in the area are for a Little Eagle and Whiskered Tern, although south of the township records exist for the Golden Sun moth and Black eared Cockoo.

In addition, the DELWP Planning and Approvals team provided the following feedback within its submission to recent exhibition of our 'omnibus' Amendment C034cgol to the Central Goldfields Planning Scheme:

The Hard Hill Public Recreation Reserve in Talbot contains one of the most significant populations of Spiny Rice-Flower (Pimelea spinescens subsp. spinescens) in the State. Most recent surveys undertaken in 2022 identified over 2000 individual plants at this site. The department recommends the Vegetation Protection Overlay be applied to the vegetation areas of this site to provide for the conservation and protection of this critically endangered species. We would also recommend the status of the land be reviewed to be a nature conservation reserve, in part.

Existing areas of public open space

There are a number of existing areas of open public space which form part of Talbot's 'green infrastructure'. There is significant opportunity to better utilise these areas of public open space to both support community wellbeing, economic development through tourism and also enhance biodiversity within the township. These areas include:

Talbot Recreation Reserve – a more formal reserve dominated by the oval and built structures accommodating sporting facilities. While the Grassy Woodland is shown as extending into this reserve, in reality, vegetation is primarily more formal introduced canopy planting around the periphery of the site. Opportunities exist to improve the integration of biodiversity as part of any project to masterplan and improve the site.



Soldiers Memorial Park – only a very small portion of this site is currently utilised for passive recreation / cultural purposes, notwithstanding the recent reintroduction of Talbot's Avenue of Honour along the alignment of O'Hara Lane. There are a number of large canopy trees in the rest of the site which contribute to the landscape character of the broader town. While there are certainly opportunities for further development of this parcel, an existing drainage line is present and retention of an informal area which reflects the broader landscape within the core of the township has benefits. These could be leverage for tourism purposes through minor interventions such as paths and tables.



Pioneers Park – is a more formal park within the core of the township. It plays a key role in market days and contains important infrastructure such as public toilets, playground etc. While it contains several large canopy trees, the vegetation on site could be improved. However, any work within this area would need to have regard to its role as Talbot's NSP.



Vacant triangular parcel (Ornamental plantation) – while identified as an area of open space and clearly intended to house tree plantings at some stage, the site remains vacant and currently offers little to the landscape or biodiversity assets of the town.



Back Creek corridor – This corridor is the most important in the township in relation to green infrastructure with biodiversity values. It contains endangered vegetation, and has significant potential for improved biodiversity outcomes, as well as the potential to contribute to both tourism opportunities, and to support community accessibility, health and wellbeing outcomes.



Vegetation Cover

The area is primarily characterised by modified pasture and native grasslands with no key areas identified. The highly modified nature of the landscape around Talbot is typical of the goldfields area where mining and associated activities had a significant impact on the previous environmental conditions. The back Creek corridor contains the most significant areas of remnant tree cover.

Vegetation in the public realm: Street trees

Street trees within the township are not consistent with significant variation across different parts of the township. Increasing street tree planting within the township has been a recommendation of numerous reports. There is no consistent character of these plantings and, while the 2016 Urban Design Guidelines identified a list of 'preferred species' (see Appendix 3) and the township's bushfire assessment flagged the need to manage vegetation carefully there is not yet any clear direction of how new plantings may be delivered. Given the important contribution that street trees make to the character, safety and climate change resilience, further work in this space is likely to be required. In addition, in a number of areas across the town, private plantings are present within the public verge. These make an important contribution to the township's character and need to be considered carefully as part of any change to strategy in the public realm.

Vegetation in the private realm: Gardens

The private gardens of Talbot, supported by the large lot sizes stemming from the lack of sewerage, are a defining feature of the township. While primarily non-indigenous, these plantings make a significant contribution to the township's green infrastructure and would support numerous bird and insect species. They include a significant number of canopy trees on private lots which form the backdrop to many of the historic buildings but also shrubs and numerous flowering species.



Private planting of verges contribute to the landscape character



Mix of native canopy and cottage plantings in private properties



Vegetation across public and private realm provides the setting for heritage forms



Cottage gardens are more prevalent in the town core



Street trees are mixed and not always complementary to heritage forms



Generous nature of private plantings is highly influential on the public realm



More recent formal planting in public spaces



Views to Talbot's heritage forms are shaped by layered landscape



Private landscapes are highly influential even in the townships core

DEVELOPMENT CAPACITY ASSESSMENT

A high-level review of existing development capacity of unsewered lots, and future development capacity of the existing township zone areas when sewerage, is required to support an overall understanding of the potential future development capacity of the Township.

Talbot contains a core area of land within the Township Zone, where a heritage overlay (HO208 – Talbot Area) also applies.

In terms of existing subdivision patterns, many of the existing properties within the township include multiple parcels.

Smaller lots are generally located along key roads, such as Ballarat Street North, part of Ballarat Street, Camp Street, Scandinavian Crescent, and Oxford Street.

This assessment does not consider existing development capacity that may be available in land surrounding the Township Zone area, including land within the Rural Living Zone, Farming Zone or Low Density Residential Zone. Understanding development capacity of the Talbot statistical area would need to consider development potential in these surrounding areas.

Development infrastructure

Talbot currently has no access to sewerage which is a widely acknowledged constraint on development. The township area does, however have access to all other expected services including potable water and electricity. These services could be expanded but would be at the cost of the individual or developer.

There is some potential issues in the ambitions to provide significant amounts of new green infrastructure in the form of canopy vegetation and Council current agreement with Powercor.

Any new development in the town may also require the upgrading of roads and footpaths within the township

Council also provides waste collection services to the township. While there are stated aspirations to increase the provision and rates of recycling in the township there is currently no infrastructure to support these ambitions. A Refuse Centre is located on public land to the north east of the railway station

Existing Development Capacity of Township Zone - Unsewered

To calculate existing development capacity of the Township Zone areas, the following types of proposals need to be considered:

- Development of dwellings on existing vacant lots in the Township Zone. This includes consideration of proposals relating to:
 - The development of a single dwelling on a vacant (dwelling-free) lot,
 - The development of two or more dwellings on a vacant (dwelling-free) lot

It is noted that the above, this could be in the context of where the property the lot is part of is developed with a dwelling, but that dwelling is located on another lot in the property. This is due to many properties within Talbot comprising multiple individual lots.

Subdivision of existing lots into additional lots in TZ to be developed for dwellings.

For the purposes of this assessment, a minimum area of 5,000sqm has been adopted as the area necessary to achieve approval of a dwelling, and 10,000sqm for the subdivision of an existing lot into additional lots.

This is based on a 5,000sqm being the current minimum site area required for approval of dwelling, nominated in Council's Population, Housing and Residential Settlement Strategy (Adopted May 2020, refer to page 51). It is noted in the strategy that:

"... This assessment is based upon the current requirement for a minimum site area of at least 5,000sqm for approval of an additional dwelling. This minimum site area is to provide for onsite sewerage disposal, and is likely to mean that multiple existing allotments would need to be amalgamated before construction of a dwelling would be approved."

A representative of Council's Statutory Planning Department has noted that 5,000sqm isn't a requirement as such, but rather it should be considered an estimate of land area needed to provide for onsite sewerage disposal. This would potentially entail a sufficiently sized effluent field for 3-4 bedroom dwelling, space for the dwelling, gardens and outbuildings, and sufficient setbacks from the field to boundaries, buildings and waterways.

It is also noted that the use of land for a dwelling must meet requirements under Clause 32.05-3 in the planning scheme. That clause includes the requirement that:

Each dwelling must be connected to reticulated sewerage, if available. If reticulated sewerage is not available, all wastewater

from each dwelling must be treated and retained within the lot in accordance with the requirements of the Environment Protection Regulations under the Environment Protection Act 2017 for an on-site wastewater management system.



Figure 23: Map 6 - Undeveloped Urban Residential Land Supply, Talbot – from the Residential Land Supply & Demand Assessment (October 2019, p.40)- Spatial Economics

Population Housing and Residential Settlement Strategy Calculation – broadhectare lots

Fifteen (15) additional dwellings is considered the “realistic capacity” for Talbot in the Population, Housing and Residential Settlement Strategy (adopted May 2020).

Fifteen dwellings is based on findings from within the Residential Land Supply and Demand Assessment (Spatial Economics, 2019), which informed the Population, Housing and Residential Settlement Strategy.

The Spatial Economics assessment identified that in March 2019, zoned broadhectare lot supply in Talbot was 15 lots, while there was 39 vacant urban lots.

In regard to the vacant urban lots, the assessment notes at Page 41 that “Although there are 39 vacant lots identified in Talbot (i.e. sized less than 5,000 sqm) it is considered that these lots

will not be available for development due to soil capabilities/ size of allotment not being suitable to support septic tank waste systems.”

The area of the zoned broadhectare lots in the assessment is based on ‘parent parcel size’. Parent lot size refers to the size of an allotment prior to subdivision.

Spatial Economics identified 8 broadhectare lots (with a total of 7.4ha), resulting in an estimated dwelling yield of 15.

Calculation based on individual lots (Hansen Partnership)

Using a minimum area of 5,000sqm as the area necessary to achieve approval of a dwelling, and 10,000sqm for the subdivision of an existing lot into additional lots, we consider that eight (8) additional dwellings could be developed under an unsewered scenario.

The individual lots greater than 5,000sqm in the Township Zone are currently observed to be:

- 1\TP160124 – 10,936.11sqm – assumed to be Vacant – assume 2 new dwellings
- 1\TP129137 – 11,616.69sqm – assumed to be developed with a dwelling – assume 1 additional dwelling
- 30~J\PP5755 – 6,826.79sqm – assumed to be vacant – assume 1 new dwelling
- 1\TP131992 – 7,504.26sqm – assumed to be vacant – assume 1 new dwelling
- 8A~K\PP5755 – 5,134.12sqm – assumed to be vacant – assume 1 new dwelling
- Part of 1\TP160125 – area of part of parcel: approx. 17,000sqm – assumed to be developed with a dwelling – assume 2 additional dwellings.

This calculation is on the basis that the 5,000sqm threshold is applied to individual lots (and not parent lots), and the assumption that no lots will be amalgamated/ consolidated to reach 5,000sqm or 10,000sqm.

