

# Access and Movement Plan Report

Wallan Town Centre Access and  
Movement Plan

CG151028

Prepared for  
Mitchell Shire Council

9 June 2016



## Document Information

Prepared for Mitchell Shire Council  
Project Name Wallan Town Centre Access and Movement Plan  
File Reference CG151028REP002D04.docx  
Job Reference CG151028  
Date 9 June 2016

## Contact Information

**Cardno Victoria Pty Ltd**  
**Trading as Cardno**  
ABN 47 106 610 913

Level 4  
501 Swanston Street  
Melbourne  
Victoria 3000 Australia

Telephone: (03) 8415 7777  
Facsimile: (03) 8415 7788  
International: +61 3 8415 7777

victoria@cardno.com.au  
www.cardno.com

## Document Control

Version	Date	Author	Author Initials	Reviewer	Reviewer Initials
D04	9/06/16	Matthew Mudge	MM	Steve Hunt	SH

© Cardno. Copyright in the whole and every part of this document belongs to Cardno and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or in or on any media to any person other than by agreement with Cardno.

This document is produced by Cardno solely for the benefit and use by the client in accordance with the terms of the engagement. Cardno does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by any third party on the content of this document.

# Table of Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	Overview	1
1.2	Purpose of the Access & Movement Plan	1
<b>2</b>	<b>Background</b>	<b>2</b>
2.1	Study Area Location and Access	2
2.2	Policy Context	3
2.3	Wallan Structure Plan	6
2.3.1	Overview	6
2.3.2	Key Directions	6
2.3.3	Priority Projects	7
<b>3</b>	<b>Wallan Town Centre</b>	<b>11</b>
3.1	Introduction	11
3.2	Existing Transport Network	12
3.3	Existing Land Use	14
3.4	Future Land Use and Town Centre Precincts	15
3.5	VicRoads Network Proposals	17
3.5.1	High Street (High Street (Northern Highway))	17
3.5.2	Watson Street (east of High Street (Northern Highway))	18
3.5.3	Relevant Regional Context	18
3.6	Consideration of Proposed Transport Network Improvements	18
<b>4</b>	<b>Pedestrian Movement</b>	<b>19</b>
4.1	Existing Issues and Opportunities	19
4.1.1	Wider Study Area	19
4.1.2	High Street / Watson Street, West of High Street (Northern Highway)	19
4.1.3	High Street / Queen Street, West of High Street (Northern Highway)	20
4.2	Pedestrian Network Improvement Recommendations	21
4.2.1	Footpath Upgrades and Future Provision	23
4.2.2	Shared Path Provision on Wellington Street	23
4.2.3	High Street (Northern Highway) Pedestrian Crossings	23
4.2.4	Queen Street Pedestrian Crossings	24
4.2.5	Mid-Block Pedestrian Connections	24
4.2.6	Other Pedestrian Measures	25
<b>5</b>	<b>Cycling Provision</b>	<b>27</b>
5.1	Existing Issues & Opportunities	27
5.2	Bicycle Network Improvement Recommendations	27
5.2.1	High Street (Northern Highway) On-Road Cycle Lanes	29
5.2.2	Watson Street On-Road Cycle Lanes	29
5.2.3	Town Centre Peripheral On-Road Cycle Lanes	29
5.2.4	End-of-Trip Facilities	29
<b>6</b>	<b>Public Transport</b>	<b>31</b>
6.1	Existing Issues & Opportunities	31
6.2	Public Transport Improvement Recommendations	31
6.2.1	Existing Town Service Review	33
6.2.2	Review of Routes Proposed Within the Structure Plan	33
6.2.3	Town Centre Bus Interchange	34

<b>7</b>	<b>Road Network</b>	<b>38</b>
7.1	Existing Issues & Opportunities	38
7.1.1	Road Network Gaps	38
7.1.2	High Street (Northern Highway) Retail Strip Service Road Access	38
7.2	Road Network Improvement Recommendations	40
7.2.1	High Street (Northern Highway) and Watson Street Capacity upgrade	42
7.2.2	High Street (Northern Highway) (High Street) Service Roads	42
7.2.3	Peripheral Road Network	43
7.2.4	Intersection Upgrades	43
7.2.5	Queen Street	44
7.2.6	Wellington Street	45
7.2.7	King Street	46
7.2.8	Additional Network Connections	46
<b>8</b>	<b>Car Parking and Loading Areas</b>	<b>47</b>
8.1	Existing Parking Provision and Utilisation	47
8.2	Proposed Parking Provision	47
8.3	Loading Areas	48
<b>9</b>	<b>Integration of Town Centre Core Precinct Transport Recommendations</b>	<b>50</b>
9.1	Overview	50
9.2	Watson Street and High Street Recommendations	50
9.3	Queen Street and High Street Recommendations	52
<b>10</b>	<b>Implementation Plan</b>	<b>54</b>
10.2	Pedestrian Network Recommendations	54
10.3	Cycle Network Recommendations	55
10.4	Public Transport Network Recommendations	56
10.5	Road Network Recommendations	56
10.6	Car Parking Recommendations	58

## Appendices

Appendix A	Wallan Town Centre Access and Movement Plan – Background Report (April 2016)
Appendix B	Indicative Road Cross Sections

