

Cardinia Shire Council

Pakenham Revitalisation Project
Update for local businesses

April 2024

Overview

Cardinia Shire Council is committed to listening and addressing the concerns of local traders throughout the design stage of the Pakenham Revitalisation Project.

During the initial stages of the project, Council engaged industry specialist Struber to provide transparent communication to the traders of Main Street, Pakenham.

The upcoming Main Street and Gateway works (stages 1A and 1B) aim to enhance pedestrian accessibility and safety, while improving the overall aesthetic appeal of the area.

These changes include wider footpaths, raised zebra crossings, parallel parking bays with accessible kerb ramps, upgraded street lighting, new seating and street furniture, and the introduction of street trees suitable for the area.



- 1 | Cardinia Shire Council
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Pakenham
a place for people

How we're listening

Struber engaged with traders through January to March 2024 to enhance connections and identify challenges.

Traders have told us they want regular updates, clear communication and face-to-face interactions.

To date, Struber's personalised engagement with traders has focused on Main Street, Pakenham.

This has included a range of different retailers, hospitality businesses and services, including NDIS providers and banks.

In January and February this year, traders were invited, in-person and online, to complete a survey outlining their requirements for operation and perceptions of the project so far.

The survey closed in early March, with 40 individual responses submitted.

More information about the Pakenham Revitalisation Project can be found at projects.cardinia.vic.gov.au.



What traders said

The survey responses highlighted that traders value proximity to parking, community engagement, a variety of businesses, lighting, safety and accessibility.

Access requirements such as front entry and day deliveries were identified as crucial for business operations.

Environmental factors like dust, noise and vibration raised concerns among traders during construction.

The responses highlight the need for ongoing support to mitigate these impacts and ensure businesses can operate smoothly throughout the revitalisation project.

Key survey results

Respondents were asked to rank particular aspects of Main Street, in terms of value to business.



How are traders attracting business

The survey responses identified most of the customer generation comes from foot traffic or vehicle traffic and word of mouth, followed closely by online methods.

This highlights the importance of physical presence, wayfinding and accessibility to businesses, as well as the visibility of shop fronts.



How online is playing a role in attracting business

A high percentage of respondents highlighted the importance of Google/search engine and online visibility for attracting potential customers.

Social media also plays a substantial role, with more than half of respondents indicating it as a source of business awareness.

Print still plays a role: While directory advertising and print advertising garnered lower percentages, they still represent notable channels for business promotion, particularly locally.



Accessibility

All respondents indicated access to front entry as essential for business operations.

This highlights the critical role of front-facing accessibility in facilitating customer interaction and ensuring smooth business operations.



Logistics

Day deliveries were identified as a crucial requirement.

This suggests the importance of working with business during disruptions that may impact full accessibility of their store to maintain inventory levels and meet customer demands effectively.



Parking

Proximity to parking emerged as one of the most important considerations, with nearly three-quarters of respondents ranking it of highest importance.

This suggests that convenient parking facilities are crucial for attracting visitors and supporting local businesses.



Street activation

A high percentage of respondents emphasised the importance of people and community, highlighting the social significance of Main Street.

This underlines its role as a hub for interaction and social cohesion within the community businesses.



Safety

The emphasis on lighting and safety suggests that ensuring a well-lit and secure environment is imperative for enhancing the street's appeal and fostering a sense of safety among residents.

What we found

Council needs to consider opportunities to enhance visibility and easy access from Main Street.

Additionally, the emphasis on word-of-mouth highlights the importance of fostering positive relationships and leveraging the power of organic referrals and recommendations.

The survey also highlights the need to prioritise improvements that address parking convenience, community engagement, business diversity, and safety measures to enhance the overall vibrancy and functionality of Main Street, as well as offering an opportunity to build trust with Council.

Council is committed to working closely with traders, as we progress through detailed design and prepare for the start of works.





Pakenham
a place for people

Proposed timeline for works

May - July 2023	Community consultation period.
August 2023	Main Street trees removed and replanted in Bayview Road, Officer.
November 2023	Future look and feel endorsed in the Pakenham Realm Strategy.
Jan - Sep 2024	Local business engagement, impact surveys and mitigation strategy.
March - April 2024	Detailed designs.
May - July 2024	Tender period and contractor awarded.
Sep - Dec 2024	Council will carry out less-intrusive set-up and preliminary works before focusing on full construction starting in January 2025.
Late 2025	Stage 1 works expected to be completed.

**Timing linked to funding requirements from the Victorian Government and neighbouring projects that require coordination to mitigate the disruption caused by works.*



Cardinia Shire Council
Pakenham Revitalisation Project
Update for local businesses

6



Cardinia Shire Council

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Pakenham
a place for people

PAKENHAM MAJOR ACTIVITY CENTRE PUBLIC REALM STRATEGY

OCTOBER 2023



“Pakenham Activity Centre will be a great place to
shop, eat, relax, socialise, work and live.”

- Pakenham Major Activity Centre Structure Plan 15 February 2021

Document prepared by:

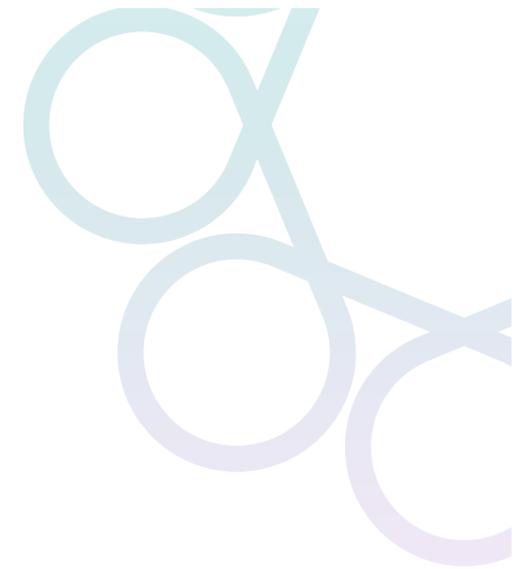
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CONTENTS



01	INTRODUCTION	P.1
02	EXISTING CONDITIONS	
	A ISSUES	P.2
	B OPPORTUNITIES	P.3
03	VISION	P.4
	A PUBLIC REALM HIERARCHY	P.5
	B DESIGN PRINCIPLES	P.6
04	COMMUNITY ENGAGEMENT	
	A REVITALISATION PROJECT	P.7 - 8
	B KEY DIRECTIONS	P.9
	C PAKENHAM, A PLACE FOR PEOPLE	P.10

05	REVITALISING PAKENHAM	
	PUBLIC REALM STRATEGY	P.11
	A MAIN STREET GATEWAY	P.12 - 16
	B MAIN STREET CENTRAL	P.17 - 20
	C DRAKE PLACE UPGRADE	P.21
	D ARCADES & LANEWAYS	P.22 - 23
06	WAYFINDING STRATEGY	
	A STRATEGY & THEMES	P.24
	B WAYFINDING SUITE	P.25
07	PRS IMPLEMENTATION	P.26





01 INTRODUCTION

PAKENHAM MAJOR ACTIVITY CENTRE STRUCTURE PLAN & UDF

STRUCTURE PLAN & URBAN DESIGN FRAMEWORK

Cardinia Shire Council has prepared a Structure Plan (the structure plan) for the Pakenham Major Activity Centre (the activity centre) which provides an integrated response to the changes envisaged for the centre until the year 2035. The structure plan is one of the tools used to guide Council's decision-making on land use and transport planning matters to improve the amenity of the Pakenham Major Activity Centre.

The Action Plan also forms part of this document and lists the actions required to implement the structure plan and indicates which Council department, agency or organisation is responsible; the timeframe and measure allocated to each action. The Pakenham Major Activity Centre Urban Design Framework (2021) accompanies the structure plan to provide urban design guidance for the activity centre, focusing on interfaces, built form, environment and the public realm.

The structure plan communicates the community's shared vision for the activity centre. Specifically, the structure plan provides certainty for the community, business owners, developers and planning applicants regarding the level and types of changes in the development of the Pakenham Major Activity Centre.

This document provides decision makers, including Council, Victorian Government and other agencies with a platform to allocate resources towards capital works, guide the determination of planning applications, and sets the work programs across different departments.

Pakenham Major Activity Centre has changed significantly over the past 20 years and will continue to change in line with significant population growth, consumer preferences and in response to the development market. These changes are positively guided by the community's vision for the activity centre as expressed through the structure plan.

(Sourced from Pakenham Major Activity Centre Structure Plan 15th February 2021)

PAKENHAM CONTEXT

Pakenham Major Activity Centre is located approximately 60 kilometres south-east of Melbourne's Central Business District and is approximately 181 hectares in size. The activity centre operates as a regional hub servicing areas both within and beyond the municipal boundary.

The Pakenham Railway Station is located towards the south-eastern end of the activity centre. Commuters have access to both a metropolitan rail service as well as V-Line services to regional Victoria. The railway line has three level crossing points enabling north-south road, cycle and pedestrian traffic movement to and from the activity centre.

The centre is known as the Pakenham Town Centre and comprises the John and Main Street shopping strips, Pakenham Place and Pakenham Central Marketplace shopping centres, the adjoining residential neighbourhoods, open space (PB Ronald Reserve and Bourke Park), and sporting and community facilities. In close proximity to the activity centre are purpose-built sporting facilities which cater for the regional catchment, including Cardinia Life, Pakenham Regional Tennis Centre and Toomuc Reserve. Pakenham is located within the Casey-Cardinia Growth Area. There are emerging employment areas such as the Cardinia Road Employment Precinct, South East Business Park, and Pakenham Employment Precinct. These areas are envisaged to be multi-functional employment areas that deliver a diverse mix of jobs to the Casey-Cardinia region. Nearby commercial centres located beyond the municipal boundary are part of Melbourne's activity centre network, which includes Fountain Gate-Narre Warren and Dandenong Metropolitan Activity Centres, and Berwick Activity Centre. The activity centre is relatively flat with some natural creeks flowing through and around the town centre. These waterways are a combination of visible flow paths and covered drains.

The commercial core of the activity centre has traditionally been located on Main Street between John and Station Street. Over the years, development has progressively dispersed away from this central point with the development of Pakenham Place in the mid 1980s and more recently Pakenham Central Marketplace (mid-2012). The broader catchment area is characterised by a mix of both established and recently developed areas surrounding it to the north and south. Land to the east, west and southwest is established; with the exception of the Bald Hill Road industrial area, which is still under development.

(Sourced from Pakenham Major Activity Centre Structure Plan 15th February 2021)

WHAT IS PAKENHAM'S PUBLIC REALM STRATEGY?

The purpose of a public realm strategy (PRS) is to create a holistic approach for the development of the activity centre that has key considerations for circulation, universal access, safety, materiality, activation, economic opportunities, and many more.

The process involves an in-depth review of the existing site conditions, as well as developing a strong understanding of proposed projects within or near the activity centre. The public realm strategy furthers key principles established within the Structure Plan and the UDF by providing a more detailed vision for the future of the activity centre land uses and public realm.

The public realm strategy identifies key projects whereby the public realm will be upgraded to provide adequate amenity that caters for the demands of a growing population, as well as ensuring seamless and considered connections with proposed large scale projects already underway. The PRS also provides the opportunity to review vehicular, pedestrian and cyclists movements across the activity centre and beyond by ensuring these are embedded within each project.

The strategy also advocates for a consolidated approach relating to urban infrastructure by proposing a unified suite of materiality and furniture elements.

As a whole, the PRS provides Council and the community with a clear vision and direction to guide future provision, planning, design, implementation and management of the public realm across the activity centre.