Future Development Capacity of Township Zone - Sewered

Under a future scenario where the township zone areas are sewerred, the minimum thresholds of 5,000sqm for approval of a dwelling, and 10,000sqm for the subdivision of an existing lot into additional lots, are no longer considered.

For the purposes of providing an estimate of future development capacity under the sewerred scenario, the following is assumed:

- A new dwelling on each undeveloped lot 400sqm or greater.
- A minimum size of 800sqm is the threshold at which it is assumed a vacant lot is subdivided into two lots of minimum 400sqm (providing for the development of two dwellings).
- A minimum size of 800sqm is the threshold at which it is assumed a developed lot with an existing dwelling is subdivided into two lots of 400sqm (providing for the development of an additional dwelling).

In addition:

- We have assumed that owners of properties and lots with existing dwellings, would seek to maximise the number of lots that could be generated through subdivision. We assumed that this would involve in some instances the demolition of existing dwellings, or reduction in the outdoor space associated with the primary dwelling in the subdivision, to maximise potential yield.
- The calculation are based on properties (see in Figure 25) rather than individual lots (shown in Figure 24) with the presumption that to develop these properties, a reconfiguration of existing lots within individual properties is a likely outcome.
- For some of the larger lots to be subdivided (generally those above 2000sqm), we have deducted around 15% from the available lot size in account of internal roadways and other infrastructure that may needed.
- The demolition of dwellings is assumed to occur within the Talbot Area Heritage Overlay (but not of significant buildings).
- We have however excluded the potential for subdivision lots which have existing buildings likely to be of heritage value which take up the majority of a lot.
- Public land, including that currently zoned Township has also been excluded, as have small anomalous lots which are unlikely to accommodate any dwelling.

This scenario also assumes that:

- No smaller lots in different properties will be amalgamated (consolidated) to reach 400sqm, and
- No undevelopable smaller lots would be amalgamated (consolidated) alongside an existing lot greater than 400sqm to reach 800sqm for subdivision (e.g. a land owner consolidating a 650sqm developable lot and 3x 50sqm undevelopable lots to enable 2 developable lots), or other similar combinations.

A 400sqm minimum lot size is assumed as that threshold provides a level of consistency with the *Talbot Urban Design Guidelines* (2016, Michael Smith and Associates), which identifies at Page 40 a minimum lot size for development of 400sqm.

Under this sewerred scenario, we estimate that an additional 718 dwellings could be developed in the existing Township Zone areas. This figure is an estimation only. The calculation requires further ground-truthing to confirm the accuracy of aerial imagery and GIS data relied upon.

It is noted that LSI01 extends across the north-western edge of the township zone area. Within this overlay, the suitability for development of some or all of lots may be limited.

In addition, analysis of key view lines and further analysis of existing heritage values of the township may identify other lots across the township which are potentially unsuitable for development.

This reduction in capacity in response to heritage and environmental constraints could potentially be offset against the identification of additional areas for development outside the existing Township zoned land.

Some consideration of opportunities for Low Density Residential land (which has a minimum lot size of 2000sqm when sewerred or 4000sqm without sewer access, in areas on the periphery of the township currently zoned for Rural Living may also increase the growth capacity of the township.

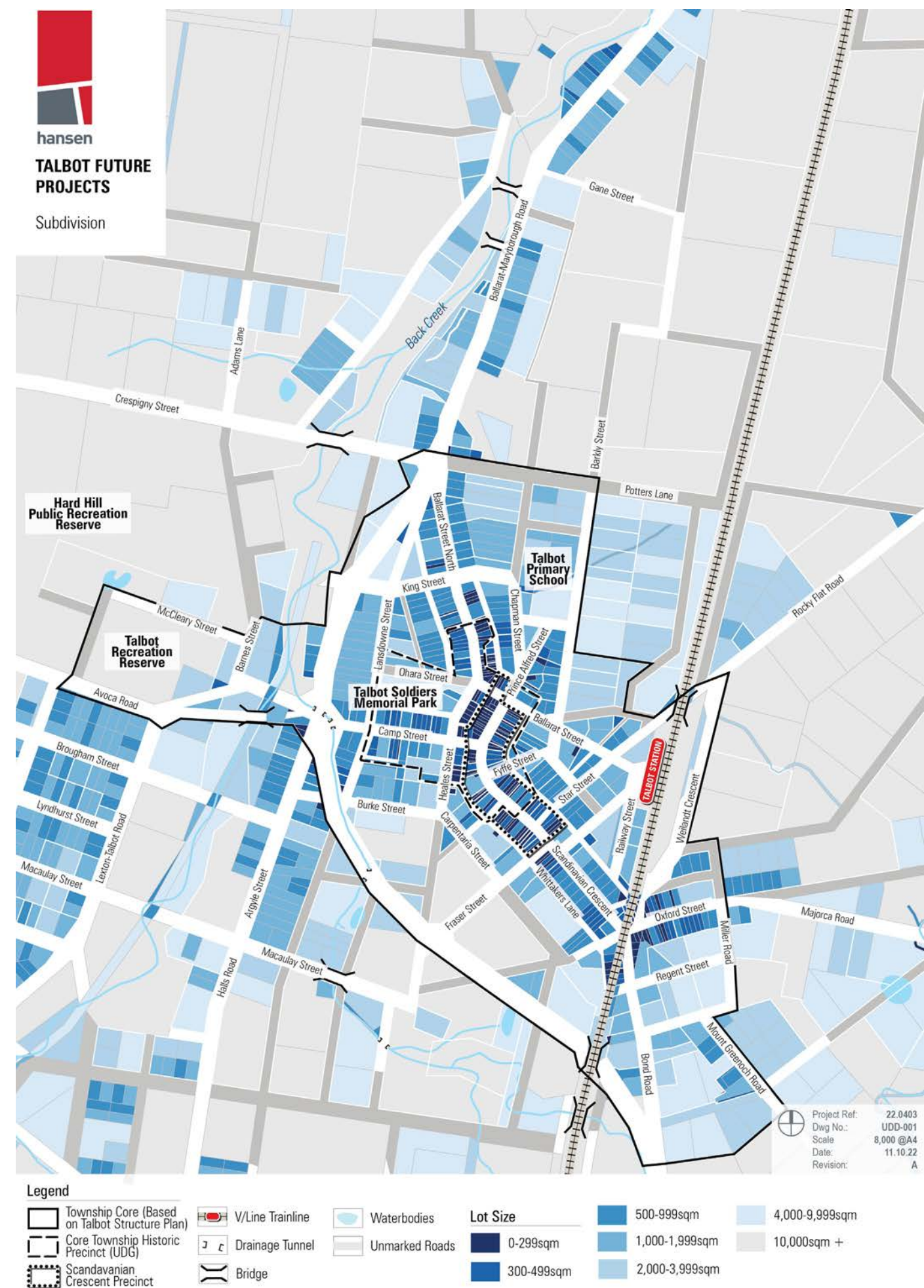
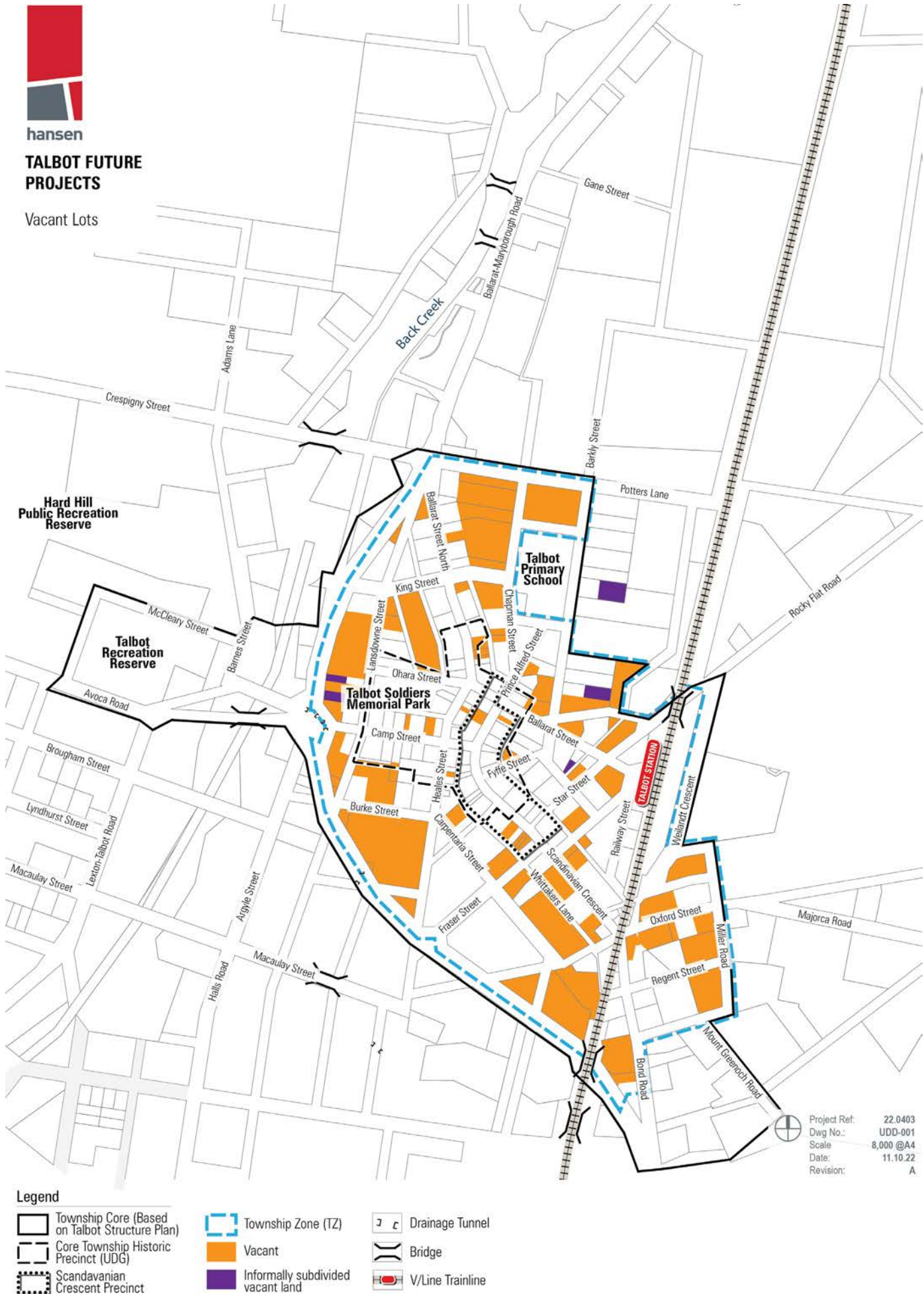