## Figures

Figure 2-1	Site Location	2
Figure 2-2	Wallan Town Centre UDF Study Area	3
Figure 2-3	The 20 Minute Neighbourhood Concept	4
Figure 2-4	The 20 Minute Neighbourhood Concept – Plan Melbourne Refresh	5
Figure 2-5	Wallan Structure Plan Excerpt – Future Land Uses	8
Figure 2-6	Wallan Structure Plan Excerpt – High Street (Northern Highway) Concept Plan	9
Figure 2-7	Wallan Structure Plan Excerpt - Future Peripheral Vehicle Movement Plan	10
Figure 3-1	Wallan Town Centre Structure Plan and UDF Study Areas	11
Figure 3-2	Existing Transport Network	13
Figure 3-3	Existing Key Land Uses	14

Figure 3-4	Proposed Land Use Precincts	16
Figure 4-1	Proposed Pedestrian Network	22
Figure 5-1	Proposed Cycle Network	28
Figure 6-1	Public Transport Interchange Options	32
Figure 6-2	Potential Bus Routes in PSP	33
Figure 6-3	Bus Interchange Option 1 (Watson Street West of High Street (Northern Highway)) Concept Plan	34
Figure 6-4	Bus Interchange Option 2 (Watson Street East of High Street (Northern Highway)) Concept Plan	35
Figure 6-5	Bus Interchange Option 3 (Wellington Street at Watson Street) Concept Plan	36
Figure 6-6	Bus Interchange Option 4 (Wellington Street at Watson Street) Concept Plan	37
Figure 7-1	Proposed Road Network	41
Figure 8-1	Proposed car Park and Access Provision	49
Figure 9-1	Watson Street / High Street Improvement Recommendations	51
Figure 9-2	Queen Street / High Street Improvement Recommendations	53

DRAFT

# 1 Introduction

---

## 1.1 Overview

Mitchell Shire Council (Council) is currently preparing a Masterplan and Urban Design Framework (UDF) for Wallan Town Centre. Cardno Victoria Pty Ltd (Cardno) has been engaged to prepare an Access and Movement Plan to inform the Town Centre Masterplan and UDF. The Wallan Town Centre Master Plan builds on the Wallan Structure Plan which was adopted by Council in 2015.

The Structure Plan includes recommendations for planning controls and policies to implement land use and development objectives and strategies for the town centre and wider Wallan area through an amendment to the Mitchell Planning Scheme.

The Wallan Town Centre Masterplan will examine the town centre in more detail and establish design requirements to address a number of key issues identified during the development of the Wallan Structure Plan. These key issues include movement and access issues, hence the need for the development of this Movement and Access Plan.

## 1.2 Purpose of the Access & Movement Plan

The purpose of this Town Centre Access and Movement Plan is to inform the development of the Town Centre Masterplan and UDF.

This Access and Movement Plan further identifies the existing transport and movement issues throughout the town centre. This analysis takes into consideration the wider issues that were previously identified during the development of the Structure Plan, and also looks at more specific issues that have been identified throughout the town centre study area.

With a good understanding of these issues, a number of improvement measures for each mode of transport have been identified and recommended for consideration in the Masterplan. These measures have been developed in an integrated manner, ensuring that all modes of transport have been considered in an appropriate way and that they complement each other throughout the town centre.

The development of the improvement measures have also considered the strategic context as identified in the Structure Plan, and through considerable consultation with key stakeholders including Mitchell Shire Council officers, VicRoads and Public Transport Victoria (PTV). It is important that whilst connectivity and amenity within the immediate town centre area is improved to cater for the existing and future demands, these improvements also complement other measures being considered for the wider connecting transport network.

