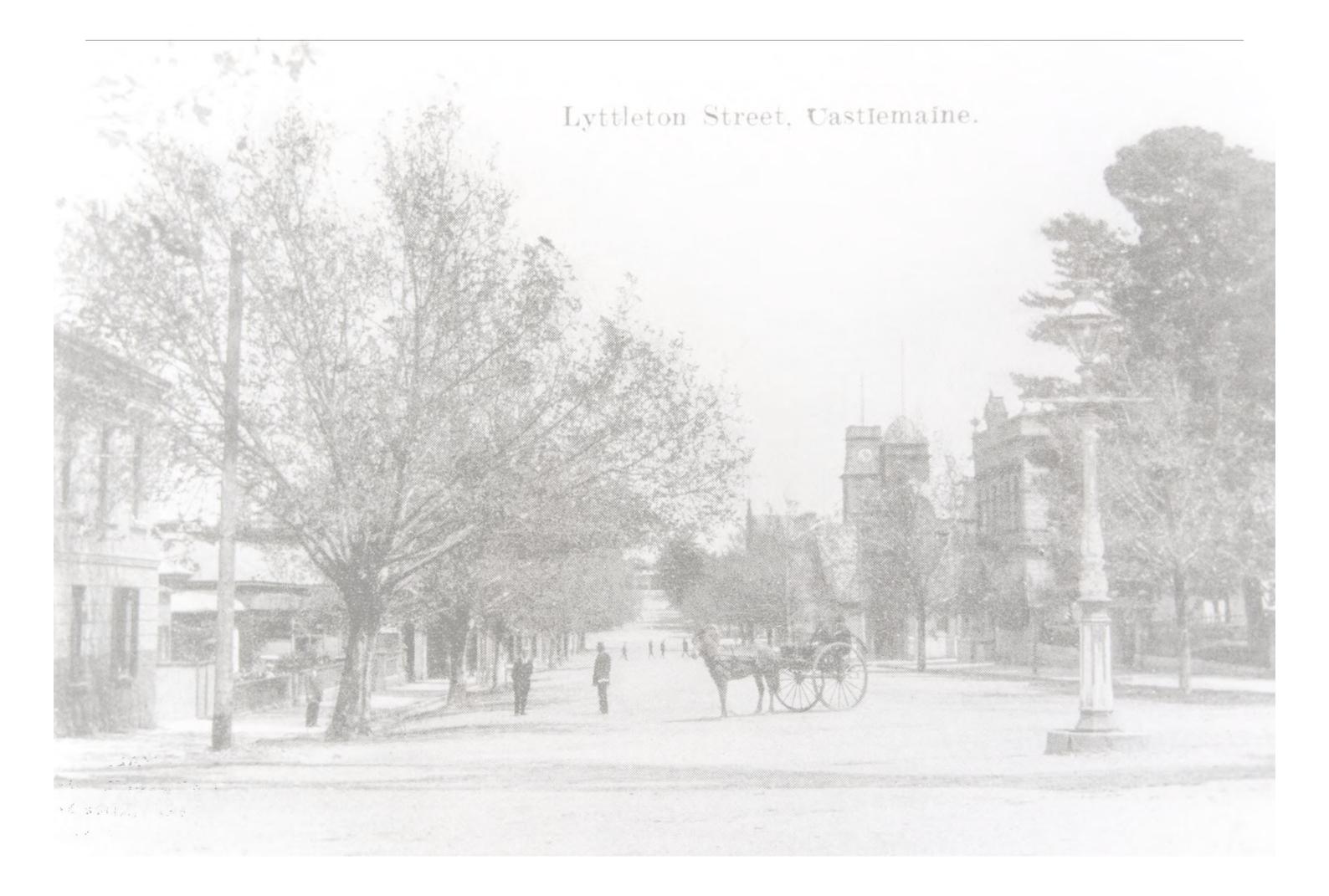


Streetscape Plan and Design Standards

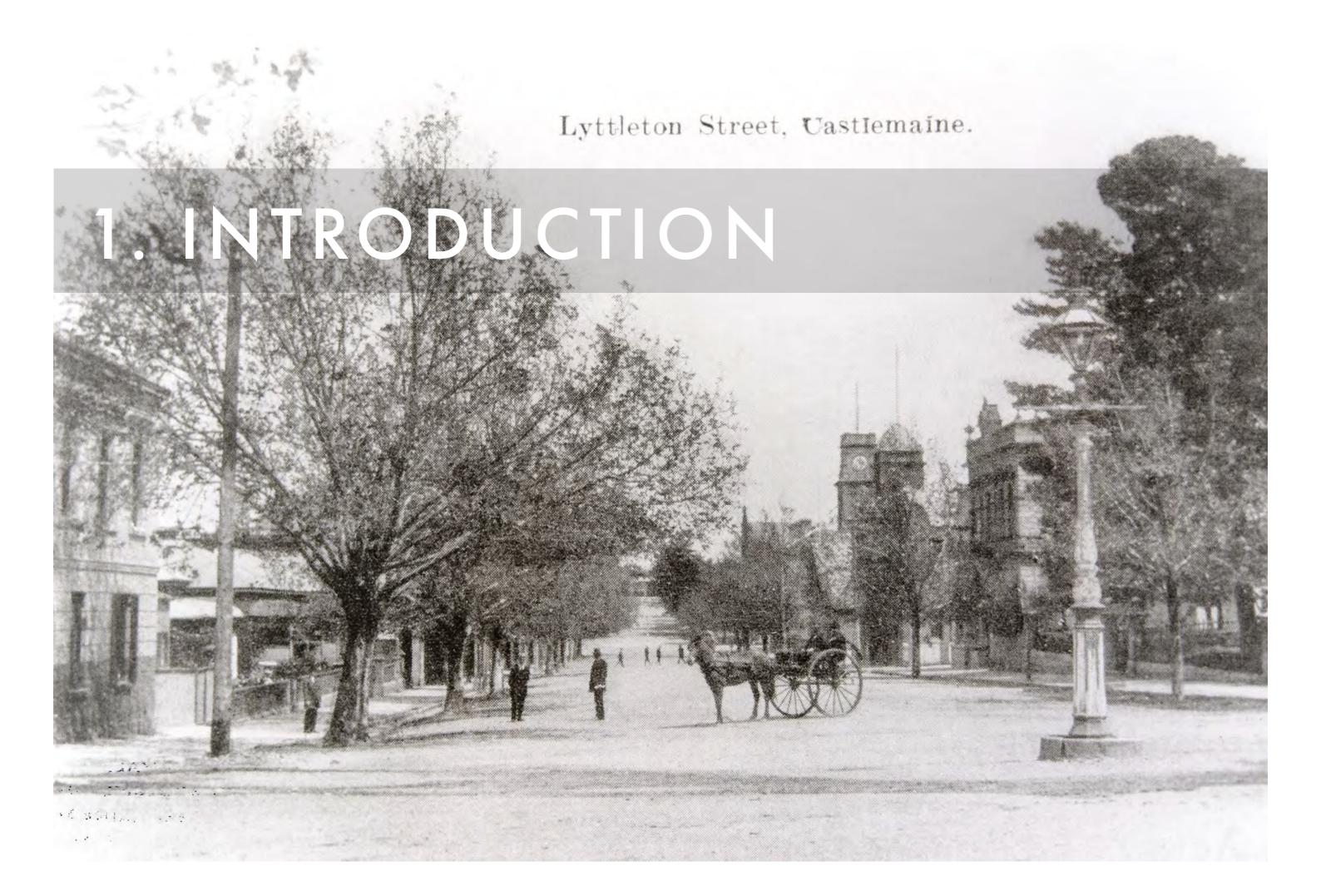
JUNE 2020





CONTENTS

1.	INTRODUCTION	04
1.1	PROJECT BACKGROUND	05
1.2	PURPOSE OF DOCUMENT	05
1.3	STUDY AREA	05
2.	CASTLEMAINE TODAY	06
2.1	ESSENTIAL QUALITIES OF CASTLEMAINE	07
2.2	STREETSCAPE DETRACTORS	08
2.3	SUMMARY OF EXISTING CONDITIONS	11
3.	ENGAGING WITH THE COMMUNITY	12
3.1	ENGAGEMENT PROCESS	13
3.2	COMMUNITY FEEDBACK	13
4.	STREETSCAPE PLAN	14
4.1	GUIDING PRINCIPLES	15
4.2	STREETSCAPE FRAMEWORK	16
4.3	STREETSCAPE PLAN	19
4.4	FEATURED PROJECTS	29
5.	DESIGN STANDARDS	42
5.1	DESIGN STANDARDS	43
5.2	PRIORITISATION AND IMPLEMENTATION	60
5.3	further community engagement	60



1.1 PROJECT BACKGROUND

In November 2016, Mount Alexander Shire Council commissioned a team of landscape architects, urban designers and town planners to develop designs for the town centre streetscapes of Castlemaine and Maldon.

A community engagement process led to a conceptual streetscape plan, design principles and design standards for both towns.

The streetscape plans cover a number of components including pedestrian connectivity, safer crossings, street trees, and improvements to public spaces. The design standards provide detail for streetscape elements such as street furniture, paving materials and crossovers.

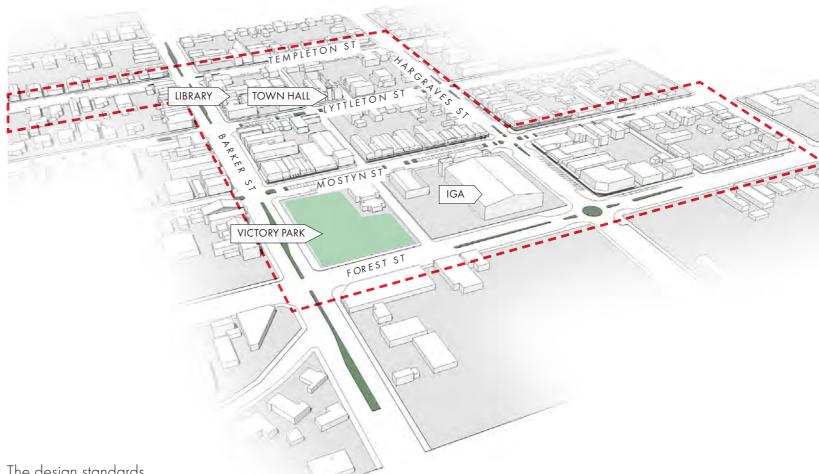
These streetscape plans and design standards will guide Council and the local community in the future management, maintenance and improvement of the historically and socially significant town centre streetscapes of Castlemaine and Maldon

1.2 PURPOSE OF DOCUMENT

Streets are the primary public spaces in all towns. They are where the life of the town happens - where people go about their daily routines, where they run into neighbours and stop to chat, where they grab a cup of coffee and sit on a bench to watch the world go by, and where shopkeepers show their wares. They are important social spaces, in addition to being central to all movement and access within the town.

With some small improvements and careful design interventions, the streets of Castlemaine could be improved for residents, visitors and business owners - to be more attractive, more functional, and more sympathetic to the historical features of the town.

This document provides strategic streetscape direction, in addition to practical short-term recommendations that Council can implement immediately. The strategic recommendations include some larger, more expensive streetscape projects, which can be planned and budgeted for by Council over a number of years.



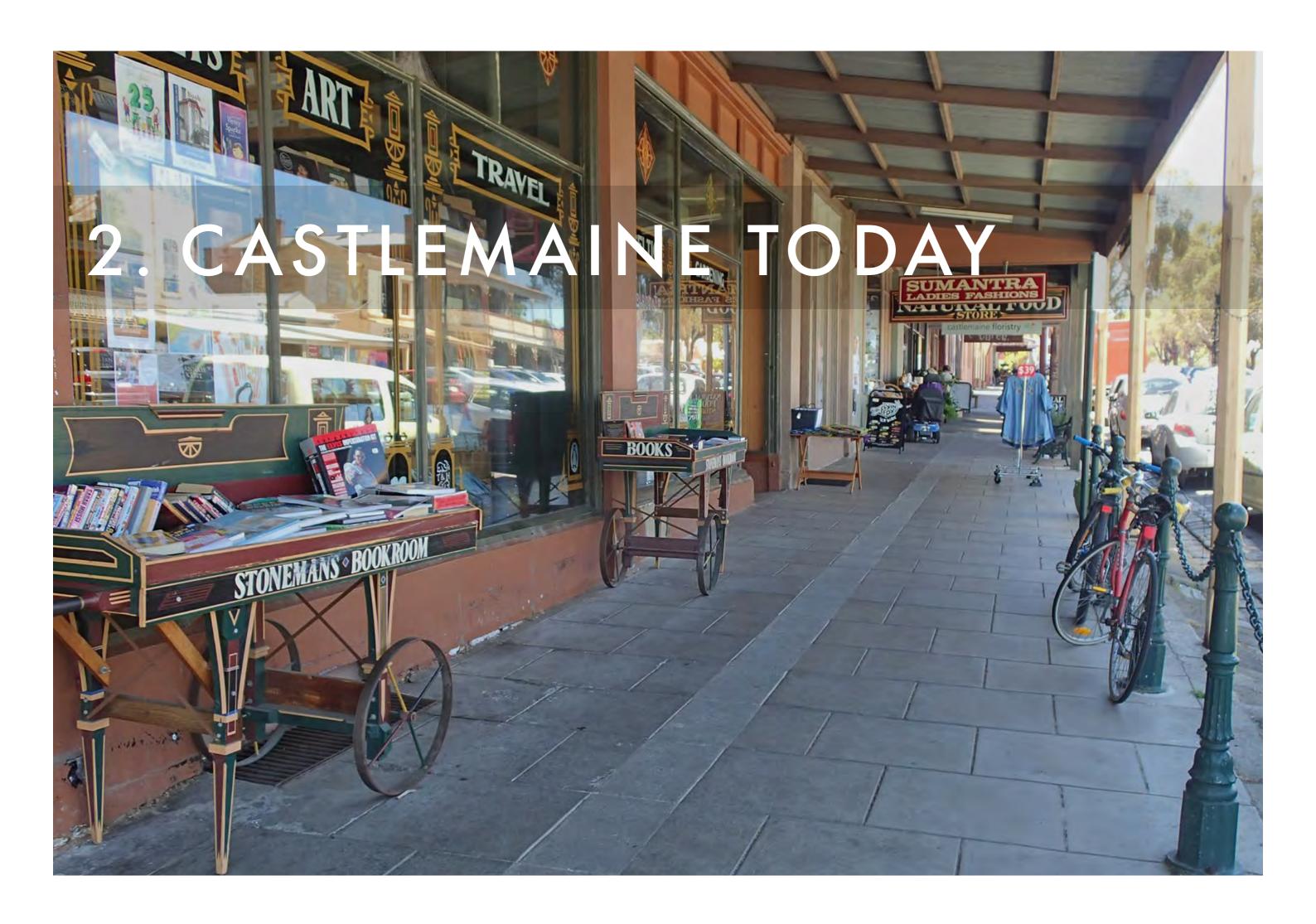
The design standards component provides a palette of recommendations that respect the history of Castlemaine while maintaining streetscape consistency, improved functionality and amenity across Castlemaine's town centre.