MAIN STREET, PAKENHAM ACTIVITY CENTRE

02 EXISTING CONDITIONS

A | ISSUES



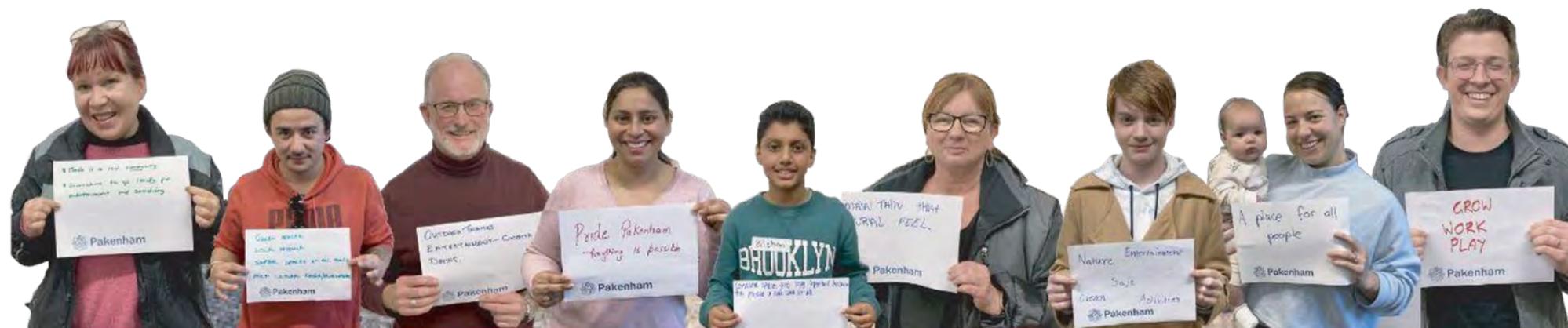
B | OPPORTUNITIES



03 VISION



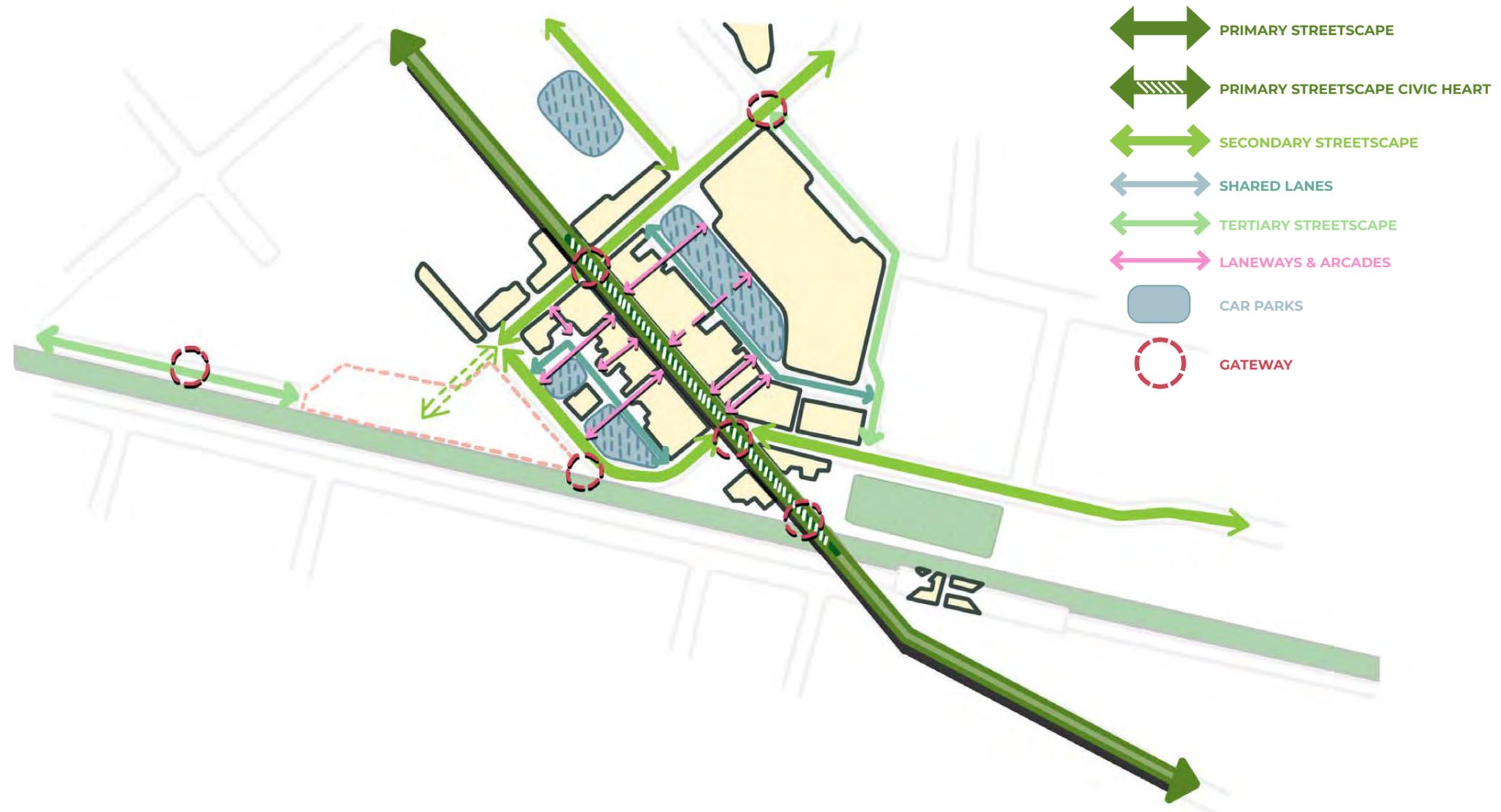
Vibrant and Active Pakenham





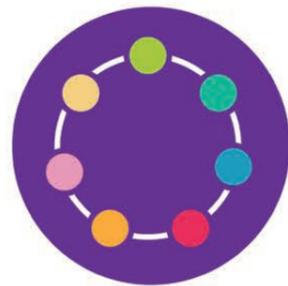
03 VISION

REVITALISING PAKENHAM A | PUBLIC REALM HIERARCHY





B I DESIGN PRINCIPLES



STRENGTHEN IDENTITY FOR
PAKENHAM



INCREASE CANOPY COVERAGE
& A COOLER GREENER
ENVIRONMENT



PROVIDE UNIVERSAL ACCESS



PROMOTE ECONOMIC
VIABILITY



STRENGTHEN COMMUNITY
PRIDE



A PLACE FOR PEOPLE TO
INHABIT



PROVIDE CONTINUOUS
AMENITIES



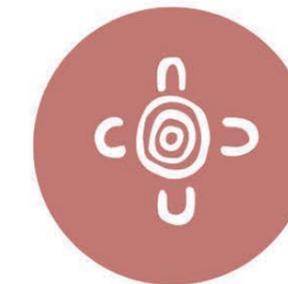
HIGH-QUALITY & DURABLE
GROUND PLANE



EMBED WATER SENSITIVE
URBAN DESIGN (WSUD)
PRINCIPLES



EMBED CRIME PREVENTION
THROUGH ENVIRONMENTAL
DESIGN (CPTED) PRINCIPLES



CONSULT WITH AND
REPRESENT FIRST NATIONS'
VALUES

04 COMMUNITY ENGAGEMENT

A | REVITALISATION PROJECT



A total of **378** people participated in the five engagement activities

-  the Phase 1 focus group about project brand (43 people)
-  the online survey (187 people)
-  the online mapping activity (55 people)
-  the postcard survey (35 people)
-  the community-based pop-ups (43 people)

Almost all (92.4%) engagement participants lived in the Shire of Cardinia, with 73.3% living in the suburb of Pakenham.



25.8% lived outside of the activity centre and/or used services within the activity centre



9.1% lived within the activity centre.

Engagement participants were mostly females, aged 35 - 49 and did not have a disability that required assistance.



54.5% were longer-term Pakenham people who had either lived, worked or used the activity centre for more than ten years.

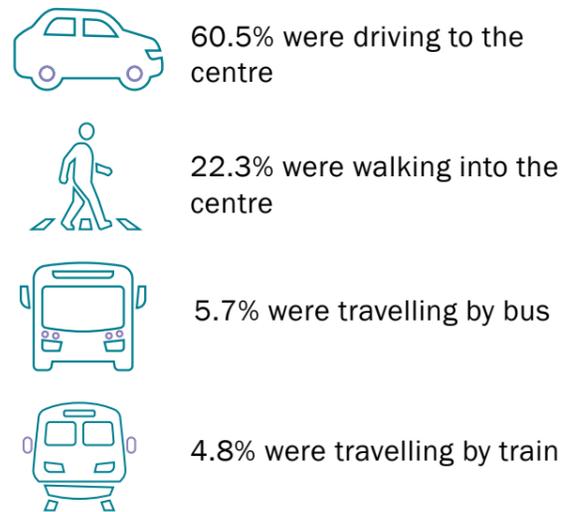
31.6% were people who had either lived, worked or used the activity centre for four to ten years.

46.2% were more likely to have been in the area for four to ten years.

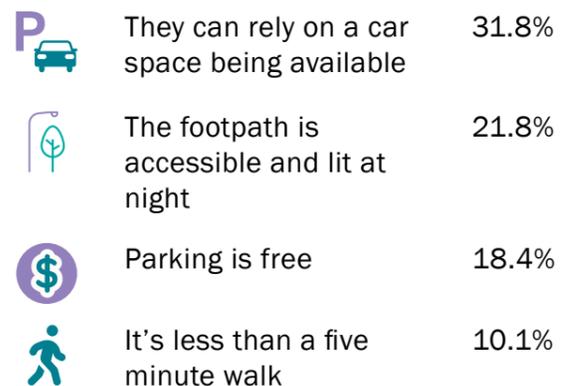


Travel and transport

Participants were asked how they get to Pakenham Activity Centre...

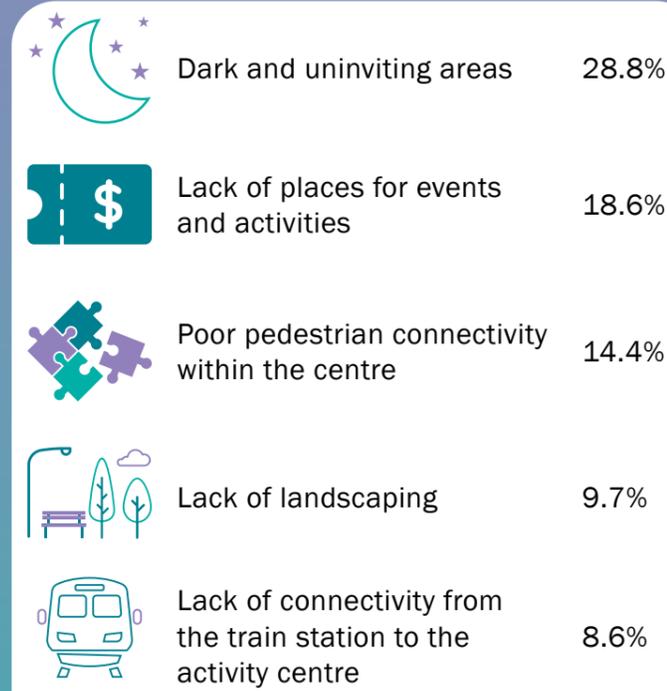


P 83.2% supported parking at the edge of the activity centre and walking the rest of the way with the following provisos:



Public Realm Strategy Issues

Top **5** issues



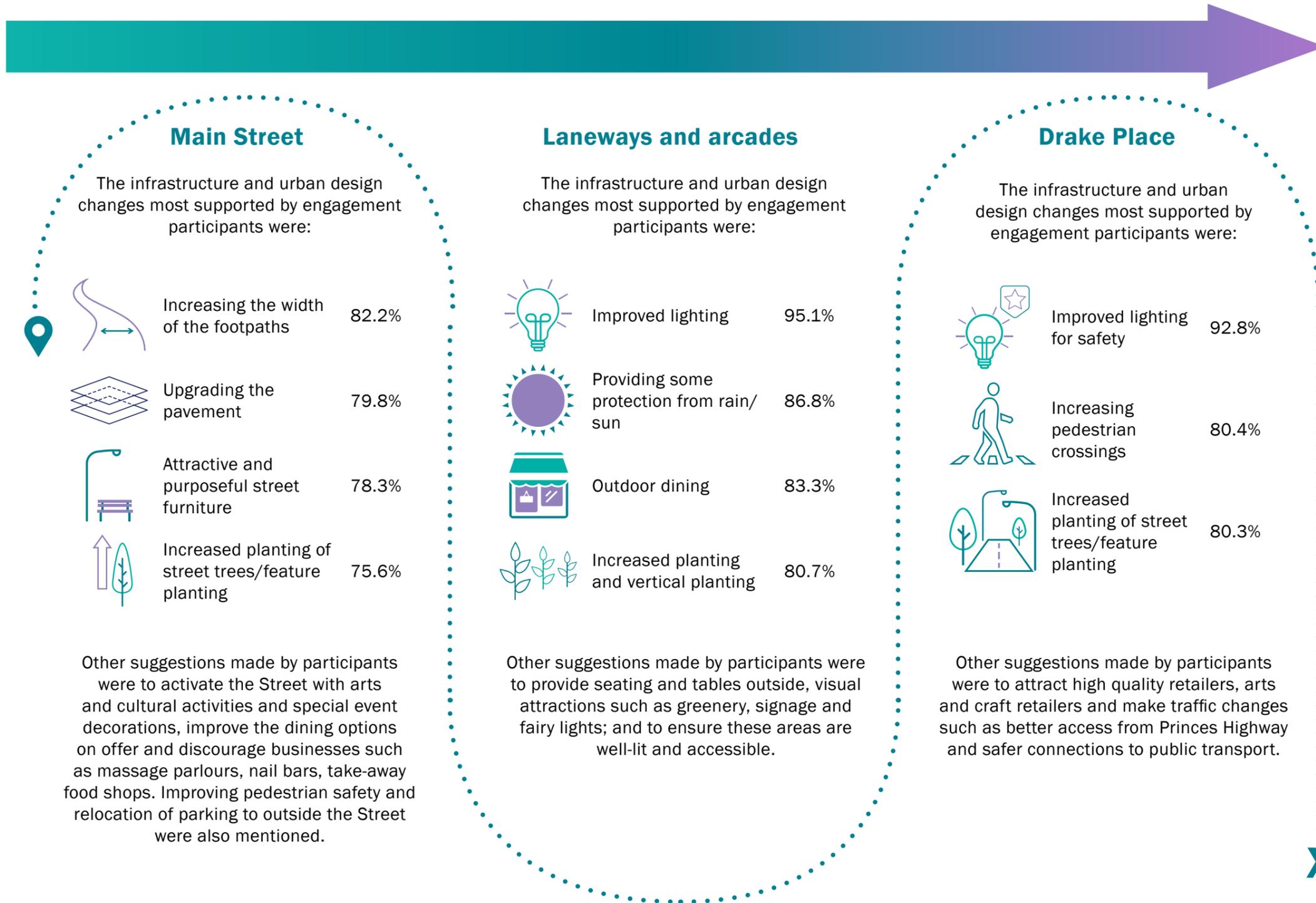
Public Realm Strategy Opportunities

Top **5** Opportunities



The benefits of these opportunities were thought to be a focus on small, local businesses to create a sense of charm and character and extended opening hours for night-time activation.

B | KEY DIRECTIONS



C | PAKENHAM, A PLACE FOR PEOPLE

Strengthening community connections

Here are the the top three suggestions to strengthen community use and social connection:

-  Upgrade the landscape and design to improve the attractiveness of the area 74 Comments
-  Increase the variety of businesses and extend opening hours to increase trade 32 Comments
-  More community festivals and events for greater appeal 29 Comments

Pakenham as a day and night time destination

Here are the the top three suggestions to make the activity centre a destination both day and night:

-  More entertainment and destination retail (cinema, bowling and live music) 119 Comments
-  Upgrade the buildings and landscaping to create an attractive centre 78 Comments
-  Better lighting and security for night time activation 74 Comments

Strengthening industry and the local economy

Here are the the top three suggestions to strengthen the local economy:

-  Make the centre attractive and safe, so people want to visit 67 Comments
-  Make Pakenham a one-stop destination for food, grocery and entertainment 57 Comments
-  Incentivise support for local businesses - events, focus on shopping local 24 Comments

Works happening in the next 12 months

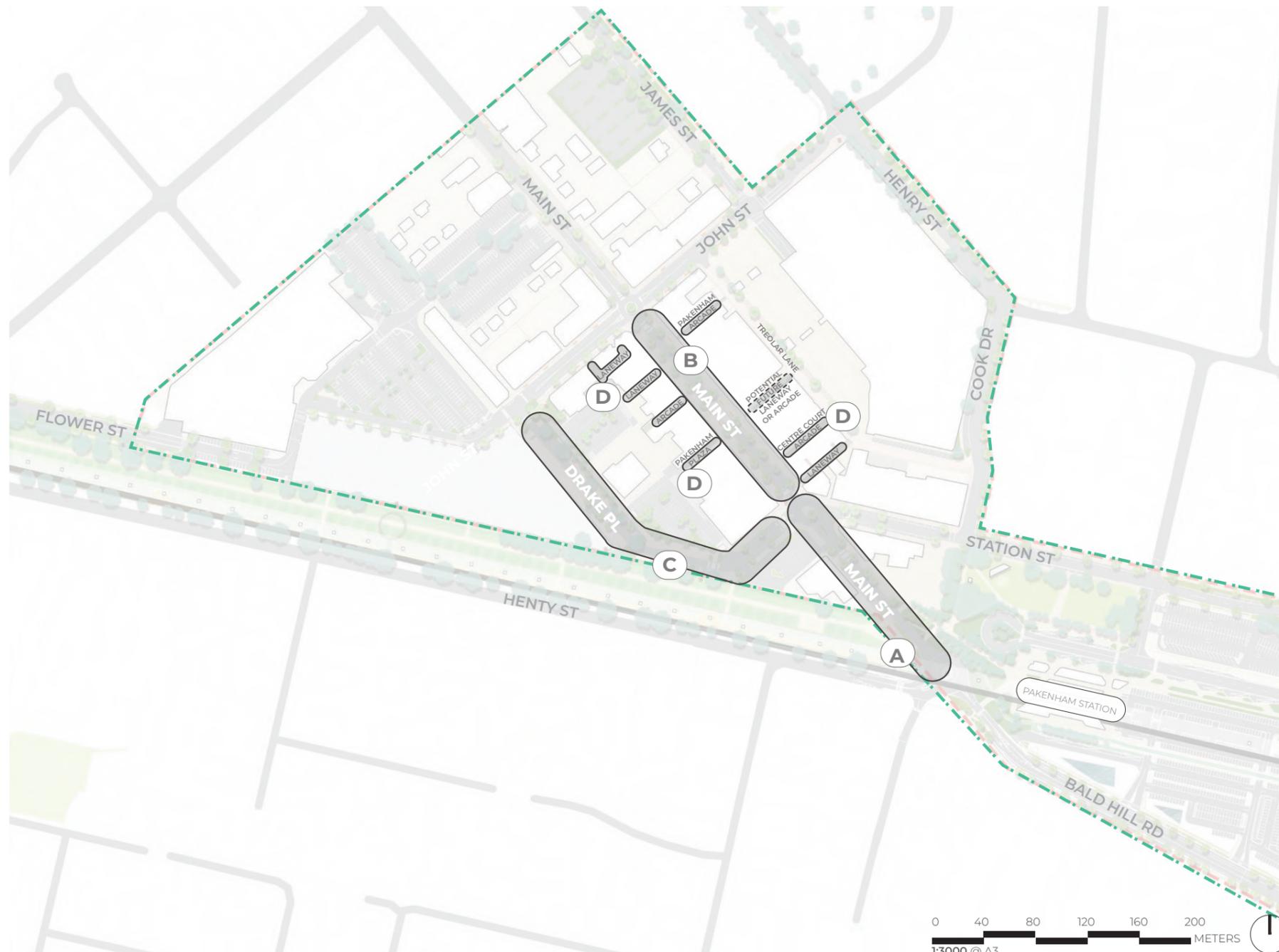


- 1 Aug 2023**
 - Trees in Main Street causing damage to the road, drainage and footpath so some Main Street trees will be moved.
 - The Crepe Myrtle trees will be relocated to Bayview Road, Officer.
 - Trees better suited to Main Street will be planted in their place.
- 2 Sept 2023**
 - Council will engage a contractor to deliver Stage 1 works.
 - Detailed plan will be communicated to all impacted businesses and community.
- 3 Jan 2024**
 - Stage 1 (Part 1) Main Street Central works: This timeframe is linked to requirements to current funding received from the Victorian Government.
- 4 Sept 2024**
 - Stage 1 (Part 2) Main Street Gateway works: It is anticipated the second part of Main Street will be delivered in September 2024 to coordinate works with the Level Crossing Project.