## 2 Background

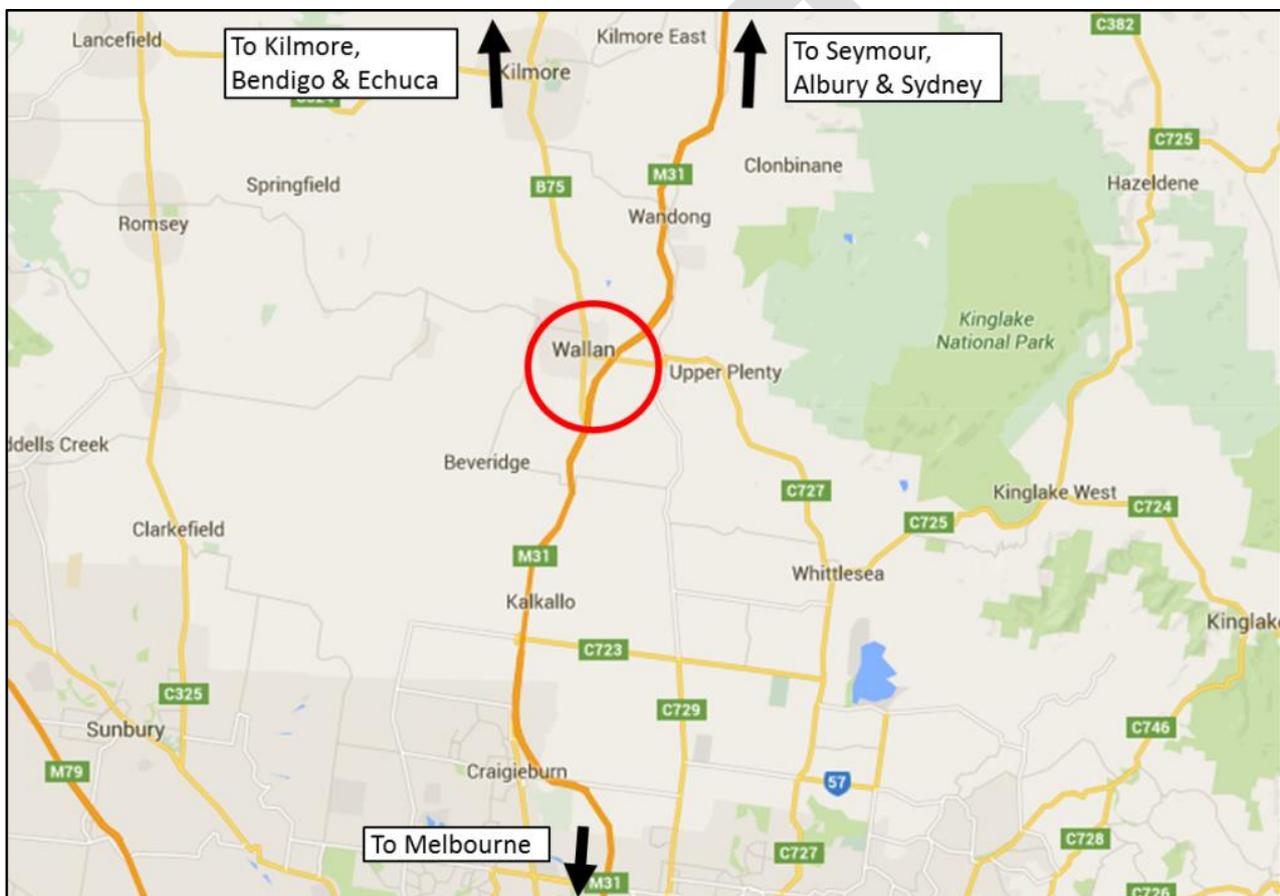
### 2.1 Study Area Location and Access

Wallan is located on High Street (Northern Highway), immediately off the Hume Freeway approximately 45km north of Melbourne. The town centre is accessed from the south via north facing slip roads on the Hume Freeway to High Street (Northern Highway), and also from the east via north facing slip roads on the freeway. It is accessed from Kilmore to the north via High Street (Northern Highway).

Wallan is also accessible by train, with a rail station located approximately 2.5 kilometres to the east of the town centre.

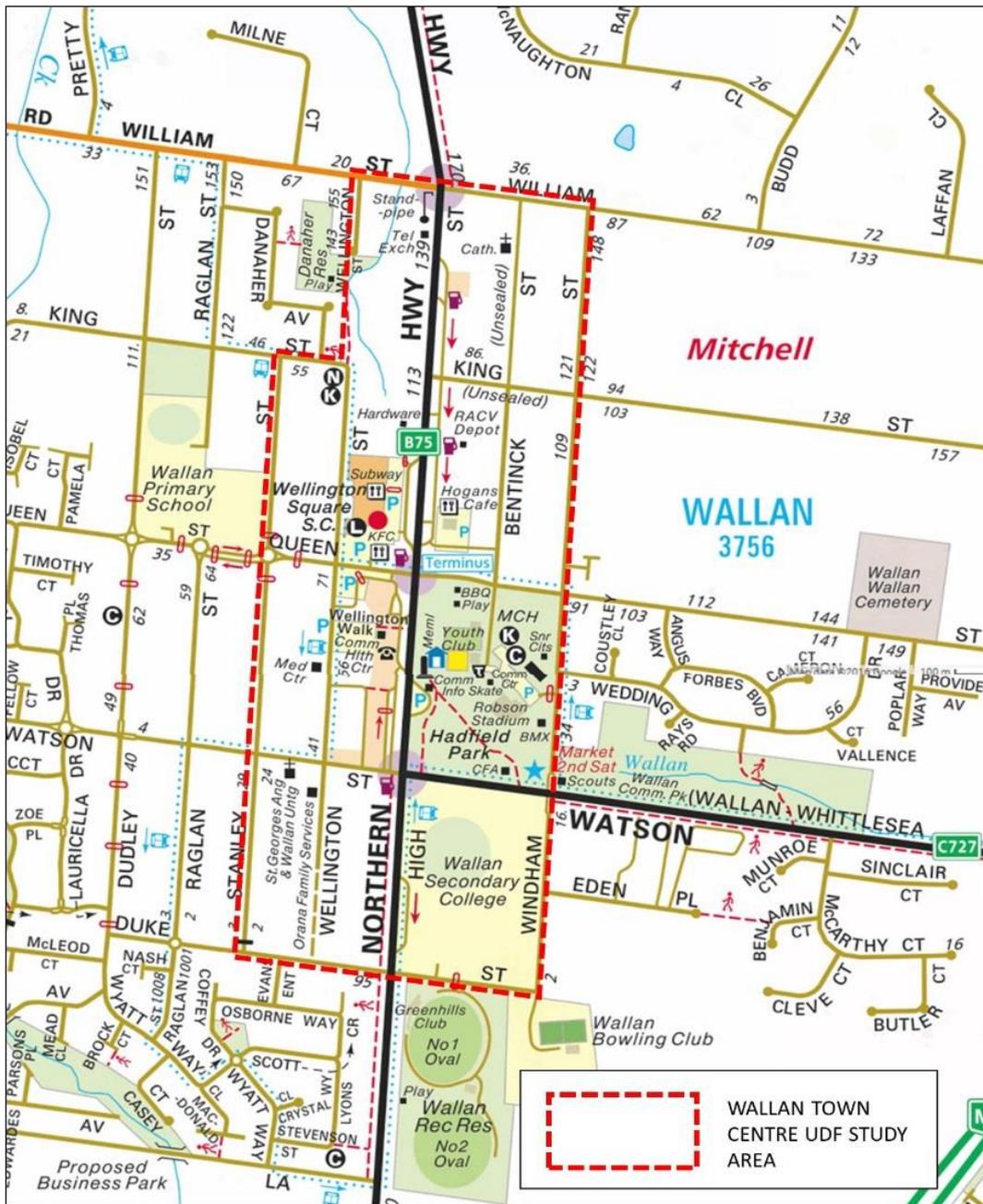
Figure 2-1 shows the location of Wallan within the region and in relation to the strategic road network.