This project concentrates on the public realm, which includes the components of the streets and footpaths. Building facades are not included.

1.3 STUDY AREA

The focus of the study area is the town centre of Castlemaine including Forest Street, Mostyn Street, Lyttleton Street, and Templeton Street generally between and including Barker Street and Hargraves Street. Refer to the map Castlemaine: Study Area.

Castlemaine: Study Area





The town centre is built around a compact street grid making it walkable and often bustling.





Large canopied mature trees add to the town's charms.



The wide streets provide opportunity for street trees, ample footpaths and verandahs.



Quirks and curiosities appear throughout the town for those who are willing to look.



The historical and often continuous verandahs are an important feature.



Stone kerbs and channels are a key feature.

ESSENTIAL 2.1 **QUALITIES OF CASTLEMAINE**

Castlemaine is a picturesque, charming and relatively intact 19th century town in the goldfields region of Central Victoria. There are a number of specific streetscape elements that make the town centre of Castlemaine an appealing destination for residents and visitors alike.

- The town centre street grid is compact allowing the town to be easily walkable. It is often bustling.
- The wide streets provide opportunities for street trees, ample footpaths and verandahs.
- The wide footpaths and intact, often continuous verandahs provide an aesthetic and functional benefit. Businesses can utilise the protection and width of the footpaths to display their wares, which also contributes to the town's charms.
- Mature street trees both in the footpath and the road also add to the town's charm.
- Heritage features such as the stone channels and kerbs are consistent throughout the town centre.

 The layers of history in the town centre result in quirks and curiosities that make it more interesting. The ad hoc nature of tree planting also adds to the charm.

These components are the essential qualities of Castlemaine. They need to be protected, maintained and subtlety enhanced to keep the town's character intact

2.2 STREETSCAPE DETRACTORS

While the streetscape of Castlemaine's town centre has overwhelming appeal, there are some aspects that do not contribute positively. The purpose of this project is to identify these and make recommendations to improve the town centre.

- 1. Mostyn Street and Barker Street are the main streets of Castlemaine. The materials and aesthetics of both reflect their status. The quality of the materials and furnishings on these streets are not always reflective of their importance in the town centre.
- 2. Views of carparking dominate Mostyn and Lyttleton Street, due to the central aisle of parking.
- 3 & 4. Barker Street and Forest Street should read as the grand

- entrance to Castlemaine. In many areas they are inferior to the other town centre streets, are difficult to cross due to lack of signalisation and are also missing tree canopy as an important feature.
- 5. Frederick Street will be a feature of this study. While not currently well designed for pedestrians, Frederick Street is a popular route for pedestrians.
- 6. Some of the existing street furniture has historical relevance, whilst other furniture is inconsistent and tired.
- 7. While many of the stone channels and associated crossovers are in excellent shape, maintenance is an ongoing issue. There are a number of crossover styles, some of which are appropriate while others are not.
- 8. Several inconsistent kerb treatments detract from the town character. The cream roll over kerbs in Mostyn Street and Lyttleton Street are not appropriate in the historical setting nor is the quality of the material befitting of a main street.
- 9. There are a few parcels of private property in the town centre that might be considered aspirational to add to the public realm and expand public space. The space immediately in front of IGA is one such space.



1 The quality of Mostyn Street materials should reflect its status of a 'Main Street'.



Views of carparking dominate Mostyn Street and Lyttleton Street.



3 Barker Street and Forest Street are difficult to cross in some locations.



Barker Street and Forest Street are missing tree canopy. They should read as the grand entrances into Castlemaine.



Frederick Street is a popular pedestrian cut through and yet it isn't actually well designed for pedestrians.



8 Some stone crossovers and channels are decaying.



There isn't enough consistency in the furniture palette and some of the furnishings are old and tired.



9 Some areas in the town centre (such as outside the supermarket) are underutilised.



7 There isn't enough consistency in the garden edge and kerb treatment.
The cream rollover kerbs are not appropriate in the historical setting.



- Mostyn Street materials and aesthetics should reflect its status as a 'Main Street'. Special features could be considered in Mostyn Street to further develop its status as a 'Main Street'
- Views of carparking dominate Mostyn Street and Lyttleton Street due to the central aisle of parking.
- Barker Street and Forest Street, both being four lane roads, are difficult to cross in some locations.
- 4 Frederick Street is a popular pedestrian cut through and yet it isn't actually well designed for pedestrians.
- Barker Street and Forest Street are missing tree canopy. They should read as the grand entrances into Castlemaine.

- There isn't enough consistency in the furniture palette and some of the furnishings are old and tired.
- 7 There isn't enough consistency in the garden edge and kerb treatment. The cream rollover kerb does not reflect the heritage of the town.
- Some areas in the town centre (such as outside the supermarket) are underutilised as places for people to meet and greet.
- Some stone crossovers and channels are decaying and inconsistent. Some inconsistency is appropriate and this is reviewed in the Design Guidelines.

2.3 EXISTING CONDITIONS RECOMMENDATIONS

Castlemaine is a beautiful town with wonderful assets. Well designed and practical interventions could improve the experience for both residents and visitors. Improvements fall into the following categories:

- Heritage Management restoring kerbs, stone channels.
- Pedestrian connectivity and safety

 identifying key crossing areas and improving pedestrian thoroughfares throughout the town centre.
- Landscape Protecting street trees and providing more shade.
- Furniture Upgrading streetscape furnishings.
- Placemaking and orientation -Identifying locations in town suitable for public realm improvements and improving legibility through town.

"Frederick Street could become a public laneway with seating, appropriate businesses opening out (i.e. cafe or restaurant) and water sensitive urban design interventions" ...incorporating sites for revolving public art

The need for a tree canopy over Barker Street is quite desperate.

3. ENGAGING WITH THE COMMUNITARY

street and create a pedestrian walk through with trees, sculptures and seating" "Open streets to pedestrians. Make a mall. Have strict speed limits, especially in lanes like Frederick Street and Mechanics Street"

I strongly disagree with extra traffic lights at either Mostyn/Barker or Hargraves/ Forest. still not nearly as welcoming or visually distinctive as other entrances"

"Creation of a space that functions as a town square (third place that's not home or work) that is welcoming, shady, beautiful and relaxed" ...raising of the road in front of the Market building will serve no useful purpose"

Street mall"

I would support a raised street plaza.

More tree planting

"Less priority to car parking, more space for trees and pedestrians"

The green space in front of IGA is underused

"Simple things like bench seats, safe pavements.

3.1 ENGAGEMENT PROCESS

The process has included four key interactions with the community. In January 2017, Council hosted an online survey to understand what the community likes about Castlemaine's town centre and identify where improvements could be considered.

In March, the early findings and designs were presented to a Community Reference Group. The group consisted of residents, traders and representatives from the community. In June, further ideas were tested with a second Community Reference Group.

In October 2017, a Listening Post was held on a Saturday morning in Mostyn Street where some of the proposed designs were displayed. The same materials were displayed on Council's 'Have your Say' webpage for two weeks following the Listening Post.

Community engagement has been important throughout, and the designs produced in this document are a genuine attempt to reflect and crystalise the sentiment of wide-ranging and often divergent community opinion.

3.2 COMMUNITY FEEDBACK

3.2.1 ONLINE SURVEY

139 people responded to the online survey. Respondents were typically full-time residents who lived within 5kms of the town centre. The main reason for coming to the town centre was to shop and eat or drink in the cafes and restaurants.

Respondents reported loving the heritage buildings, cafes, wide footpaths, trees, atmosphere, the village feel, Victory Park, Market Hall and the shops. They also wanted improvements to pedestrian crossings, parking, signage, footpaths, street furniture, street trees, bike infrastructure, shaded parking, and accessibility.

When asked, respondents overwhelmingly supported investigating changes to Frederick Street such as increasing the amount of pedestrian space and providing better bike and scooter access.

3.2.2 COMMUNITY REFERENCE GROUP #1

Attendees supported an emphasis of pedestrian connectivity, more consistency in paving and furnishings, and more street trees, particularly in medians. They also supported the notion of respecting the town's

heritage features and character. There were mixed opinions about parking supply. Some think there isn't enough parking while others think that there is, but that parking restrictions are not enforced.

Some attendees felt that not enough emphasis had been put on bicycle infrastructure, the use of native plants and accessibility. The majority supported reducing speed limits particularly on Barker Street and some wanted to see better pedestrian access to the library.

3.2.3 COMMUNITY REFERENCE GROUP #2

Attendees had mixed opinions about parking in the town centre. Some felt that there is not enough parking while others felt that the issue was more nuanced, explaining that the parking needed to be better enforced, and that employees of retail premises should park beyond the town centre so as to not take up the town centre spaces all day long. Some suggested that the taxi rank needed to be move beyond the town centre with space for just one taxi at a time in Mostyn Street. Others suggested that there needed to be more short-term (10-15 minute) parking in the town centre.

Some attendees supported a cycle friendly town and thought that town centre bicycle facilities should connect to the trails beyond.

There was discussion about better street tree selection, more shade, and some use of indigenous plants. The concept of rain gardens and above ground storm water management was supported. The proposals for Frederick Street continued to be generally supported.

3.2.4 LISTENING POST

The two hour session was well attended and garnered a wide range of opinion. While there was a great deal of support for many of the proposals, there were also voices who were not supportive. A brief summary appears below, but it is prudent to say that some of the concern around the larger more ambitious proposals comes from the conceptual designs. Detailed design will resolve many of the engineering and drainage issues raised by some residents.

Better pedestrian access throughout the town centre and particularly across Barker Street and Forest Street and at key intersections was supported by many.

The emphasis on maintaining and restoring the heritage features of Castlemaine was still a popular feature of the plan. There is a general resistance from many that highly contemporary features are not appropriate in Castlemaine.

The people who responded online and attended the Listening Post mentioned wanting to see more references to public art, slowing traffic speed throughout the town centre, adding more trees, and creating a uniform approach to furnishings.

A few people wanted to emphasise:

- Templeton Street at the Train Station as a major entrance to town.
- Mechanics Street arrival to library and the pedestrian experience.
- Inclusion of the Art Gallery Precinct.
- Kennedy Street as an important corridor through town.

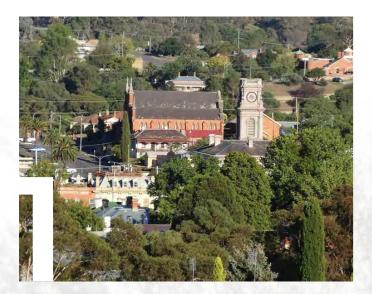
Others questioned whether:

- Frederick Street needed to stay open to vehicle traffic at all.
- Mostyn Street (at the intersection with Frederick St) should be raised.
- Barker Street should be one lane in either direction instead of two to make way for a better pedestrian and bicycle environment and more on street parallel parking.

Some people are wary of big changes including:

- Additional traffic lights or removal of roundabout at the corner of Forest Street and Hargraves Street.
- Reversal of traffic flow on Frederick Street.
- Any dramatic changes to streets, traffic flow, intersections, or changes to parking.





Reference the history of Castlemaine



Improve pedestrian and bicycle connectivity



Green Castlemaine



Review the existing conditions to ensure that the urban environment provides accessibility to as many people as possible

4.1 GUIDING PRINCIPLES

The following principles have been presented to the community and used to guide and shape the ultimate project outcomes:

1. Reference the history of Castlemaine

A successful project is one that references and respects the historical features of the town without overshadowing them or devaluing them with overly contemporary or faux-heritage streetscape elements. If heritage features are used, they must have a strong connection to the history of the town.

