

FOR CONSULTATION

Inland Rail

Benalla Station Precinct - Concept Plan Report

2-0008-112-ELE-80-RP-0001

25-Jul-2023
Benalla Station Precinct

FOR CONSULTATION

Inland Rail

Benalla Station Precinct - Concept Plan Report

Client: Australian Rail Track Corporation

ABN: 75 081 455 754

Prepared by

AECOM Australia Pty Ltd

Wurundjeri and Bunurong Country, Tower 2, Level 10, 727 Collins Street, Melbourne VIC 3008, Australia

T +61 3 8670 6800 www.aecom.com

ABN 20 093 846 925

25-Jul-2023

Job No.: 60637387

AECOM in Australia and New Zealand is certified to ISO9001, ISO14001 and ISO45001.



© AECOM Australia Pty Ltd (AECOM). All rights reserved.

AECOM has prepared this document for the sole use of the Client and for a specific purpose, each as expressly stated in the document. No other party should rely on this document without the prior written consent of AECOM. AECOM undertakes no duty, nor accepts any responsibility, to any third party who may rely upon or use this document. This document has been prepared based on the Client's description of its requirements and AECOM's experience, having regard to assumptions that AECOM can reasonably be expected to make in accordance with sound professional principles. AECOM may also have relied upon information provided by the Client and other third parties to prepare this document, some of which may not have been verified. Subject to the above conditions, this document may be transmitted, reproduced or disseminated only in its entirety.

FOR CONSULTATION**Quality Information**

Document Inland Rail – Benalla Station – Concept Plan Report
 Ref [2-0008-112-ELE-80-RP-0001](#)
 60637387
 Date 25-Jul-2023
 Originator Winston White
 Checker/s Zac Cvitkovic
 Verifier/s Daniel Haysom

Revision History

Rev	Revision Date	Details	Approved	
			Name/Position	Signature
A	14-Jul-2023	Benalla Station – Draft Concept Plan Report	Zac Cvitkovic	
B	25-Jul-2023	Benalla Station – Concept Plan Report for Consultation	Zac Cvitkovic	

FOR CONSULTATION

Table of Contents

Abbreviations and Definitions	1
1.0 Introduction	2
1.1 Purpose	2
1.2 Inland Rail Beveridge to Albury Project	2
1.3 Benalla Station Precinct – Concept Overview	3
2.0 Community and Stakeholder Engagement	4
2.1 Overview of Stakeholder Engagement	4
3.0 Site Context	2
3.1 Existing Conditions	2
3.2 Historical Context	2
3.3 Landscape Character and Impact Sensitivity	3
3.4 Site Character	3
3.5 Land Use Context	7
3.6 Built Form and Heritage	8
3.7 Transport and Access	8
4.0 Design Response	10
4.1 Design Overview	10
5.0 Design Options Considered	11
6.0 Urban Design Framework Alignment	12
7.0 Environmental Management Framework Compliance	20
8.0 Conclusion	23
9.0 APPENDIX A	24
8.1 Concept Design Plans, Sections and Elevations	24

FOR CONSULTATION

Abbreviations and Definitions

ARTC	Australian Rail Track Corporation
BOBCAR	Best Option Benalla Community and Amenities Rail
BOM	Bureau of Meteorology
B2A	Beveridge to Albury
CBD	Central Business District
CEMP	Construction Environmental Management Plan
CLMP	Glenrowan Heritage Precinct - Conservation and Landscape Management Plan
CPFP	Creating Places for People: An Urban Design Protocol for Australian Cities
CPTED	Crime Prevention Through Environmental Design
DEECA	Department of Energy, Environment and Climate Action
DDA	Disability Discrimination Act
DSAPT	Disability Standards for Accessible Public Transport
DTP	Department of Transport and Planning
EIS	Environmental Impact Statement
EMF	Environmental Management Plan
EPR	Environmental Performance Requirement
EVC	Environmental Vegetation Class
FSC	Forest stewardship council
HI	Heritage Inventory
HO	Heritage Overlay
ISCA	Infrastructure Sustainability Council of Australia
IR	Inland Rail
IS	Infrastructure sustainability
LCZ	Landscape Character Zone
LX	Level Crossing
MCA	Multi Criteria Analysis
OVGA	Office of the Victorian Government Architect
PAZ	Priority Avoidance Zones
PSR	Project scope and requirements
RFI	Request for information
ROW	Right of Way
SiD	Safety in Design
SRI	Solar Reflectance Index
SUP	Shared user path
UDF	Urban Design Framework
UDG	Urban Design Guidelines
VHR	Victorian Heritage Register
VPO	Vegetation Protection Overlay
WSUD	Water Sensitive Urban Design
XPT	Express Passenger Train

FOR CONSULTATION

1.0 Introduction

1.1 Purpose

This report accompanies and supports the Benalla Station Precinct Concept Plan, which has been prepared in accordance with Condition 4.2.6 of the Beveridge to Albury Incorporated Document, December 2021 (the Incorporated Document).

In line with Condition 4.2.7 of the Incorporated Document, the **Benalla Station Precinct Concept Plan** (the Concept Plan) shows the general built form and includes site layout plans, sections and elevations, site boundaries, as well as the location of permanent buildings and structures.

In line with Condition 4.2.8 of the Incorporated Document, this **Benalla Station Precinct Concept Plan Report** (the Concept Plan Report) includes commentary on design options considered, an explanation demonstrating how the Concept Plan has been prepared in accordance with the approved Urban Design Framework and how the Concept Plan complies with the relevant clauses of the Environmental Performance Requirements (EPRs) included in the endorsed Environmental Management Framework (EMF).

In addition, this report also provides a summary of the consultation conducted prior to making the Concept Plan and Concept Plan Report available for public inspection and comment.

In line with Condition 4.2.9 and 4.2.10 of the Incorporated Document, the Concept Plan and Concept Plan Report will be provided to Benalla Rural City Council and the Department of Transport and Planning (Head, Transport for Victoria) for consultation, and will be made available for public inspection and comment. Following stakeholder and community feedback the Concept Plan and Concept Plan Report will be updated and a summary of the consultation undertaken, key themes raised in written comments, consideration, and responses to key issues will be provided as an appendix to this report.