05 REVITALISING PAKENHAM

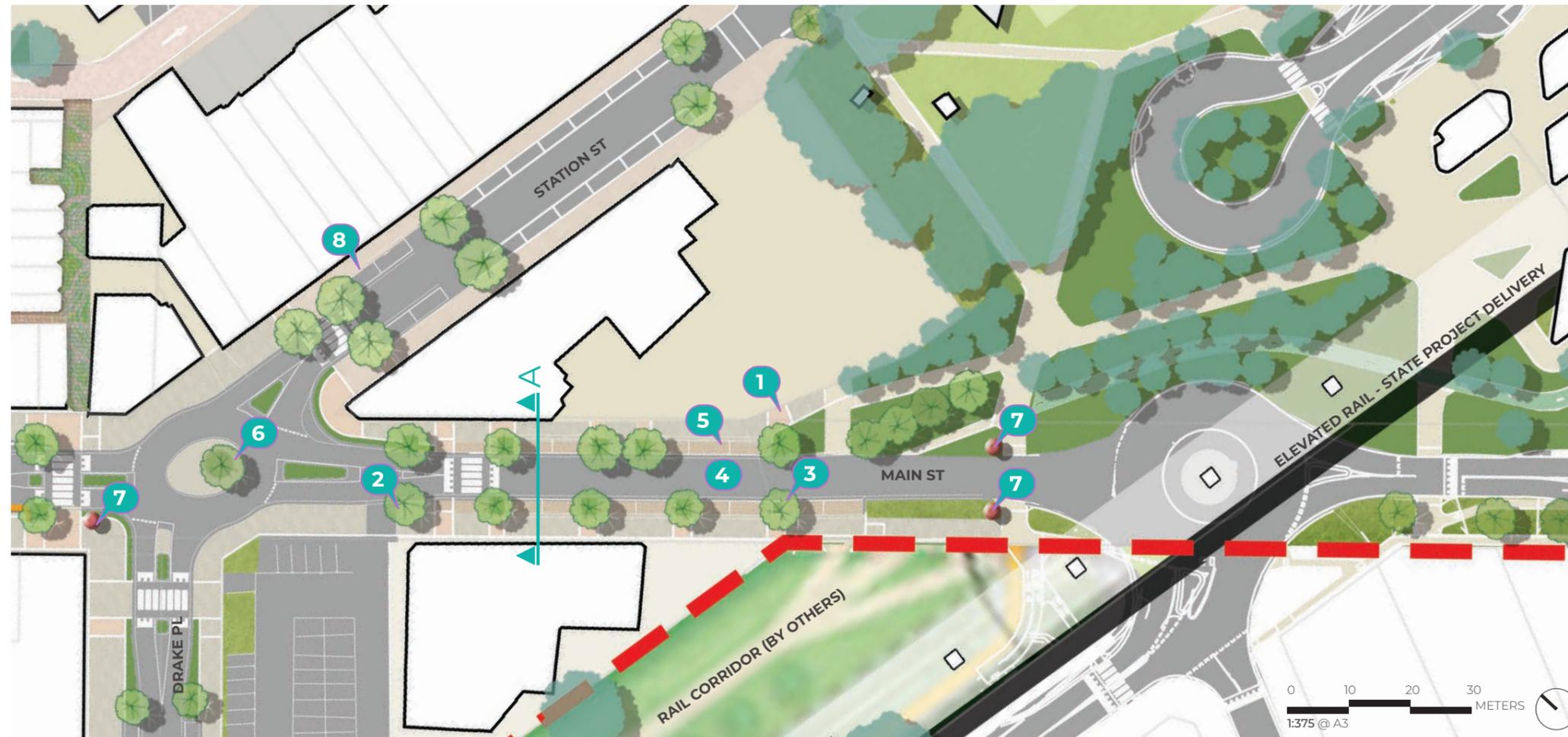
PUBLIC REALM STRATEGY



KEY PUBLIC REALM PROJECTS

- A | MAIN STREET GATEWAY
- B | MAIN STREET CENTRAL
- C | DRAKE PLACE UPGRADE
- D | ARCADES & LANEWAYS

A | MAIN STREET GATEWAY



- | | |
|--|-------------------------------------|
| 1 PRIMARY PAVING TREATMENT | 6 FEATURE PLANTING |
| 2 STREET TREES | 7 WAYFINDING SIGNAGE |
| 3 TREE OUTSTAND/ RAINGARDEN | 8 SECONDARY PAVING TREATMENT |
| 4 NARROW CARRIAGEWAY | |
| 5 PARALLEL PARKING PERMEABLE PAVING | |



KEY PLAN

A | MAIN STREET GATEWAY

A MAIN STREET GATEWAY TYPICAL SECTION



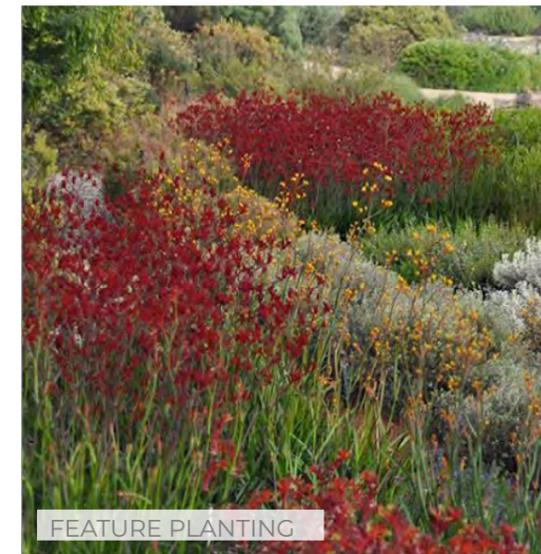
TREE-LINED STREETS



GATEWAY & SCULPTURES



WAYFINDING SIGNAGE



FEATURE PLANTING



PERMEABLE SURFACES



FOOTPATH MATERIALITY



PARKLETS



A | MAIN STREET GATEWAY - EXISTING



A | MAIN STREET GATEWAY - STAGE 1



STAGE 1
(Render shown indicatively only)

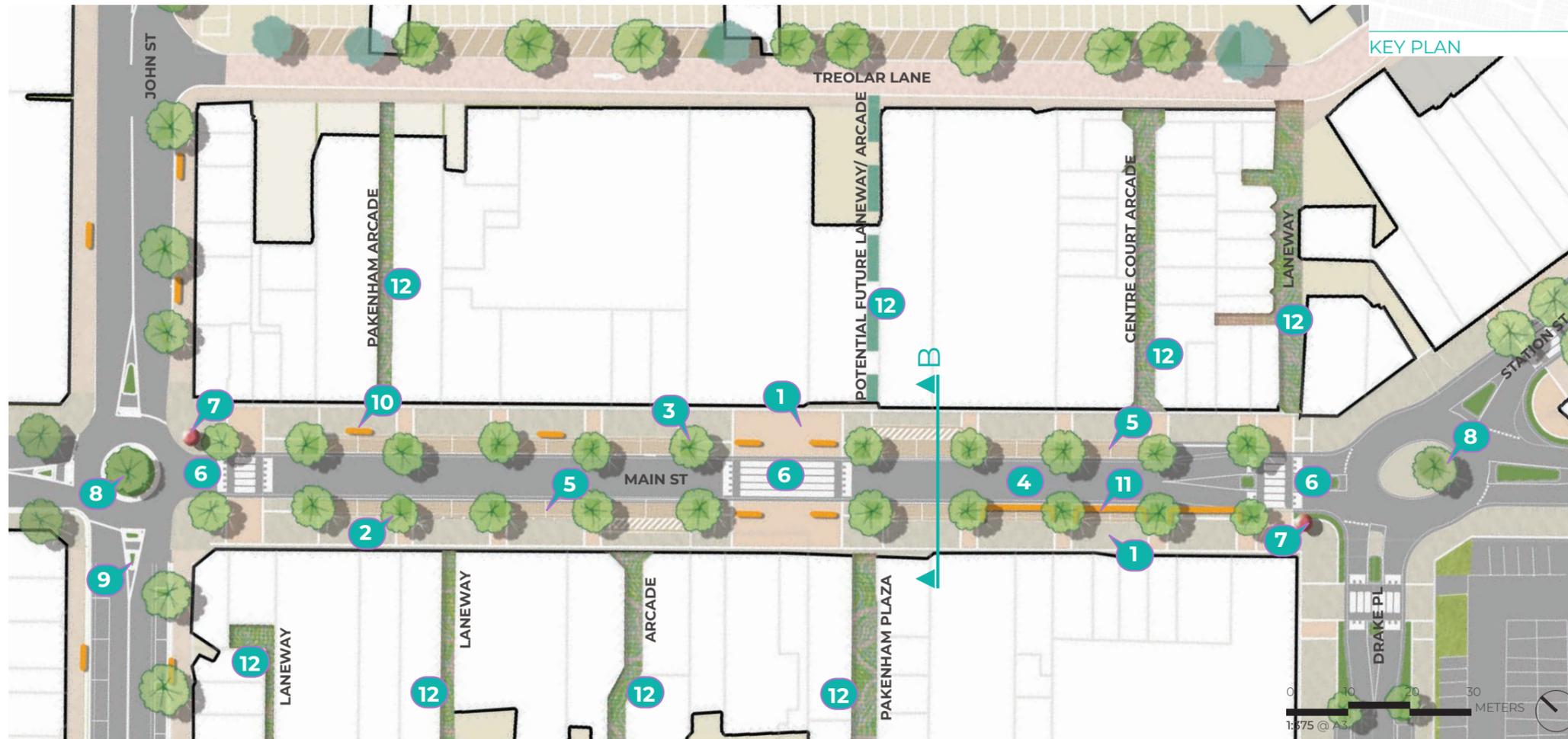
A | MAIN STREET GATEWAY - STAGE 2



B | MAIN STREET CENTRAL



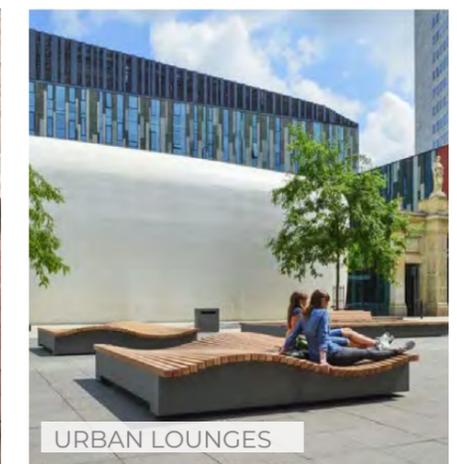
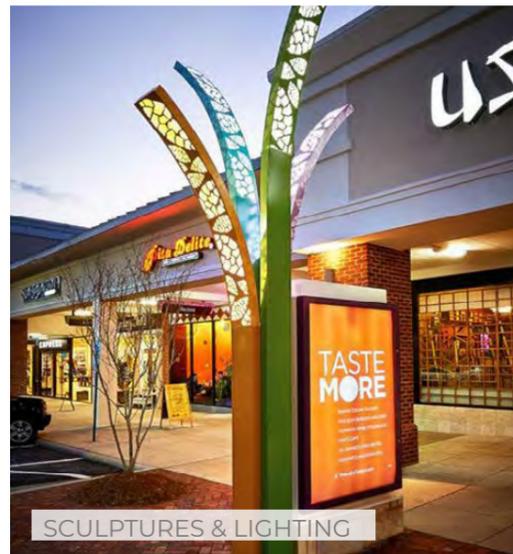
KEY PLAN



- | | | |
|--|--|--|
| 1 PRIMARY PAVING TREATMENT | 6 PEDESTRIAN CROSSING | 11 PARKLET
Outdoor dining, planter bed, seating and umbrellas. |
| 2 STREET TREES | 7 WAYFINDING SIGNAGE | 12 LANEWAYS & ARCADES
Upgrade paving, activate blank walls, lighting, alfresco dining, markets, etc. |
| 3 TREE OUTSTAND/ RAINGARDEN | 8 FEATURE TREE | |
| 4 NARROW CARRIAGEWAY | 9 FEATURE PLANTING | |
| 5 PARALLEL PARKING PERMEABLE PAVING | 10 STREET FURNITURE
Bench, bike hoops, dual bins, drinking fountains, etc. | |