The inclusion of design elements that acknowledges and celebrates traditional owners and their connection with the area is important.

2. Green Castlemaine

A good canopy of trees exists through the town centre. There is the opportunity to add many more into the wide streets of the town centre.

3. Improve pedestrian and bicycle connectivity

Walkability and bicycle access throughout the town centre could be improved by better access across Barker Street, Forest Street, Mostyn Street and Frederick Street. Adding bicycle infrastructure will support a nascent bicycle community.

4. Apply universal design principles.

Incorporate universal design principles into the urban environment to provide accessibility to as many people as possible, regardless of their age, level of ability, cultural background, or any other differentiating factors that contribute to the diversity of our community.



Find the underutilised spaces in the town and explore the opportunities



Keep it quirky

5. Expand the public realm

There are many opportunities to create interesting and useful public spaces by finding underutilised spaces within the town's rights-of-way, particularly in the wide footpaths. This could include additional street furnishings or public art. There are a few parcels of private property in the town centre that might be considered aspirational to add to the public realm and expand public space.



Have fun with public art and temporary streetscape elements

6. Keep it quirky

Part of the charm of a historical town is that the streetscape is not all 'perfect'. In so many instances, the streetscape oddities and peculiarities found throughout Castlemaine are what make the town so appealing.

7. Have fun with temporary streetscape elements

Streetscapes can be bright, creative places in a historical town such as Castlemaine. Temporary features such as revolving public art, poster wall, festivals, parklets and loose furniture ensures that the historical fabric remains intact

4.2 STREETSCAPE FRAMEWORK

The plan makes recommendations for a number of streets in the town centre of Castlemaine. A streetscape framework establishes the types of streets and creates a hierarchy which can be used to better identify where the improvements should be both distributed and concentrated.

Boulevard Streets

The boulevard streets are Barker Street, Forest Street and Templeton Street (between the railway station and Barker Street). These streets are the entrances and exits to the town, and should read as grand gateways. They could be lined with large trees on both sides of the road and within the median where one exists and where powerlines permit.

Town Centre Streets

The core town centre streets are Mostyn Street, Lyttleton Street and Hargraves Street. The environment of these streets should support pedestrian and

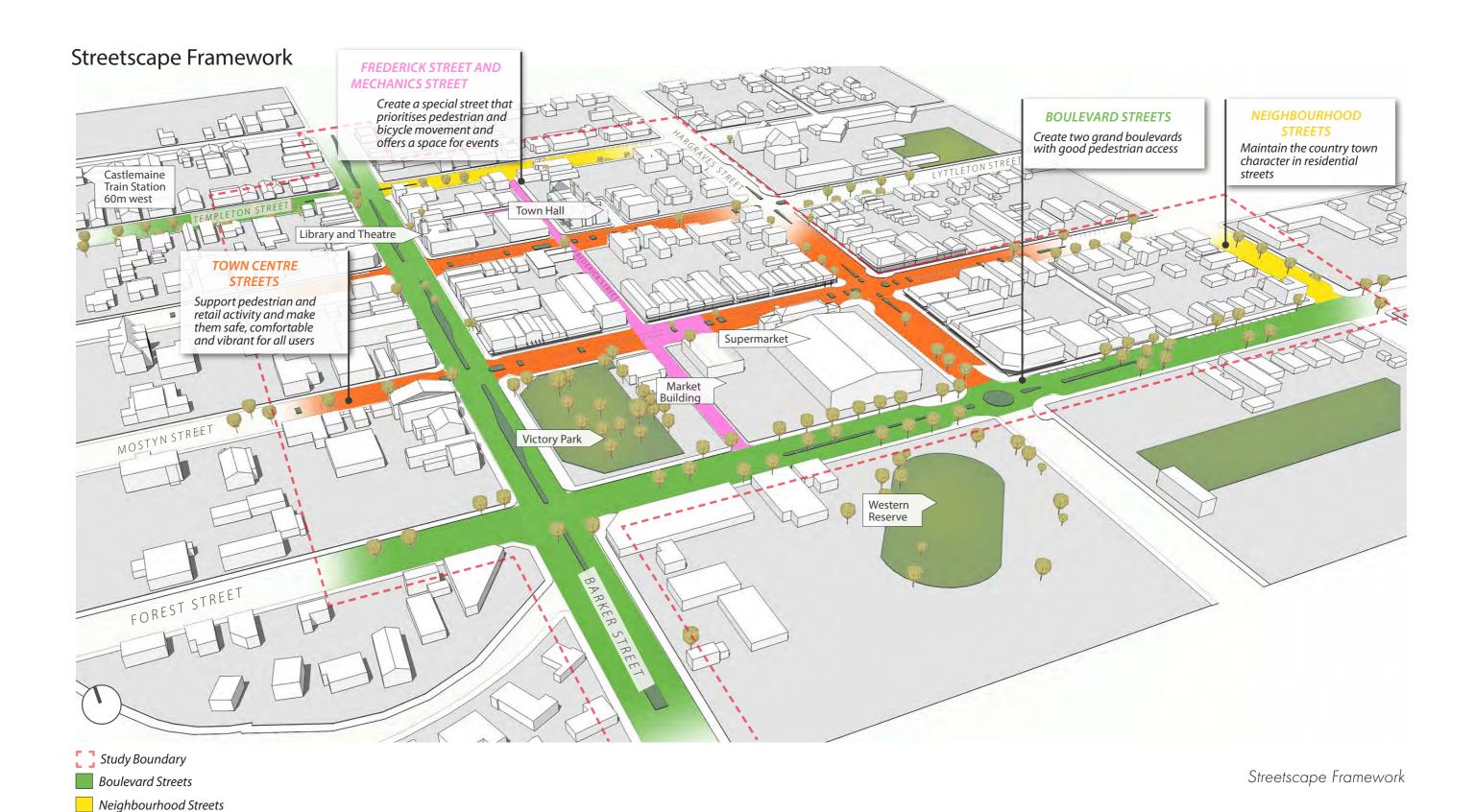
retail activity and create more comfortable places for people to sit and chat and 'stay-a-while'.

Neighbourhood Streets

The neighbourhood streets included in this project are Urquhart Street and Templeton Street between Barker Street and Hargraves Street. The philosophy for these streets should be the same for many of the residential streets in Castlemaine - leave them as they are. These streets are charming 'country town' streets where the inconsistencies and imperfections make them what they are. Adding additional parking in a centre aisle or formalising parking in any way will permanently change the character of these streets and should be avoided.

Frederick Street and Mechanics Street

Concept designs for Frederick Street and Mechanics Street have been created to investigate the creation of a network of back streets which promote pedestrian and bicycle activity, and a space for events.



Town Centre Streets

Frederick Street & Mechanics Street

17

TEMPLETON STREET CASTLEMAINE TOWN HALL LYTTLETON STREET FREDERICK ST SHARED STREET MOSTYN STREET RAISED CASTLEMAINE MOSTYN STREET EMPYRE HOTEL VISITOR NFORMATION TO SCHOOL MAXI SUPA IGA THEATRE ROYAL FOREST STREET Conceptual Streetscape Plan

18

LEGEND

- Consider a Mostyn Street Plaza in front of the Market Building that will become a shared pedestrian and vehicle space.
- Create a pedestrian and cyclist prioritised Frederick Street and Mechanics Street.
- 3 Strategically add trees to the centre of Mostyn Street in key locations to de-emphasise parking and provide more shade.
- Create grand boulevards to Barker Street and Forest Street by adding canopy trees to medians. Ultimately consider removing dedicated right turn lanes on Barker Street to create a consistent median width.
- Investigate possibilities to expand the public realm. For example, utilising the private property in front of the supermarket would create a mini park/plaza immediately adjacent to Mostyn Street.
- Ultimately consider signalising the intersection of Mostyn Street and Barker Street to provide safe access across Barker Street.
- Provide improved pedestrian and bicycle access from the town centre to Western Reserve by adding one or two pedestrian crossings on Forest Street. Investigate the potential to remove the existing roundabout at Forest Street and Hargraves Street, add traffic signals and relocate the miner's statue to a high profile location within Castlemaine, with appropriate community consultation.
- Add passive mid-block crossings (that meet AS 1428) in medians along Barker Street (not formalised crossings to allow pedestrians to cross mid-block at refuge points in median).
- Suggested bicycle routes. Refer Chapter 4 for detail.

4.3 STREETSCAPE PLAN

Heritage Management

Upgrade streetscape with materials that don't detract from the building facades and heritage architecture. The permanent materials should be subtle and respectful of the town's history. This is outlined further in the Design Standards.

Look for opportunities to frame and emphasise historical buildings such as the Market Building.

Systematically underground powerlines throughout town centre as funding becomes available.

Placemaking and Orientation

Create grand boulevards to
Barker Street and Forest Street by
adding canopy trees to medians.
Consider removing dedicated
right turn lanes on Barker Street to
create a consistent median width.

Investigate possibilities to expand the public realm. For example, opening up the space in front of the existing supermarket would create a mini park/plaza immediately adjacent to Mostyn Street

Design Frederick Street and Mechanics Street to be easily closed off to traffic for public events.

Landscape

Street trees are a major feature of Castlemaine. Existing trees should be protected and new trees added to further enhance the Castlemaine streetscape.

Strategically add trees to the centre and edges of Mostyn Street in key locations to de-emphasise parking and provide more shade.

Tree species selection considers the importance of preserving and enhancing the heritage character of Castlemaine. Consideration is also given to species adaptability to changing climatic conditions and its ability to adapt to urban conditions which is critical when aiming for a sustainable tree population.

Investigate storm water management opportunities in road reserves where appropriate.

Furniture

Upgrade streetscape furnishings to create a consistent palette of furnishings throughout the town centre as required.

Create guidelines for wayfinding signage and provide precedent examples.

Pedestrian and bicycle connectivity and safety

Create a pedestrian and cyclist prioritised Frederick Street and Mechanics Street. Frederick Street is already a major pedestrian thoroughfare. This initiative will still allow for vehicles to use the street but it will be designed to highlight the presence of pedestrians and cyclists and make them safer.

Consider a Mostyn Street Plaza in front of the Market Hall that will become a shared pedestrian and vehicle space. It will slow traffic, emphasise pedestrians frame the Market Hall, and offer an area of the street suitable for temporary events and closures.

Review and update the Walking and Cycling strategy in the town centre. Add bike infrastructure across the town centre.

Consider signalising the intersection of Mostyn Street and Barker Street to better provide safe access across Barker Street.

Recognise Barker Street as a retail street with significant pedestrian activity. Investigate possibilities to remove east- and west-bound right turn lanes on Barker Street to expand planted medians and provide adequate pedestrian and bicycle refuges in centre of road. Key intersections to consider are Barker Street at Mostyn Street, Barker Street at Lyttleton Street and Barker Street at Templeton Street. To test the removal of the west-bound right turn lanes should occur in a first stage. If successful, the removal of the east-bound right turn lanes could be considered. Barker Street is managed by Regional Roads Victoria and as such, these suggestions would require significant liaison.

Provide better pedestrian and bicycle access from the town centre to Western Reserve by adding one or two pedestrian crossings on Forest Street. A flashing zebra crossing would be appropriate just east of the Barker Street/
Forest Street intersection.

Roundabouts are notoriously difficult for pedestrians and cyclists to cross.

Investigate potential to remove the roundabout at Forest Street and Hargraves Street and add traffic signals. This would require liaison with Regional Roads Victoria, but would dramatically improve access to Western Reserve and to the town centre from the neighbourhoods south of Western Reserve.

Add passive mid-block crossings (that meet AS 1428) in medians along Barker Street (not formalised crossings to allow pedestrians to cross midblock at refuge points in median).

AS 1428 must be considered in the design of pedestrian access and parking.

Key Features

This is a generic list. Not all features will appear on every plan.