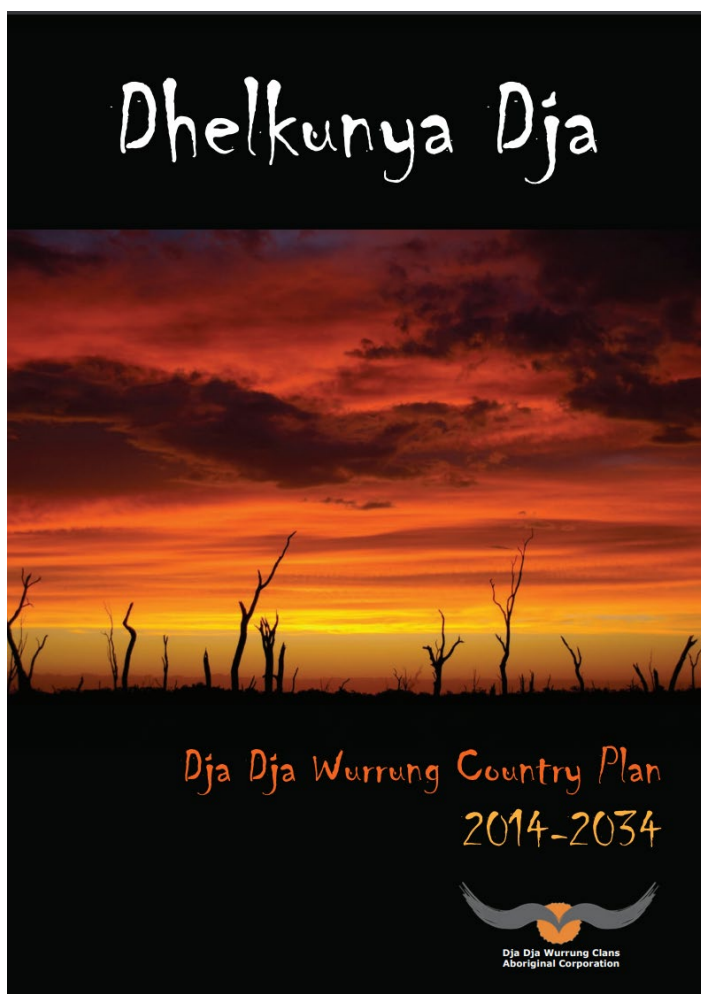
Figure 24: Existing subdivision pattern



CULTURAL HERITAGE

Given the type and scope of the project no direct engagement has been undertaken with the Traditional Owners of the land on which Talbot is located. Nonetheless it is important to ensure the project has an understanding of the history and background of the landscape and area from the viewpoint of those Traditional custodians. The Regional Catchment Strategy (RCS) undertaken recently included documentation of the cultural values of the area and has formed the basis for this documentation. No assessment or recommendations are made on the basis of this documentation, on the grounds that any determination as such should be driven by the Traditional Owners.

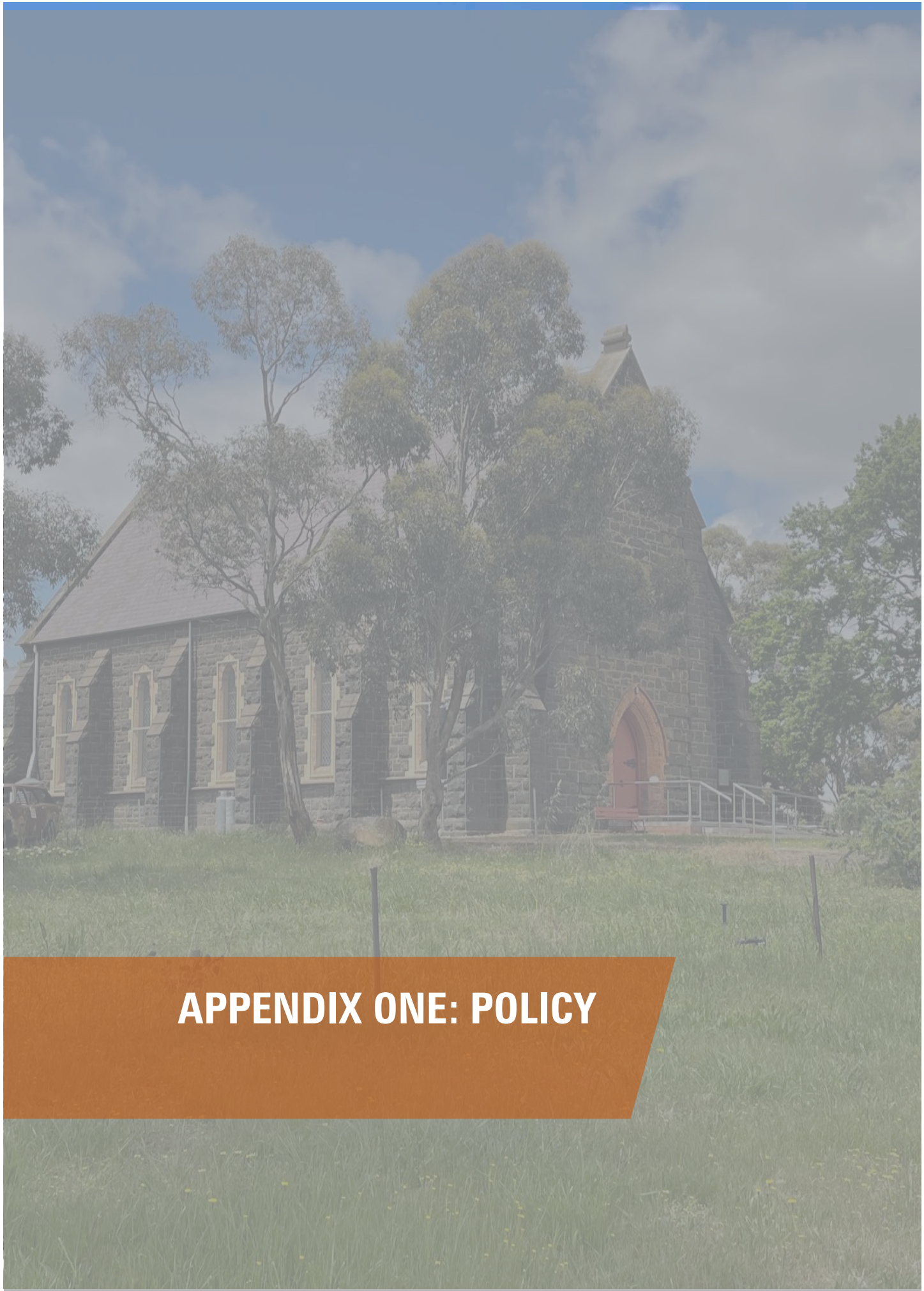
In addition to the background documented in Appendix 4, which is drawn from the RCS, it is noted that the Dja Dja Wurrung Registered Aboriginal Party have prepared their own plan to guide how their Country is planned and managed, Dhelkunya Dja.



From a planning perspective, a number of areas in close proximity to the township are identified as being potentially of Cultural Heritage Significance and are therefore subject to the State mandated Cultural Heritage Management Plan process. This is applied within a certain distance of waterways in recognition of their importance as part of the broader landscape to Traditional Owners. There are no individual sites identified, although the presence of an important Birthing Tree in the wider district is acknowledged. The areas identified by the Cultural Heritage Significance Overlay includes parts of the Township zoned land on the western edges



Figure 26: Areas of potential cultural heritage significance for which a CHMP would be triggered.



APPENDIX ONE: POLICY

Planning Policy Details

Settlement

State Policy sets out the principles for identifying areas for growth and the expectations in terms of land supply.

Clause 02-03-1 (Settlement) identifies Talbot as a 'local community centre', the role of which is to provide "mainly day to day convenience shopping". This Clause also specifies that the townships' identity is "defined by town's heritage character, particularly Scandinavian Crescent and Camp Street". Relevant settlement strategies include directing development to infill lots that are suitable for development in Talbot and encouraging a more compact urban form.

Clause 11.01-1L (Settlement - Central Goldfields Planning Scheme (CGPS)) supports the provision of low density and rural living opportunities around the periphery of Talbot where they do not conflict with environmental and agricultural objectives and where infrastructure can be supplied in a cost-effective way.

Environmental and landscape values

Clause 02.03-2 (Environmental and landscape values) highlights that there is a need to protect and enhance the natural environment to protect ecological processes while providing for continued land use change.

12.01-2S (Native vegetation management) sets the objective to mitigate deterioration of native vegetation. Allocates the use of the Guidelines for the removal, destruction or lopping of native vegetation (Department of Environment, Land, Water and Planning, 2017) which includes the three step approach to:

- Avoid the removal, destruction or lopping of native vegetation.
- Minimize impacts from the removal, destruction or lopping of native vegetation that cannot be avoided.
- Provide an offset to compensate for the biodiversity impact from the removal, destruction or lopping of native vegetation.

Protecting the Talbot districts' volcanic rises as a significant landscape is a key strategy at Clause 02.03-2 (Environmental and landscape values)

Environmental risks and amenity

The environmental risks and amenity policy are contained in clause 13 to concerning development with factors including climate change impacts, bushfire risk, floodplains, soil degradation, noise, air quality and amenity, human health and safety.

The CGPS Contains no locally applicable content / directions.

Natural resource management

State policy for natural resource management is included at clause 14. Generally, strategy revolves around preserving agriculture, water and natural resources whilst also managing the conflicts with urban development.

Clause 14.02-2L (Water quality - Central Goldfields) seeks to ensure that any effluent disposal systems in unsewered areas are located and maintained to minimise the risk of pollution to waterways.

Built Environment

Clause 15.01-1 (Built Environment) contains policy to the urban design, building design and subdivision design as well as strategies to achieve broader goals of achieving healthy neighbourhoods, neighbourhood character and design for rural areas. General themes to these clauses are to develop an identity and character of new developments that are of high amenity and give people the opportunity to access green space and public transport.