Finally, this report provides key design outcomes that the project is expected to provide to the community of Benalla and the key design outcomes are expected to be achieved through a range of possible strategies. Therefore, the Concept Plan and Concept Design Report does not provide a detailed design level of clarity as detailed design has not yet been undertaken.

1.2 Inland Rail Beveridge to Albury Project

The Beveridge to Albury (B2A) project is part of the Inland Rail project that will connect Melbourne and Brisbane via regional Victoria, New South Wales, and Queensland via a 1,600km freight rail line. The focus of the B2A project is to improve track clearances and resultant safety for double-stacked freight trains.

The improvements will be delivered in tranches and include track adjustment, new road bridges, underpasses, and station upgrades at several locations from Beveridge to Albury, namely:

- Broadford-Wandong Road, Wandong
- Hamilton Street, Broadford
- Short Street, Broadford
- Marchbanks Road, Broadford
- Hume Highway, Tallarook
- Seymour-Avenel Road, Seymour
- Hume Highway, Seymour
- Euroa Station Precinct, Euroa
- **Benalla Station Precinct, Benalla**
- Beaconsfield Parade, Glenrowan
- Wangaratta Station Precinct, Wangaratta

FOR CONSULTATION

- Murray Valley Highway, Barnawartha North



Figure 1 : Project Summary Map

Inland Rail – Beveridge to Albury Project Summary Map

1.3 Benalla Station Precinct – Concept Overview

The concept for the Benalla Station Precinct has evolved significantly as the Project has been developed and has been substantially informed by both stakeholder and community input, and the principles and site-specific objectives outlined within the Urban Design Framework.

The concept involves:

- Removal of the existing road bridge from Mackellar Street to the station forecourt.
- Realignment of the southern-most rail track to the north of the corridor.
- Removal of the existing southern-most station platform.
- Building a new station platform to the north.
- Replacing the existing pedestrian underpass with a wider, taller, and shorter underpass, accessed by gentle ramps, stairs, and lifts to platform level.
- Retention of the heritage station building and adjacent platform.
- Building new car parking and a bus stop directly accessible from Mackellar Street and with direct access to the station building.
- New landscape to the entire interface with Mackellar Street from Nunn Street to Smythe Street, including hard and soft landscaped areas accessible to the public.

FOR CONSULTATION

2.0 Community and Stakeholder Engagement

2.1 Overview of Stakeholder Engagement

2018

In 2018 engagement commenced with stakeholders including the Benalla Rural City Council, the Department of Transport and Planning, VicTrack, V/Line and the Benalla community. Initially, ARTC's engagement activities focused on a vehicular bridge/overpass (grade separation) option between Mackellar Street and the station building. In response, the community group Better Benalla Rail (formally BOBCAR) formed to advocate for Inland Rail to deliver holistic station precinct improvements to overcome legacy concerns of safety, accessibility, and connectivity at the Benalla Station.

2019

During the second half of 2019, ARTC conducted four meetings with BOBCAR (Best Option Benalla Community and Amenities Rail). BOBCAR renamed itself and is now recognized as Better Benalla Rail.

ARTC continued to complete extensive field studies to gain an understanding of the environmental features, technical challenges, and opportunities for Benalla. These studies, combined with feedback from landowners, neighbours and community, assisted ARTC in the progression of the preferred design objectives and development of approval documentation.

2020

In May 2020, ARTC sought applications for community members to join the independently chaired Benalla ARTC Working Group. By September 2020, the group was formalised and held their first meeting. The group worked collaboratively with ARTC and its consultants to further develop design objectives for the Benalla component of the Inland Rail project. These elements were included in the Urban Design Framework for the Project and were used to evaluate ARTC's design options.

At the time there were two options under consideration for Benalla:

- The bridge replacement option (retains the "XPT" platform and a road overpass)
- The track realignment option (a second through track is constructed north of the station), allowing the "XPT" line to be removed and opening the station forecourt to Mackellar Street.

The group assessed visualisations for both the track realignment (including either a pedestrian overpass or underpass option) and bridge replacement option for Benalla and concluded that the track realignment option broadly meets the endorsed design objectives, and the bridge replacement option did not meet any of the endorsed design objectives.

The group strongly supported the track realignment option as offering the best outcome for Benalla. Much of the group supported the pedestrian underpass option as the best outcome for Benalla.

FOR CONSULTATION

2021

ARTC continued to work with Council, the Benalla Working Group and the community to further develop the Urban Design Framework for the Inland Rail Project in Victoria. The framework outlined the overall vision and principles of the Project, alongside specific objectives for the Project in Benalla.

The site-specific urban design objectives had been endorsed by the Benalla Working Group at a meeting held on 3 May 2021.

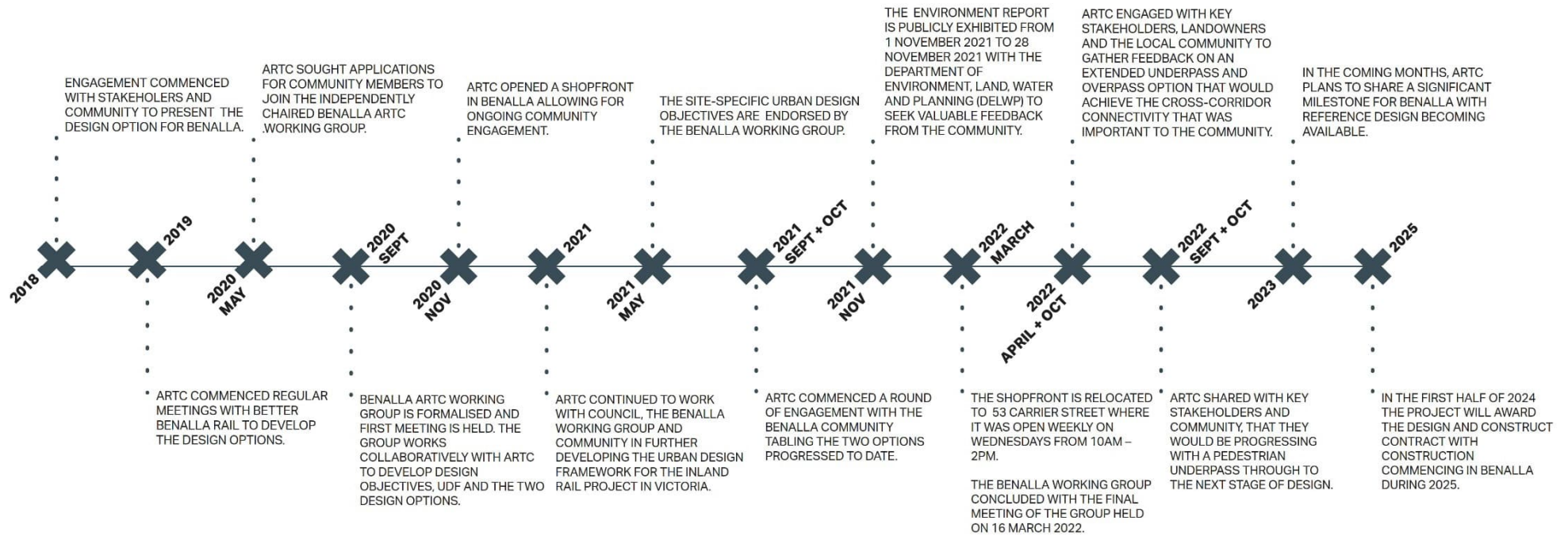
During September and October 2021, ARTC commenced a round of engagement with the Benalla community tabling the two options progressed to date:

- Higher vehicular open span bridge/overpass connecting Mackellar Street with Benalla Station.
- Track re-alignment consolidating all four tracks into a single corridor with a new platform, pedestrian underpass/overpass and redeveloped station access and forecourt.

The response received was overwhelmingly in favour of the option that involves realigning a portion of current west track to the north side of the station.

Connectivity across the station precinct was highlighted as important to the community. To address this, the pedestrian connection across the station precinct was extended. Thereafter, an updated 3D model was prepared for the community and stakeholders for both the extended underpass and overpass options.

Both the pedestrian underpass and overpass options allowed for cross corridor connectivity from Mackellar Street and the eastern platform to the new northern platform and to Railway Place on the northern side of the rail corridor.



Community Stakeholder Engagement Timeline

FOR CONSULTATION

2022

From April 2022 to June 2022, ARTC engaged with key stakeholders, landowners and the local community to gather feedback on an extended underpass and overpass option that would achieve the cross-corridor connectivity that was important to the community.

The group identified key issues that required further consideration as the design progresses:

- Platform requirements.
- Emergency vehicle access.
- Bus and car parking.
- Flooding considerations.
- New platform safety, security, accessibility, maintenance, and heritage impact considerations.
- Alternatives to the zig zag approach to the underpass and emergency access.
- Social impacts including visual impacts.
- Management of site contamination.
- Noise and vibration impacts.
- Level crossing safety and future signaling improvements.

Engagement included additional shopfront openings, Benalla Farmers Market and Winton Hands-on Trades Day.

72% of people providing feedback preferred the underpass option based on visual amenity and connectivity across the station precinct.

From September to October 2022 ARTC shared with key stakeholders and community, that following feedback received, the Project would be progressing with a pedestrian underpass through to the next stage of design.

Benalla Rural City Council commenced involvement in the design review process with ARTC from December 2022 as the Reference Design reached 40% completion.

2023

ARTC has continued to meet with Council, the Department of Transport and Planning, VicTrack, V/Line, members of the Better Benalla Rail and the general community regularly and has completed the 100% reference design engagement with council and the relevant state agencies.

In the coming months, ARTC plans to share a significant milestone for Benalla with Reference Design becoming available. In Reference Design ARTC will engage the Benalla community and invite input on the following key elements of the station precinct:

- Pedestrian connections
- Station forecourt
- Car parking locations and configurations
- Landscaping

The Project may also provide an opportunity for community involvement in the beautification of a wall within the underpass. This will be further explored during the Reference Design process.

2024

In the first half of 2024, ARTC expects the Project Design and Construct contract to be awarded, with construction in Benalla expected to commence in 2025.

FOR CONSULTATION

3.0 Site Context

3.1 Existing Conditions

Benalla is located approximately 212km north-east of Melbourne CBD and has a population of approximately 14,037. Benalla is the major town centre for the Rural City of Benalla and supports a network of smaller surrounding towns. Much of the city's economy is focused on its regional centre role, agricultural production, tourism, and manufacturing. Residents are well serviced by a large variety of community and recreational facilities, and public open spaces.

Benalla is also well-known for its beautiful public gardens, with the rural Botanical Gardens being a popular tourist attraction. The city is surrounded by rich farmlands and has several prominent waterways running through the town such as Broken River, Winton Wetlands and Lake Benalla, contributing to the rural character and setting of the city.

3.2 Historical Context

In 1824, the area was first sighted by Europeans during an expedition by Hamilton Hume and William Hovell to find new grazing land for the colony. In 1838, the 'Battle of the Broken River' took place between 20 Aboriginal people and 18 European settlers. The site of the incident was re-discovered in 1907. In 1839 a police station was established on the river and named the Broken River Crossing Place. Around the same time, a grazier named William MacKellar established a pastoral run which he named 'Benalta', which is thought to have come from an Aboriginal word for musk duck. In 1848, the town was officially surveyed and named Benalla by the Port Phillip District superintendent, Charles La Trobe. In 1873, the Benalla Railway Station opened. In 1962, the Northeast standard gauge line opened, and in 1965 Benalla was proclaimed a city. In 1970, Lake Benalla was constructed to assist with flood risk mitigation.



Historic photos of Broken River and Benalla Station



Historic photos of a Benalla streetscape and an aerial view Benalla Station

FOR CONSULTATION

3.3 Landscape Character and Impact Sensitivity

The previously undertaken Urban Design Framework Report (UDF) has informed Landscape character impacts for land within and surrounding the Project area. The surrounding areas have been assessed according to their assigned Landscape Character Zones (LCZ). LCZs are areas which have been defined in terms of their level of development, urban character, land use, landform, vegetation coverage, presence of water, road and street configuration and other characteristic features.

The most sensitive Landscape Character Zone (LCZ) identified by the UDF was the LCZ6 (General Residential) due to their proximity, along Mackellar Street, to the current bridge. The rail realignment and pedestrian underpass option (Option A) was expected to have a low-negligible impact to this part of the LCZ6, and the bridge option (Option B) would likely produce a high impact for a large proportion of Mackellar Street. This was due to the required height and length of the bridge and the associated retaining structure.