B | MAIN STREET CENTRAL

B MAIN STREET CENTRAL TYPICAL SECTION



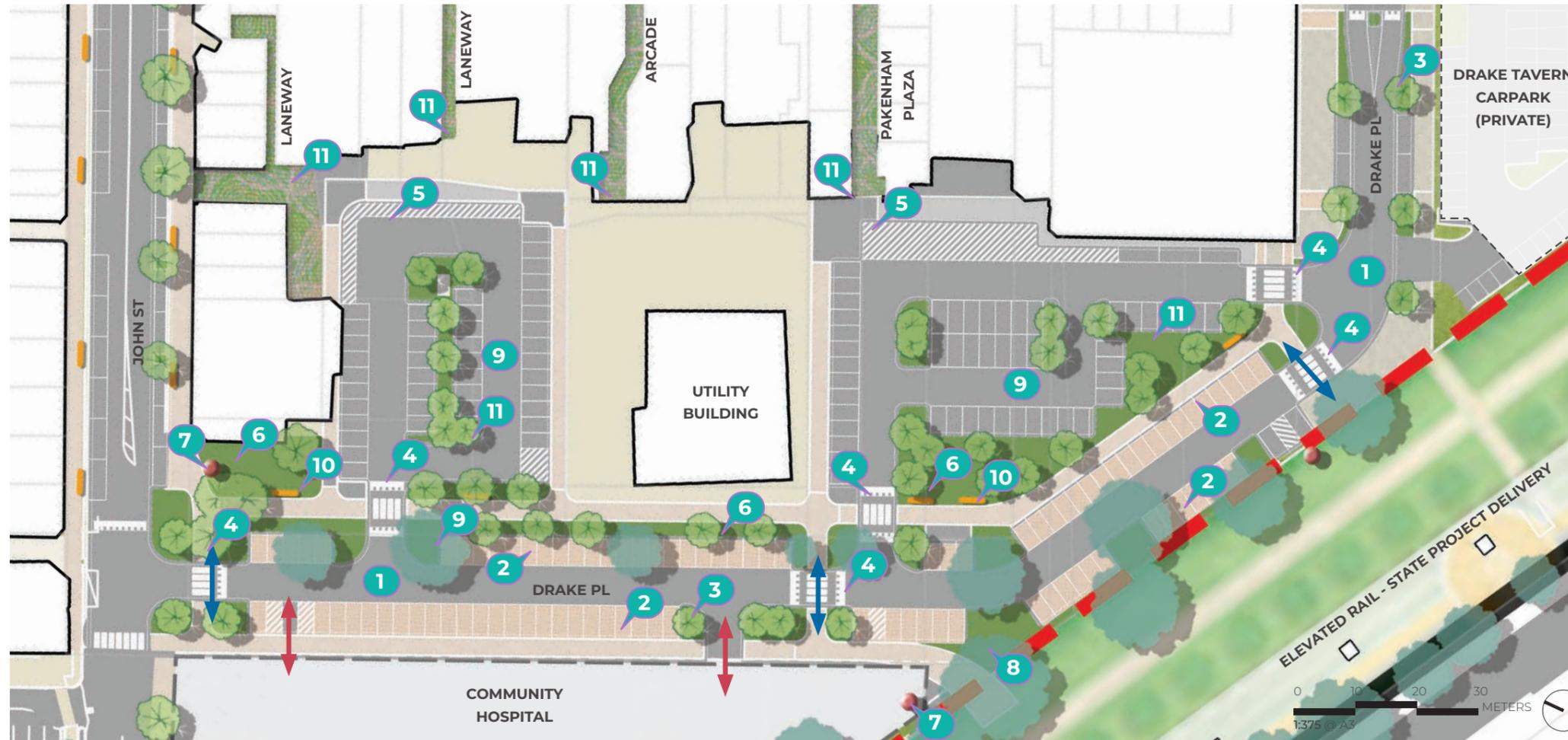
B | MAIN STREET CENTRAL - EXISTING



B | MAIN STREET CENTRAL - FUTURE



C | DRAKE PLACE UPGRADE



- 1** TWO-WAY STREET
- 2** 90° PARKING PERMEABLE PAVING
- 3** STREET TREE OUTSTAND
- 4** PEDESTRIAN CROSSING
- 5** POTENTIAL SHARED STREET/ DELIVERY VEHICLE ACCESS
- 6** LINEAR PARK/ WSUD ELEMENT
- 7** WAYFINDING SIGNAGE
- 8** GATEWAY LANDSCAPE
- 9** EXISTING TREES
- 10** STREET FURNITURE
- 11** UPGRADE LIGHTING FOR SAFETY
- PEDESTRIAN ACCESS** (Blue double-headed arrow)
- HOSPITAL CAR PARK FLEET ACCESS** (Red double-headed arrow)



KEY PLAN

D | ARCADES & LANEWAYS

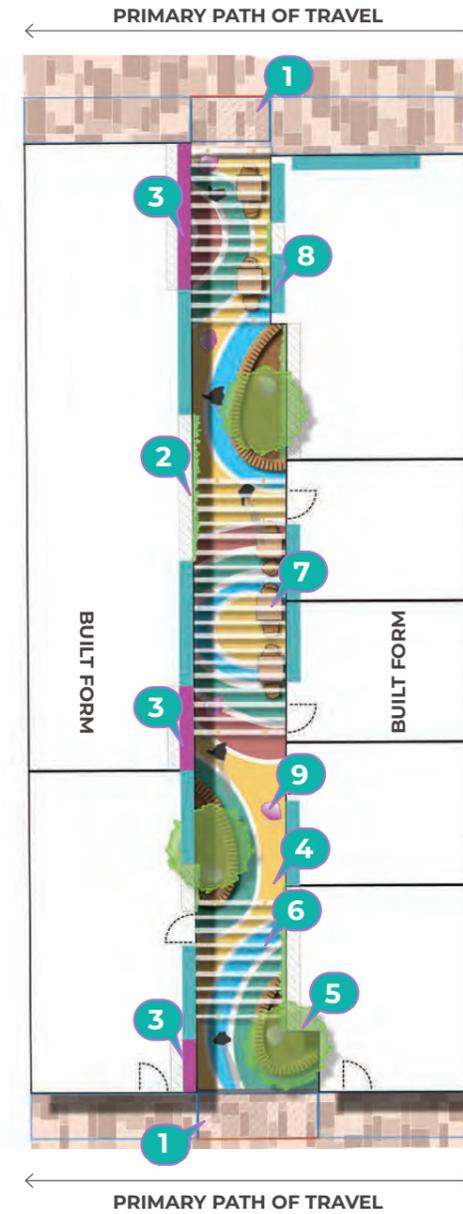
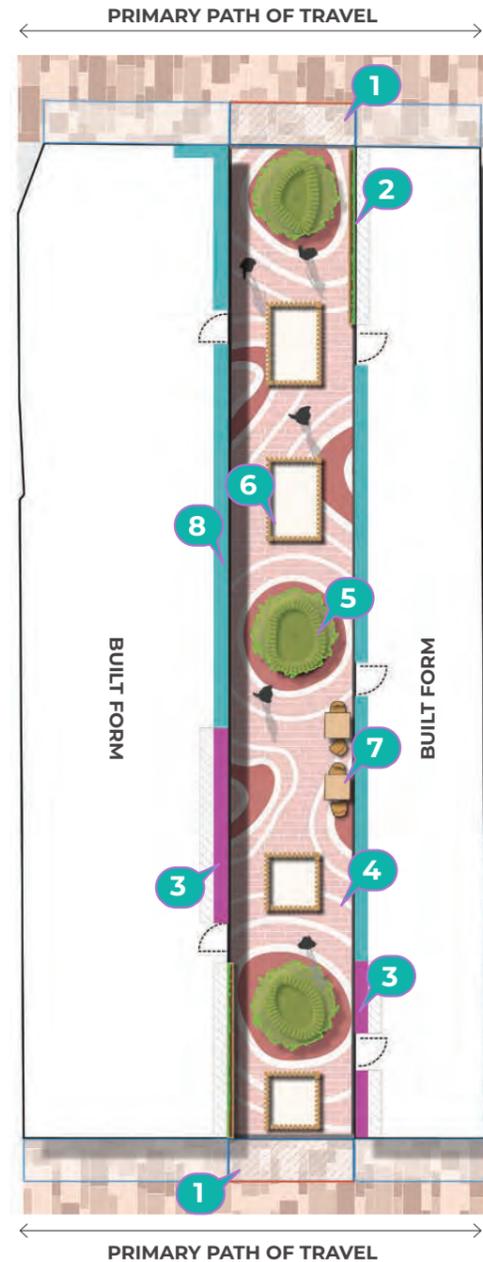
OPPORTUNITIES TO IMPROVE ACTIVATION AND SAFETY OF ARCADE INCLUDE:

- 1 FEATURE AWNING WITH LIGHTING
- 2 BLANK WALL - OPPORTUNITY FOR VERTICAL GREENING
- 3 BLANK WALL - OPPORTUNITY FOR MURAL/ STREET ART
- 4 SMALL FORMAT PAVING WITH LINEMARKING PATTERN
- 5 SEATING WITH TREE PLANTING
- 6 OPPORTUNITY FOR MARKET STALLS
- 7 OPPORTUNITY FOR ALFRESCO DINING
- 8 GLASS/ WINDOWS FOR PASSIVE SURVEILLANCE AND LIGHT SPILL

ARCADE CONCEPT PLAN

Identified as an enclosed passage that provides key circulation movements across the activity centre. Arcades have the potential for spill out spaces for fine grain retail uses, outdoor furniture, lighting and other activation uses.

[ENCLOSED OR SEMI-ENCLOSED PASSAGE]



OPPORTUNITIES TO IMPROVE ACTIVATION AND SAFETY OF LANEWAY INCLUDE:

- 1 FEATURE AWNING WITH LIGHTING
- 2 BLANK WALL - OPPORTUNITY FOR VERTICAL GREENING
- 3 BLANK WALL - OPPORTUNITY FOR MURAL/ STREET ART
- 4 FEATURE PATTERN GROUND PLANE
- 5 SEATING WITH TREE PLANTING
- 6 OPPORTUNITY FOR ALL WEATHER PROTECTION
- 7 OPPORTUNITY FOR ALFRESCO DINING
- 8 GLASS/ WINDOWS FOR PASSIVE SURVEILLANCE AND LIGHT SPILL
- 9 OPPORTUNITY FOR PUBLIC ART/ SCULPTURES/ DISPLAYS/ EVENTS

LANEWAY CONCEPT PLAN

Identified as a mostly open air passage that provides key circulation movements across the activity centre. Laneways have the potential for spill out spaces for fine grain retail uses, street furniture, murals, vertical greening, canopy structures, lighting, public art and more activation.

[SEMI-ENCLOSED OR OPEN AIR PASSAGE]

D | ARCADES & LANEWAYS



KEY PLAN



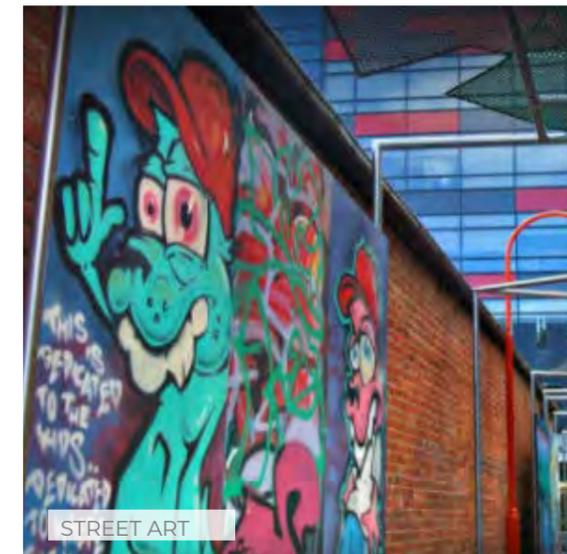
ART DISPLAY



MARKET



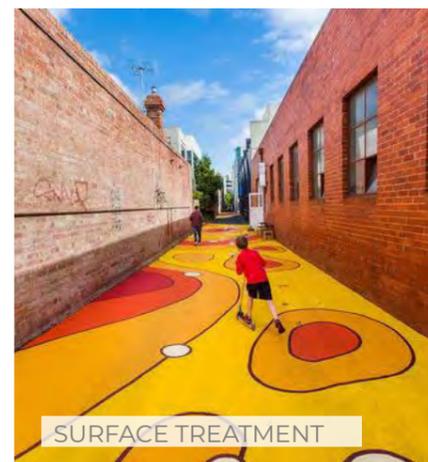
VERTICAL GREENING



STREET ART



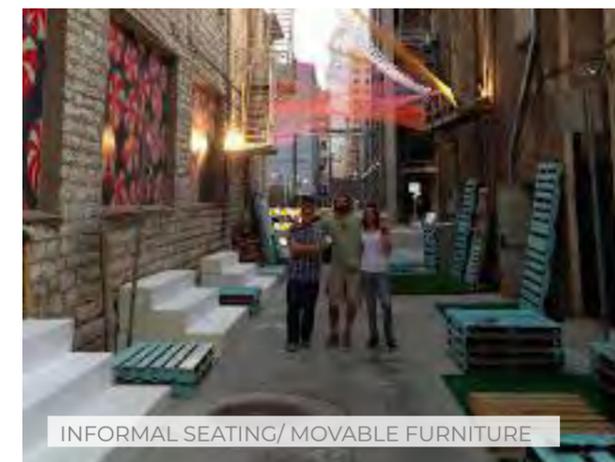
ART/WEATHER PROTECTION



SURFACE TREATMENT



OUTDOOR DINING



INFORMAL SEATING/ MOVABLE FURNITURE

06 WAYFINDING STRATEGY

A | STRATEGY & THEMES

The Pakenham Major Activity Centre is made up of distinct precincts that are well-known to the community, the future Community Hospital and the Level Crossing Removal Project (LXRP) will create new precincts with distinct destinations for locals and visitors. It is of prime importance to consider the relationship between the different types of precincts to encourage safe walking and cycling via a multitude of routes.

The design for Pakenham's wayfinding system acknowledges the various land uses and activities located across the Major Activity Centre. Scale, hierarchy and consistency are the major guiding principles that underpin the proposed wayfinding strategy. The strategy proposes to align with the hierarchy of open space identified as part of the Draft Public Realm Strategy; this will ensure each journey is supported accordingly. It will need to be represented through a clear and legible suite of signage that is made up of a continuous graphic and aesthetic.

The three design principles established for Pakenham's wayfinding strategy are:

- A. Consistent language
- B. Connectivity
- C. Journey



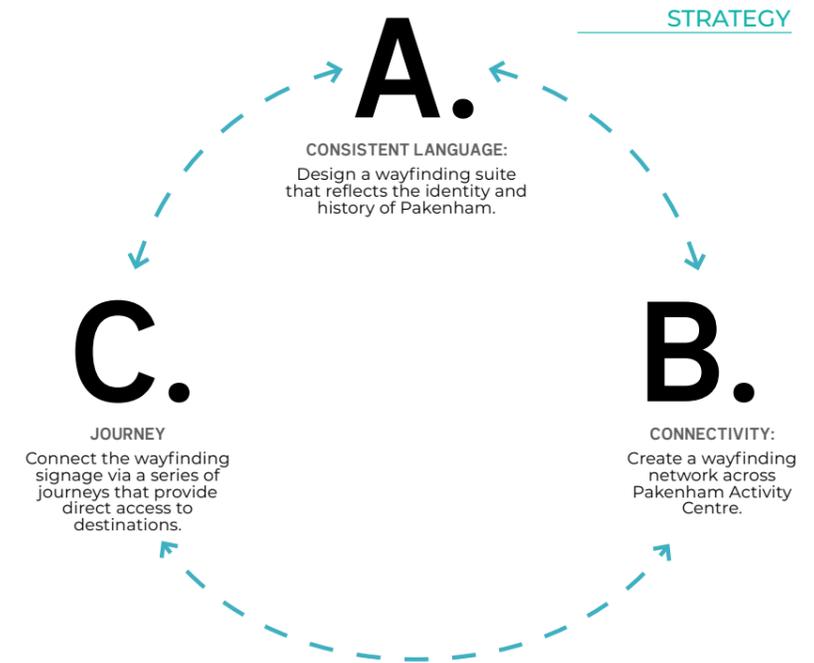
The proposed narrative for the wayfinding strategy aims to stitch together the various themes and stories of the site. The indigenous story lines, the European settlement history, the agricultural and production history and the commuter suburb are all rich stories that may be captured through the wayfinding signage.