Clause 02.03-5 (Built environment and heritage) identifies that the main street Talbot is amongst the most intact heritage streetscapes in the Goldfields region, while the Talbot Structure Plan (Clause 02.04) identifies the central core of Talbot as a 'Conservation Precinct' where "historic urban form, heritage buildings and streetscapes" are to be protected and enhanced.

Housing

Clause 16.01 (Residential Development) firmly outlines the requirement of the council to provide adequate housing supply that is supported with a "high level of internal and external amenity". Housing affordability is a strong pillar to the policy whereby housing variety and accessibility at a range of incomes should be available to the community. The 16.01-3S Clause (Rural residential development) sets the strategy of development so that it does not occur on high quality agricultural land uses. It ensures the integrity of the surrounding environment is maintained and policy encourages that housing development should be supported through a housing and settlement strategy.

CGPS contains no locally applicable content / directions.

Economic development

Clause 17.04-1S (Facilitating tourism) sets the objective to create social and cultural destinations that are also compatible with surrounding uses and the natural environment.

Clause 17.03-1L (Industrial land supply - Central Goldfields) encourages industrial development in rural areas and within unsewered urban areas where a number of criteria are

demonstrated to be met, specifically:

- The industry cannot be located in an established industrial zone.
- A sufficient standard of road access is available or can be provided.
- Effluent can be contained within the site and there is a method of disposal that minimises the potential for pollution to waterways and groundwater systems.
 - A reliable potable water supply is available.
 - Detrimental impacts on the following are minimised:
 - Adjacent productive agricultural land.
 - The visual amenity of the rural landscape.
 - The amenity of adjacent residential land.

On a regional basis (all Clause 17.01-1R Diversified economy – Loddon Mallee South):

- the ongoing role and contribution of the region’s small towns, including Talbot, through investment and diversification of the local economy is supported.
- emerging and potential growth sectors such as tourism, renewable energy, resource recovery and other green industries are supported.
- new manufacturing and food processing industries that build on supply chains and take advantage of well-located and affordable land are to be facilitated.

On a regional basis, tourism opportunities in appropriate locations near heritage places and natural environments are to be facilitated (Clause 17.04-1R (Tourism – Loddon Mallee South).

Transport

Clause 18.01 (land use and transport) largely describes the need to provide access to public transport that is convenient and accessible to both urban and rural areas in Victoria. Furthermore, development should coincide and be based around transport connections.

CGPS contains no locally applicable content / directions.

Infrastructure

Clause 19.02 (community infrastructure) advocates for sufficient provision of health, education and cultural facilities to the community. Additionally, open space and social infrastructure is to equally be prioritised in development.

The development infrastructure clause at 19.03 includes the need to provide an adequate integrated water management and a development and infrastructure contributions plan.

Clause 19.03-3L (Integrated water management – Central Goldfields) seeks to ensure effluent disposal systems can be contained within the site and to minimise the potential for pollution if reticulated sewerage is not available.

On a regional basis, ongoing investment in water infrastructure and management of water resources to enhance security and efficiency of water supply to irrigators, farms and urban areas is supported. (Clause 19.03-3R Integrated water management. – Loddon Mallee South).

Also on a regional basis, development in renewable energy, waste to energy, carbon sequestration and other new energy opportunities is supported and to be facilitated (Clause 19.01-2R Renewable energy – Loddon Mallee South).

Zones

TZ - Township Zone

Applies to the central core of the township. The local Schedule contains no variations.

LDRZ - Low Density Residential Zone

Applies to a small area of land north of the township core, on the east side of the Ballarat – Maryborough Road. The local Schedule contains no variations.

RLZ - Rural Living Zone

Applies to land surrounding the central core of the township. The local Schedule contains no variations.

FZ - Farming Zone

Applies to land surrounding the township, beyond the Rural Living Zone. The local Schedule applies a minimum subdivision area of 40ha, and a minimum area for which no permit is required to use land for a dwelling also of 40ha.

PPRZ - Public Park and Recreation Zone

Applies to the Talbot Football Ground and the Hard Hill Public Recreation Reserve to the west of the township core.

PUZ - Public Use Zone

PUZ1 - Service and Utility

PUZ2 - Education

PUZ3 - Health and Community

PUZ6 - Local Government

PUZ7 - Other Public Use

Transport Zone

TRZ1 - State Transport Infrastructure: Applies to the Mildura line, which passes through Talbot and includes the Talbot Train Station.

TRZ2 - Principal Road Network: Applies to the Ballarat – Maryborough Road and to the Lexton – Talbot Road.

TRZ3 - Significant Municipal Road: Applies to Ballarat Street North, Avoca Road, Camp Street, Scandinavian Street, Oxford Street and Majorca Road.

Overlays

Bushfire Management Overlay

Applies to parts of the Hard Hill Public Recreation Reserve and some RLZ lots on the western periphery of the study area. No local Schedule applicable.

Erosion Management Overlay

Applies to the whole of the study area. The local Schedule exempts the use and development of an outbuilding having an area of less than 120 square metres.

Heritage Overlay

HO208 (Talbot area) applies to all TZ land and RLZ parcels between Bond and Mt Greenoch Road to the south of the township core

HO132 applies to the Amherst Cemetery and is not currently listed in the local HO Schedule.

Land Subject to Inundation Overlay & Land Subject to Inundation Overlay Schedule 1

Both apply to the same areas of land:

- A large swathe of land that in part follows the general alignment of Back Creek and in part follows the general alignment of the Ballarat Maryborough Road.
- Parts of the Amherst Bushland Reserve to the west of the township

The local Schedule exempts:

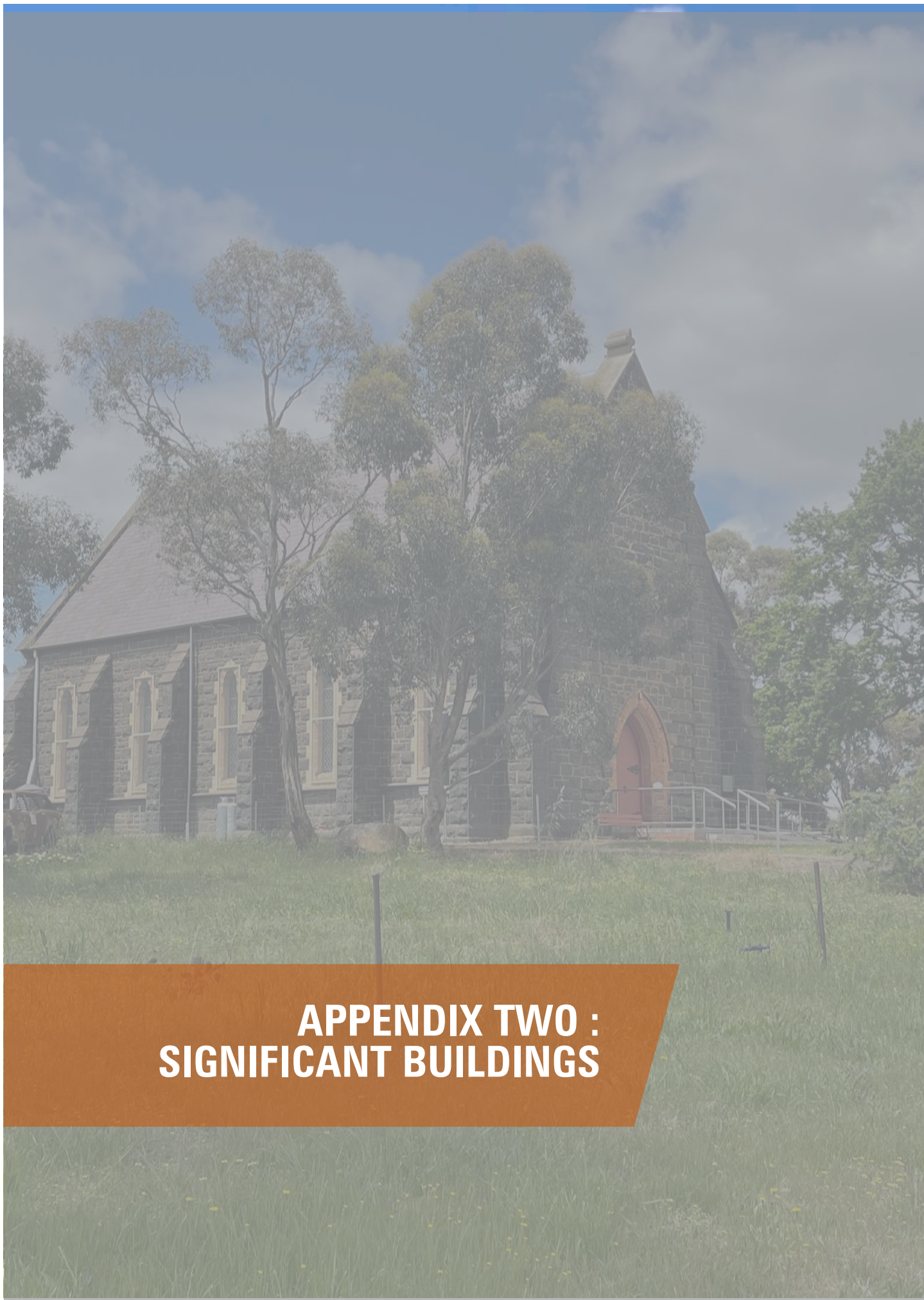
- The construction of an outbuilding with an area of less than 120

square metres.

- Repairs and routine maintenance to existing buildings and works, excluding levees.
- Buildings and works associated with passive recreation.

Salinity Management Overlay

Applies to the whole of the study area. The local Schedule exempts the use and development of an outbuilding having an area of less than 120 square metres.