Therefore, Option B was expected to have a negative visual impact to the residences along Mackellar Street, with limited options for vegetative screening due to spatial constraints. Aside from LCZ10 (Transport Corridor), all other LCZs were deemed to be minimally affected by either option and impacts can be mitigated by revegetation and rehabilitation of the site surrounds.

Given the significant scale and visual impact of the bridge option (Option B), the more likely rail realignment and pedestrian underpass option was selected as it was agreed to provide the preferred landscape character outcome.

3.4 Site Character

The urban character of the Benalla Station Precinct has been captured below.



View north-west of Mackellar Street observing the road bridge ascent and shared urban interface with the rail station and the suburban setting.

FOR CONSULTATION

The urban interface created by the existing road bridge structure. The retaining wall directly abuts the northern kerb of Mackellar Street and causes a drainage trap point during high intensity rain events.



Elevated view south-east observing Nixon Street from the Benalla Road bridge.



The Benalla Station building facade and passenger entry and egress. Observed from the asphalt carpark.

FOR CONSULTATION



A coach attempting a three-point-turn maneuver south of the station. The lack of sufficient space for bus circulation results in a dangerous impediment upon the station's northern platform. As a result, commuters are put at risk despite visual and tactile warnings.



View south towards the station from the northern land expanse. The expanse comprises of disorganized, unused, or wasted rail assets, which are observed upon arrival to Benalla.



Pedestrian ramp and associated retaining wall structures when ascending from the underpass connecting Railway Place and Mackellar Street.

FOR CONSULTATION

Ramp and associated stabilised embankments upon descent into the pedestrian underpass from Railway Place.



View east observing the existing platform south of the station. The platform's width has been cited as a safety concern due to poor visibility because of its width.

FOR CONSULTATION

3.5 Land Use Context

Residential

Low density single detached residential properties can be found surrounding the Project area, predominantly to the north, south and east. Residential properties are also located on the other side of the Broken River to the west.

Commercial/Mixed Use

The Benalla City Centre is located to the south of the Project area along Carrier Street and Bridge Street East. The centre hosts a large variety of restaurants and cafes, retail stores, supermarkets, banks, and post offices. A small section of land abutting the north-western section of the Project area is designated for mixed use, however currently, only residential properties and several vacant sheds and buildings are sited on this land.



Benalla Station Land Use Context – Urban Design Framework

Industrial

Industry exists on the corner of Hannah Street and Commercial Road, abutting the northern boundary of the Project area. Further north, beyond Roe Street and abutting the rail corridor, there are large expanses of land used for more heavier industry such as a lumber store, seed, fertiliser, and farm equipment suppliers, and excavating contractors.

Community Facilities and Recreation

Several community and recreational facilities can be found to the Project area’s west and include the Benalla croquet, football, netball and tennis clubs and an indoor recreation centre. Further to the south-west of the Project area along Broken River is the Benalla Aquatic Centre, Benalla Art Gallery, local library and an Information Centre for visitors to the area.

FOR CONSULTATION

Open Space

Towards the western end of the Project area is the large football field, which provides a space for the community to play football as well as to utilise as a walking or running track. There is an unnamed public open space to the east of the Project area, however the space does not seem to be frequently used by the community. Other public open spaces areas flank Lake Benalla and Broken River, where a pedestrian footpath is provided along both banks.

3.6 Built Form and Heritage

Built Form and Character

Benalla is an attractive small rural city, noted for its public gardens and artwork. While the Project area is surrounded by a variety of different uses, built form remains at a height of 1-3 storeys. Residential properties are largely in the form of one storey brick or weatherboard houses and have smaller building footprints. Industrial warehouses and sheds are of a larger building footprint and are typically made from aluminium, steel, or wood. The existing road bridge to the station presents a substantial retaining wall along Mackellar Avenue, for which its face is exposed to opposite residential properties. The street layout surrounding the Project area follows an almost rectangular gridded nature, however some roads to the north are more organic in alignment to accommodate for the larger industrial and agricultural blocks.

Aboriginal Cultural Heritage

Prior to European settlement, the Yorta Yorta people were the first inhabitants of Benalla. Yorta Yorta People's lifestyle and culture was based on hunting, fishing, and collecting food from the variety of food sources provided by the Country, coming from the extensive network of rivers, lagoons, creeks, and wetlands which are still regarded as the life source and the spirit of the Yorta Yorta Nation. The Yorta Yorta people strongly advocate for the survival of the ancestral land to make sure that their timeless connection to the Yorta Yorta land is continued. They continue to exercise their rights as indigenous occupants and owners of Yorta Yorta Country within local communities, focusing on protecting the social, spiritual, economic, and cultural links with the land.

Heritage

Benalla has several buildings and places that are of local heritage significance, with some of these located within the Project area. The western half of the Project area is within the Benalla Central Urban Conservation Area. Within this Conservation Area, two signal boxes on either side of Benalla Railway Station as well as the Station itself is of local heritage significance.

The North-eastern Hotel, the Victoria Hotel and Stables and the Farmers Arms Hotel are all abutting the Project area and are also of local heritage significance.

Benalla also has strong ties to the historical figure Ned Kelly. The town played host to Kelly's formidable bushranging history where he experienced his first encounters with the law, as well as where his final court trial was held in 1880 at the Old Benalla Courthouse on Arundel Street.

3.7 Transport and Access

Public Transport

While the dominant form of transport is via private vehicle, the Project area can be accessed by bus via the No. 2 Route travelling from the eastern parts of Benalla. Benalla Railway Station also has a small bus interchange located between the two platforms and is accessed via the existing bridge, which services four bus routes: Albury to Bendigo via Wangaratta and Shepparton, Albury to Melbourne via Seymour, Melbourne to Mulwala via Seymour and Benalla and Sydney to Adelaide via Albury. Benalla Railway Station is situated within the western portion of the Project area. It is a V-Line Station and services two rail lines: the Northeast Line and the freight-only Oaklands Line. The station has two platforms and five rail tracks.