**Figure 2-1 Site Location**



The Wallan Town Centre UDF study area is generally bounded by William Street in the north, Windham Street in the east, Duke Street in the south and Stanley Street and Wellington Street in the west. The study area boundary is shown in Figure 2-2.

Figure 2-2 Wallan Town Centre UDF Study Area



## 2.2 Policy Context

Wallan is located just within the northern boundary of the former Growth Area Authority (GAA)'s Northern Growth Corridor, and is therefore subject to the key policy summarised in the following sections.

### 2.2.1 The Transport Integration Act (2010)

The Transport Integration Act (the Act) came into effect on 1 July 2010, with the purpose of creating a framework for the provision of an integrated and sustainable transport system in Victoria. The Act sets out six transport objectives as follows:

- > Provide a means by which persons can access social and economic opportunities to support individual and community wellbeing;
- > Facilitate economic prosperity;
- > Actively contribute to environmental sustainability;

- > Provide for the effective integration of transport and land use and facilitate access to social and economic opportunities;
- > Facilitate network-wide efficient, coordinated and reliable movements of persons and goods at all times; and
- > Be safe and support health and wellbeing.

In essence, the Act aims to ensure all Department stakeholders work towards a common goal to provide an integrated and sustainable transport system. Departments and agencies are bound by the Act and are therefore required to have regard to the transport system objectives and decision-making principles when making decisions and exercising powers.

### 2.2.2 Plan Melbourne (2014)

*Plan Melbourne* is the current Metropolitan Planning Strategy, and was developed by the State Government and adopted in May 2014. It is an integrated land use and transport plan aimed at guiding the way the city will grow and change over the next 40 years. It is a strategy to house, employ and connect more people to jobs and services closer to where they live. In terms of transport related objectives, *Plan Melbourne* indicates that it will “provide an integrated transport system connecting people to jobs and services, and goods to market”.

*Plan Melbourne* aims to provide good-quality neighbourhood travel options to help people reach a wide range of local services and activities within 20 minutes, supporting social inclusion and well-being. The concept of a 20-minute neighbourhood as outlined in *Plan Melbourne* is illustrated in Figure 2-3.

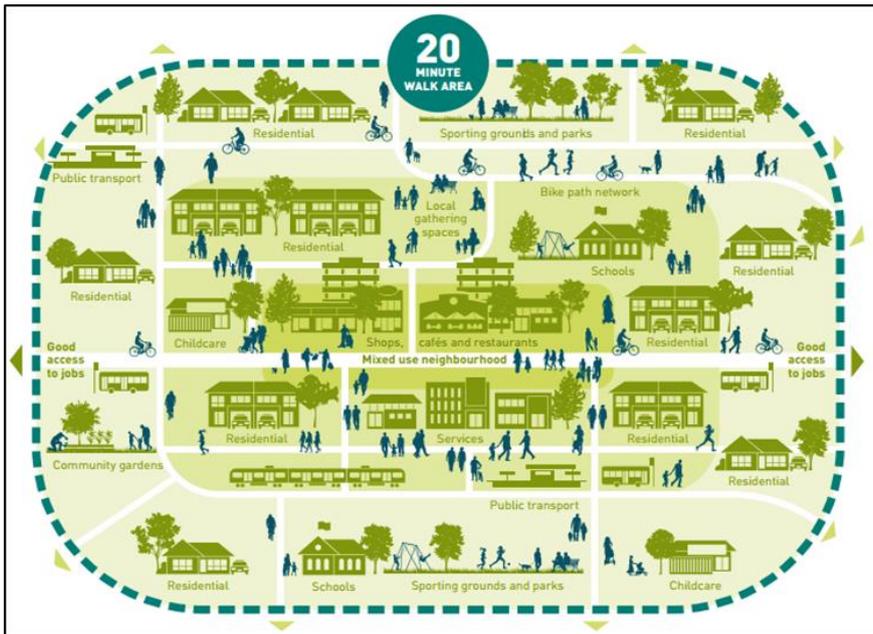
**Figure 2-3 The 20 Minute Neighbourhood Concept**



Based on the above, the future development of the Wallan Activity Centre must include planning for access via all transport modes and promote the use of sustainable transport modes (i.e. walking, cycling and public transport) as a means of access.