APPENDIX TWO : SIGNIFICANT BUILDINGS

Township of Talbot

Former Talbot Borough Hall, Ballaarat Street	411
A.N.A. Hall, Ballaarat Street, corner Heales Street	413
Ramsay shop and residence, Ballaarat Street North	414
Former Bull and Mouth Hotel, Ballaarat Street	416
Former Burdess Residence, Barkly Street	424
Former Presbyterian Manse, Bond Street (see former Presbyterian Church, Heales Street)	
Former Willox Residence, Bond Street, corner Mount Greenock Road	428
Former Church of England vicarage, Brougham Street, corner Russell Street (see St Michael's Church of England, Lansdowne Street)	
Former Hoskins Residence, Camp Street, corner Heales Street	434
Post and Telegraph Office, Camp Street, corner Heales Street	436
Former Court House, Camp Street	438
Free Library (Former Court of Petty Sessions), Camp Street	439
Former Dowling Residence, Camp Street	441
Former Primitive Methodist Church, Camp Street	442
Shops and residence, Camp Street, corner Scandinavian Crescent	446
Former Elder residence, Camp Street	448
Former Camp Hotel, Camp Street, corner Heales Street	449
Former Wesleyan Church, Camp Street	453
Fire Brigade Engine House, Heales Street	457
Former Police quarters, lock-up and stables, Heales Street	458
Former Sub-Treasury, Heales Street	460
Former Presbyterian Church, Heales Street and former Presbyterian Manse, Bond Street	461
Former London Chartered Bank Coach House and Stables, Heales Street (see Former London Chartered Bank, Scandinavian Crescent)	
St Michael's Church of England, Lansdowne Street, corner O'Hara Street and former Vicarage, Brougham Street, corner Russell Street	
Talbot Railway Station, Railway Street	463
Prince Alfred State School No.954 and former Common School, Rowe Street	471
Former Commercial Hotel, Scandinavian Crescent and Fyfe Street	475
Shop, Scandinavian Crescent (see Shops and residence, Camp Street, corner Scandinavian Crescent)	479
Former London Chartered Bank, Scandinavian Crescent and former Coach House and Stables, Heales Street	483
Former Talbot Gas Works, Whittakers Lane	490

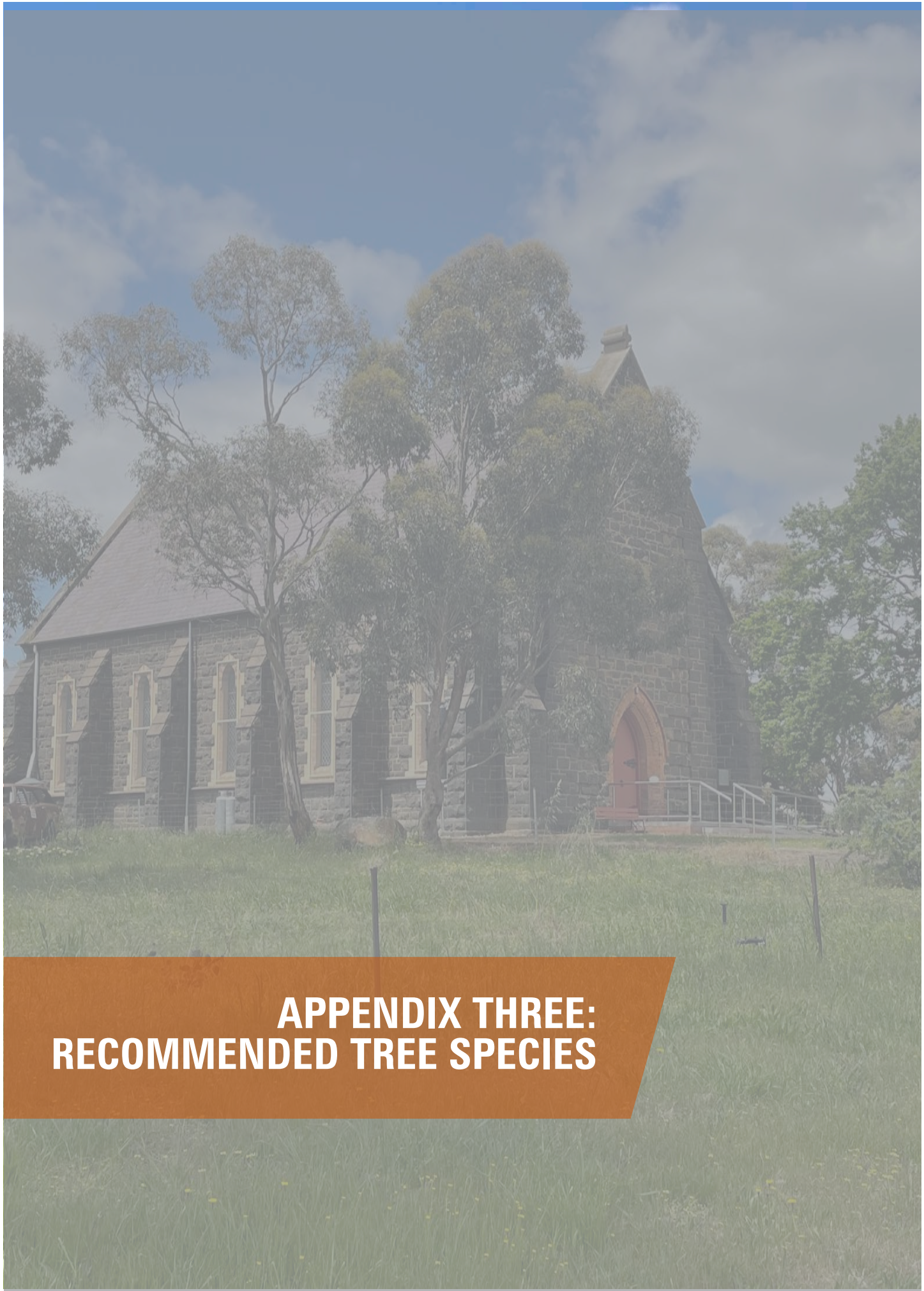
Township of Talbot

Former Talbot Borough Hall, Ballaarat Street	411
A.N.A. Hall, Ballaarat Street, corner Heales Street	413
Ramsay shop and residence, Ballaarat Street North	414
Former Bull and Mouth Hotel, Ballaarat Street	416
Former Burdess Residence, Barkly Street	424
Former Presbyterian Manse, Bond Street (see former Presbyterian Church, Heales Street)	
Former Willox Residence, Bond Street, corner Mount Greenock Road	428
Former Church of England vicarage, Brougham Street, corner Russell Street (see St Michael's Church of England, Lansdowne Street)	
Former Hoskins Residence, Camp Street, corner Heales Street	434
Post and Telegraph Office, Camp Street, corner Heales Street	436
Former Court House, Camp Street	438
Free Library (Former Court of Petty Sessions), Camp Street	439
Former Dowling Residence, Camp Street	441
Former Primitive Methodist Church, Camp Street	442
Shops and residence, Camp Street, corner Scandinavian Crescent	446
Former Elder residence, Camp Street	448
Former Camp Hotel, Camp Street, corner Heales Street	449
Former Wesleyan Church, Camp Street	453
Fire Brigade Engine House, Heales Street	457
Former Police quarters, lock-up and stables, Heales Street	458
Former Sub-Treasury, Heales Street	460
Former Presbyterian Church, Heales Street and former Presbyterian Manse, Bond Street	461
Former London Chartered Bank Coach House and Stables, Heales Street (see Former London Chartered Bank, Scandinavian Crescent)	
St Michael's Church of England, Lansdowne Street, corner O'Hara Street and former Vicarage, Brougham Street, corner Russell Street	463
Talbot Railway Station, Railway Street	471
Prince Alfred State School No.954 and former Common School, Rowe Street	475
Former Commercial Hotel, Scandinavian Crescent and Fyfe Street	479
Shop, Scandinavian Crescent (see Shops and residence, Camp Street, corner Scandinavian Crescent)	
Former London Chartered Bank, Scandinavian Crescent and former Coach House and Stables, Heales Street	483
Former Talbot Gas Works, Whittakers Lane	490

Township of Talbot

Basalt barn or outbuilding, Argyle Street	408
Residence, Argyle Street	409
Standpipe, Argyle Street (see Talbot Reservoir, Parish of Caralulup)	
Residence, Ballaarat Street East	410
Former Talbot Borough Hall, Ballaarat Street	411
A.N.A. Hall, Ballaarat Street, corner Heales Street	413
Ramsay shop and residence, Ballaarat Street North	414
Residence, Ballaarat Street North	415
Former Bull and Mouth Hotel, Ballaarat Street	416
Residence, Ballaarat Street North	418
Residence, Ballaarat Street North	419
Former Flour Mill, Ballaarat Street North	420
Residence, Ballaarat Street North	421
Residence, Ballaarat Street North, corner Crespigny Street	422
Former Burdess Residence, Barkly Street	423
Residence, Barkly Street	424
Former Presbyterian Manse, Bond Street	425
(see former Presbyterian Church, Heales Street)	
Residence, Bond Street, corner Regent Street	426
Former Flynn Residence, Bond Street, corner regent Street	427
Former Willox Residence, Bond Street, corner Mount Greenock Road	428
Residence, Bond Street, corner Mount Greenock Road	429
Residence, Bond Street	430
Former Church of England vicarage, Brougham Street, corner Russell Street (see St Michael's Church of England, Lansdowne Street)	
Residence, Bulwer Street	431
Talbot Public Park and Recreation Reserve, Bulwer Street	432
Former Hoskins Residence, Camp Street, corner Heales Street	434
Post and Telegraph Office, Camp Street, corner Heales Street	436
Former Court House, Camp Street	438
Free Library (Former Court of Petty Sessions), Camp Street	439
Former Dowling Residence, Camp Street	441
Former Primitive Methodist Church, Camp Street	442
Former Dunach State School No. 1412, Camp Street, corner Lansdowne Street	445
Shops and residence, Camp Street, corner Scandinavian Crescent	446
Former Elder residence, Camp Street	448
Former Camp Hotel, Camp Street, corner Heales Street	449
Residence, Camp Street, corner Heales Street	451
Court House Hotel, Camp Street	