FOR CONSULTATION

Active Transport

Cross corridor pedestrian connectivity around the Project area is limited. To access the station, there is a long and narrow pedestrian underpass, providing a link between Railway Place and Mackellar Street. The access between Mackellar Street and the station via the underpass is relatively short and is significantly more open to the sky than the access from Railway Place. Towards the west, there is an at-grade pedestrian crossing at the level crossing along Midland Highway. The Project area does not have any designated bicycle routes within proximity.

Road Transport

Several vehicle crossings of the rail line exist, including level crossings to the south-west and north-east of the Project area. The bridge currently provides vehicle access to the station and its carpark, however its geometry limits safe circulation access for coaches.

FOR CONSULTATION

4.0 Design Response

4.1 Design Overview

Inland Rail Timeline in Benalla

Since 2019, ARTC has worked with the community, stakeholders, and technical specialists to develop, review and determine the best solution for Benalla. This timeline illustrates the design stages undertaken to progress the station precinct design.



Engagement Timeline

Key Design Elements

The Concept Plan has been developed by responding to and integrating, constraints and opportunities presented by the stakeholder comments received throughout the Reference Stage of design. The area around the Project site is generally flat and the Project proposes the removal of the existing bridge and ramps, which will provide better connections between the station and Mackellar Street and spatially provide for an easily accessible car park in front of the station.

The proposal also involves the removal of the existing pedestrian underpass and the construction of a new pedestrian underpass to allow for better connectivity across the rail corridor and to the new station platforms. This is expected to promote active transport and a better interface for the station with adjacent residential areas. The station's eastern edge abutting Mackellar Street will include landscape planting and public amenity areas.

The existing car parking at the station will be removed and new parking will be provided including DDA compliant bays and access routes to the new station platforms. The bus stop will be provided adjacent to the station building and provide direct, safe passenger access from the platform. New safer pedestrian footpaths between the new station and the parking will also connect to the underpass ramps. Landscaping will be employed to create a coherent and visually stimulating public realm.

The signaling building will be relocated and/or reconfigured, where possible, to allow for important assets to be included in the new precinct. Native gardens will envelope the small heritage walk which is proposed to the west of the station. The forecourt is envisaged to provide flexibility of use for markets and other community events. The open lawn area is central and can be used as a passive recreational activities area.

FOR CONSULTATION



Artistic impression of the upgraded Benalla Station precinct

FOR CONSULTATION

5.0 Design Options Considered

Through the planning and development of Inland Rail – B2A, a range of options were developed to test feasibility, assess impacts, and inform costing and programming across all enhancement sites. As part of this, options for the Benalla Station Precinct were examined. Table 1 provides a description of the options that were developed and considered during the design phases of the Project.

Table 1 Benalla Station Precinct - Design Options Considered

Options Considered	Details
Replacement of current bridge in the same location	<p>The initial design, prior to Reference Design, proposed a replacement of the existing bridge from Mackellar Street into the station forecourt, involving the demolition of the existing bridge and its approaches and constructing a taller bridge to the north on Mackellar Street that would accommodate clearance for double-stacked freight trains. As part of this, new on street angled parking spaces were to be provided on Mackellar Street to offset any lost parking spaces. The existing pedestrian underpass was to be retained and used as the pedestrian access to Benalla Station.</p>
Replacement of current bridge to the east of current location	<p>During the initial Design development, an opportunity to improve the design solution by proposing a bridge replacement to the east of the existing bridge was considered. This option had the advantage of maintaining vehicle accessibility to Benalla Station while constructing the new bridge.</p> <p>The construction duration for this option was considerably less than the other options, however the design had the potential to create a negative visual impact to the residences along Mackellar Street, with limited options for vegetative screening due to spatial constraints.</p>
Track realignment, bridge removal and pedestrian underpass (Preferred Option)	<p>After further consultation with stakeholders a new option was considered consisting of:</p> <ul style="list-style-type: none"> - Removal of the existing road bridge from Mackellar Street to the station forecourt - Realignment of the southern-most rail track to the north of the corridor - Removal of the existing southern-most station platform - Building a new station platform to the north - Replacing the existing pedestrian underpass with a wider, taller and shorter underpass, accessed by gentle ramps, stairs and lifts to platform level - Retention of the heritage station building and adjacent platform - Building new car parking and bus stop directly accessible from Mackellar Street and with direct access to the station building - New landscape to the entire interface with Mackellar Street, from Nunn Street to Smythe Street, including hard and soft landscaped areas accessible to the public <p>This option best responded to user needs, community interests and created the best potential to fulfil the UDF objectives. By removing the large bridge structure, realigning rail tracks, and providing a new pedestrian underpass, the heritage station building could again become part of the public realm of the town centre, and be more readily accessed by all.</p>

FOR CONSULTATION

6.0 Urban Design Framework Alignment

The *Victoria Inland Rail Urban Design Framework – October 2021* establishes a vision, urban design principles, and site-specific objectives for the B2A project.

The vision for the Inland Rail project as a whole is to achieve:

1. A corridor of towns that take pride in the physical legacy created by Inland Rail, sensitively acknowledging and respecting their existing heritage.
2. Restoring and reconnecting local places to facilitate future prosperity, local identity, and environmental sustainability.
3. Through strong collaboration, sensitive design and integrated thinking, the Project will deliver:
 - Improved local connectivity,
 - Carefully considered insertions that enhance local life,
 - Eased movement,
 - Improved safety, and
 - Important building blocks for the future of these regional towns.

The urban design principles were informed by principles of the *Creating Places for People: An Urban Design Protocol for Australian Cities (CPFP)*, which informed the key objectives for the Benalla Station Precinct as follows:

1. A station that is visually and physically connected to Carrier Street and Benalla's town centre, promoting its pedestrian accessibility, and facilitating activity and vibrancy.
2. A safe and accessible station that provides for prioritised, safe, and secure pedestrian access between Mackellar Street, the station, car parking and bus stops for all abilities, and future connection to the north of the rail corridor.
3. A precinct that has removed, minimised, and mitigated the visual impacts of infrastructure to Mackellar Street, adjacent properties and integrates seamlessly with the residential character of the area.
4. A heritage precinct that increases the prominence of the existing heritage buildings and celebrates the heritage character of central Benalla.
5. A precinct readied for further growth and facilitating future investment into cross-town connections, regeneration and development of the precinct itself and areas north of the railway line.
6. A station precinct that strengthens the landscape character of Benalla.