- Heritage bench (Refer 5.1.2)
- Heritage lamp post (Refer 5.1.2)

4.3.1 FOREST STREET

Street Type

Boulevard Street

Also refer Section 5.1.1

town centre intersection

Street furniture at a typical

- 3 Timber bollard (Refer 5.1.2)
- 4 Steel bollard (Refer 5.1.2)
- Contemporary backed bench (Refer 5.1.3)

- 6 Rubbish bin (Refer 5.1.3)
- 7 Bike hoop (Refer 5.1.3)
- 8 Feature paving (Refer 5.1.4)
- 10 Crossing (Refer 5.1.4)
- Double stone kerb (Refer 5.1.5)

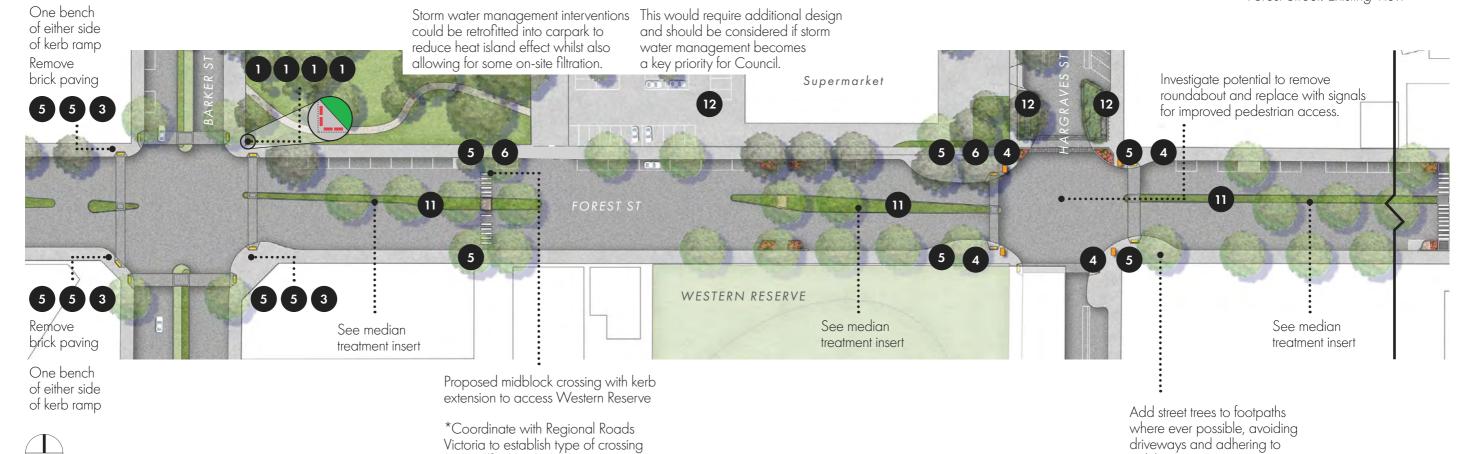
(zebra/flashing zebra)

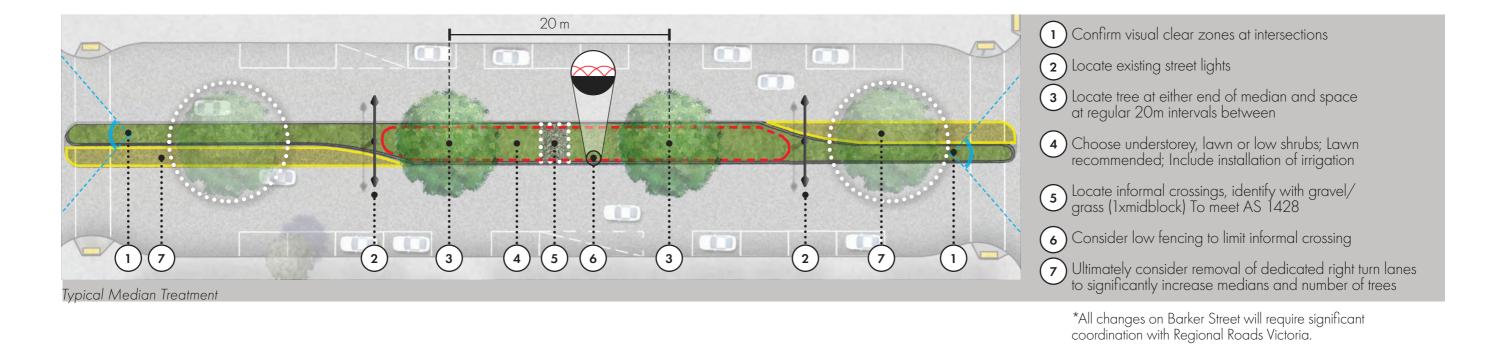
- Low fencing (Refer 5.1.5)
- Rain garden/WSUD intervention (Refer 5.1.7)



sightline requirements

Forest Street: Existing View





URQUHART.

Suggested Street Tree

Large Shade Tree

Tree1 Quercus alba (White Oak)

Tree 2 Quercus cerris (Turkey Oak)

Tree 3 Quercus canariensis (Algerian Oak)

Proposed midblock crossing with kerb extension to access Western Reserve (if roundabout removal is unlikely).

Coordinate with Regional Roads Victoria to establish type of crossing (zebra/flashing zebra)

Key Features

This is a generic list. Not all features will appear on every plan.

- Heritage bench (Refer 5.1.2)
- Heritage lamp post (Refer 5.1.2)
- Timber bollard (Refer 5.1.2)
- Steel bollard (Refer 5.1.2)
- Contemporary backed bench (Refer 5.1.3)

- Bike hoop (Refer 5.1.3)
- Feature paving (Refer 5.1.4)

Rubbish bin (Refer 5.1.3)

- Crossing (Refer 5.1.4)
- Double stone kerb (Refer 5.1.5)
- Low fencing (Refer 5.1.3)
- Rain garden/WSUD intervention (Refer 5.1.7)





4.3.2 MOSTYN STREET

Street Type

Town Centre Street

Also refer Section 5.1.1

Street furniture at a typical

town centre intersection



Mostyn Street: Existing View



Suggested Street Tree

Medium-large shade tree

Tree1 Ulmus parvifolia 'Emer II Allee' (Chinese Elm)

Tree2 Fraxinus pennsylvanica 'Cimmaron' (Cimmaron Ash)

Tree 3 Quercus phellos (Willow Oak)

Tree 4 Eucalyptus sp. east of Hargraves Street

Key Features

This is a generic list. Not all features will appear on every plan.

Street Type

Town Centre Street

Also refer Section 5.1.1 Street furniture at a typical town centre intersection

4.3.3 LYTTLETON STREET

- Heritage bench (Refer 5.1.2)
- 2 Heritage lamp post (Refer 5.1.2)
- 3 Timber bollard (Refer 5.1.2)
- 4 Steel bollard (Refer 5.1.2)
- Contemporary backed bench (Refer 5.1.3)

- 6 Rubbish bin (Refer 5.1.3)
- 7 Bike hoop (Refer 5.1.3)
- 8 Feature paving (Refer 5.1.4)
- 9 Crossing (Refer 5.1.4)
- Double stone kerb (Refer 5.1.5)
- Low fencing (Refer 5.1.3)
- Rain garden/WSUD intervention (Refer 5.1.7)



Tree 3 Quercus phellos (Willow Oak)

Lyttleton Street: Existing View



4.3.4 TEMPLETON STREET

Street Type

Boulevard Street

Also refer Section 5.1.1 Street furniture at a typical town centre intersection

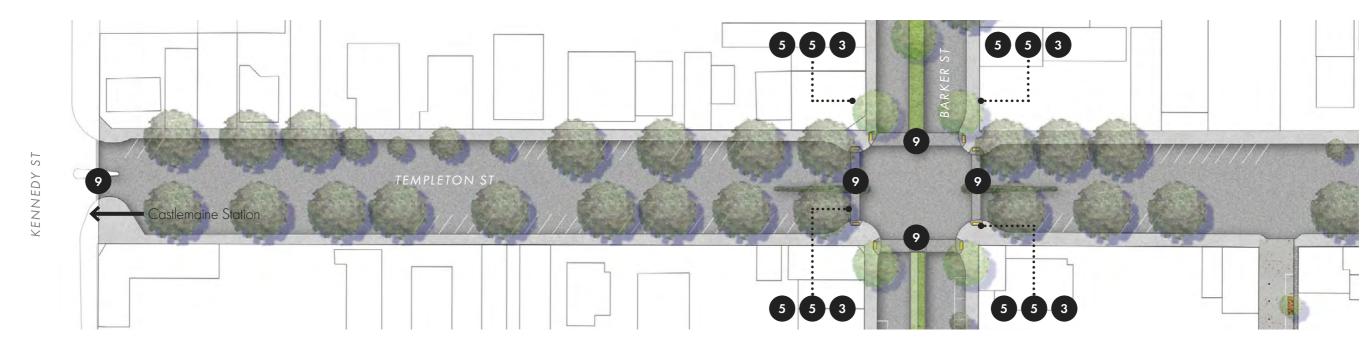
Key Features

This is a generic list. Not all features will appear on every plan.

- 1 Heritage bench (Refer 5.1.2)
- Heritage lamp post (Refer 5.1.2)
- 3 Timber bollard (Refer 5.1.2)
- 4 Steel bollard (Refer 5.1.2)
- Contemporary backed bench (Refer 5.1.3)

- 6 Rubbish bin (Refer 5.1.3)
- 7 Bike hoop (Refer 5.1.3)
- 8 Feature paving (Refer 5.1.4)
- 9 Crossing (Refer 5.1.4)
- Double stone kerb (Refer 5.1.5)
- Low fencing (Refer 5.1.3)
- Rain garden/WSUD intervention (Refer 5.1.7)







Suggested Street Tree

Tree1 Retain Platanus x acerifolia (Plane Tree)

Key Features

This is a generic list. Not all features will appear on every plan.

- Heritage bench (Refer 5.1.2)
- 2 Heritage lamp post (Refer 5.1.2)
- 3 Timber bollard (Refer 5.1.2)
- 4 Steel bollard (Refer 5.1.2)
- Also refer Section 5.1.1

 Street furniture at a typical town centre intersection

 5 Contemporary backed bench (Refer 5.1.3)

4.3.5 BARKER STREET

Street Type

Boulevard Street

- 6 Rubbish bin (Refer 5.1.3)
- 7 Bike hoop (Refer 5.1.3)
- 8 Feature paving (Refer 5.1.4)
- 9 Crossing (Refer 5.1.4)
- Double stone kerb (Refer 5.1.5)
- Low fencing (Refer 5.1.3)
- Rain garden/WSUD intervention (Refer 5.1.7)



Barker Street: Existing View



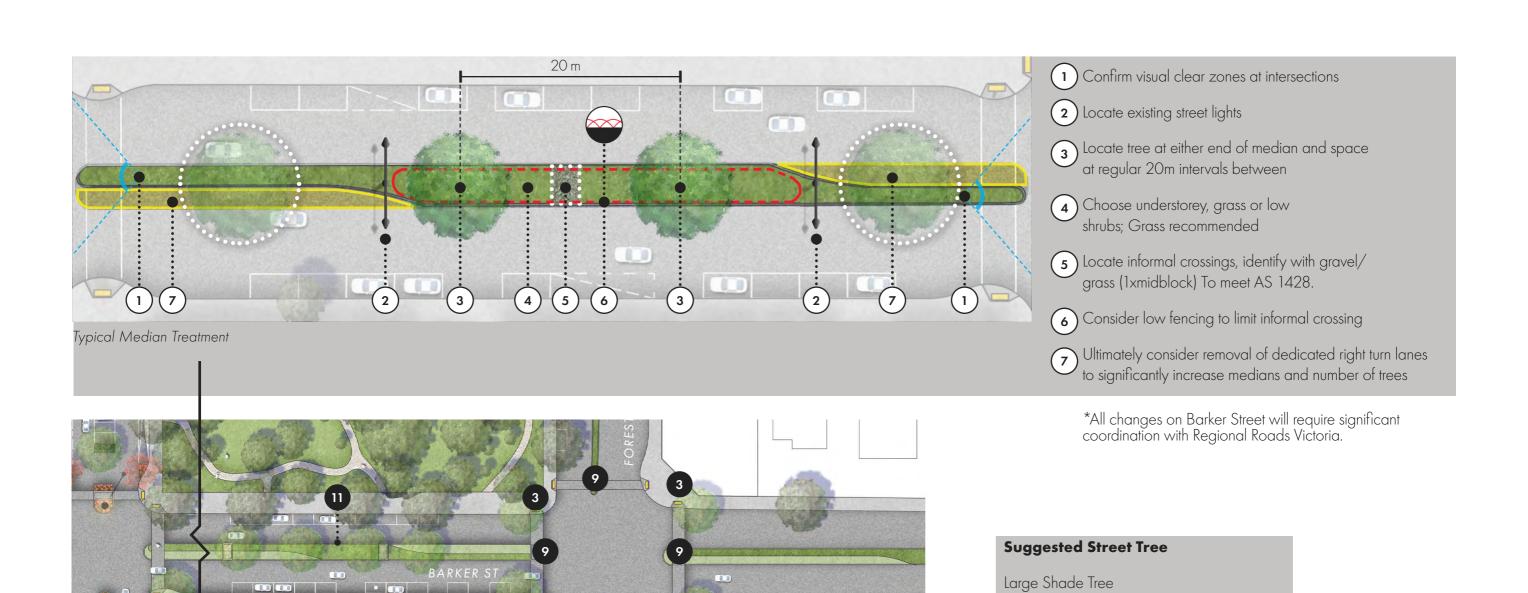
(Beyond hotel porte-cochère)



Tree1 Quercus alba (White Oak)

Tree 2 Quercus cerris (Turkey Oak)

Tree 3 Quercus canariensis (Algerian Oak)



4.3.6 HARGRAVES STREET

Street Type

Town Centre Street

Also refer Section 5.1.1 Street furniture at a typical town centre intersection

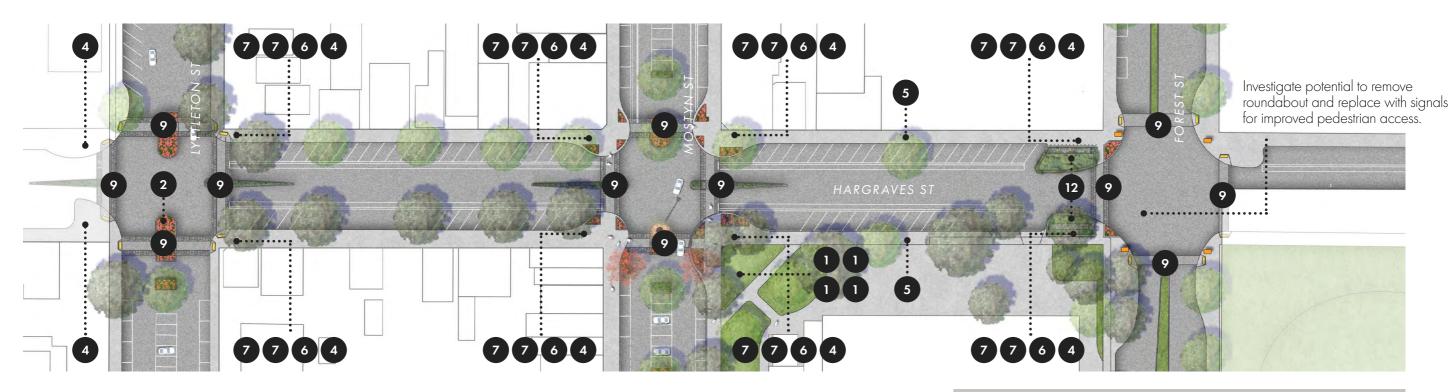
Key Features

This is a generic list. Not all features will appear on every plan.