Court House Hotel, Camp Street	451
Former Wesleyan Church, Camp Street	452
Residence, Chapman Street	453
Soldiers Memorial Park, Heales Street, corner O'Hara Street and Lansdowne Street	454
Fire Brigade Engine House, Heales Street	455
Former Police quarters, lock-up and stables, Heales Street	457
Former Sub-Treasury, Heales Street	458
Former Presbyterian Church, Heales Street and former Presbyterian Manse, Bond Street	460
Former London Chartered Bank Coach House and Stables, Heales Street (see Former London Chartered Bank, Scandinavian Crescent)	461
St Michael's Church of England, Lansdowne Street, corner O'Hara Street and former Vicarage, Brougham Street, corner Russell Street	
Residence, Oxford Street	463
Standpipe, Oxford Street (see Talbot Reservoir, Parish of Caralulup)	465
Back Creek National School site, Peel Street	466
'Bolties Bridge', Peel Street	467
Former Edwards Shop and residence, Prince Alfred Street	468
Residence, Prince Alfred Street	469
Residence, Prince Alfred Street	470
Talbot Railway Station and railway residences, Railway Street	471
Ornamental Plantation Reserve, Railway Street, corner Grey St	472
Former Roman Catholic Church, Regent Street	473
Prince Alfred State School No.954 and former Common School, Rowe Street	
Former Talbot Leader Office, Scandinavian Crescent	475
Residence, Scandinavian Crescent	476
Former 'London House', Scandinavian Crescent	477
Former Commercial Hotel, Scandinavian Crescent and Fyfe Street	478
Residence, Scandinavian Crescent, corner Star Street	479
Former Burdess Shop, Scandinavian Crescent, corner Ballaarat St	480
Shop, Scandinavian Crescent (see Shops and residence, Camp Street, corner Scandinavian Crescent)	481
Shop, Scandinavian Crescent	
Former London Chartered Bank, Scandinavian Crescent and former Coach House and Stables, Heales Street	482
Former Bank of Australasia, Scandinavian Crescent	483
	484
Former Phoenix Hotel, Scandinavian Crescent	
Former Bach Butchers Shop, Scandinavian Crescent	485
Former Shop, Scandinavian Crescent	486
Former Shops, Scandinavian Crescent	487
Residence, Scandinavian Crescent, corner Fraser Street	488
Former Talbot Gas Works, Whittakers Lane	489
	490

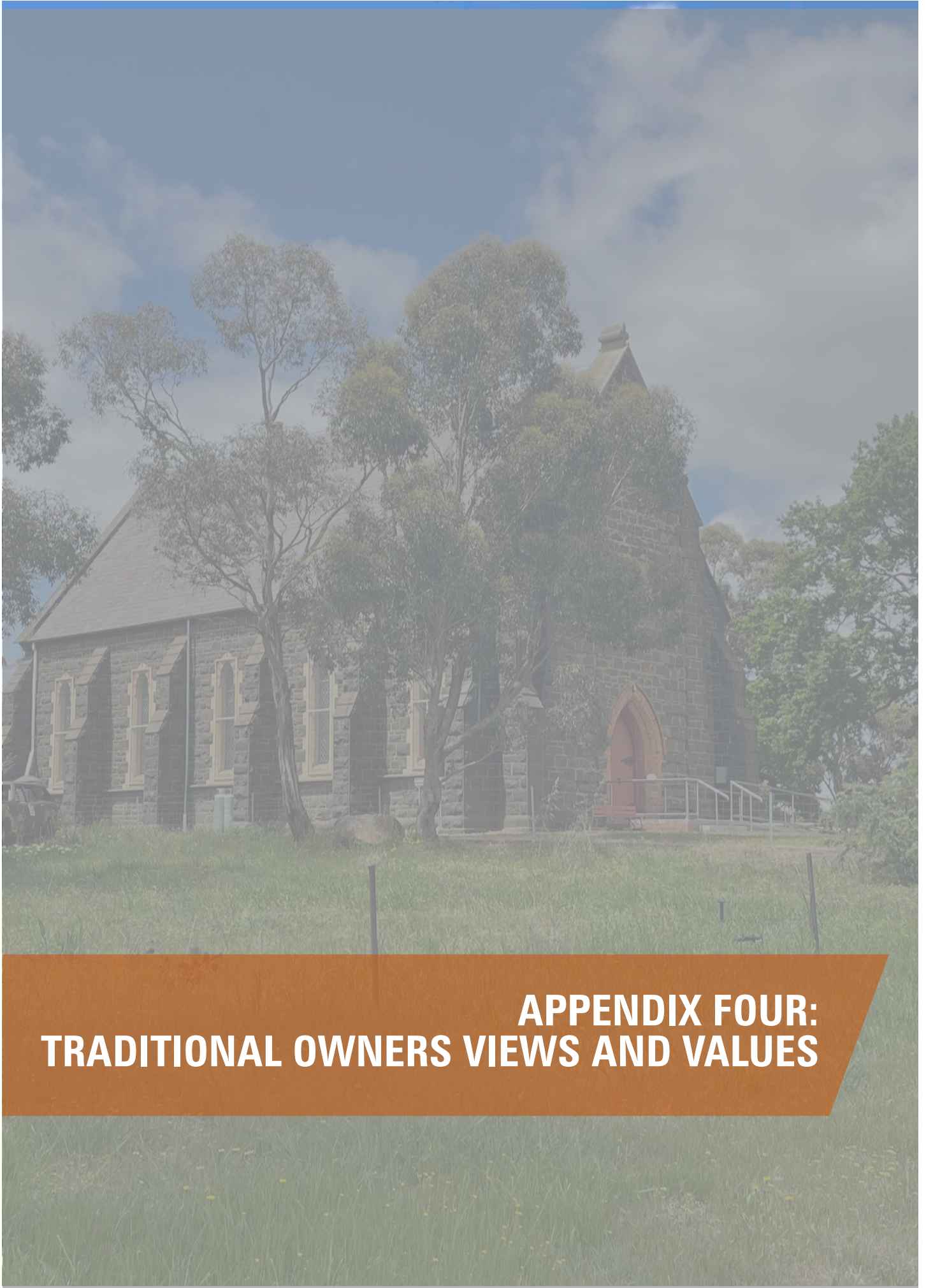


APPENDIX THREE: RECOMMENDED TREE SPECIES

Figure 4 - Talbot – Recommended Street and Park Tree List

The following list are suitable tree species for use as street trees and parkland open space areas in Talbot. They are hardy species tolerant to frosts and dry conditions. Those marked with (x) would be suitable for planting under overhead power wires.

(X)	Botanical Name	Common Name
	<i>Acer freemanii</i> "Autumn Blaze"	Norwegian Maple
	<i>Acer rubrum</i> "October Glory"	Norwegian Maple
	<i>Allocasuarina littoralis</i>	Black Sheoak
	<i>Allocasuarina glauca</i>	Grey Buloke
	<i>Angophora costata</i>	Smooth-Bark Apple-Myrtle
	<i>Brachychiton populneus</i>	Kurrajong
X	<i>Callistemon</i> "Harkness Hybrid"	Bottlebrush
	<i>Celtis occidentalis</i>	Hackberry
	<i>Corymbia citriodora</i>	Lemon Scented Gum
X	<i>Corymbia citriodora</i> "Dwarf Pink"	Lemon Scented Gum
X	<i>Corymbia citriodora</i> "Lemon Squash"	Lemon Scented Gum
	<i>Cupressus torulosa</i>	Bhutan Cypress
X	<i>Eucalyptus cladocalyx</i> "Vintage Red"	Dwarf Sugar Gum
	<i>Eucalyptus leucoxylon</i>	Yellow Gum
	<i>Eucalyptus leucoxylon</i> "Rosea"	Red-Flowered Yellow Gum
	<i>Eucalyptus leucoxylon</i> "Goowla Gem"	Red-Flowered Yellow Gum
X	<i>Eucalyptus leucoxylon</i> "Euky Dwarf"	Dwarf Yellow Gum
	<i>Eucalyptus mannifera</i>	Brittle Gum
	<i>Eucalyptus mannifera</i> "Little Spotty"	Dwarf Brittle Gum
	<i>Eucalyptus melliodora</i>	Yellow Box
	<i>Eucalyptus sideroxylon</i>	Ironbark
	<i>Fraxinus pennsylvanica</i> "Urbanite"	Ash
X	<i>Hakea francisiana</i>	Grass Leaf Hakea
X	<i>Geijera parviflora</i>	Wilga
X	<i>Lagerstroemia indica x fauriei</i> (Various Cultivars)	Crepe Myrtle
X	<i>Melia azedarach</i> "Elite"	White Cedar
	<i>Pyrus calleryana</i> (Various Cultivars)	Ornamental Pear
	<i>Quercus cerris</i>	Turkey Oak
	<i>Robinia pseudoacacia</i> "Frisia"	Black Locust
	<i>Schinus molle</i>	Peppercorn



APPENDIX FOUR: TRADITIONAL OWNERS VIEWS AND VALUES

Regional Catchment Strategy documentation

Note: this content is quoted directly from the RCS (published 09.09.22)

Traditional Owners Views and Values

The Dja Dja Wurrung are the Traditional Owners of the land on which Talbot was established. Through work undertaken as part of the Regional Catchment Strategy for the area, the cultural values of the area were recognised and are replicated here.

Dja Dja Wurrung Country is entirely within and comprises 58 per cent of the north central region. It extends from the upper catchments of the Bulutjal Yaluk (Loddon River) and Golipan (Coliban River) to Lalgambook (Mount Franklin) and the towns of Creswick and Daylesford in the southeast, to the Yaluk (Campaspe River) Kyneton, Redesdale and Rochester in the east, Yung Balug Djandak (Boort Lakes) in the north, Lake Buloke, Donald in the northwest, to the Avon Richardson River, Navarre Hill and Mount Avoca marking the south west boundary.

In 2013, the Dja Dja Wurrung Aboriginal Clans Corporation (DDWCAC) signed a Recognition and Settlement Agreement (RSA) with the Victorian government, under the Traditional Owner Settlement Act 2010. The Dja Dja Wurrung RSA involved transfer of six parks in the region, to Aboriginal Title. In collaboration with partner organisations the Dhelkunya Dja Land Management Board developed a Joint Management Plan (JMP) for the parks which include:

- Greater Bendigo National Park
- Hepburn Regional Park
- Kara Kara National Park
- Kooyoora State Park
- Paddys Ranges State Park
- Wehla Nature Conservation Reserve

DDWCAC also has Registered Aboriginal Party (RAP) status under the Aboriginal Heritage Act 2006. The boundaries of the RAP and RSA areas are consistent. The Dja Dja Wurrung Aboriginal Clans Corporation have prepared the Dhelkunya Dja, Dja Dja Wurrung Country Plan which contains further detail about their cultural connection to Country.