FOR CONSULTATION

The Concept Plan that has been developed aligns with and fulfils these objectives in the following ways:

- 1. A station that is visually and physically connected to Carrier Street and Benalla's town centre, promoting its pedestrian accessibility, and facilitating activity and vibrancy.**

The new station and precinct arrangement aligns with Carrier Street and provides a new public space at the interface between the station and the surrounding urban fabric. Pedestrian safety has been prioritised by providing new safe links between the new parking areas and the station building as well as across the rail corridor. The car parking and bus bay has also been integrated in the layout.

The existing bridge and ramps to Mackellar Street will be removed and converted into soft landscape area. The existing railway tracks along the southern side of the train station will also be removed and opened to become the station forecourt that opens to Mackellar Street.

The Concept Plan provides for the visual and physical connection to Carrier Street and Benalla's town centre in the following ways:

- Improvement to the public realm quality of the station precinct and creation of a new community destination.
 - Creation of a positive arrival experience and provision of pedestrian linkage to (and across) Mackellar Street, to Carrier Street and onto the town centre.
 - Creation of identifiable frontages to Mackellar and Hannah Streets.
 - Improvement to connectivity and accessibility across the rail corridor by providing a wider, taller, shorter underpass and generous walkways and gentle ramps that are open to natural light, for level changes.
 - Creating new usable space serving as a station forecourt and as a new flexible, community-oriented area linking to the retail uses across Mackellar Street.
 - Allowing for cycling facilities such a bike path, Parkiteer, bike parking hoop and bike repair station to enhance bike use and effectively health and wellbeing of the community in this location.
- 2. A safe and accessible station that provides for prioritised, safe, and secure pedestrian access between Mackellar Street, the station, car parking and bus stops for all abilities, and future connection to the north of the rail corridor.**

Crime Prevention Through Environmental Design

The Concept Plan has been prepared using Crime Prevention Through Environmental Design (CPTED) principles as set out in the Safer Design Guidelines for Victoria by the Department of Sustainability and Environment, Crime Prevention Victoria; and the foundational CPTED principles of:

1. Natural surveillance
2. Access, movement, and sightlines
3. Activity
4. Ownership
5. Management and maintenance

The intent of these principles is to ensure places that improve community safety and reduce opportunities for crime and antisocial behaviour. This has been achieved through maximising visual connections and passive surveillance opportunities in the station and public spaces. Furthermore, the Concept Plan provides clear, generous, and legible pedestrian routes, entries and exits.

Project-specific CPTED provisions include:

- The at grade car park has maximised sightlines internally and from Mackellar Street. Pedestrians travelling to and from the car park have defined travel paths which will provide an increased sense of safety.

FOR CONSULTATION

- The pedestrian link including the underpass ramps and stairs have been designed allowing for appropriate widths, openness, light levels, and passive surveillance.
- Clear sightlines for pedestrians at road intersections with low level planting in garden beds has been employed. The landscaping design has strategically located proposed trees to allow natural surveillance across pedestrian circulation paths in the public realm. The lawn areas have been kept clear of vegetation, which will attract users to the seating areas and increase space activation.
- There are alternative, at-grade, pedestrian paths throughout the precinct and users will not be forced to travel along a single path for an extended period, which will contribute to their sense of safety.
- The existing Station Building will continue to operate as-is and will therefore provide a staff presence during the day and provide users with an internal waiting area and access to existing amenities.
- Stainless steel seating bolted to the ground is extremely durable and does not present as an attractive target for sabotage or vandalism.
- The access ramp from Railway Place is surrounded by a boundary fence which will deter unauthorised access.
- The platform itself is delineated by fencing for physical access control.
- Behavioural signage will be placed in visible locations to promote proper behaviour and discourage loitering and acts that will discourage other users from using the Station.
- Wayfinding signage will be provided to afford users a sense of confidence in selecting the best travel paths.
- The Parkiteer bike storage unit will promote cyclist travel to the Station and protection of bicycles.
- The end of platform free egress routes will assist in emergency evacuation, and security gates at the platform ends will prevent unauthorised access.
- The lift doors are proposed to be glazed and allow natural surveillance and identification of hazardous situations inside the lift or in the lift landing area.
- The wide stair landings will provide excellent visibility and awareness of other passing users.
- Standards-compliant lighting design will be employed.

Access for All Abilities

The station precinct will provide for access for all abilities by delivering infrastructure which will achieve Disability Standards Accessible Public Transport (DSAPT) compliance through the provision of:

- Vertical circulation from street level to platforms via compliant stairs, ramps and lifts
- Dedicated ground level circulation routes for pedestrians that are continuous, appropriately wide, level and line marked when crossing vehicle routes, from accessibility car parking spaces and bus stops to station platforms
- The use of tactile strips and signage to aid visually impaired users

FOR CONSULTATION



Artistic impression of the view from Mackellar Street towards Benalla Station

3. A precinct that has removed, minimised, and mitigated the visual impacts of infrastructure to Mackellar Street, adjacent properties and integrates seamlessly with the residential character of the area.

The Concept Plan demonstrates the substantial improvement the precinct will make to the visual environment to Mackellar Street and adjacent properties through the removal of the existing 180 metre long retaining wall and ramps associated with the existing bridge over the rail line. Along with the realignment of the southern-most rail track, this will open the heritage Benalla Station building directly to Mackellar Street and unlock all of the land between the street and the station for landscape, public space and car parking.

The new pedestrian underpass will be accessed by a ramp, stair and lifts. The building footprint of these features will be minimal and visibility of new built forms from adjacent streets and properties will be mitigated through landscape and tree planting.

The new built forms of the Project include:

- A new platform to the north of the existing track on 180m length – part of which is provided with a canopy
- New stairs, lifts and ramps to access the new pedestrian underpass
- A new pedestrian underpass
- New fences and balustrades to platform edges, ramps and walkways
- A new bicycle Parkiteer

These features are generally less than 3.0 metres in height as measured from natural ground level, except for the lift shafts which rise to 6.0 metres in height from natural ground level, but within the relatively compact of area of less than 8.0 square metres.

The bicycle Parkiteer is located some 30 metres from the nearest property boundary (24 Carrier Street – the Victoria Hotel). All other built forms are generally more than 50 metres from the nearest property, with landscape and tree planting to mitigate visual impacts.