- Heritage bench (Refer 5.1.2)
- 2 Heritage lamp post (Refer 5.1.2)
- 3 Timber bollard (Refer 5.1.2)
- 4 Steel bollard (Refer 5.1.2)
- Contemporary backed bench (Refer 5.1.3)

- 6 Rubbish bin (Refer 5.1.3)
- 7 Bike hoop (Refer 5.1.3)
- 8 Feature paving (Refer 5.1.4)
- 9 Crossing (Refer 5.1.4)
- Double stone kerb (Refer 5.1.5)
- Low fencing (Refer 5.1.3)
- Rain garden/WSUD intervention (Refer 5.1.7)







Suggested Street Tree

Medium-large shade tree

Tree1 Ulmus parvifolia 'Emer II Allee' (Chinese Elm)

Tree2 Fraxinus pennsylvanica 'Cimmaron' (Cimmaron Ash)

Tree 3 Quercus phellos (Willow Oak)



Possible Treatment 1: Shared streets cater for



Possible Treatment 3: Kerbless streets allow pedestians to use the space more freely



Possible Treatment 2: Bollards demarcate the space



Possible Treatment 4: Small public spaces can be incorporated into shared street design

Possible Treatments for Frederick Street and Mechanics Lane

FEATURED PROJECTS

4.4.1 FREDERICK STREET AND MECHANICS STREET

Frederick Street is a natural pedestrian thoroughfare between two town centre streets - Mostyn Street and Lyttleton Street. When asked in the online survey, 60% of respondents support:

- Increasing pedestrian space
- Providing landscaping
- Increased seating
- Spaces for art and installation
- Providing bike/scooter access

The conceptual proposal is to create a shared street on Frederick Street between Mostyn Street and Templeton Street and on Mechanics Street between Frederick Street and Barker Street.

A shared street is a street that allows access for vehicles, pedestrians and cyclists, and minimises the segregation between the modes.

In the case of Frederick Street and Mechanics Street:

- the road surface could be raised to the same level as the footpaths making it essentially 'kerbless' for improved accessibility.
- an economical surface treatment of asphalt could be used or a higher grade material (compared

- to asphalt) could be considered.
- in addition to the different street treatment, signage would alert drivers to the presence of pedestrians and cyclists.
- street trees and low planting could be added.
- 9 or 10 parking spaces would be retained on one side pending detailed design.
- street furniture would be added
- bollards would demarcate the 'road' and 'footpath' to maintain a 'no car zone'.
- the streets could easily be closed off and used for events.
- permanent or temporary public art could be incorporated, particularly on the blank walls along Frederick Street, in liaison with property owners.
- access to the retail loading dock and the former parking lot would be retained. Detailed design and engineering advice will be required.
- AS 1428 must be met and a continuous accessible path must be delineated and accompanied with way finding cues.

There is also the possibility to extend the Frederick Street materials and design details across Mostyn Street and through the pedestrian walkway to the car park behind the Market Building. This is an excellent opportunity to tie the public realm together and improve connectivity and legibility within the town centre.

- Street level could be raised to same height as footpaths to create a single level street for vehicles, cyclists and pedestrians.
- Historical stone channel and historic loading eye will be retained and restored.
- Vehicles will move northbound.
- Trees, planters and furniture will be added to provide amenity. Planters could also have a storm water management function.

- 9 or 10 parking spaces will be retained on one side, pending detailed design.
- Bollards could be added to create safe pedestrian zones.
- 7 Access to loading dock and all other existing driveways will be retained.
- Street can be closed for community events through the use of removable bollards.
- Public art, murals on blank walls, furniture and lighting will be key to enlivening the space.

Furniture palette to include:

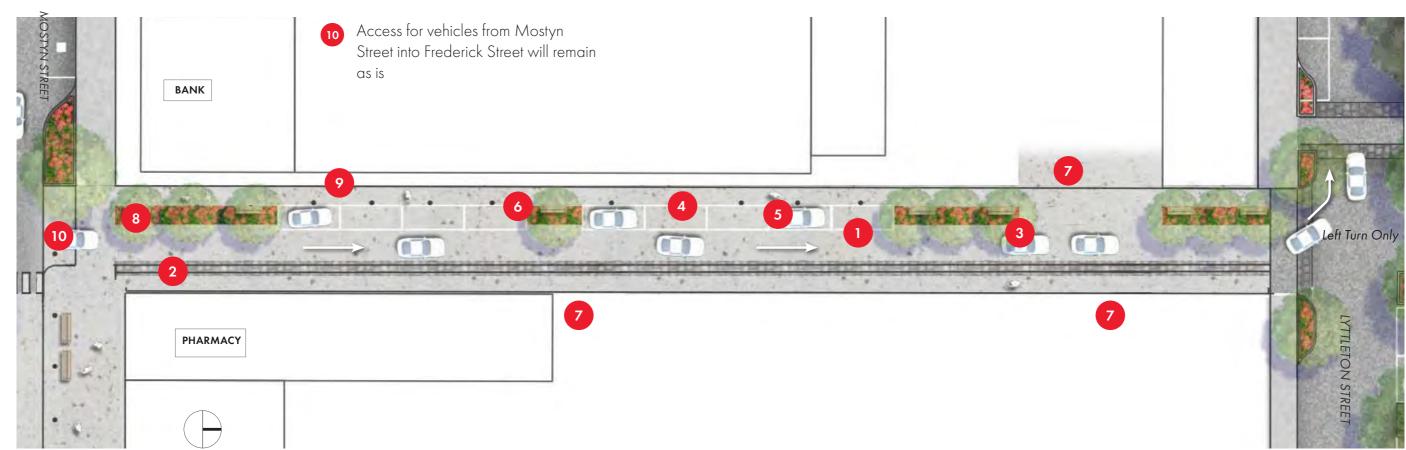
Steel bollard (Refer 5.1.3)

Contemporary backed bench (Refer 5.1.4)

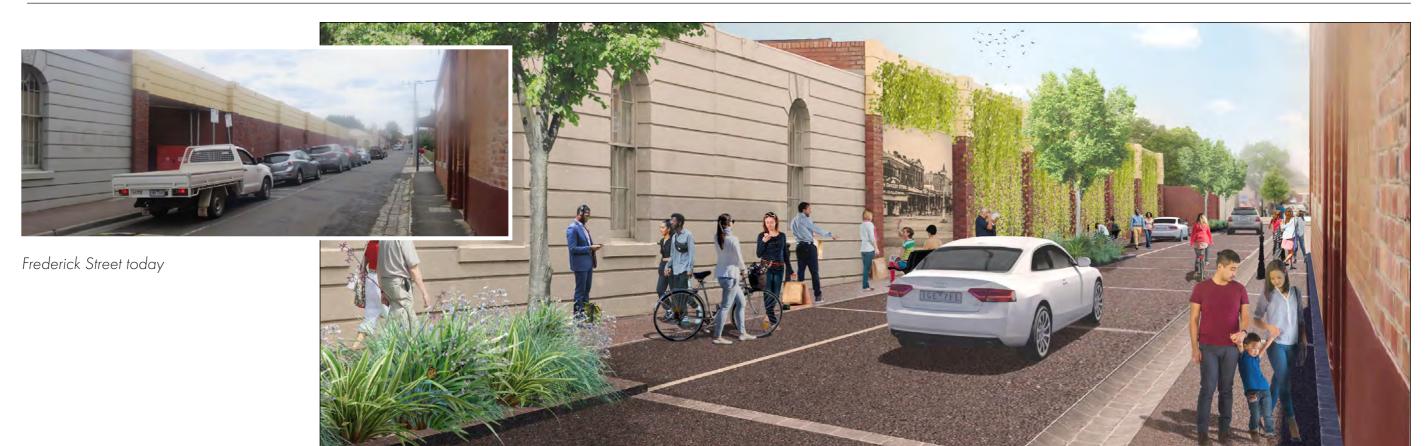
Rubbish bin (Refer 5.1.4)

Bike hoop (Refer 5.1.4)

Tactile Ground Surface Indicators will be necessary - and must be considered throughout detailed design.



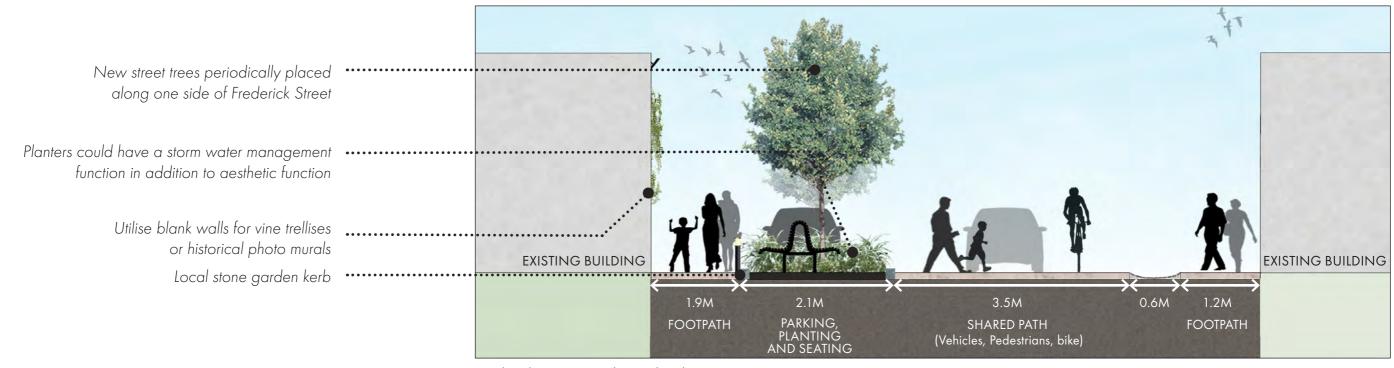
Frederick Street between Mostyn Street and Lyttleton Street



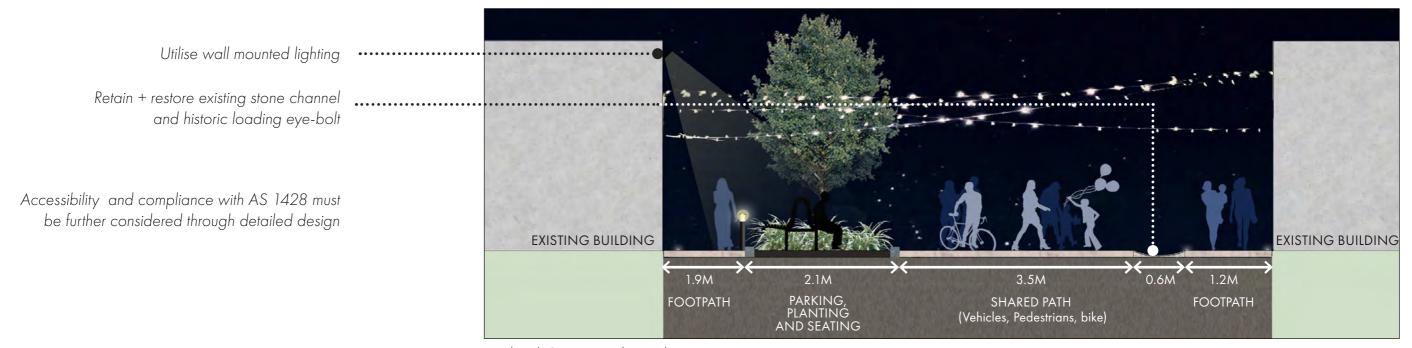
Frederick Street use during the day - proposed



Frederick Street use during the evening - proposed



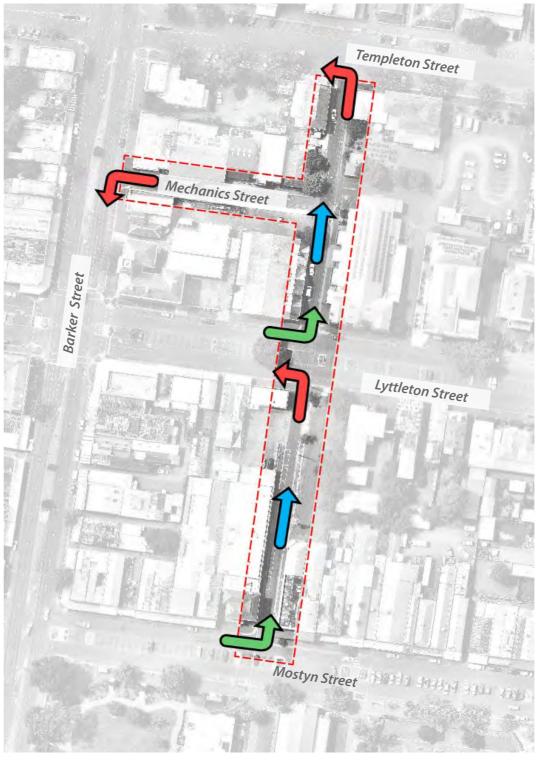
Frederick Street use during the day



Frederick Street use during the evening



Flow of traffic on Frederick Street will remain unchanged, although the opportunity exists to stop vehicles crossing Lyttleton Street, essentially ensuring it does not become a cut through for vehicles. This intervention would promote the street as a pedestrian priority street.