*Plan Melbourne* is currently undergoing a ‘refresh’, with further review being taken of the 20 minute neighbourhood concept as part of the refresh. In particular, the *Plan Melbourne Refresh Discussion Paper* (Oct 2015) highlights that the 20 minute neighbourhood should refer to a 20 minute walking distance rather than to a 20 minute car journey. This concept further encourages the densification of communal activities and services, as illustrated in Figure 2-4.

**Figure 2-4 The 20 Minute Neighbourhood Concept – Plan Melbourne Refresh**



### **2.2.3 Metropolitan Planning Authority (MPA) (Former Growth Areas Authority)**

#### **2.2.3.1 Northern Growth Corridor Plan**

The North Growth Corridor Plan (NGCP) was prepared by the former Growth Areas Authority and facilitated the expansion of the Urban Growth Boundary (UGB). It identifies the Wallan Area within a 'logical inclusion zone' and designated Wallan as a Principal Town Centre.

As a Principal Town Centre, the NGCP designates Wallan as a regional centre which would service the wider growth area and be well serviced by heavy rail, as well as multiple public transport routes, arterial roads and regional cycling and trail networks.

The NGCP seeks to enhance the public transport network with new rail stations along the Sydney-Melbourne rail line supported by a series of high capacity public transport services which will connect substantial parts of the corridor to higher order town centres and to stations along the heavy rail corridor.

Specific to Wallan, the NGCP notes that development in the area will have a significant impact on the character and functionality of the Wallan township. The NGCP notes that Wallan will require good transport connections to the services and facilities planned in the North Growth Corridor. It also suggests that the township can be linked to the wider growth area via public transport links into the Aitken Boulevard Principal Public Transport Network (PPTN) and the Sydney – Melbourne rail line.

#### **2.2.3.2 Logical Inclusions Process**

The Logical Inclusions Process was completed in June 2012 and resulted in Wallan being included in the UGB with support from Council.

### **2.2.4 Mitchell Shire Planning Scheme**

The Mitchell Shire Planning Scheme notes that planning should ensure an integrated and sustainable transport system. The network should provide access to social and economic opportunities, facilitate economic prosperity, contribute to environmental sustainability, coordinate reliable movements of people and goods, and should be safe.

Key transport strategies outlined by the Planning Scheme include:

- > Ensuring access is provided to developments in accordance with forecast demand, taking advantage of all available modes of transport and to minimise adverse impacts on existing transport networks and the amenity of surrounding areas;

- > Coordinating improvements to public transport, walking and cycling networks with the ongoing development and redevelopment of urban area;
- > Concentrating key trip generators such as higher density residential development in and around Central Activities Districts, Principal, Major and Specialised Activity Centres on the Principal Public Transport Network;
- > Requiring integrated transport plans to be prepared for all new major residential, commercial and industrial developments;
- > Requiring that substantial increases in activity in employment corridors are connected to the Principal Public Transport Network;
- > Providing routing, bus stop and interchange arrangements for public transport services in new development areas; and
- > Providing safe, convenient and direct pedestrian and cycling access to activity centres, public transport interchanges and other strategic redevelopment sites.

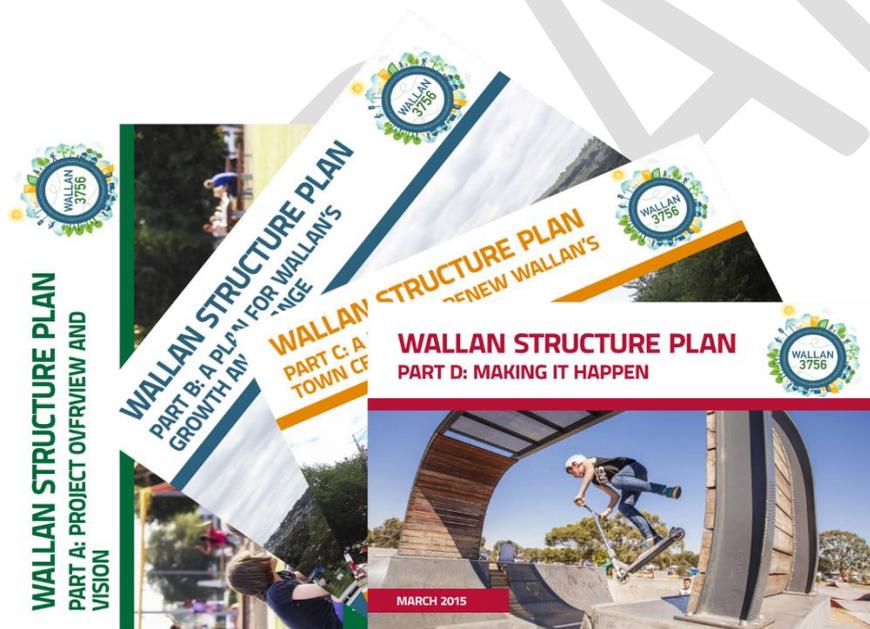
## 2.3 Wallan Structure Plan

### 2.3.1 Overview

The Wallan Structure Plan was adopted by Council in December 2015 and outlines the vision for Wallan as it grows from the current population of 10,000 people to 50,000 people in the future.

The Structure Plan sets a clear framework for the future growth of the township and aims to support sustainable growth of the town while retaining aspects of Wallan's 'country town' character.