The wayfinding strategy identifies a linear graphic that encapsulates all the themes mentioned above in a way that celebrate each story.

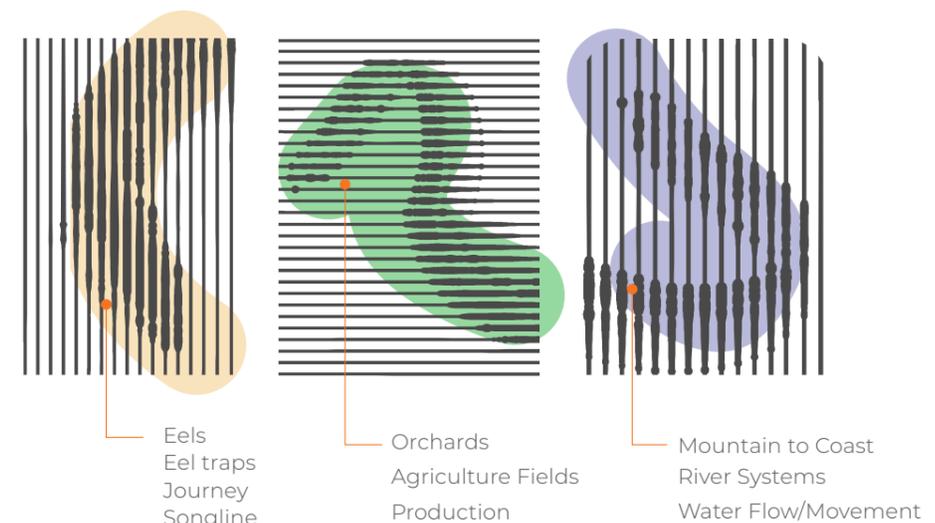
The stripped patterns relates to:

- + First Nations story: eels movement, eel traps, mountain to coast journey, river systems, water as resource
- + European Settlement story: agricultural fields and production patterns, orchards, water as supply
- + Pakenham's story: train line and journey

Please note this wayfinding strategy is a draft and has been released for community feedback. The wayfinding strategy may change in consultation with State Government agencies including the Level Crossing Removal Project.

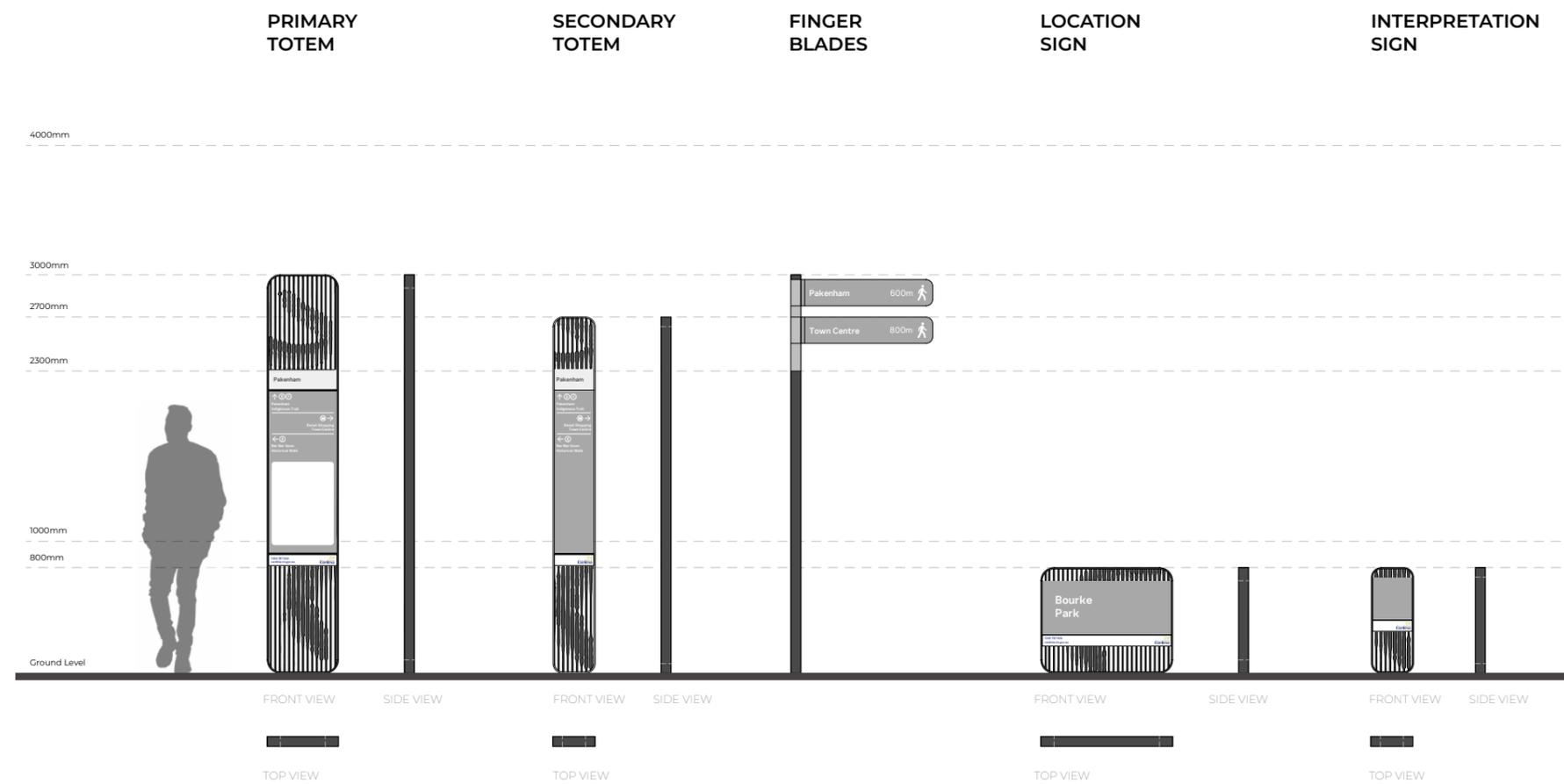


THEMES:





B | WAYFINDING SUITE



0 200 400 800 1200mm METERS
SCALE 1:400 @ A3

Please note this wayfinding strategy is a draft and has been released for community feedback. The wayfinding strategy may change in consultation with State Government agencies including the Level Crossing Removal Project.

07 PRS IMPLEMENTATION

PRIORITY PUBLIC REALM PROJECTS

1. MAIN STREET (2024)

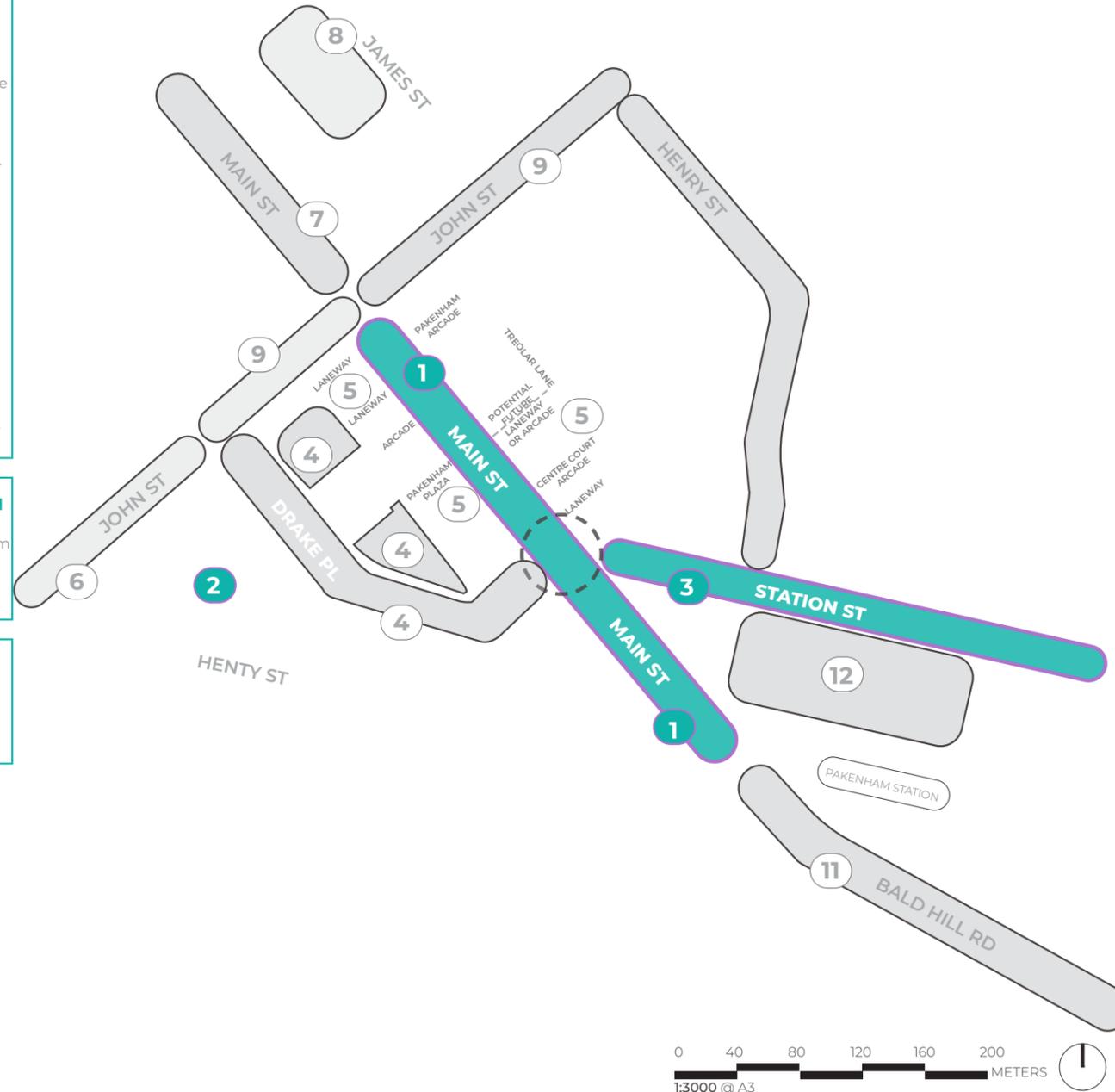
- Upgrade road cross-section and drainage
- Reduce traffic lanes from 4m to 3.2m
- Parallel parking with permeable paving to reduce surface runoff
- Improve pedestrian accessibility and experience through:
 - + Re-grading the footpaths to work in with floor levels of shops
 - + Replace barrier curb with continuous kerb ramp
 - + Provide outdoor dining opportunities
- Streetscape improvements include, feature paving or patterned concrete, seating areas, planter boxes, improved public lighting, street trees and wayfinding signage
- To be developed in 2 stages:
 - + Stage 1 Central: scheduled delivery early 2024
 - + Stage 2 Gateway: scheduled delivery late 2024

2. WAYFINDING STRATEGY IMPLEMENTATION

- (short term)*
- A consistent wayfinding system across Pakenham Major Activity Centre that is cohesive, efficient and provides clear directions across the activity centre.

3. STATION STREET

- Parallel carpark line marking (2024)
- Upgrade footpaths
- Consider street tree planting
- Improve connections to Bourke Park



PUBLIC REALM PROJECTS

4. DRAKE PLACE (short to medium term)

- Stage 1 - Upgrade Drake Place
- Stage 2 - Opportunity for mixed-use development with multi-level car parking *(long term)*

5. ARCADES & LANEWAYS (medium term)

- Opportunity for activation (murals/arts festival)
- Upgrade surface finishes
- Potential to engage local artists
- Upgrade lighting for safety
- Outdoor furniture
- Weather protection

6. JOHN STREET (short term - TBC)

- Road extension through to Henty Street

7. MAIN STREET NORTH (long term)

- Upgrade primary footpaths
- Consider street tree planting
- Street furniture

8. JAMES STREET (long term)

- Formalise car parking area
- Stage 2 - multi-level Carpark *(Long term)*

9. JOHN STREET (long term)

- Upgrade primary footpaths
- Consider tree planting
- Gateway element
- Street furniture

10. HENRY STREET AND COOK DRIVE

- (long term)*
- Upgrade footpaths
 - Consider street tree planting

11. BALD HILL ROAD (long term)

- Upgrade footpaths
- Review uses along Bald Hill Road
- Consider street tree planting

12. KEY DEVELOPMENT AND OPPORTUNITIES

- (long term)*

Pakenham
a place for people



Cardinia

Pakenham Revitalisation Project

Cardinia Shire Council

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{item-no} {item-title-do-not-remove}

Responsible GM: Peter Benazic
Author: {Kylie Traeger}

Recommendation(s)

That Council endorses the Public Realm Strategy to support the implementation of the long-term plan to revitalise Pakenham.

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Attachments

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Executive Summary

The Pakenham Revitalisation Project is a Council priority project – a long term plan to deliver a vibrant and prosperous Pakenham for all people, one stage at a time. This report seeks approval of the Public Realm Strategy, the overarching strategy and direction to achieve Council's long term plan. Figure 1 illustrates the staged plan.

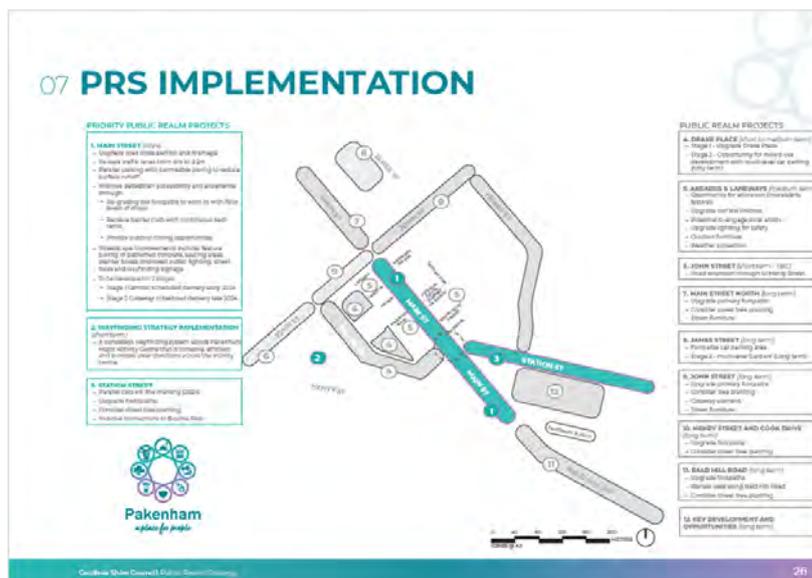


Figure 1 – Strategic context for the Pakenham Revitalisation Project

The Plan contains twelve stages to revitalise Pakenham, together with the community to bring in more visitors to give the businesses the boost they need.