Vehicle Circulation

Frederick Street/Mechanics Street Circulation

The circulation concept pictured proposes that Frederick Street and Mechanics Street become shared streets as discussed previously in this section. The scheme allows traffic to flow north on Frederick Street as it currently does, but would stop vehicles crossing Lyttleton Street, essentially stopping it being used as a cut through. Vehicle flow in Mechanics Street would travel west, exiting into Barker Street.

4.4.2 MOSTYN STREET PLAZA

A Mostyn Street shared plaza would provide an opportunity to:

- slow traffic speed in this primary retail street
- improve pedestrian linkages and define a slow point for safer crossing by pedestrians
- highlight the heritage listed Market Building
- plant street trees, install feature stone garden edges and heritage lighting
- provide an area suitable for temporary events and closures

A shared street plaza is a part of the street that allows access for vehicles, pedestrians and cyclists, while creating a special feature area in the town centre. To facilitate a street plaza:

- an economical surface treatment of asphalt could be used or a higher grade material (compared to asphalt) could be considered.
- feature street trees, stone garden edges and low planting could be added to improve the aesthetics of this part of the street.
- bollards would demarcate the 'road' and 'footpath' to maintain a 'no car zone'.
- the plaza could easily be closed off and used for events.
- permanent or temporary public art could be incorporated, particularly in the proposed new medians.
- traffic circulation will remain the same.
- Detailed design including traffic engineering, accessibility compliance (AS 1428) and drainage advice will be required.

If implemented in full, the treatment is likely to result in a reduction of 2-4 car park spaces. This loss of car parking can be replaced by investigating improved distribution of existing short-term parking throughout the town centre and a review of loading zone use and distribution. The taxi rank could be reduced in size and/or relocated to another location such as Lyttleton Street or Mostyn Street, west of Barker Street. Further investigation and community consultation is necessary.



Mostyn Street today



Mostyn Street Improvements

- The street in front of Market Building could be repayed in a feature material to create a plaza and town focal point shared by vehicles, cyclists and pedestrians.
- Add feature historical street light at the terminus of Frederick Street.
- Add feature trees and planting to expanded medians in Mostyn Street.
- A second zebra crossing could be considered to improve pedestrian linkages, access and safety across Mostyn Street. An example of this treatment already exists in Kennedy Street, outside the Castlemaine railway station.
- or planter boxes to demarcate pedestrian realm and vehicular realm on both sides of the street at the western end of the plaza. (Refer 5.1.3)

- Maintain good views to the market building.
- Follow paving materials guide in 5.1.5. Maintain asphalt as the base material with feature edging and banding.
- 8 Contemporary backed bench (Refer 5.1.4)
- 9 Rubbish bin (Refer 5.1.4)

Tactile Ground Surface Indicators will be necessary - and must be considered throughout detailed design.



Mostyn Street Plaza

4.4.3 STREET TREES IN CASTLEMAINE

Castlemaine has good street tree coverage throughout the town, including some splendid individual trees. Many trees are mature and reaching the end of their useful lives while there are also some significant gaps in the tree canopy. This strategy provides a high level approach to street trees in the town centre.

- Maintain existing mature street trees. Remove areas of asphalt immediately around base of trees to create additional pervious surface.
- Although the central aisle of parking on Lyttleton Street and Mostyn Street provides a significant number of parking spaces, it has the effect of making those streets look like carparks and less like a historical streetscape. The view of the street would change dramatically with the addition of just a few more canopy trees in the centre aisle. While there are already some small trees in the medians of these streets - the goal would be

to ensure good canopy trees at each end. Consider the removal of 2 parking spaces in the central aisle of parking on Mostyn Street - one at either end of the block. Sight lines would need to be taken into consideration.

 Many of the Plane trees are very old and reaching the end of their useful lives. As beautiful as they are, they could be replaced with an alternative species as noted on the Streetscape Plans in Chapter 4.



The central aisle of parking makes Lyttleton Street look like a car park



Example of carefully placed street trees in the centre aisle does not significantly impact parking but the additional street trees improve the aesthetics and micro-climate of the street.



The central aisle of parking makes Mostyn Street look like a car park



Remove some of the asphalt around the base of trees to increase the pervious surface

4.4.4 IMPLICATIONS FOR PARKING

Mostyn Street (between Barker Street and Hargraves Street) is the heart of business in Castlemaine, but at present parked cars are so visually dominant that the street resembles more of a carpark than the bustling heart of the town.

Realising the plans for Mostyn Street, Lyttleton Street and Frederick Street will mean more and improved space for pedestrians, beautiful tree-lined streets and the loss of some parking spaces in their current locations. A more comfortable streetscape environment will only add to the shopping experience. Finding a place to sit in the shade or parking a car in the shade are just a couple of the benefits of more street trees.

The environmental benefits of shade are significant with improved microclimates and reduction of the urban heat island effect, but the loss of spaces will need to be offset by a number of parking strategies which are aimed at minimising impacts.

Proposals include:

- A reimagined Frederick Street with additional street tree planting which could result in the loss of none or perhaps 1 parking space, pending detailed design.
- A reimagined Mostyn Street plaza that includes additional street tree planting may result in a reduction of 2 parking spaces.
- Judicious removal of 2
 parking spaces in the
 centre aisle of Mostyn
 Street between Hargraves
 Street and Barker Street

Impact minimisation strategies are:

- Enforce parking limits more rigorously.
- Encourage retail employees to not park in Mostyn Street or Lyttleton Street, but instead park beyond the town centre to free up those spaces for shoppers.
- Investigate improved distribution of existing short-term parking throughout the town centre and a review of loading zone use and distribution.
- Add short-term parking (10-15 minute max) on Frederick
 Street and Mostyn Street. For example, 10 minute parking would allow customers to pick up scripts from the pharmacy.
- The taxi rank could be reduced in size and/or relocated to another location such as Lyttleton Street or Mostyn Street, west of Barker Street.
- Trial these proposals and undertake them in a staged way to be able to fully assess the impacts.



4.4.5 WALKING AND CYCLING STRATEGY, AND BIKE AMENITIES

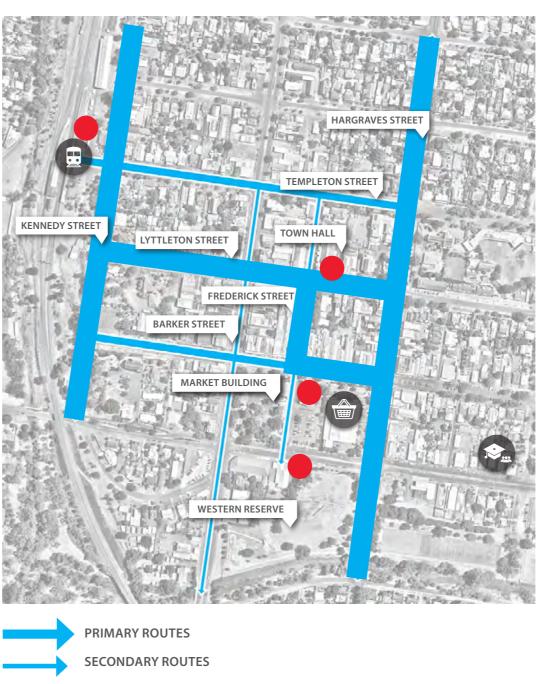
The goal of Council's existing Walking and Cycling Strategy is to improve and increase walking and cycling in the shire.

While cycling in Castlemaine is not a major mode of transport, there is an opportunity to utilise the wide streets to provide safer bicycle passage through the town.

A review of the Walking and Cycling strategy has determined the following recommendations:

- Relocate major cycling routes off the primary arterial routes of Barker Street and Forest Street and utilise the quieter town centre streets of Frederick Street, Hargraves Street and Lyttleton Street.
- Add or refresh existing bike lanes (regular or buffered) on the primary routes (as shown) on Kennedy Street, Lyttleton Street and Hargraves Street

- Add bike symbols or 'sharrows' to Mostyn Street between Hargraves Street and Frederick Street
- Include bike signage around town
- Add bike boxes at key signalised intersections such as Lyttleton Street and Barker Street
- Add four bike stations throughout the town at: Market Building on Mostyn Street, Castlemaine Railway Station, Western Reserve, the Town Hall





Proposed bicycle network



Buffered bike lanes are appropriate on Lyttleton Street, Hargraves Street and Kennedy Street. Although bike lanes can be painted green, they need not be.



An example of a bike station - bike racks and air pump



Painted bike symbols on Mostyn Street to alert drivers to the presence of cyclists even in a street where there is not sufficient room to include a dedicated bike lane.



Bike boxes at signalised intersections allow cyclists to wait at the front of the line of waiting cars increasing visibility and safety.





5.1 DESIGN STANDARDS

5.1.1 STREET FURNITURE AT A TYPICAL TOWN CENTRE INTERSECTION

Street furniture is located on the streetscape plans in Sections 4.3.1 - 4.3.6. The adjacent plan shows in more detail how to specifically locate street furniture.

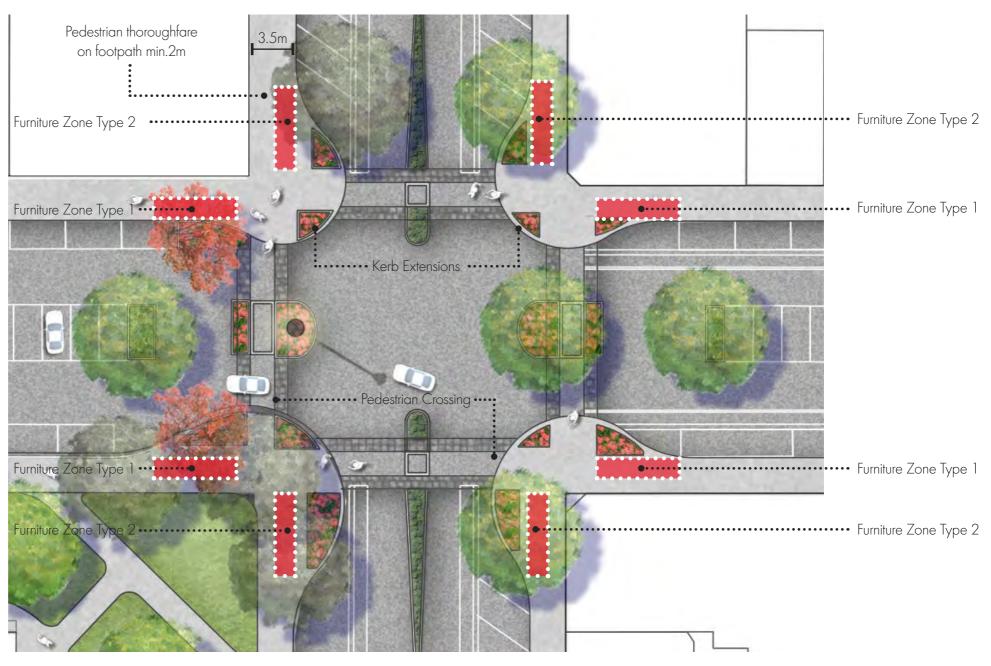
Furniture should be arranged into two zones that sit just beyond the corner to avoid interference with pedestrian thoroughfares.