The Structure Plan forms the basis from which this Town Centre Access and Movement Plan is developed.



### 2.3.2 Key Directions

'Part B: A Plan for Wallan's Growth and Change' of the Structure Plan outlines Directions to guide the growth of the township. The key transport related direction under this section of the Structure Plan is summarised as follows:

#### **Direction B4 - Ensure people can move easily and safely throughout Wallan**

- > A connected network of walking and cycling paths and trails that follows open space corridors and connects residents to a variety of destinations across Wallan is identified;
- > The Structure Plan recommends improvements to existing key streets within Wallan that form a key part of the pedestrian network;

- > A future bus network that improves access to existing neighbourhoods and ensures good access to future neighbourhoods is identified; and
- > The Structure Plan outlines a future road network that establishes a clear hierarchy of vehicle movements.

'Part C: A Plan To Renew Wallan's Town Centre' of the Structure Plan outlines Directions to guide the growth of the township. The key transport related directions under this section of the Structure Plan are summarised as follows:

**Direction C1 – Encourage a healthy mix of land uses that foster prosperity and activity**

- > Aims to provide a future land use scenario that will cater for the anticipated population growth whilst facilitating ease of movement within the town centre.

**Direction C2 - Make High Street (Northern Highway) a Great 'Country Town' Main Street**

- > Recommendations for future improvements to High Street (Northern Highway) are provided. These improvements include additional pedestrian crossings across the Highway, pedestrian priority at intersecting side streets, and retention of the Avenue of Honour in future designs.

**Direction C3 - Transform Wallan's shopping strip into a vibrant and engaging public space**

- > The Structure Plan provides scenarios for the reconfiguration of the shopping area on the west side of High Street (Northern Highway), north of Watson Street and south of Queen Street.
- > These scenarios aim to provide for an improved experience for pedestrians including wider footpaths, additional tree planting and potential public plaza spaces. An additional master planning process is recommended for this precinct (Priority Project 2).

**Direction C4 - Encourage a town structure that supports potential change and redevelopment.**

The Structure Plan proposes a circulation road around the periphery of the town centre, which feeds vehicles into car parks at the rear of shops and eases vehicle congestion along High Street (Northern Highway).

**2.3.3 Priority Projects**

'Part D: *Making it Happen*' of the Structure Plan outlines six priority projects aimed at guiding the transformation of Wallan.

An overview of **Priority Project 2 – Town Centre Master Plan and Urban Design Framework** is detailed in the Structure Plan as follows:

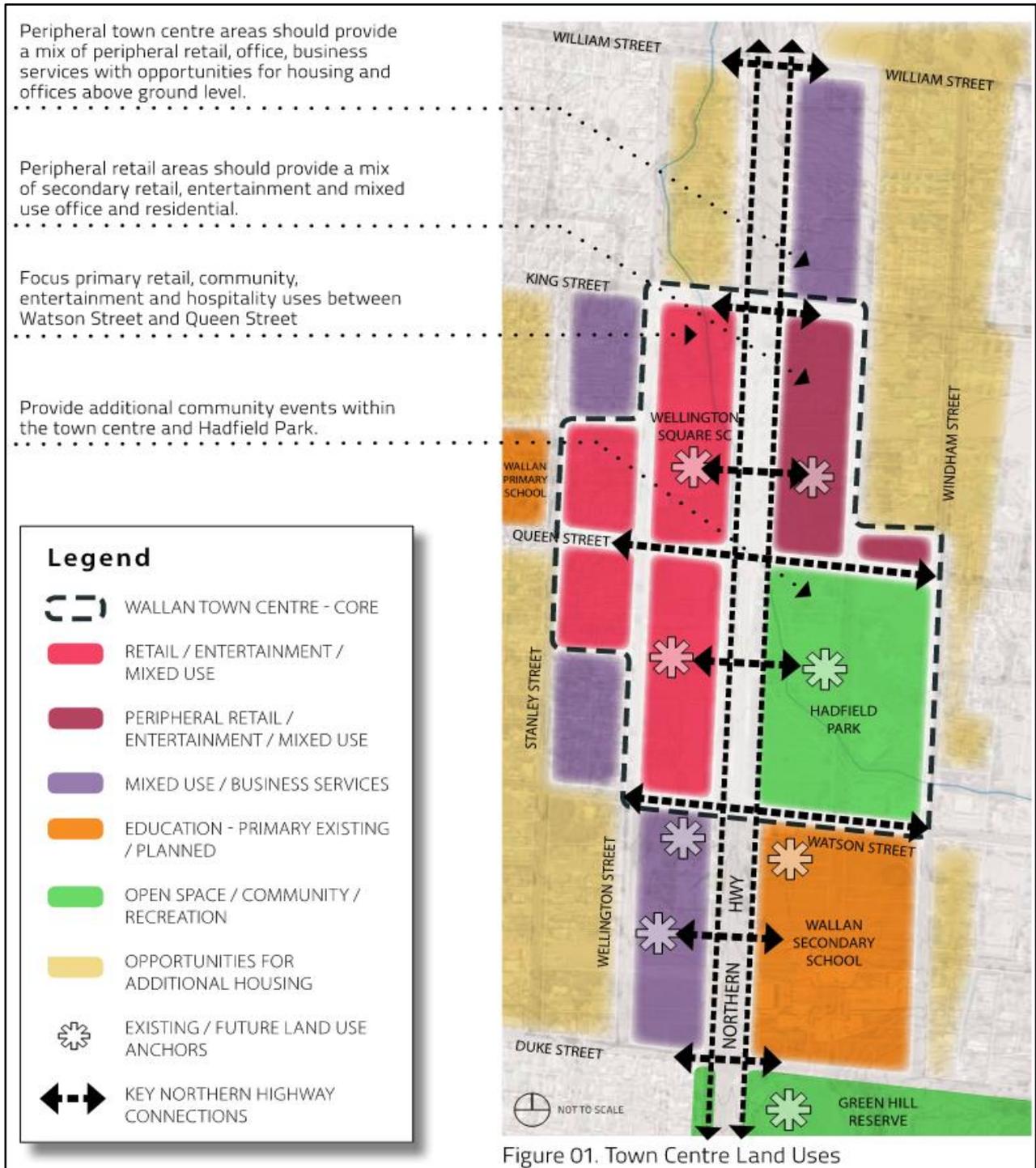
*"The development of the town centre emerged as a critical success factor during the preparation of the structure plan. The Master Plan and Urban Design Framework will examine the town centre in closer detail and establish requirements for the design of buildings as well as for public areas. The purpose is to provide clear expectations to the market in terms of the expected quality of design before any rezoning takes place."*