The project involves 12 stages in total, and will begin with the first stage

- Main Street Central – to be delivered in early 2024
- Main Street Gateway – to be delivered in late 2024

The improvements aim to improve Main Street to make it more people focused, vibrant, safe and accessible for all people.

- Upgrade road cross-section and drainage
- Reduce traffic lanes from 4m to 3.2m

- Parallel parking with permeable paving to reduce surface runoff

Improve pedestrian accessibility and experience through

- Regrading the footpaths to work in with floor levels of shops
- Replace barrier curb with continuous kerb ramp

Stage 1 is funded by \$1M Growing Suburbs Funding from the Victorian Government, combined with Council's capital works contribution of \$1.4M.

Community consultation was undertaken in August 2023 to test elements of the Public Realm Strategy, with close to 500 people providing their feedback online, at one of the five pop up events or workshops. The key themes the community were focused on

- A safe place with better lighting
- Accessible footpaths and entrances to shops
- Active with more restaurants and entertainment during the day and night
- An attractive place, featuring greening to attract people to visit and spend time

A summary report has been published on Creating Cardinia and key stakeholders have been notified.

Council is currently managing the detailed design phase of the project, with the tender and evaluation process to follow, anticipated to be presented to Council in February 2024.

Background

Council's vision for the Pakenham Major Activity Centre is aligned and guided by the hierarchy of documents shown below in Figure 2.



Figure 2 – Strategic context for the Pakenham Revitalisation Project

To achieve this vision, the Pakenham Revitalisation Project is delivering the following:

- **Public Realm Strategy** to improve the road and pedestrian network
- **Wayfinding Strategy** to provide a cohesive and consistent wayfinding system for all abilities
- **A Community Activation** program of activities that suit community demographics
- **Economic Activation** program to attract investment and drive job growth and economic opportunities within the activity centre.
- Amendment C228 was on public exhibition from 24 October 2019 to 6 December 2019.

- Submissions were considered at the Council meeting on 17 February 2020. Council resolved to refer the submissions to an independent Planning Panel.
- A Planning Panel hearing was held on 4 May 2020.
- The Amendment C228 Panel Report was finalised on 23 June 2020.
- Council resolved to adopt Amendment C228 at the Council meeting on 15 February 2021.
- Cardinia Planning Scheme Amendment C228 was gazetted in September 2021

Planning History

Cardinia Planning Scheme Amendment C228 sought to apply the Activity Centre Zone to the Pakenham Major Activity Centre and include both the Pakenham Major Activity Centre Structure Plan and the Urban Design Framework as reference documents in the Cardinia Planning Scheme.

Cardinia Planning Scheme – Activity Centre Zone

Schedule 1 to Clause 37.08 of the Cardinia Planning Scheme (Activity Centre Zone) includes objectives to be achieved for both transport and movement and the public realm. The transport and movement objectives include:

- Ensuring safe and convenient vehicle, pedestrian and cycle networks that facilitate movement through and to the activity centre.
- Encouraging active transport on streets, within car parking areas and arcades, in open space and along the creek network.
- Providing a clear, efficient and logical vehicle network and ensure access to convenient and safe car parking in the activity centre.

The public realm objectives include:

- Ensuring a network of attractive, safe and accessible streets that cater for and enhance the different activities and land uses within the activity centre.
- Promoting human scale and pedestrian focused streets to encourage a vibrant and lively public realm in the retail core, including evening activities.
- Facilitating activation of Precinct 1 streets (including Main Street) in the evening by encouraging outdoor dining areas and active uses throughout the precinct.

These objectives have informed both the Draft Public Realm Strategy and the concept plans for the first stage of works within the Pakenham Revitalisation Project.

Policy Implications

This work sits within Cardinia Shire key documents of:
Local Government Act in undertaking community engagement
Council Plan – commitment to our community
Liveability Plan
Pakenham Major Activity Centre Structure Plan
Pakenham Major Activity Centre Urban Design Framework
Pakenham Parking Precinct Plan
Procurement Policy
Engagement Policy
Community Safety Policy
Access and Inclusion Plan
Ageing Well Strategy

Relevance to Council Plan

The Pakenham Revitalisation Project is a Council initiative within the 2021-25 Council Plan, listed below and links to the community vision and priorities.

- Design Pakenham town centre streetscape

- Commence Pakenham town centre streetscape upgrades
- Progress Pakenham town centre streetscape upgrades
- Complete Pakenham town centre streetscape upgrades

1.1 We empower our communities to be healthy, connected and resilient

1.1.3 Lead by example in creating an inclusive and welcoming community for all by facilitating community education, capacity building, connection and celebration of our diversity.

1.1.4 Facilitate a partnership approach to create safer communities.

2.1 We support the creation of liveable spaces and places

2.1.1 Advocate, plan for and deliver accessible community infrastructure and services that address community need.

2.1.2 Plan and maintain safe, inclusive and connected open spaces, places and active travel routes.

2.1.5 Upgrade Council's road network to improve safety and connectivity while considering traffic demand and freight transport needs.

Text - Refer to Reference Document

Consultation/Communication

Community consultation was undertaken in August 2023 to test the elements of the Public Realm Strategy, with the following focused areas

- What should the project brand be
- Ways to strengthen the walkability of Main Street through activation
- Ways to support safety and movement around Pakenham
- Testing specific elements of the draft Public Realm Strategy, the look and feel
- Ideas to create community activation, social connection, community culture and civic pride
- Ideas to strengthen the local economy and industry

500 people provided their feedback online, at one of the five pop up events or workshops. The key themes the community were focused on

- A safe place with better lighting
- Accessible footpaths and entrances to shops
- Active with more restaurants and entertainment during the day and night
- An attractive place, featuring greening to attract people to visit and spend time

A summary report has been published on Creating Cardinia and shared with key stakeholders.

Financial and Resource Implications

Stage 1 involves the design and development of the streetscape in Main Street Central in the current 23/24 financial year – scheduled to commence by March 2024. A 1M has been granted under a Growing Suburbs Funding Agreement with the Victorian Government, combined with Council's contribution of \$1.4M to deliver Main Street Central.

Main Street Gateway has been tendered and designed at the same time for project and financial efficiency, however the area is not accessible until after the Level Crossing Removal Project has

completed their works to the roundabout at Main, Baldhill and Henty Streets, anticipated in late 2024, in the 24/25 financial year. A separate budget exists for this stage and incorporates funding from the Level Crossing Removal Project from an asset maintenance Agreement.

The long-term project has 12 stages in total, stages 2 – 12 are unfunded at this stage.

Advocacy is actively sought at every opportunity across all levels of government to achieve additional funding for the future stages of Pakenham Revitalisation.

Conclusion

Pakenham is going through a major transition as it moves from a suburb on the fringe of metropolitan Melbourne servicing residents and commuters, to a Major Activity Centre that will be a destination for thousands of new residents and workers travelling to, or from the area. Pakenham Activity Centre is projected to service 24,756 additional people by 2041, this does not include people who will travel to Pakenham in the future to visit and spend time.

The Public Realm Strategy will guide the growth and development alongside the community to ensure Pakenham becomes an attractive and safe destination, accessible for all people featuring entertainment and community events, one stage at a time.

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Responsible GM: Peter Benazic
Author: {author-name}
Report Purpose: Papers attached
Time: 25 minutes

Recommendation(s)

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That Council considers the actions taken in response to the four-part Notice of Motion at the 20 November Ordinary Council Meeting 2023, endorsing the Public Realm Strategy to support the implementation of the long-term plan to revitalise Pakenham.

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Attachments

1. PRP - Council Meeting Report 20 November 2023
2. Main Street Pakenham – Traffic Impact Assessment
3. Trader Impact Assessment Summary

Executive Summary

The Pakenham Revitalisation Project report was presented to Council at the 20 November Ordinary Council Meeting seeking approval of the Public Realm Strategy. A four-part Notice of Motion resulted and has been actioned as follows:

20 November Ordinary Council Meeting four-part Notice of Motion	
1.	Endorses the public realm strategy to support the implementation of the long-term plan to revitalise Pakenham.
ACTION:	
The endorsement of the public realm strategy enabled the Major Projects Team to progress into the detailed design phase of the project ensuring the grant funding contributed to realising Council’s long-term plan to revitalise Pakenham.	
2.	Provides further consideration towards the potential of a one-way traffic scenario for Main Street Pakenham.
3.	Undertakes further assessment of the viability of a one-way traffic flow scenario that may potentially be implemented during future phases of this strategy.
ACTION:	
Council’s Traffic team engaged Trafficworks to assess the potential for a one-way traffic scenario for Main Street Pakenham.	
The report (as attached) concluded;	

<ul style="list-style-type: none"> • One way traffic will increase travel times, delay and is likely to result in congestion issues along the key roads surrounding Main Street. • Change to one way traffic would provide a minimal increase in footpath width (additional 1.6 m total width) if the existing car parking configuration is maintained. • Considering the function of Main Street within Council's existing road network, a two-way traffic flow option with parallel parking provision on both sides would provide the best intended outcome.
<p>4. Commences engagement with the community and local traders to inform them of the Pakenham Revitalisation Project and the impacts for the delivery of phase 1 of the project.</p>
<p>ACTION:</p> <ul style="list-style-type: none"> • The Major Projects Team have engaged Struber, a skilled consultancy that specialises in stakeholder management. And have carried out the following activities <p>Activities during January and February</p> <ul style="list-style-type: none"> • Introduction and project timeframe update • An impact assessment with each individual trader to understand each traders' concerns. This helps plan and mitigate where possible throughout stage 1 of the project disruptions. <p>Activities planned during March and April</p> <ul style="list-style-type: none"> • Share design plans, along with responses to their key concerns gathered at the impact assessment. • Continue to engage and support the traders with up-to-date project timeframes and impacts leading into and during construction.

Background

Refer to Pakenham Revitalisation - Council Meeting Report 20 November 2023, as attached.

Policy Implications

N/A

Relevance to Council Plan

2.1 We support the creation of liveable spaces and places

- 2.1.1 Advocate, plan for and deliver accessible community infrastructure and services that address community need.
- 2.1.2 Plan and maintain safe, inclusive and connected open spaces, places and active travel routes.
- 2.1.4 Advocate for increased and more-connected public transport options.
- 2.1.5 Upgrade Council's Road network to improve safety and connectivity while considering traffic demand and freight transport needs.

5.1 We practise responsible leadership

- 5.1.1 Build trust through meaningful community engagement and transparent decision-making.
- 5.1.2 Manage our finances responsibly and leave a positive legacy for future generations.

5.1.5 Champion the collective values of the community through the Councillors' governance of the shire.

Climate Emergency Consideration

N/A

Consultation/Communication

Refer to Pakenham Revitalisation - Council Meeting Report 20 November 2023, as attached

Financial and Resource Implications

N/A

Conclusion

Pakenham is going through a major transition as it moves from a suburb on the fringe of metropolitan Melbourne servicing residents and commuters, to a Major Activity Centre that will be a destination for thousands of new residents and workers travelling to, or from the area. Pakenham Activity Centre is projected to service 24,756 additional people by 2041, this does not include people who will travel to Pakenham in the future to visit and spend time.

The Public Realm Strategy will guide the growth and development alongside the community to ensure Pakenham becomes an attractive and safe destination, accessible for all people featuring entertainment and community events, one stage at a time.

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Traffic Impact Assessment Report

Main Street, Pakenham

Project Number 230523

Final Report 2/02/2024

Client Cardinia Shire Council



Document control record

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Document control	
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Client contact	Nicholas Charrett

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230523 Main Street, Pakenham – Traffic Impact Assessment Report
Final 2/02/2024



Table of Contents

1	Introduction	1
2	Background documents	2
2.1	Pakenham Structure Plan	2
2.2	Urban Design Framework	3
2.3	Public Realm Strategy	4
2.4	Zones and overlays	5
3	Existing conditions	7
3.1	Road network	7
3.1.1	Main Street	7
3.1.2	Station Street	8
3.1.3	John Street	9
3.1.4	Henry Street	9
3.1.5	Cook Drive	9
3.1.6	Drake Place	9
3.1.7	Treloar Lane	9
3.2	Traffic volumes	10
4	Proposal	15
5	Assessment of the one-way arrangement	16
5.1	Car parking implications	16
5.2	Access implications	18
6	Conclusions	21



1 Introduction

Cardinia Shire Council engaged Trafficworks to undertake a high-level traffic impact assessment of the impacts of converting **Main Street, Pakenham** to one-way traffic flow between John Street and Station Street being considered as part of the Pakenham Revitalisation Project.

For the detail about:

- description of background documents – see section 2
- existing conditions – see section 3
- description of the proposal – see section 4
- assessment of the one-way arrangement – see section 5
- our conclusions – see section 6.



2 Background documents

2.1 Pakenham Structure Plan

The Pakenham Structure Plan provides an integrated response to the changes envisaged for the activity centre until the year 2035, which is intended to guide Council's decision making on land use and transport planning matters.

The structure plan shows the following future changes to the road network within and surrounding the Pakenham Precinct:

- elevation of the railway line and grade separation of all existing rail crossings
- pedestrianisation of Main Street between Station Street and the existing level crossing to discourage through traffic
- extension of Flower Street to the east, to provide a continuous connection to Drake Place
- extension of John Street to directly connect with the Flower Street / Drake Place extension
- new link road to connect Main Street with McGregor Road, with a signalised intersection
- future intersection treatments at:
 - Station Street / Drake Place / Main Street
 - John Street / Main Street
 - Rogers Street / Main Street
- extension of Webster Way to provide a connection with Ascot Park Drive and an additional link across the railway line.

The Transport and Movement Plan for the Pakenham precinct, reproduced from the structure plan, is shown in Figure 1.

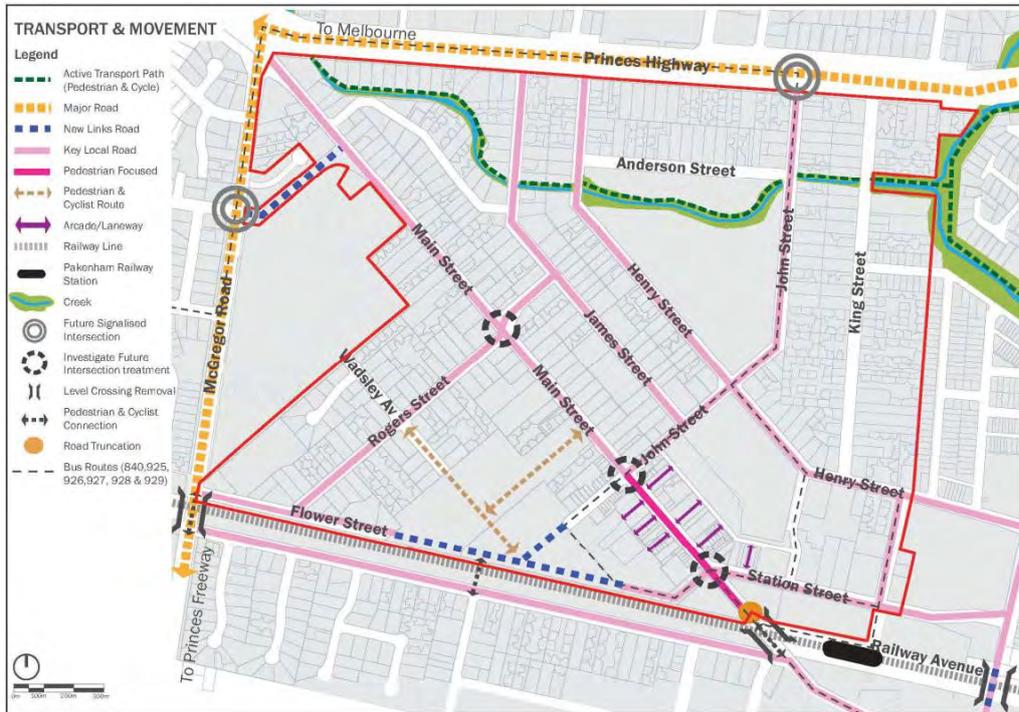


Figure 1: Transport and Movement Plan (source: Pakenham Structure Plan)

2.2 Urban Design Framework

The Urban Design Framework (UDF) provides clear guidance regarding the development and structure of the land located within the Pakenham Major Activity Centre.