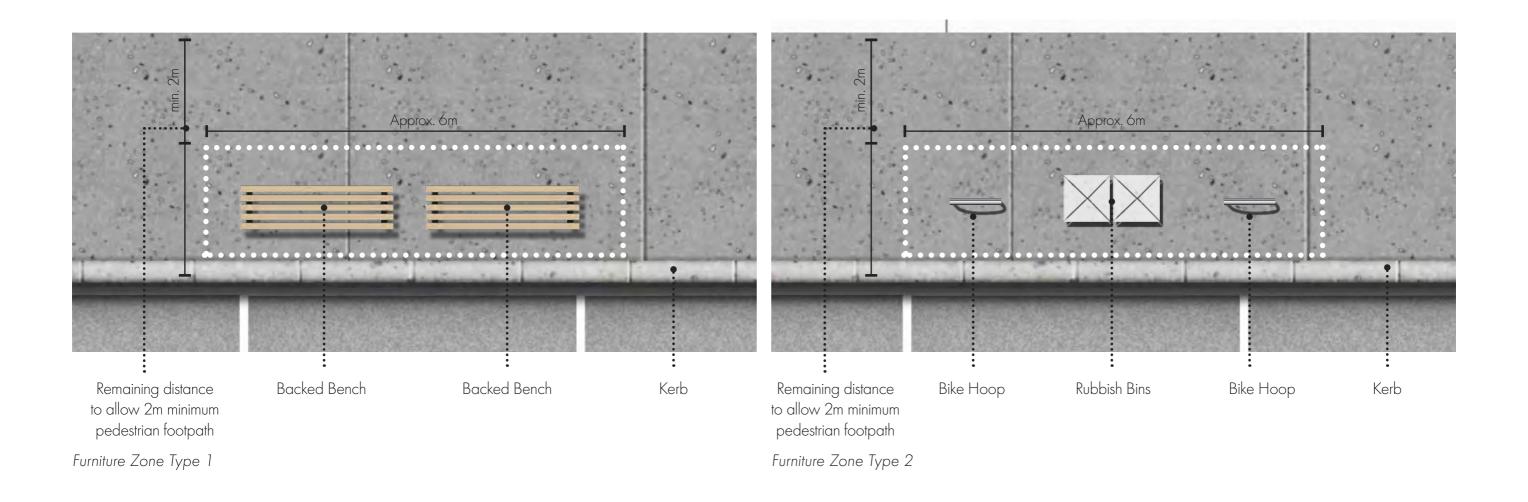
The furniture zones at a typical corner consist of two benches in Zone Type 1 and two bike hoops and 2 rubbish bins in Zone type 2.

Furniture zones are further detailed in diagrams on opposite page.

Pedestrian paths of travel will require tactile indicators. Each case will be different and reference must be made to Australian Standard AS 1428.4.1 - 2009 to ensure compliance.







5.1.2 THE CASTLEMAINE HERITAGE PALETTE

VISION

The goal of these design standards is not to completely reinvent the palette of fixtures and materials throughout the town centre but to work with the good elements of the existing palette and augment it with new elements to blend with what exists. The reason for doing this is two-fold:

- 1. There are elements of the existing palette of furnishings and materials that are entirely appropriate for the town. It is a historical town and many of the fixtures in the town have been manufactured locally for decades.
- 2. It is more cost effective to work with some of what exists and augment as necessary, rather than replace every fixture in town.

DESCRIPTION

This palette of furnishings consists of existing fixtures that have long been a part of Castlemaine's streetscape. It includes a lamp post, bollard and bench, all manufactured by a local foundry. Billmans Foundry has been manufacturing products in Castlemaine for several decades and retains some of the original casts seen in many of the historical photographs.

LOCATION OF HERITAGE PALETTE

Benches

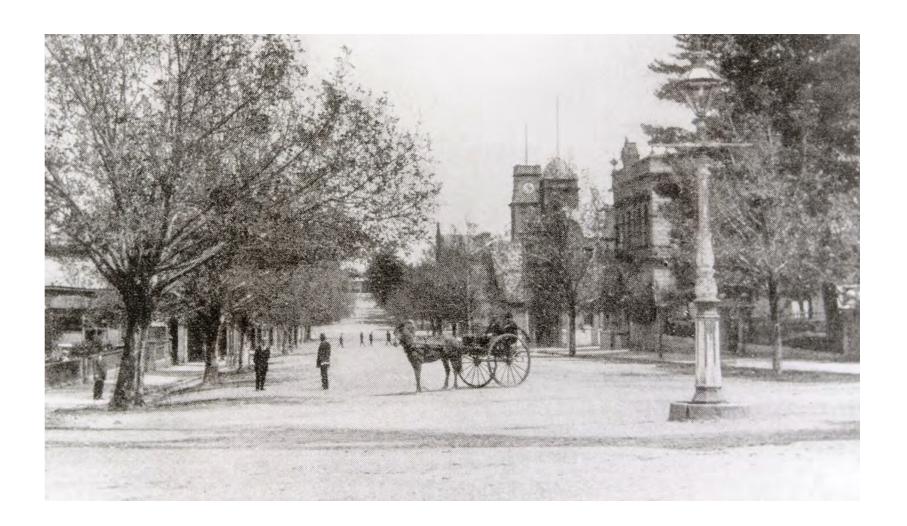
- Locate heritage benches sporadically through town as identified in Section 4 and as appropriate outside key heritage buildings or features.
- On footpath, locate the backs of seats 400mm from kerb facing storefronts.
- Position seats to take advantage of summer shade, winter sun and interesting views or activities.
- Locations of existing seats should be re-considered at time of re-painting and be either moved or retained in place.

Heritage Lamp Post

 This is a feature to be used sparingly throughout the town centre. One lamp is suggested in the median at the proposed Mostyn Street plaza. Two other appropriate locations are at Lyttleton Street and Hargraves Street intersection and the Barker Street and Mostyn Street intersection.

Bollards

 Timber and steel bollards should be used across the town as identified in Section 4, and where they provide a safety function of demarcating space particularly between footpaths and stone channels.





MATERIAL

Cast Iron

COLOUR

Satin Black 304-7013 (PPG Commercial Performance)

NOTES

Investigate with Billmans Foundry, the possibility of using narrower timber battens to make the fixture more contemporary and better match the contemporary palette.

Also investigate with Billmans Foundry the option to meet AS 1428.2 - 1992 Clause 27.2.

LAMP POST **DESCRIPTION**

Billmans Foundry Campaspe Column

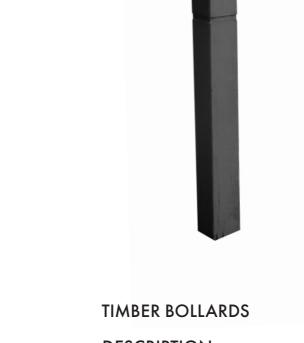
A custom lamp head will need to be selected to be larger than the standard heads available to better reflect the original fixture.

MATERIAL

Cast Iron

COLOUR

Satin Black 304-7013 (PPG Commercial Performance)



DESCRIPTION

Timber bollards per heritage detail with rolled top

MATERIAL/COLOUR

Natural timber to age silver grey



STEEL BOLLARDS

DESCRIPTION

Billmans Foundry Colonial Bollards

MATERIAL

Cast Iron

COLOUR

Satin Black 304-7013 (PPG Commercial Performance)

5.1.3 THE CASTLEMAINE CONTEMPORARY PALETTE

VISION

The goal of these design standards is not to completely reinvent the palette of fixtures and materials throughout the town centre but to work with the good elements of the existing palette and augment it with new elements that will still blend with what exists.

This contemporary palette will be used throughout the town centre and will provide some variation. It's important that the heritage palette is not overused with the potential to become twee.

Again, cost effectiveness is a consideration, and these components have been selected to be able to be easily incorporated into Council's budget.

DESCRIPTION

This palette of furnishings consists of a backed bench, bike racks and rubbish bins.

If any one manufacturer goes out of business, any new proposed furnishings should be of a matching style, colour and materials.

LOCATION OF CONTEMPORARY PALETTE

Benches

- Locate backed benches at corners and mid-points on each block as identified in Section 4 and in Section 5.1.2.
- Add additional backed benches outside specific establishments as required.
- On footpath, locate the backs of seats 400mm from kerb facing storefronts.
- Position seats to take advantage of summer shade, winter sun and interesting views or activities.
- Locations of existing seats should be re-considered at time of re-painting and be either moved or retained in place.

Bins

 Locate bins at each corner as identified in Section 4 and in Section 5.1.2.

Bike Racks

• Locate bike racks as identified in Section 4 and in Section 5.1.2.

Low Fencing

• Locate as marked on plans in Section 4 or as necessary.



BACKED BENCH

DESCRIPTION

Street Furniture Australia Classic Plaza Seat

MATERIAL

Eco-certified timber battens on steel frame as per manufacturer specification

COLOUR

As per Eco-certified timber battens

Frame colour to match Satin Black 304-7013 (PPG Commercial Performance)



RUBBISH BINS

DESCRIPTION

Furphy Avenue 120L General Litter (FFSB013002/ Recyclable litter (FFSB013004)

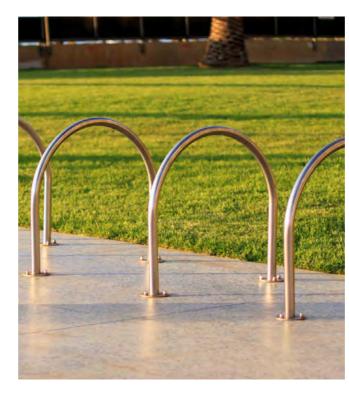
MATERIAL/COLOUR

Timber slats - Oil finish

Black (C/B Night Sky) Satin Finish

NOTES

A small Shire logo should be incorporated.



BIKE HOOPS

DESCRIPTION

Commercial Systems BR7010 Bike Leaning Rail

MATERIAL

316 Stainless Steel

COLOUR

Satin Polished



LOW HOOPED METAL FENCING

DESCRIPTION

Low fencing to deter pedestrian movement

MATERIAL

Mild steel hot dip galvanised

COLOUR

Black



Footpath material #1: Asphalt



Footpath material #2: Stone banding used sparingly in the footpath and on pedestrian crossings to match local stone.

5.1.4 PAVING

DESCRIPTION

The footpaths of Castlemaine are primarily asphalt. This material is inexpensive, durable, easy to replace and it does not draw attention away from the built form. Asphalt should remain the primary paving material throughout the town. Stone banding is appropriate in some locations as noted.

LOCATIONS

Asphalt should remain the primary footpath material throughout the town centre.

In feature areas such as Frederick Street or Mostyn Street plaza or in front of important buildings, stone banding may be used sparingly. The stone should be local stone to match existing kerbs and be a similar finish, colour, cut and proportion. The aim is not to introduce a new palette of materials but rather to work within the existing palette. Pedestrian crossings should be asphalt with stone edging. They can be raised or flush with the road. The stone should match existing. Stone abutments must meet the requirements of AS 1428.1-209 Clause 7.2.

MATERIAL

- Black asphalt
- Feature stone banding- local stone to match kerbs

MAINTENANCE

 Care should be taken to lay asphalt in a uniform way and without impacting heritage kerbs. Asphalt spill on stone kerbs in not acceptable and should be removed.

COLOUR

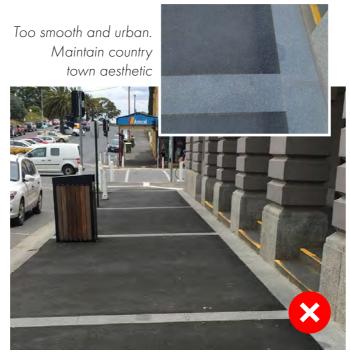
- Standard hot mix not cafe mix.
- Stone banding local stone to match kerbs.



Asphalt paving is inexpensive, durable, easy to replace and does not draw attention away from the built form.



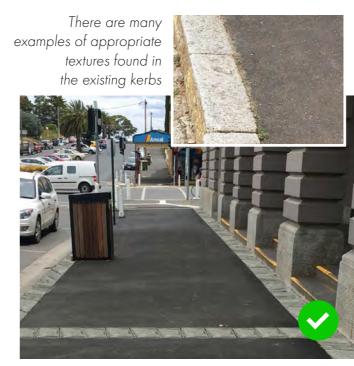
Overly contemporary aesthetics are less appropriate for the primary streetscape treatment in the town centre.



The sawn stone used in this footpath treatment does not match the existing stone in the town centre. While stone still needs to meet accessibility standards, the aesthetic should still match existing stone.



The existing crossings in the town centre could be upgraded to include stone curbs and raised crossings.



A small amount of banding across an asphalt footpath may be appropriate in feature locations, however bands should be used sparingly and made from local rough stone to match kerbs.



The raised wombat crossings with stone edges are appropriate for Castlemaine's town centre. If not raised, the stone edging clearly demarcates the crossing.



Care should be taken when laying asphalt to ensure neat edges that don't compromise the stone kerbs



Local stone garden edging is appropriate



Local stone kerb is appropriate and should be maintained and reinstated throughout the town centre



Double stone garden edging is a feature that should be used in key areas such as the extended median at the Mostyn Street raised plaza



Sandblasted concrete kerb with 10mm-15mm aggregate is an appropriate less expensive kerb option



The existing rolled cream kerb is not appropriate in Castlemaine's town centre

5.1.5 KERBS

DESCRIPTION

The stone kerbs of Castlemaine, constructed with local stone, are one of the endearing features of the town. The kerbs should be maintained where they exist and re-created where they don't throughout the town centre.