Key outcomes to be achieved through Priority Project 2 include the following transport related outcomes:

- > If the VicRoads proposal to duplicate High Street (Northern Highway) is required, ensure that it is designed to respond to its town centre context and provide a high level of pedestrian amenity; and
- > Develop a secondary vehicle circulation network around the town centre (which also considers streets outside the core of the town centre area).

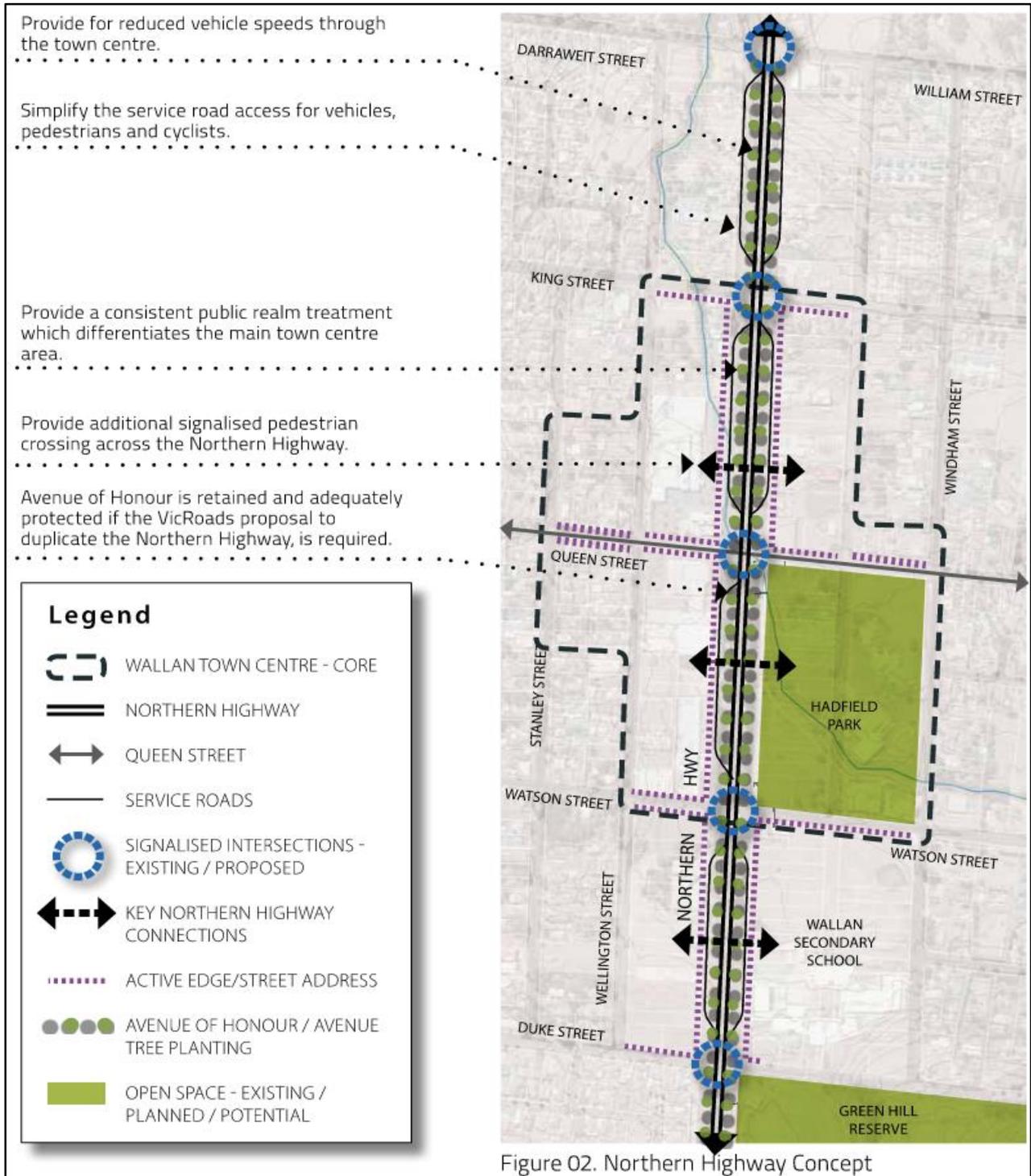
With respect to the proposed land use, Figure 1 of Part C of the Structure Plan which is reproduced in Figure 2-5 outlines the anticipated future land uses within the town centre and key east-west connections across High Street (Northern Highway).