The Jaara (Dja Dja Wurrung people) were engaged as part of the development of the Regional Catchment Strategy and identified the following values:

Values, concerns and aspirations

The following values, concerns and aspirations were developed through discussions and provided by Dja Dja Wurrung in writing (written contributions are shown in italics). In relation to biodiversity, we have referenced outcomes of DELWPs regional Biodiversity Response Planning engagement with Dja Dja Wurrung. In relation to water, we engaged the Dja Dja Wurrung water knowledge group Kapa Gatjin. Dja Dja Wurrung made it clear that all areas of Djandak (Dja Dja Wurrung Country) are of great importance and that the naming and identification of specific locations and species in this RCS, is intended to provide a focus for this RCS and should not compromise the importance of those not listed. They also stressed that cultural values identified here do not fully define the interests and beliefs of Jaara, which are multifaceted and cannot be defined through a single standpoint or response.

Vision for Country

From Dhelkunya Dja, Dja Dja Wurrung Country Plan:

"Our Vision for Country is to ensure that:

The health and wellbeing of our people is strong, and underpinned by our living culture.

Our lands and waters are in good condition and actively managed to protect our values and to promote the laws, culture and rights of all Dja Dja Wurrung People.

As this Country's First People we are politically empowered with an established place in society and capable of managing our own affairs from a strong and diverse economic base."

Cultural lore

Bunjil, the creator being, bestows Jaara with the laws and ceremonies that ensure the continuation of life. Mindi the Giant Serpent is known as a protector and enforcer of Bunjil's Lore and is a large and powerful creator being that was not to be messed or disturbed with. Mindi holds the powers of justice for Lore breakers and death/destruction. Mindi the Giant Serpent guides and enables the Lore keepers, punishes Lore breakers and continues the cycles of life force and creation.

Waa the Crow is known to be the protector of the rivers and waterways, ensuring that water (Gatjin) continues to run through the veins of our Country and provide for Bunjil's creations, the animals and the plants across Djandak. Waa is also the discoverer of Wi (fire), having stole the secret of Wi, burning his feathers black in the process.

The roles that these creators play are central to the Lores and laws that dictate Jaara today. Similarly, Wi and Gatjin are essential for life, essential for the regeneration of Country and central to the restoration of ecological balance across Djandak. These lessons begin in childhood with the stories of Country, teaching the relationship and cultural worldview that make the foundation of the relationship to all the aspects of Country.

Impacts and threats to Healthy Country

After the frontier wars, after the surviving Jaara people were forced onto missions to free up the land for more migrants to occupy, many drastic changes to the Cultural Landscape took place. Goldmining, agriculture and urban development had inadvertently been the downfall of living in balance with our Djandak in a way that all things could live sustainably. These drastic changes are what we refer to as 'upside-down Country'.

Gold mining tempted many people from all over the world to come with much haste. The race was on in a 'free for all' manner, digging up the Country to find the precious Kara Kara (gold). Alluvial mining added mass sediments to the water and leached out the arsenic, poisoning groundwater systems which are alarmingly expensive to mitigate or just keep at bay. This is the legacy of mining that still interferes with the health of the land and the people today. Many of these practices are no longer legal due to the environmental harm caused. However, mining continues today with different methods that still require large amounts of water and by process still contaminate it. The mines go for kilometres underground with tunnels honeycombing Jaara Country and eventually will destabilise it.

The introduction of foreign crops, animals and mindsets completely changed the landscape in a radical nature. The land was cleared for farming, removing many of the mother trees that supported and stabilised the forest and water table. This triggered the main problems of the future, our present dilemma of erosion and salinity. This was accelerated by the introduction of hard-hoofed animals: cattle and sheep. Widespread clearing has caused much of the productive topsoil to erode away and allowed the establishment of many pest animals and plants that are displacing and preying on our native species. In some cases, the shift in ecosystem composition is causing an over-abundance of native species like kangaroo, which is increasing the demand on already limited food resources. The majority of native animal habitat has since been fragmented and reduced to small pockets, islands and parks.

Up to 81 per cent of Dja Dja Wurrung Country is privately owned and 65 per cent of this is used for agriculture. Having crops is not something new or since colonisation in north central Victoria, Aboriginal People were farmers as well. However, they were farming native grains and perennial grasses and tubers that could be eaten all year round and did not require watering after

establishment. Some surviving remnant patches of Buwatj (Kangaroo grass), Murnong (Yam Daisies) and other tubers can still be found around Jaara Country today.

The natural and seasonal flow regimes on Jaara Country have been significantly altered by the creation of reservoirs and channels, enabling the control and release of flows when farmers want it for foreign crops that need it all year round. This is not in line with breeding times of many native species and therefore affects levels of sustainable populations. It also effects the movement of animals to have to go where the water is stored. Irrigation would have been a strange concept to our ancestors. Meddling with the natural course of water for human only purposes would have caused more harms than gains and breached the Lore's of this land. It has undermined the spirituality of water and its integrity of the knowing the best path for its role in Country.

All of Bunjils creations

Instead of Biodiversity, Dja Dja Wurrung refer to 'all of Bunjils creations' as more easily understood and appropriate for Djandak (Dja Dja Wurrung Country). In relation to all of Bunjils creations, they highlighted the following priorities:

Returning of Murrup

The landscape that is Djandak is of great importance to Dja Dja Wurrung. **The returning of Murrup (spirit), practice and people to landscapes is vital to enable Dja Dja Wurrung to lead the decolonisation of the landscape to allow for reconciliation to occur.** Important Murrup to return to Country are those that are connected with our Stories and identity, Gal Gal (Dingo) has a named connection to clans which were dispersed from the southern section of Djandak, including the Gal Gal Balug and Gal Gal Gunditj. Lalgambook (Mt Franklin) the 'Emu's nest' is conspicuous with the absence of Barramul (Emu). Yung Balug in the Boort landscape have spiritual connections to the Yung (Quoll). To return Dja Dja Wurrung to the landscape we must ensure that we return the people and their Murrup to enable these landscapes to heal again.

Food and fibre plants

Buwatj (grasses used for grain), Witji (weaving grasses), Gatjawil Matom (tuberous plants with scented flowers) are some **key food and fibre plants and include Kangaroo grass, Lomandra and Dianella species, Chocolate, Vanilla and Bulbine Lilies and Murnong (Yam daisies).**

These plants were once abundant on Djandak and seasonally the fields would change colour from yellow in Datimn Datim – Wai Kalk (early spring) to purple in Wanyarra – Gurri (late Spring) to Orange bronze in Boyn – Lawan (summer). Removal of Dja Dja

Wurrung and our knowledge of how to work with and care for these plants in the landscapes through sustainable use and the intricate unforced use of Wi resulted in the initial collapse of many of these populations. This was compounded by the bringing of Sheep and Cattle by invaders which largely decimated our farming systems and reduced a once plentiful abundance of food and fibre, maintained and cared for over millennia. . . . **Returning food and fibre to the landscape, not just in parks and reserves but in the most productive parts of Djandak is key to ensuring healing of Djandak.**

Wi (fire)

When the squatters came to our Country, they saw multiple plumes of smoke in the air, little did they know that was one form of communication to make other nations aware that intruders are coming to be on the lookout. At night time that's all they could see in the distance was flickering fires everywhere. Wi is a tool with many uses, it comes in many forms, you obviously have Wi to cook, you have Wi to keep you warm, Wi for ceremony, Wi for hunting, lighting strikes can cause wild Wi and you have Wi for Caring and Healing Country. Wi is a tool to Jaara use in many ways and its use is always guided and informed by Our Lore as it has been for millennia.

The name of one of the great Jaara ancestors Walpanumin/ Jacky Logan translates to "burning with fire" it was said he was the fire and messenger man for his clan. Jaara have always used Djandak Wi in many forms to manicure the landscape. They say our fire people would be like Picasso with a paint brush, instead of paint brushes our people used grasstree spikes as firesticks to paint the landscape, with the right fire, at the right time, we care for the Country the way our ancestors have for millennia. We have always been told when growing up that Wi is the way our ancestors manage the land and manipulated the environment. We live this today.

In the dreamtime stories about the two feuding volcanoes Tarrengower big and heavy (a mountain situated near the township of present-day Maldon) and Lalgambok (the nest of Barramul now known as Mt Franklin), near Daylesford. The story about the hawk getting a red hot ember from the fire and taking it up to the sky then dropping it further along in the unburnt to start the fire further ahead so he can hunt the insects coming out of the fire. Boort which is our word for smoke and its said that saying consecutive Boort Boort means big smoke, Boort also refers to the town on Jaara country, embedding smoke and Wi in the landscape. There is a hill in the middle of Boort now called Bald Hill where the water tower is located today. Yung Balug Clan would pile up a big heap of green vegetation and light it up to signal to other nations that trading season has begun and that they were open for trade.

Gatjin (water)

Use and cultural heritage

Jaara people used the waterways as travel routes on canoes, fishing with spears and woven nets, water birds were brought down with boomerangs and above water nets. Women would give birth in the birthing trees close by to water holes, swamps, and rivers. Gatjin ceremonies and celebrations were conducted with gatherings in high flood times. Children would laugh and play in the water's edge while the women dug out water ribbon, harvested weaving plants and reeds for ceremony adornments. Skin bags and tarnuks were filled with water to drink from and soak weaving plants. Food that needed to be leached was put in dilly bags and tied to the banks of flowing water. Fish traps were made at different elevations with knowledge of the river flows and fish breeding times. In the dry season, holes would be dug in the sand of the riverbed to access water from the lower ground waters. Rock wells found on travel routes held water for periods of the drying out rivers, these had rock or bark lids to prevent leaves or animals falling in and contaminating the water.

Within the Cultural Landscape there are memories and stories of past visits and management of Country pre-colonisation. **All waterways are culturally sensitive areas that trigger the Aboriginal Heritage Act 2006. There is extensive, vast and recorded cultural heritage all over Dja Dja Wurrung Country, especially around water sources.** Cultural heritage surveys have given us some insight into the extent of the resource use by Dja Dja Wurrung people. Revealing intergenerational meeting places and travel routes, artefact scatters, culturally modified trees (scarred trees and ring trees) midden sites and earth ovens (amongst many other artefacts, sites and places).