This document indicates that the vision for Main Street is a pedestrian friendly street section.

This document indicates that the currently unoccupied former Woolworths site on Drake Place / John Street will be redeveloped. Information provided by Council indicates that this site will be developed into a Community Hospital.



2.3 Public Realm Strategy

The Pakenham Activity Centre Public Realm Strategy was endorsed by Council in November 2023. The strategy provided a plan to achieve Council's long-term plan for the Pakenham Activity Centre.

The strategy identified a number of existing issues within the activity centre including:

- narrow and inconsistent footpaths creating conflicts between pedestrians and vehicles
- poor pedestrian connectivity and legibility
- arcades and laneways present poor, low quality outcomes that do not achieve CPTED (crime prevention through environmental design) principles
- poor interface and activation along Bourke Park
- lack of canopy tree cover
- poor quality landscaping
- lack of coherence in furniture and materials
- LXR (level crossing removal project) rail corridor interface to activity centre
- lack of gathering spaces and nodes
- lacking scales of activation and events for community gatherings

The strategy identifies Main Street between John Street and Station Street as an opportunity to provide higher amenities for pedestrians including increasing the footpath widths to provide opportunities for outdoor dining and parklets.

The vision for Main Street as per the strategy is shown in Figure 2 and Figure 3.



Figure 2: Main Street vision plan (source: Pakenham Activity Centre Public Realm Strategy)

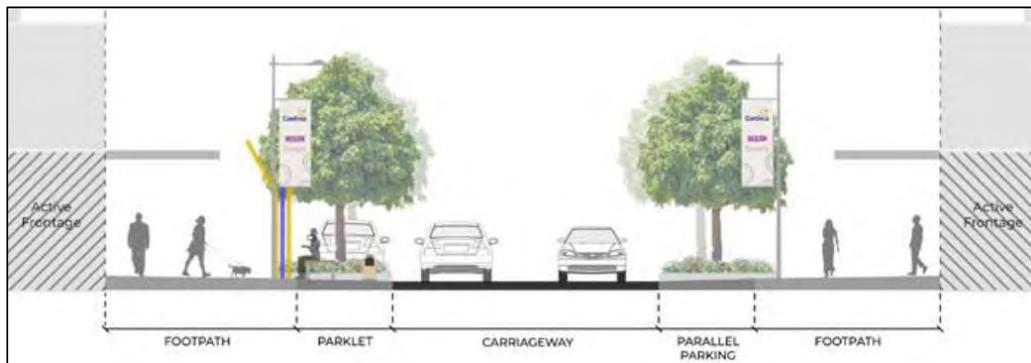


Figure 3: Main Street typical cross section – section B (source: Pakenham Activity Centre Public Realm Strategy)

2.4 Zones and overlays

The subject site is zoned Activity Centre Zone (ACZ1) and subject to a Parking Precinct (PO1) and Development Contributions Plan (DCPO1) Overlay under the Cardinia Shire Council Planning Scheme.

The objectives of the parking overlay are to:

- manage car parking equitably and efficiently across the activity centre
- consolidate and improve existing car parks to maximise the sharing of parking supply between different land uses
- encourage and improve public car parking provision, sustainable transport provision and travel within and to the activity centre



- identify and provide for the collection of financial contributions to contribute to the construction of publicly accessible off-street parking facilities within the activity centre
- spread the cost of providing and upgrading infrastructure on an equitable basis.

The parking overlay allows developers to provide a financial contribution for each car parking space required by under Clause 45.09 and/or Clause 52.06, but not provided on the land of the development. This financial contribution is to fund public parking projects in the precinct.



3 Existing conditions

3.1 Road network

The key road network and accessibility within the activity centre is shown in Figure 4.

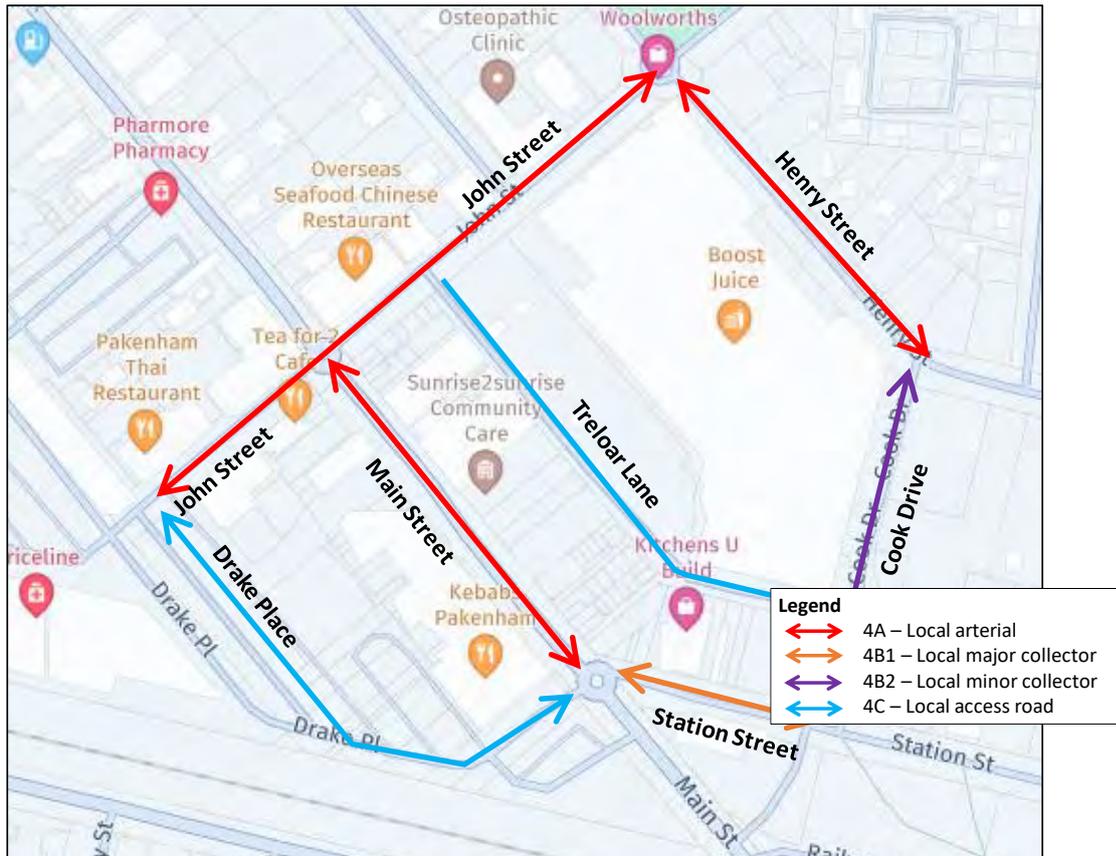


Figure 4: Existing road network and classifications

The key roads are discussed in the following sections.

3.1.1 Main Street

Main Street is designated as a Local Arterial Road (4A) in the Cardinia Shire Council (Council) road register, and currently provides a connection between McGregor Road to the north-west with Racecourse Road (as Bald Hill Road) to the south-east. As per the Pakenham Structure Plan, Main Road will be closed at the existing level crossing to reduce through traffic volumes.

Main Street comprises a 23.0 m cross section which provides two-lane, two-way traffic flow. The car parking configuration within the activity centre is detailed in Table 1. Main Street is subject to a 40 km/h posted speed limit within the activity centre.



Table 1: Description of Main Street cross sections

Road segment	Description
Level crossing to Station Street	— indented parallel car parking provided on both sides
Station Street to pedestrian crossing (refer to Figure 5)	— indented 45° angle car parking provided on the eastern side — indented parallel car parking provided on the western side
Pedestrian crossing to John Street (refer to Figure 6)	— indented parallel car parking provided on the eastern side — indented 45° angled car parking provided on the western side
John Street to McGregor Road	— indented parallel car parking provided on both sides

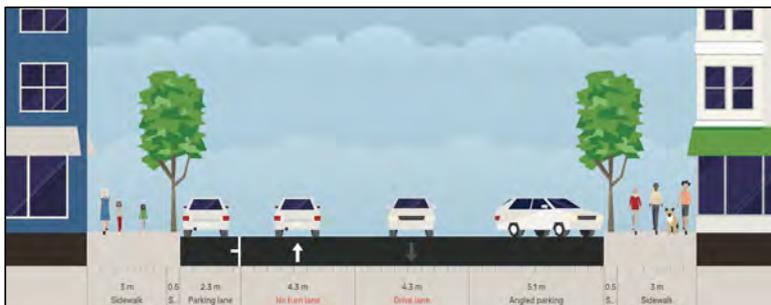


Figure 5: Existing Main Street cross section (between John Street and pedestrian crossing)

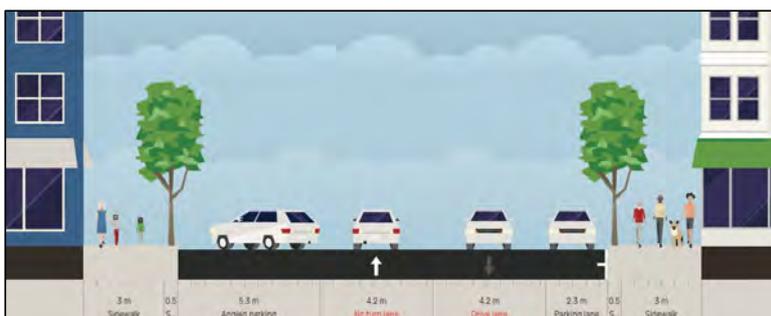


Figure 6: Existing Main Street cross section (between pedestrian crossing and Station Street)

3.1.2 Station Street

Station Street is designated as a Local Major Collector Road (4B1) in the Council road register, and provides a connection between Henry Street to the north-east and Main Street to the south-west. Station Street is generally configured as a two-lane, two-way road with indented parallel car parking provided on both sides. Station Street is subject to the 50 km/h urban default speed limit.



3.1.3 John Street

John Street is designated as a Local Arterial Road (4A) in the Cardinia Shire Council road register, and provides a connection between Princes Highway to the north-east and the Pakenham Shopping Centre to the south-west. John Street is generally configured as a two-lane, two-way road with indented parallel car parking provided on both sides within the activity centre. John Street is subject to a 40 km/h posted speed limit.

3.1.4 Henry Street

Henry Street is designated as a Local Arterial Road (4A) between John Street and Station Street in the Council road register, and provides a connection between the Princes Highway service road to the north-west and Racecourse Road to the south-east. Henry Street is generally configured as a two-lane, two-way road with indented angle parking provided on one side and kerbside parallel car parking permitted on the other side within the activity centre. Henry Street is subject to the 50 km/h urban default speed limit.

3.1.5 Cook Drive

Cook Drive is designated as a Local Minor Collector Road (4B2) in the Council road register, and provides a connection between Henry Street to the north and Station Street to the south. Cook Drive is generally configured as a two-lane, two-way road. Cook Drive is subject to the 50 km/h urban default speed limit.

3.1.6 Drake Place

Drake Place is designated as a Local Access Road (4C) in the Council road register, and provides a connection between Main Street to the north-east and John Street to the north-west.

Drake Place is generally configured as a two-lane, two-way road. Near John Street, the northbound carriageway provides angled car parking on both sides and the southern carriageway provides angled car parking on the eastern side in some places. Near Main Street, parallel car parking is provided on the north side and angled car parking is provided on the south side. Drake Place is subject to the 50 km/h urban default speed limit.

3.1.7 Treloar Lane

Treloar Lane is designated as a Local Access Road (4C) in the Council road register, and provides a connection between John Street to the north-west and Cook Drive to the south-east. John Street is generally configured as a one-lane, one-way south-eastbound road with indented angle car parking provided on the northern side. Treloar Lane is subject to the 50 km/h urban default speed limit.



3.2 Traffic volumes

Council has provided the most recent 24-hour vehicle traffic volume data available for the following roads surrounding the Pakenham activity centre (refer to Figure 7):

1. Main Street, between Station Street and John Street (February 2017)
2. Main Street, between Snodgrass Street and McGregor Road (October 2018)
3. Main Street, between Railway Line and Station Street (June 2012)
4. Cook Drive, between Henry Street and car park entrance (February 2017)
5. Drake Place, approximately 60 m south-west of Main Street (February 2017)
6. Henry Street, between John Street and loading zone (February 2017)
7. John Street, between Henry Street and James Street (February 2017)
8. John Street, between Main Street and Treloar Lane (February 2017)
9. Treloar Lane, north of Cook Drive (February 2014)
10. Station Street, between Cook Drive and Slattery Place (February 2017).

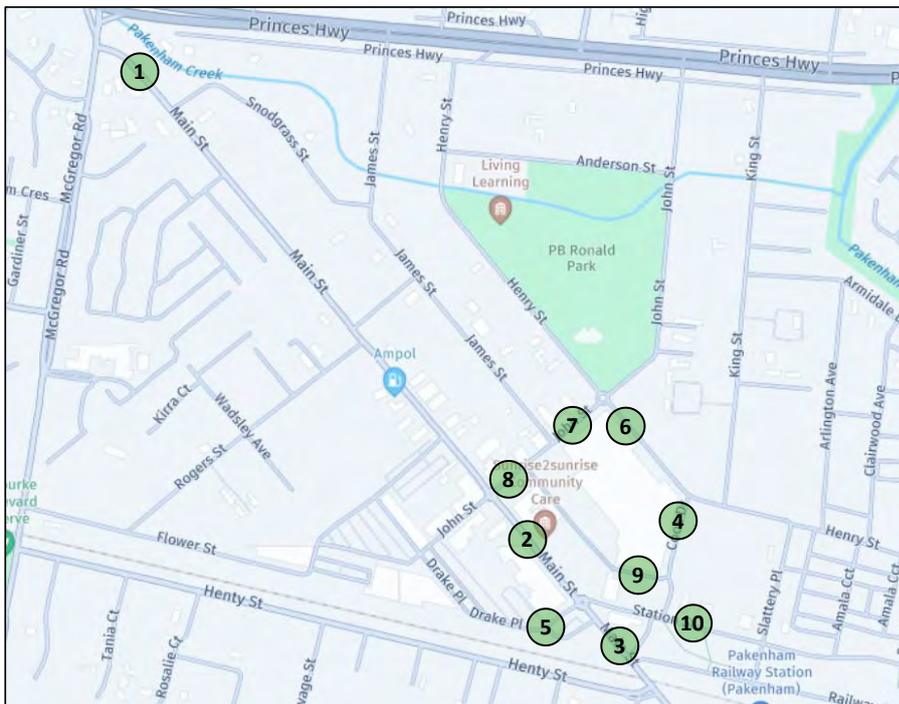


Figure 7: Traffic survey locations

The traffic volumes are summarised in Table 2.