FOR CONSULTATION

4. A heritage precinct that increases the prominence of the existing heritage buildings and celebrates the heritage character of central Benalla.

The Concept Plan removes the twin visual barriers of the bridge ramps and the southern-most rail track between the Benalla Station building and Mackellar Street. This significant reorganisation of infrastructure will promote the visibility of the heritage station building and magnify its presence, given it will remain the most substantial built form in the rail corridor.

With the provision of a new pedestrian underpass, rather than an overpass, the station building will be visible from both sides of the corridor and not be diminished in scale.

The proposed forecourt has been designed to reflect the heritage character, with geometry and detailed materials and planting to complement the heritage of the station precinct and immediate surrounds.

The forecourt materiality and layout can reference Benalla's colourful presence, the botanical gardens and art events such as the Wall-to-Wall festival. The palette will allow for the incorporation of materials sympathetic to the heritage such as brick pavements and recycled bluestone pitched and integrated into a modern response linking the future with the past.



Artistic Impression of Benalla Station Heritage Building within upgraded public realm

5. A precinct readied for further growth and facilitating future investment into cross-town connections, regeneration and development of the precinct itself and areas north of the railway line.

The Concept Plan demonstrates a substantial investment into the heritage, accessibility, and public space of the Benalla Station Precinct. Together these provide a strong foundation for further redevelopment and growth for this precinct and its surrounds.

Cross-town connection

FOR CONSULTATION

The Project will provide a new, wide pedestrian underpass which will be shortened from the existing 75.0-metre-long underpass to approximately 40.0 metres long. It will be both wider and taller than the existing underpass and provide a gentle (DSAPT compliant) pathway from Mackellar Street to Railway Place.

This will provide easier and safer access, for both pedestrians and cyclists to the north side of the rail corridor.

In addition, the Nunn Street level crossing will provide an active pedestrian level crossing improving the safety of the at grade access for pedestrian and cyclists in this location. Together, these improved pedestrian and cycling crossing points provide a substantial upgrade for local access.

Future growth and redevelopment

The Project also provides a substantial improvement to the way Benalla Station addresses Mackellar Street and Railway Place, with a new station forecourt along much of the frontage of Mackellar Street replacing the current retaining walls and rail track fencing. The public space created in front of the station provides a genuine local node of public space that can accommodate a degree of local community activation.

The frontage to Railway Place is more modest but improves the safety and presentation of the access point to the station, and provides a flexible, future opportunity to consider how land in the rail corridor that is not required for rail purposes could complement redevelopment to the north of Railway Place.

The pedestrian access point is aligned with the intersection of Hannah Street and Commercial Road to maximise the walkability and accessibility to the station from the northern precinct adjacent to the rail corridor.

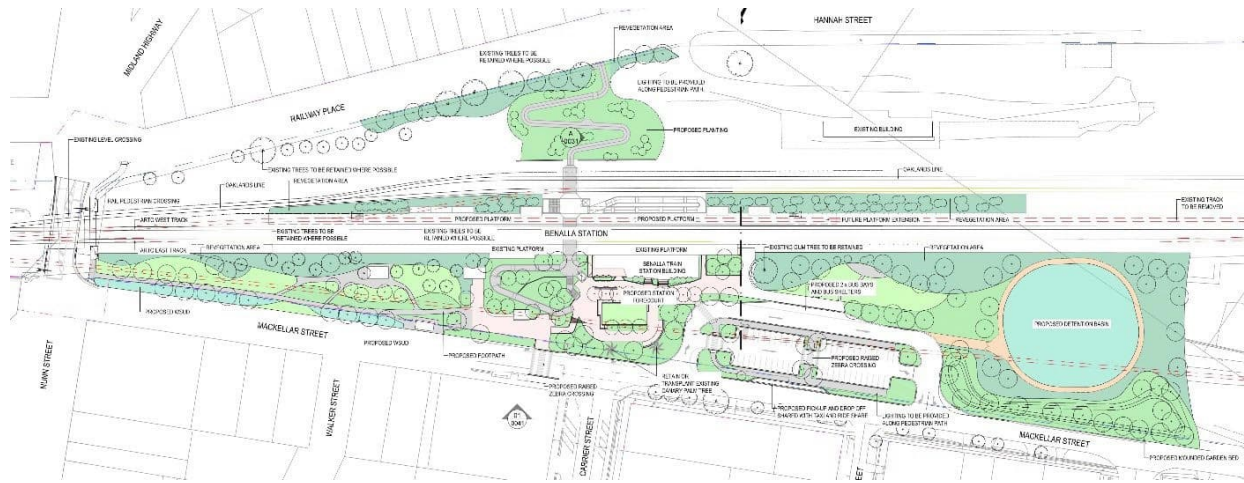


Artistic impression of the upgraded access infrastructure within the Benalla Station precinct

6. A station precinct that strengthens the landscape character of Benalla.

The Concept Plan includes a revegetation and landscaping of both station approaches, particularly the Mackellar Street station forecourt area. This has been informed by the heritage characteristics of the precinct, and the landscape character.

FOR CONSULTATION



Benalla Station Precinct General Arrangement - Concept Plan extract

Large areas transformed by demolition of existing track, bridge and associated ramps and embankments are to be revegetated with native trees and shrubs, some grasses, and self-seeding species to minimise future maintenance.

The newly created areas along the Mackellar and Hannah Streets create a unique opportunity for a native revegetation area with retention of exiting trees. The area to the southeast should be considered as passive irrigation / retention planted beds to minimise the need to rely on irrigation and to maximise drought resilience.



Artistic impression of Benalla Station urban character upgrades

Within the immediate station and street frontage area planting locations have been carefully considered to maximise sight lines. Trees will be selected for appropriate canopy height and positioned for uninterrupted views.

The following planting design and plant selection principles have been adopted:

FOR CONSULTATION

- Use of native plant species with the revegetation areas to contribute to local biodiversity.
- Use passive irrigation strategies to create larger plated areas.
- Use of self-seeding species allowing for minimal inputs to future maintenance.
- Use of hardy exotic species to highlight prominent areas, respond to urban character and increase floristic diversity.
- Species selection based on more severe plant survival conditions due to climate change.
- Plant species of low water use, and proven performance in an urban environment.
- Consideration of the ARTC standards for vegetation maintenance and tree planting in a rail corridor and near ARTC assets.
- Maintaining clear sightlines for pedestrians at road intersections with low level planting in garden beds, using CPTED principles.
- Planting densities and tree placements to anticipate some plant failure.
- Use passive irrigation strategies to create larger plated areas.