Artefact scatters can show us that whilst visiting that site there was plenty of food around to designate time to knapping stones and creating spear heads, scrapers and other implements. It can also show us their path where the stone came from or trade routes where a stone has been traded from other groups. The scar trees showed us where the water was suitable for canoes and fishing was practiced from them. Ring trees show us that this was a path used navigating from one place to another. Midden sites and earth ovens can show us what types of food were eaten there and what was abundant at the time of visiting and seasonal movement over the land. It also reveals how often the site was used by the soil layers over time. The past use and history of our living culture is read from the land and not from a book.

Today, via DDWCAC and Dja Dja Wurrung Enterprises, Jaara people are engaged in recording and documenting these important places to ensure their conservation and preservation under the Aboriginal Heritage Act 2006. This work includes conducting cultural heritage surveys to document and protect cultural heritage, and salvaging artefacts affected by land use activities.

Contemporary use and connection are maintained through a deep relationship with Country and respect to the ancient traditions and Lore that still govern Jaara today.

Dependent values and stories

There are many stories shared about water and water spirits describing the simple and also complex role of gatjin in our lives. There are many Lores around the use and protection of gatjin. There were highly spiritual waterbodies that were not for swimming or drinking but were known for the presence of spirit beings that reside there. There are stories of water bodies that are women's places and men are forbidden, with song lines and stories that speak of water as women's business, and animals like the Brolga representing life and birth. There are Lores of water sharing in times of drought and ceremonies to bring the water and celebrate it.

The Brolga is a waterbird native to many wetlands across Jaara Country and are highly important to Dja Dja Wurrung people. The Brolga's natural movements are often referred to as 'dancing', due to their mating rituals that look similar to dancing. Today, the Jaara people have ceremonial dances that have been passed down through generations, that mimic the movements of the Brolga, and the calls that they make to each other. In Jaara Lore, the Brolga is known as a symbol of self expression, a symbol of life and birth linked closely to water and women's business. The Brolga is representative of our connection to Country, and the transformation between a human spirit and the spirit of the creature. The Brolga holds close ties to the ceremonies and Lore that surround water and birth, such as the use of birthing trees to bring new life to Djandak. It represents that birth and life is what unifies us as Bunjil's creations. Brolga populations have declined rapidly due to the degradation of their natural nesting habitat over time, meaning they struggle to breed successfully due to a lack of water and food sources. Tang Tang Swamp is a well-known Brolga nesting site that has a close connection and rich history with the Jaara people.

The Murray Cod has its birthplace imprinted in its stomach as a memory of its creation. The stomach lining shows the imprint of the tree on the river where it first came into this world. This demonstrates the dendritic connection and reflection of Country – the very relationship shared between the Cod and the tree through the river. Fish populations across Country are seeing a drastic decline due to introduced exotic fish species such as mosquitofish and carp that threaten water quality as well as take over the habitat and food supply of native fish. Most of these pest species are aggressive, causing detrimental impacts to native fish and their ability to survive, and thrive.

River systems and places of special interest

Originally, the great waters of Jaara Country ebbed and flowed with seasonal rain events that pumped water to the flood plains and grasslands and forests. Connecting lakes, creeks and rivers and swamps. The periodic wetting and drying phases made for healthy and abundantly diverse swamps. Rivers and waterways would pool and pond in their paths, creating many ecosystems and habitats. In drought, these deep ponds would create refuges for aquatic creatures. Occasional high flows and floods would connect them all up and this was the time for large gatherings, trade and ceremony with neighbouring clans. Jaara people traditionally travelled to meet with most neighbours at seasonal times of sharing. This includes high floods that linked up creeks, swamps and rivers to Kow Swamp and the Murray River. Traditionally, Jaara used the waterways as travel routes as well, either on canoes or walking nearby for the water and the food source that it provides.

Steamboats were used along the Murray to transport goods and resources, including the trees that were cut down for timber. In order to utilise the river as transport for large water craft, all the logs and snags in the river that supported fish habitat, stabilised the banks and slowed down the flow – reducing turbidity, were removed. This had devastating effects that were not considered by the new migrants, because they didn't understand that Country. Since then, the important role of logs and snags in the river have been realised and some put back in the rivers.

Like all naturally occurring rivers, the Campaspe River was much larger than it is today, seeing scar trees and artefact scatters on the highbanks (elevation of up 10 metres), tells of a time of a mighty river. It is considered a boundary marker and neutral resource between Dja Dja Wurrung and Taungurung tribes, both traditionally and contemporarily. It is highly significant to both groups, with scar trees, ring trees, burial sites, stone quarries, artefact scatters and other cultural heritage sites being recorded along the waterway. Large stone tool scatters and significant archaeological sites have been identified along the main section of the waterway, demonstrating continuous use of the land and resources along the waterway for many thousands of years. The Campaspe River is home to many species of fish – redfin, yellowbelly – as well as water rats and many native birds such as black ducks and ibis. It is also a well known platypus habitat.

In the past, the Coliban river was a rich habitat for native flora and fauna. However, the introduction of water catchments and the allocation of water in the Coliban river prevent the waterway from having a consistent flow of water. Sections of the river have been dramatically modified and the construction of levees and sills has altered the course of waterway, therefore the flow is no longer natural. Large stone tool scatters and significant Tachylite quarry sites can be found along the main channel and adjacent to storages in the Upper Coliban.

Gutjun Bulok (Tang Tang Swamp) is a freshwater wetland situated within the Dja Dja Wurrung landscape. It is a culturally significant place for the Jaara people who still practice culture and ceremony there today. The wetland features bial (River Red Gums) with significant marker 'ring trees', scar trees, ovens, basket weaving grasses and many other cultural features. The Swamp is managed as a Wildlife Reserve by Parks Victoria, and is registered on the National Directory of Important Wetlands due to Brolga nesting and many other visiting migratory waterbirds. It contains ecologically important plants and vegetation communities such as Southern Cane Grass, aquatic plants and patches of rare native grassland. Dja Dja Wurrung Clans Aboriginal Corporation have previously completed a Cultural Heritage Assessment and Aboriginal Waterways Assessment at the Swamp to record and document cultural and ecological values as well as cultural heritage present across the Swamp. In the past, Tang Tang Swamp was naturally a temporary wetland, with periods of wet and dry phases, fed by flows from Bendigo Creek. However, land use changes upstream and the construction of levees and sills has altered how the swamp gets water so that the water flow is no longer natural. The wetland is not connected to a water source and so relies on natural inflows caused by rain. Currently, Dja Dja Wurrung and The North Central CMA are exploring ways to deliver water to Tang Tang Swamp. The connection of the swamp and delivery of environmental or cultural water will help the Brolga and all other of Bunjil's creatures to breed and thrive at the wetland, delivering important outcomes for both the environment and Jaara people.

Water holds memory, songs and stories. Water has spirit – Murru – the life-force in the energy of all things. It must be respected as an entity in itself that knows where it needs to go. The Lores that govern our relationship with our Country are simple – only take what you need. If you must take more, then you must give back. So what are we giving back to the rivers to keep the balance?

Climate change

The Dja Dja Wurrung Country Plan 2014-2034, Dhelkunya Dja, outlines the strategic direction for the Dja Dja Wurrung Clans Aboriginal Corporation (DDWCAC) and Djandak Enterprises as well as the rights and aspirations of Djaara peoples. Dhelkunya Dja provides a critical framework and policy context for the region in which to implement climate change mitigation and adaptation strategies. Climate change is not new to Djaara peoples – cultural practices of land management including fire, forest care and water health have been utilised to adapt and mitigate past climate change events. These practices are recognised in Djaara peoples' current rights to heal and manage Djandak, or Country. The recognition and ability given to DDWCAC and Djandak Enterprises to implement those rights have far-reaching regional benefits to the environment and communities to mitigate and adapt to contemporary, human-induced climate change.

'Walking Together' to care for country

Dja Dja Wurrung describe 'Walking Together' as the roles and ways in which they are comfortable to work or would like to work with partners. For the Regional Catchment Strategy they identified a desire to collaborate and to be empowered.

They sought to be able to return to traditional practices in a culturally safe way. If there are any significant sites within Talbot then the expressed preference is to implement a measurable approach to allow us to celebrate with partners and stakeholders who actively and systematically look to overcome barriers. Importantly, they expressed the following in relation to their knowledge.

"Our knowledge has been built up over generations of observation and management and passed down. We are gardeners of the environment. We care for the land and it provides for us. We use Lomandra and matt rush to weave baskets. We hunt wallaby, emu and goanna. We eat the eels, mussels, crayfish and yellow belly from our streams. We gather bardi grubs and duck eggs, nardoo and yam daisies and wattle seeds for food and medicine. We use buloke and red gum timber for our tools and ceremonies.

We know the place where Mindi first emerged. It is still a sacred place, but sadly it is a desecrated space. We know the places where our waterbirds nest, and what Bunjil's other creatures need to breed and thrive. We remember when the rivers were once mighty – our Elders hold memories of their crystal clear waters with an abundance of platypus, water plants and good fish.

We know where to go to collect our medicine, food plants and weaving grasses – many of these can still be found in the landscape today. We know where these plants will flourish and thrive, and we the best ways to harvest them. Many species require harvesting at specific times of the year or in specific ways, and others will not grow without certain seasonal conditions such as rainfall. These are the things we continue to pass down to our children."

Regarding sharing of intellectual property, there is a constant battle between fear that information may be lost forever (as much already has) vs the fear that it may be stolen or misused.

...there needs to be a levelling of the knowledge fields between Western Science and Dja Dja Wurrung knowledge. There is currently a high level of bias towards western science-based decision support tools with little active and or resourcing to support the development of Dja Dja Wurrung knowledge-based tools.

Until this relationship becomes equal, the risk to Dja Dja Wurrung people of sharing knowledge remains significant and unfair.

Education is required on both ends, to be able to understand one another, particularly the more complex components of Aboriginal culture, so therefore we must work together to learn from each other, using past experiences as a guide to shape the future.

Jaara want to build partnerships, including with private landholders and engage with the broader community to raise cultural awareness.

“We feel a moral responsibility to care for our Country as it binds us to the past, present and future. Our ancestors looked after this Country and we are duty bound to look after it for the next generation. We believe we are an integral part of the ecosystem and place strong value the balance of natural resources and their management.

When the Country is sick, we are sick. We must do better.””



Remnant vegetation along Back Creek