TYPES

There are four types of kerbs appropriate for the town centre of Castlemaine:

- Kerb #1 is the heritage kerb constructed from local stone.
- Kerb #2 is a less expensive kerb made from sandblasted concrete with 10mm-15mm aggregate.
- Kerb# 3 is the existing garden kerb - which tends to be made from stone of slightly shorter lengths than the street kerbs.
- Kerb #4 is a double kerb a variation on the garden kerb

LOCATIONS

- Kerb #1should be maintained wherever they currently exist. New kerbs should be added in the highest profile streets such as Mostyn Street.
- Kerb #2 should be utilised where the expense of installing stone kerbs is not appropriate. It might be used in carparks or on driveways.
- Kerb #3 is the existing garden kerb. It should be used for all gardens on footpaths throughout the town centre and in the reimagined Frederick Street.
- Kerb #4 should be used in feature locations such as the new median in the Mostyn Street raised plaza.

5.1.6 CROSSOVERS

DESCRIPTION

There are a number of crossovers throughout the town centre. Not all of them are appropriate and should be replaced over time as per the following guidelines. New crossovers should be built to meet accessibility requirements per AS 1428.1 -2009.

TYPES

There are three types of crossover appropriate for the town centre of Castlemaine:

- Crossover #1 is a rectangular concrete culvert.
- Crossover #2 is a rectangular concrete culvert with asphalt footpath over the top.
- Crossover #3 is a timber crossover.

LOCATIONS

There is no fixed location for the various crossovers. Part of the charm of Castlemaine is the slightly ad hoc placement of streetscape features. While some coordination is necessary to keep an appropriate aesthetic, the approach to crossovers should be flexible. However, general guidance might be:

- Crossover #1 is suitable throughout the town centre
- Crossover #2 is suitable for Mostyn Street and Hargraves Street in the retail section of the town centre.
- Crossover #3 is more suited to the quieter town centre streets such as Urhquart Street and Templeton Street.



Concrete crossover with a rectangular culvert across the stone channel is acceptable.



Make-shift asphalt crossovers compromising the stone channels are not acceptable. The crossover must be a stand alone component.



Asphalt on top of a rectangular culvert is acceptable.



Crossovers in poor repair run the risk of blocking water flow and impacting drainage.



Timber crossovers are acceptable providing they meet the requirements of AS 1428.1 - 2009 Clause 7.2.



A rain garden where storm water is channeled into a planted kerb extension and allowed to permeate to a certain level before entering the storm drain system.



Rain gardens can fit within the crosssection of the footpath



5.1.7 STORMWATER MANAGEMENT STRATEGY

Water sensitive urban design (WSUD) is a term broadly used to describe the better management of storm water to allow it the opportunity to permeate back into the ground before being channeled into the town's storm water underground drainage system.

The expanses of hard, nonpermeable surfaces in urban areas mean that rain water enters the underground drainage network and is discharged, often kilometres away in a creek corridor, which is often overburdened by the wash.

Water sensitive urban design aims to collect at least some of the water on site before it enters the storm drain system. The benefits are two fold:

 Water is allowed to permeate into the ground providing opportunities for greenery and rain gardens. • The quantity of water reaching the overburdened creek corridors following a rain event is reduced.

There are a few locations throughout the town centre where water sensitive urban design may be appropriate.

- Hargraves Street at Forest Street just north of the roundabout in the existing wide kerb extensions.
- Existing kerb extensions at the intersection of Hargraves Street and Mostyn Street
- In the existing carpark behind the Market Building and beside the supermarket
- In the new streetscape works at the southern end of Frederick Street at the intersection with the Mostyn Street.

Locals have continually referenced the heavy downpours in Castlemaine. Water sensitive urban design and the use of rain gardens may well be an appropriate response, however further investigation and engineering advice is required.



Hargraves Street, corner of Forest Street Rain gardens: PLAN



Hargraves Street, corner of Forest Street Rain gardens: SECTION AA



Hargraves Street at Forest Street: Stone channels set in wide, asphalt covered kerb extensions are prime candidates for water sensitive urban design approaches such as rain gardens.

This document also proposes to investigate the potential for removal of the roundabout at Forest Street and Hargraves Street and the ultimate signalisation of the intersection.

While WSUD interventions and a reconfigured intersection could co-exist a decision should be made on the future of the roundabout before investing in stormwater interventions.



Lighting is a terrific temporary intervention that can add another dimension to the town centre streetscape.



Paint is another inexpensive material that can be used as a temporary way to enliven a





5.1.8 TEMPORARY FEATURES

DESCRIPTION

Given the importance of maintaining the historical features of the Castlemaine streetscape, and the project goal of not detracting permanently from the architecture of the town centre, temporary streetscape features are something that could be employed from time to time.

The temporary or 'pop up' culture is having an impact across the world, and while it's not always appropriate, there is a place for it when:

- Improvements need to be made quickly
- Improvements need to be made inexpensively
- As a way of testing a streetscape improvement with the community.
 If it proves to be unpopular, the intervention can be removed.

The improvements to Frederick Street might be tested as part of a temporary project prior to funding for permanent improvements.



Movable furniture can quickly liven up a space.



Art installations can completely change a space for a short or long period



Encouraging busking or music on the street can dramatically change the street for an hour or an afternoon.



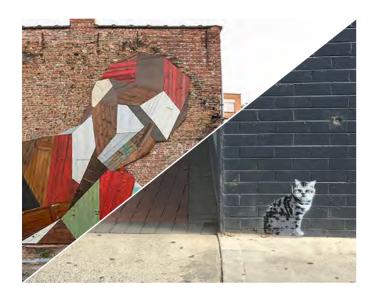
Temporary planting can also quickly turn a space into somewhere pleasant to sit and spend a while.



Temporary features could also include lighting to add another dimension to the town centre.



Not all public art has to be permanent.



Blank building walls provide an excellent canvas.



Wayfinding and historical interpretation can be incorporated into public art.



Public art can bring a freshness to an old streetscape.



Beautiful, subtle pieces of art can be incorporated into the footpaths and garden areas of the streetscape.

5.1.9 PUBLIC ART

Castlemaine is an ideal candidate for an evolving street-based public art program, or an art walk. With an established arts community, and a well-known and respected art gallery, there is the opportunity for the Castlemaine town centre to be a venue for high profile public art. Both a walkable town centre and a tourist town, the opportunities for public art are endless.

This streetscape document does not prescribe the exact locations and pieces, but will make recommendations around the types of public art that could be considered if public art were to become more prominent.

- Not all art has to be permanent.
 Temporary art works allow a great deal of flexibility.
- Blank building walls provide an excellent canvas. Frederick Street is ideal for this type of public art.
- Beautiful, small, subtle pieces of art, as found elsewhere in Castlemaine are also appropriate in the town centre. The town centre of Werribee is a good example of how art can be incorporated into a streetscape-footpaths and garden areas.

- High quality art embedded into the streetscape materials is a way of bringing some contemporary features into an old streetscape.
- Lighting can be incorporated into public art to add another dimension to the streetscape.
- Wayfinding and historical interpretation can be incorporated into public art.

5.1.10 WAYFINDING

DESCRIPTION

Informational and wayfinding signage already exists in the Castlemaine town centre. This provides a strategy for additional wayfinding signage and is not intended to be a detailed signage palette. This should be considered the starting point for further investigations.

STRATEGY

Generally, the signage approach should be to add useful and necessary signage in a very subtle way. The strategy is to utilise existing signage so as to be cost effective. In addition, where possible instead of incorporating signage on new posts, it should be mounted on existing walls and small signage in the ground plane.

APPROPRIATE SIGNAGE

- Tweak the existing 'Explore Castlemaine' signage by changing the post to black and incorporating the same 'top of post' detail as found on the heritage bollards.
- Directional signage may utilise the same type of signage and post.



Existing signage in town centre should remain, with some subtle tweaks to bring it into the same language as the rest of the furnishings palette.

These are large signs and

should be used sparingly throughout the town. Where

• Smaller wayfinding signage

could be incorporated

possible, utilise wall-mounted

signs to avoid signage clutter.

onto black metal blades on

footpaths or in garden areas.

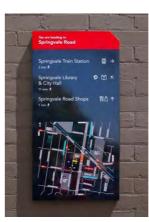


Explore Castlemaine sign-Replace post with black timber post with same top of post detail as heritage bollards



Wall-mounted sign provides information without cluttering the street.





Wayfinding signage might also be incorporated on a black metal blade in the footpath.



Where possible, utilise wall-mounted signs to avoid signage clutter.



Small maps can be incorporated into small signage blades.



Existing planter boxes are natural timber.



Painted charcoal black to match the town centre furnishings palette.

5.1.11 MISCELLANEOUS

PLANTER BOXES

DESCRIPTION

Timber planter boxes are popping up around the town centre as part of a community initiative for vegetable planting. With a few subtle tweaks to the design of the planter boxes they can continue to be a much loved community asset.

LOCATIONS

 Community driven, but their use is restricted to Templeton Street and Hargraves Street and the west side of Barker Street.

MATERIAL

• Timber sleepers

DIMENSIONS

• Many of the existing planters are 3 sleepers high. Each planter is to be no more than 3 sleepers high with a 100mm space between the planter box base and the footpath. The finished height will be approximately 700mm.

COLOUR

 To match RAL 7021 Black Grey or RAL 9004 Signal Black

5.2 PRIORITISATION AND IMPLEMENTATION

General Implementation Strategy

The intention of this document is to maximise the aesthetic appeal and function of the streetscape using the rich, intricate built form that already exists. Accordingly, recommendations for implementation of the Castlemaine Streetscape Plans and Design Standard are generally subtle, restrained and economical with most of the recommendations able to be completed as funding becomes available or as maintenance needs arise.

To implement the recommended improvements to the streetscapes of Castlemaine, the following list has been prioritised in order of need:

High Priority

- Refurbish and add street furniture
- Maintain footpaths
- Maintain, restore and improve stone kerbs/channels as required
- Add bike stations and signage
- Frederick Street undertake detailed design and implement
- Mostyn Street undertake detailed design and implement
- Add street trees to Forest Street and Barker Street medians
- Add irrigation and understorey planting to Forest Street and Barker Street medians
- Add passive mid-block crossings in medians along Barker Street (not formalised crossings) to allow

- pedestrians to cross mid-block at refuge points in median
- Implement temporary streetscape improvements to test ideas and generate community interest
- Develop and implement a public art program and strategy
- Develop a wayfinding and signage strategy
- Implement changes to planter box guidelines

Medium Priority

- Improve pedestrian crossings by adding stone edging or raised crossing
- Investigate a storm water management strategy
- Investigate possibilities to expand the public realm. For example, opening up the space in front of the supermarket would create a mini park/plaza immediately

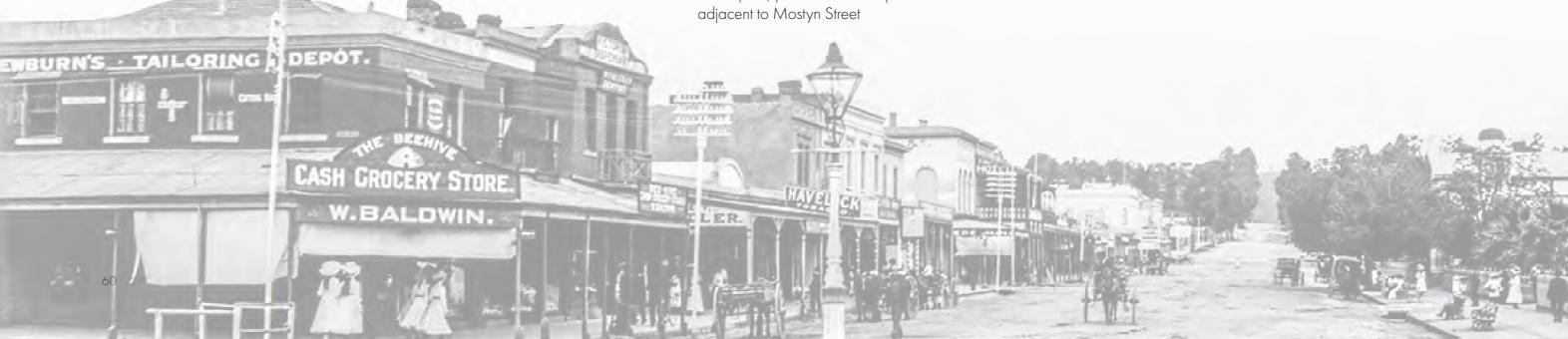
Provide better pedestrian and bicycle access from the town centre to Western Reserve by adding one or two pedestrian crossings on Forest Street

Low Priority

- Systematically underground powerlines throughout town centre
- Consider signalising the intersection of Mostyn Street and Barker Street to provide safe access across Barker Street
- Investigate the potential to replace the roundabout at Forest Street and Hargraves Street with traffic signals. In consultation with the community, relocate the miner's statue to a high profile location in Castlemaine.
- Construct rain gardens
- Implement a wayfinding and signage strategy

5.3 FURTHER COMMUNITY ENGAGEMENT

- The Castlemaine Streetscape
 Plan and Design Standard is a
 high level strategic document. A
 number of the recommendations
 will result in a change to the
 existing streetscape and during
 the detailed design of these
 projects, further community
 engagement is required.
- Community engagement should consider the wider
 Castlemaine community, business community, traditional owners in accordance with the
 Dja Dja Wurrung Settlement
 Agreement and the town's children as outlined in the Child
 Friendly Cities and Communities
 Charter, where appropriate.





Castlemaine Town Centre Streetscape

Streetscape Plan and Design Standards

Prepared by Tract for Mount Alexander Shire Council

June 2020