Table 2: Existing traffic volumes

Ref no.	Road name	Segment	Date	Direction	Weekday average traffic volumes			%HV	85% speed
					Daily	AM	PM		
1	Main Street	between McGregor Road and Snodgrass Street	Oct-18	Peak period	-	10:00 am-11:00 am	3:00 pm-4:00 pm	4%	52.6
				Two-way	8,662	674	688		
				Northbound	3,732	290	282		
				Southbound	4,930	384	406		
2	Main Street	between John Street and Station Street	Feb-17	Peak period	-	10:00 am-11:00 am	5:00 pm-6:00 pm	3%	32.1
				Two-way	7,895	522	618		
				Northbound	3,956	284	309		
				Southbound	3,939	238	309		
3	Main Street	between level crossing and Station Street	Jun-12	Peak period	-	11:00 am-12:00 pm	4:00 pm-5:00 pm	4%	45.6
				Two-way	9,365	685	907		
				Northbound	4,519	355	409		
				Southbound	4,846	330	498		
4	Cook Drive	between Henry Street and car park entrance	Feb-17	Peak period	-	11:00 am-12:00 pm	4:00 pm-5:00 pm	5%	35.9
				Two-way	3,580	314	366		
				Northbound	2,747	249	298		
				Southbound	833	65	68		



Ref no.	Road name	Segment	Date	Direction	Weekday average traffic volumes			%HV	85% speed
					Daily	AM	PM		
5	Drake Place	approx. 60 m southwest of Main Street	Feb-17	Peak period	-	11:00 am-12:00 pm	12:00 pm-1:00 pm	7%	31.8
				Two-way	3,772	362	377		
				Eastbound	2,035	197	199		
				Westbound	1,737	165	178		
6	Henry Street	between John Street and loading zone	Feb-17	Peak period	-	11:00 am-12:00 pm	3:00 pm-4:00 pm	5%	45
				Two-way	3,758	346	345		
				Eastbound	1,224	103	115		
				Westbound	2,533	243	230		
7	John Street	between Henry Street and James Street	Feb-17	Peak period	-	11:00 am-12:00 pm	12:00 pm-1:00 pm	6%	39.7
				Two-way	7,617	646	635		
				Eastbound	3,240	277	270		
				Southbound	4,377	369	365		
8	John Street	between Main Street and Treloar Lane	Feb-17	Peak period	-	11:00 am-12:00 pm	4:00 pm-5:00 pm	3%	37
				Two-way	7,635	611	681		
				Eastbound	4,195	346	391		
				Southbound	3,440	265	290		



Ref no.	Road name	Segment	Date	Direction	Weekday average traffic volumes			%HV	85% speed
					Daily	AM	PM		
9	Treloar Lane	north of Cook Drive	Feb-14	Peak period	-	11:00 am-12:00 pm	4:00 pm-5:00 pm	3%	33.1
				Two-way	2,871	265	313		
				Northbound	2,857	264	312		
				Southbound	14	1	1		
10	Station Street	between Cook Drive and Slattery Place	Feb-17	Peak period	-	11:00 am-12:00 pm	4:00 pm-5:00 pm	3%	33.1
				Two-way	3,095	277	316		
				Eastbound	1,777	166	200		
				Westbound	1,318	111	116		



The existing traffic volumes indicate that:

- Main Street is carrying in the order of:
 - 7,900 vpd two-way
 - 4,000 north-westbound
 - 3,900 south-eastbound

Based on the traffic volumes to the north and south of the subject section of Main Street, there is a high number of through vehicles currently travelling along Main Street. It is anticipated that traffic volumes may reduce with the pedestrianisation of Main Street at the level crossing.

- Station Street is currently carrying two-way traffic volumes in the order of 3,100 vpd. It is anticipated that traffic volumes may increase with the closure of Railway Avenue at Main Street.
- Drake Place is currently carrying two-way traffic volumes in the order of 3,800 vpd. It is anticipated that traffic volumes may increase with the development of the Community Hospital along Drake Place.



4 Proposal

Council is investigating converting Main Street to one-way traffic flow to address concerns raised with the reduction in on-street car parking as a result of the Pakenham Revitalisation project.

The Pakenham Revitalisation project will deliver upgrades across the Pakenham Activity Centre including implementing upgrades identified in the Public Realm Strategy. It is understood the upgrades will include:

- Pedestrianisation of Main Street as per the Public Realm Strategy (refer to Section 2.3), including conversion of the on-street car parking to parallel car parking to increase the footpath width.
- Reconfiguration of Drake Place to provide an upgraded road cross section. These works are anticipated to coincide with the Community Hospital development.
- Closure of Railway Avenue at Main Street (as part of the level crossing removal works).



5 Assessment of the one-way arrangement

5.1 Car parking implications

Main Street comprises a road reservation width of 23.0 m which is restricted by commercial frontages on both sides.

As discussed in Section 3.1.1, the existing Main Street cross section achieves a footpath width of approximately 3.5 m on each side. This width has been identified as not adequately catering for the activation of the commercial frontages, including footpath trading.

To achieve additional footpath space, the Main Street cross section is proposed to comprise one traffic and parking lane in each direction. The proposed cross section will achieve a footpath width of approximately 5.5 m on each side (i.e. increase in 2.0 m each side) and provide equitable parking for the Main Street traders on both sides.

Based on a high-level estimate, the proposed conversion of angled car parking to parallel car parking is anticipated to reduce the available on-street parking supply along Main Street from 44 spaces to 30 spaces between John Street and Station Street.

To increase the on-street car parking yield, Council is investigating converting Main Street to one-way traffic flow. The on-street car parking configurations with one-way traffic flow being considered include:

- maintaining the existing car parking configuration (mixture of angled parking and parallel car parking)
- angled car parking on one side.

These options are discussed in Table 3. The dimensions of on-street car parking spaces are based on the minimum on-street car parking dimensions specified in AS2890.5:2020, and on the following criteria associated with Main Street:

- speed limit less than 60 km/h
- traffic volumes between 200-800 vph
- short-term car parking
- no allowance for vehicle overhang (i.e. to a high kerb or wall, so there is no encroachment into the footpath area).

It is noted that the anticipated car parking yield has been estimated based on the existing provision of parallel or angled car parking along Main Street between John Street and Station Street. The ultimate car parking yield may be lower to provide landscaping opportunities or traffic management measures.



Table 3: Comparison of cross-section options

Option	Approx. parking provision (spaces)	Approx. total footpath width	Cross section
Existing conditions	44	7.0 m	Figure 5 and Figure 6
Two-way traffic parallel parking	30	11.0 m	Figure 8
One-way traffic, existing parking configuration	44	8.6 m	Figure 9
One-way traffic, angled car parking on one side only	29	10.8 m	Figure 10

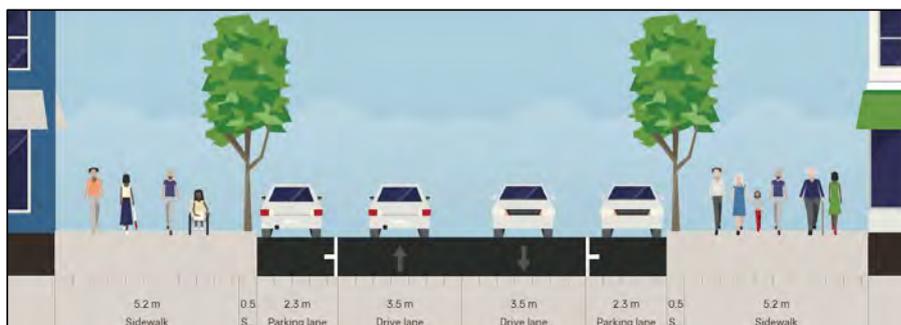


Figure 8: Main Street cross section – proposed two-way configuration



Figure 9: Main Street cross section - one-way, existing parking configuration



Figure 10: Main Street cross section - one-way, angled parking on one side

Table 3 indicates that the conversion of Main Street to one-way traffic flow will provide a minimal increase in footpath width (additional 1.6 m total width) if the existing car parking configuration is maintained. This is due to the traffic lane width required to accommodate angled car parking entry/exit movements (7.0 m).

The conversion of Main Street to one-way traffic may result in the following:

- inequitable provision of on-street car parking (i.e. parking provided on one side only)
- inequitable footpath widths on each side of Main Street. Further investigation will be required to confirm if a centralised carriageway is achievable (i.e. ensuring adequate lateral shifts).

5.2 Access implications

The conversion of Main Street to one-way traffic flow will require vehicles travelling in the opposing direction to the one-way flow to be displaced onto the road network surrounding Main Street.

The following routes are anticipated to be used by traffic displaced as a result of the one-way flow (refer to Figure 11):

- John Street – Drake Place
- John Street – Henry Street – Cook Drive – Station Street
- John Street – Treloar lane – Cook Drive – Station Street (south-eastbound traffic only).



The roundabouts at each end of Main Street would help to facilitate movement of traffic around the impacted section of Main Street. However, some of the local intersections along the alternative route are uncontrolled intersections. Further investigation would be required to determine if there is adequate capacity within these intersections to accommodate the displaced traffic volumes. The uncontrolled intersections that would require further investigation include:

- Drake Place / John Street
- Treloar Lane / Cook Drive
- Cook Drive / Station Street
- Cook Drive / Henry Street.

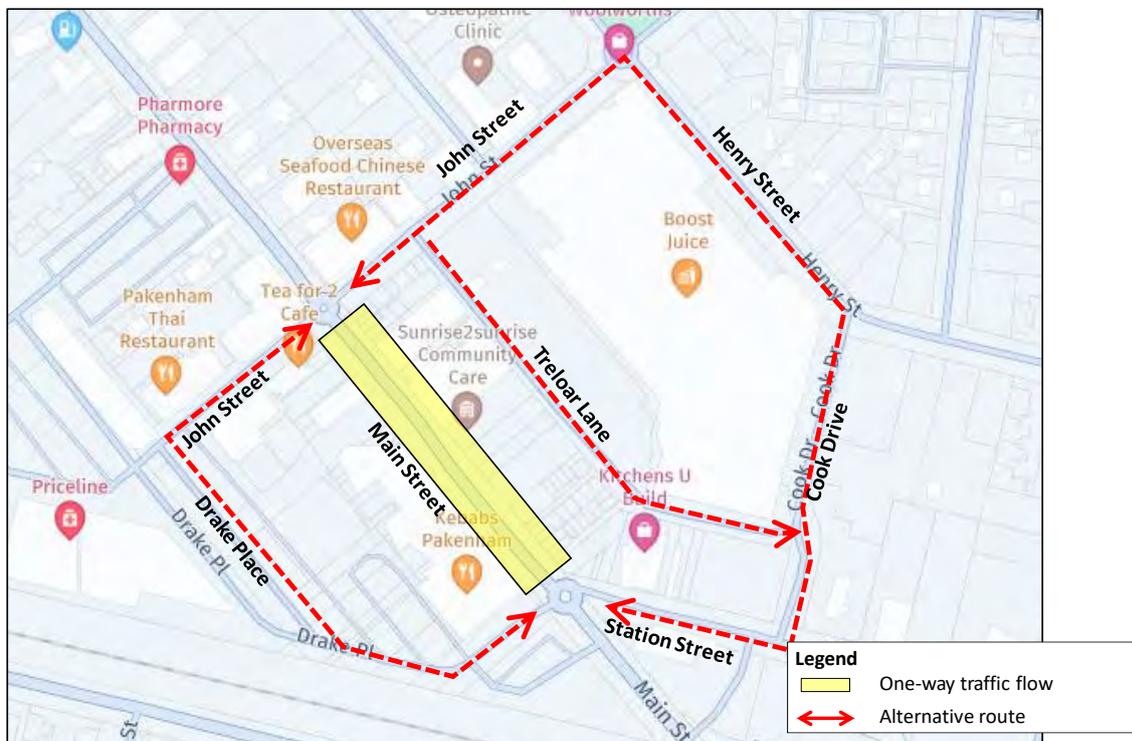


Figure 11: Alternative routes for opposing traffic

The alternate routes for opposing traffic will require longer travel times and distances as demonstrated in Table 4. It is noted that the travel times are based on Google Maps and will vary depending on the time of day / traffic volumes.



Table 4: Travel time/distance comparison

	Travel time / distance	Increase
Existing conditions	3 min / 450 m	-
John Street – Drake Place	3 min / 650 m	200 m
John Street – Henry Street – Cook Drive – Station Street	4 min / 950 m	1 min / 500 m
John Street – Treloar lane – Cook Drive – Station Street (south-eastbound traffic only)	3 min / 550 m	100 m

The alternate routes provide angled on-street car parking and cars entering / exiting these spaces may increase delays along the route.

As discussed in Section 2.4, Main Street is currently carrying approximately 7,895 vpd which is split evenly in each direction. Therefore, approximately 4,000 vpd will be displaced as a result of the proposed one-way configuration.

The traffic volumes indicate that key roads surrounding Main Street are carrying 3,000-7,500 vpd. The addition of up to 4,000 vpd would increase the traffic volumes along the key roads to approximately 7,000-11,500 vpd (assuming all vehicles following one route).

The mid-block capacity for a kerb lane with occasional car parking is 600 vph or 6,000 vpd per lane based on Austroads Guide to Traffic Management Part 3. Therefore, a two-lane, two-way road would have a mid-block capacity of 12,000 vpd. It is noted that the high turnover of car parking within the activity centre would likely reduce the capacity of the roads.

The Engineering Design Manual specifies an intended capacity of 3,000-7,000 vpd for a two-lane, two-way connector road / local arterial road. This traffic volume represents the capacity of a road from an amenity perspective.

Based on the above, the surrounding roads will continue to operate under mid-block capacity, however, the increase in traffic volumes may exceed the intended capacity which will impact amenity of these roads. Therefore, the displaced traffic is likely to cause congestion issues from an amenity perspective which may be exacerbated by drivers circulating the activity centre searching for car parking.



6 Conclusions

This report has been prepared to assess the impacts of converting Main Street, Pakenham to one-way traffic flow between John Street and Station Street being considered as part of the Pakenham Revitalisation Project to maintain the existing car parking provision whilst achieving greater footpath widths.

The assessment indicates that the conversion of Main Street to one-way traffic flow will:

- provide a minimal increase in footpath width (additional 1.6 m total width) if the existing car parking configuration is maintained (angled parking on one side and parallel parking on the other)
- may result in equity issues for fronting traders and further investigation is required to confirm a centralised traffic lane can be achieved
- will increase travel times, delay and is likely to result in congestion issues along the key roads surrounding Main Street.

The conversion of Main Street to one-way traffic flow is likely to result in congestion in the centre and will not achieve the desired increase to footpath widths.

Considering the function of Main St within Council's existing road network, a two-way traffic flow option with parallel parking provision on both sides would provide the best intended Urban Development Framework outcome.