FOR CONSULTATION

7.0 Environmental Management Framework Compliance

The Concept Plan has been developed in consideration of the Project's Environmental Performance Requirements (EPRs), which are detailed in the Project's approved Environmental Management Framework (EMF).

The following section provides an explanation demonstrating how the Concept Plan complies with relevant EPRs.

FF13 - Design Opportunities – Avoiding Native Vegetation Impacts

ARTC and the Contractor must consider design opportunities for enhancement sites and overhead powerline sites to ensure clearing of native vegetation is kept to the minimum extent practical. Design considerations must incorporate and respond to the Priority Avoidance Zones (PAZs) and should avoid, wherever possible, the removal of native vegetation and impacts on habitat connectivity – this includes removal of any vegetation within an Environmental Significance Overlay and Vegetation Protection Overlay. Where the removal of native vegetation is unavoidable, ARTC must meet the assessment and offset requirements of the EPBC Act, Environmental Offsets Policy and the Victorian Guidelines for the removal, destruction or lopping of native vegetation prior to the commencement of main works. Replanting native vegetation shall be prioritised in areas within an Environmental Significance Overlay and Vegetation Protection Overlay.

Concept Plan Response:

The Concept Plan was developed with a focus on retaining native vegetation including established native trees. In locations where new planting is proposed the design approach focuses on selection of native species and creating large revegetation areas for community enjoyment and nature conservation. Proposed planting mixes will respond directly to the environment to which they are planted.

Large areas transformed by demolition of existing track, bridge associated ramps and embankments are to be revegetated with native trees and shrubs, some grasses, and self-seeding species to minimise future maintenance. A botanically diverse garden is included for enjoyment and to reference the existing public gardens in Benalla.

Where the removal of native vegetation is unavoidable, offsets will be obtained in accordance with the *Guidelines for removal, destruction or lopping of native vegetation* (Department of Environment, Land, Water and Planning, December 2017) and Conditions 4.2.11 & 4.2.12 of the Incorporated Document.

LV1 - Urban Design

The Contractor must demonstrate compliance with the Inland Rail – Beveridge to Albury Urban Design Framework (UDF) and Urban Design Guidelines (UDG).

Concept Plan Response:

Refer to Objective 6 response in Urban Design Framework Alignment.

SW1 - Water Sensitive Urban Design (WSUD)

Where discharge to stormwater source from run off is anticipated (e.g., car parks) water sensitive urban design (WSUD) measures must be considered and prioritised in order to retain and treat water prior to its discharge.

Concept Plan Response:

The Concept Plan removes a substantial existing bridge and ramps and creates new public space between the existing station building and Mackellar Street. Car parking and bus stops are in this area, along with a proposed detention basin which will retard and treat stormwater that collects on paved areas of the Project.

FOR CONSULTATION

This facility has been sized to retain the volume of storm water forecast to be generated by storm events and will be vegetated. The detention basin will form part of the treatment of stormwater before it is slowly released to the network and waterway system.

SU1 - Infrastructure Sustainability Rating - Excellent

The Contractor must achieve an Infrastructure Sustainability (IS) program rating of 'Excellent' for design and as built (using the IS Rating Tool Version 1.2. The contractor must adopt a consistent and high-quality approach to sustainability across the Project. The Contractor must meet all key sustainability outcomes and requirements contained within the Specification Inland Rail Sustainability Requirements (0-0000-900-ESS-00-SP-0001) to the satisfaction of ARTC.

Concept Plan Response:

The following sustainability initiatives have been considered in the preparation of the Concept Plan and will be adopted for the Project during the following detailed design stages.

Climate Change Adaptations:

- Vegetation included around station precinct and along the rail corridor to reduce the urban heat island effect.
- Low water requirement species specified within landscape design to adapt to projected increased frequency of droughts because of climate change.
- Inclusion of water sensitive urban design gardens to the edge of Mackellar Street, where a new landscaped zone is proposed, and selecting appropriate species to thrive in shade environment.
- Consideration of the material selections in relation to SRI factor.
- Ecology, Biodiversity and Habitat Connectivity.
- Revegetation of Benalla urban realm to re-instate lost habitat, enhance the ecological value, and improve habitat connectivity.
- Provision of large revegetation areas consisting largely of natives to contribute to the existing value.

Materials and waste:

- It is suggested to use Portland cement reduction.
- Concrete water reduction – use of reclaimed or recycled water.
- Recycled materials to be used for pavements where possible.
- Sustainable timber products.
- Inclusion of recycled plastic material where possible.
- Reused and repurposed timber from removed trees.

Water:

- The irrigation and planting strategy includes plants with low water requirements
- Most of the garden beds will not require irrigation. Where irrigation is installed, it will be subsurface automatic drip irrigation with moisture sensors.
- The spatial provisions for new plant growth, rain penetration and sun exposure will allow for introduction of low water requirements planting, and minimal automatic irrigation provisions.

FOR CONSULTATION

8.0 Conclusion

It is considered that the above Concept Plan Report and supporting Concept Plan satisfies the relevant conditions of the Beveridge to Albury Incorporated Document, December 2021.

The Concept Plan Report and Concept Plan responds to the requirements of the Incorporated Document by:

- Detailing the general built form of the Benalla Station Precinct, including site layout plans, sections and elevations, site boundaries, as well as the location of permanent buildings and structures.
- Providing commentary on design options considered for the Benalla Station Precinct
- Demonstrating how the Concept Plan has been prepared in accordance with the approved Urban Design Framework
- Demonstrating how the Concept Plan complies with the relevant clauses of the project's Environmental Performance Requirements

The Concept Plan Report and Concept Plan will now be provided to Benalla Rural City Council and the Department of Transport and Planning (Head, Transport for Victoria) for consultation, and will be made available for public inspection and comment.

FOR CONSULTATION

9.0 APPENDIX A

9.1 Concept Design Plans, Sections and Elevations