**Figure 2-5 Wallan Structure Plan Excerpt – Future Land Uses**



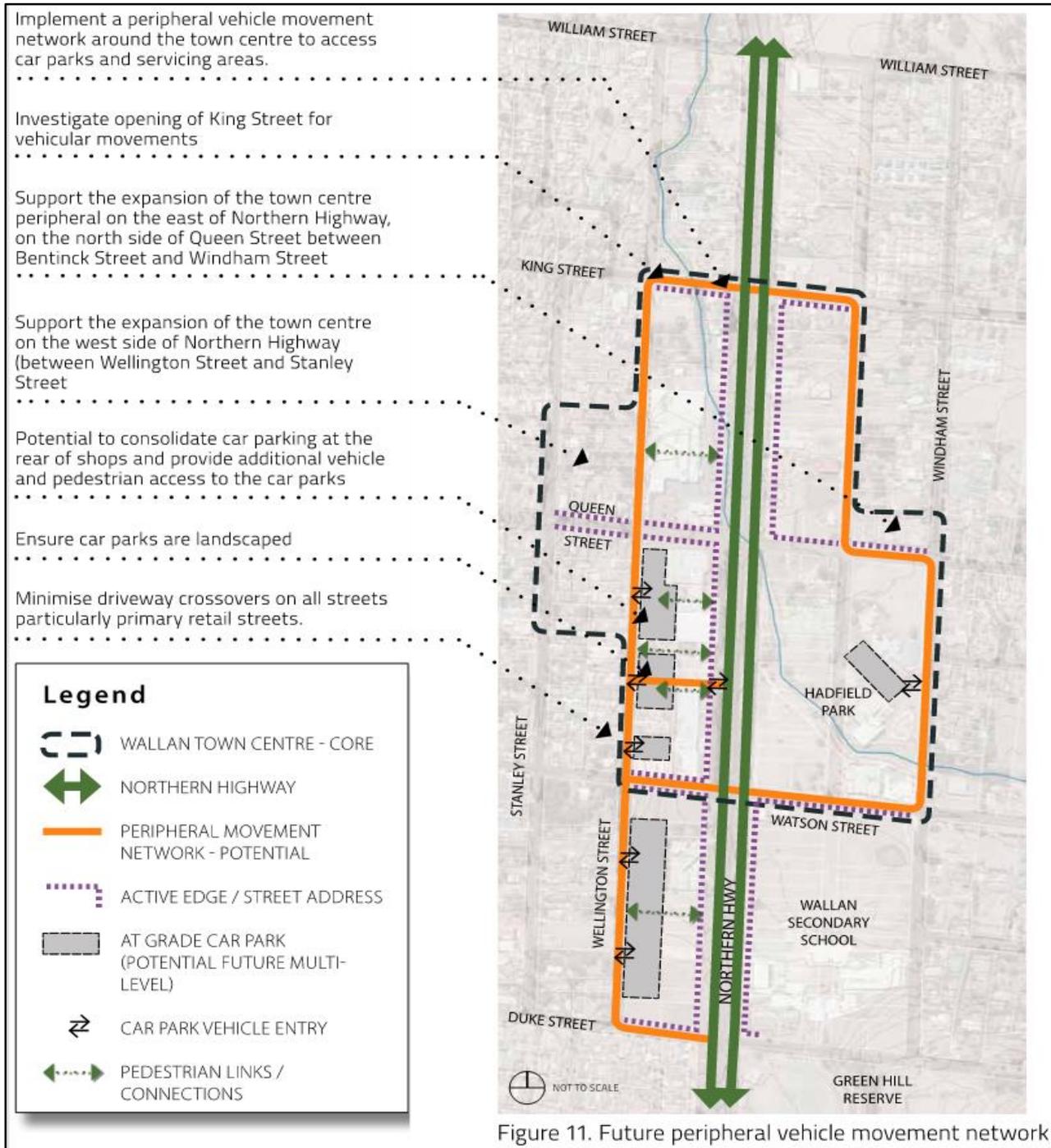
The Structure Plan includes a concept plan for High Street (Northern Highway), reproduced as Figure 2-6, which provides an indication of the locations of midblock pedestrian crossings. High Street (Northern Highway) concept plan also identifies the intersections with King Street and Duke Street as proposed signalised intersections.

**Figure 2-6 Wallan Structure Plan Excerpt – High Street (Northern Highway) Concept Plan**



The potential peripheral movement network identified by the Structure Plan is reproduced in Figure 2-7 below. The potential peripheral movement network would require the construction of King Street between Wellington Street and High Street (Northern Highway), as well as the construction of Wellington Street between Watson Street and Duke Street.

**Figure 2-7 Wallan Structure Plan Excerpt - Future Peripheral Vehicle Movement Plan**



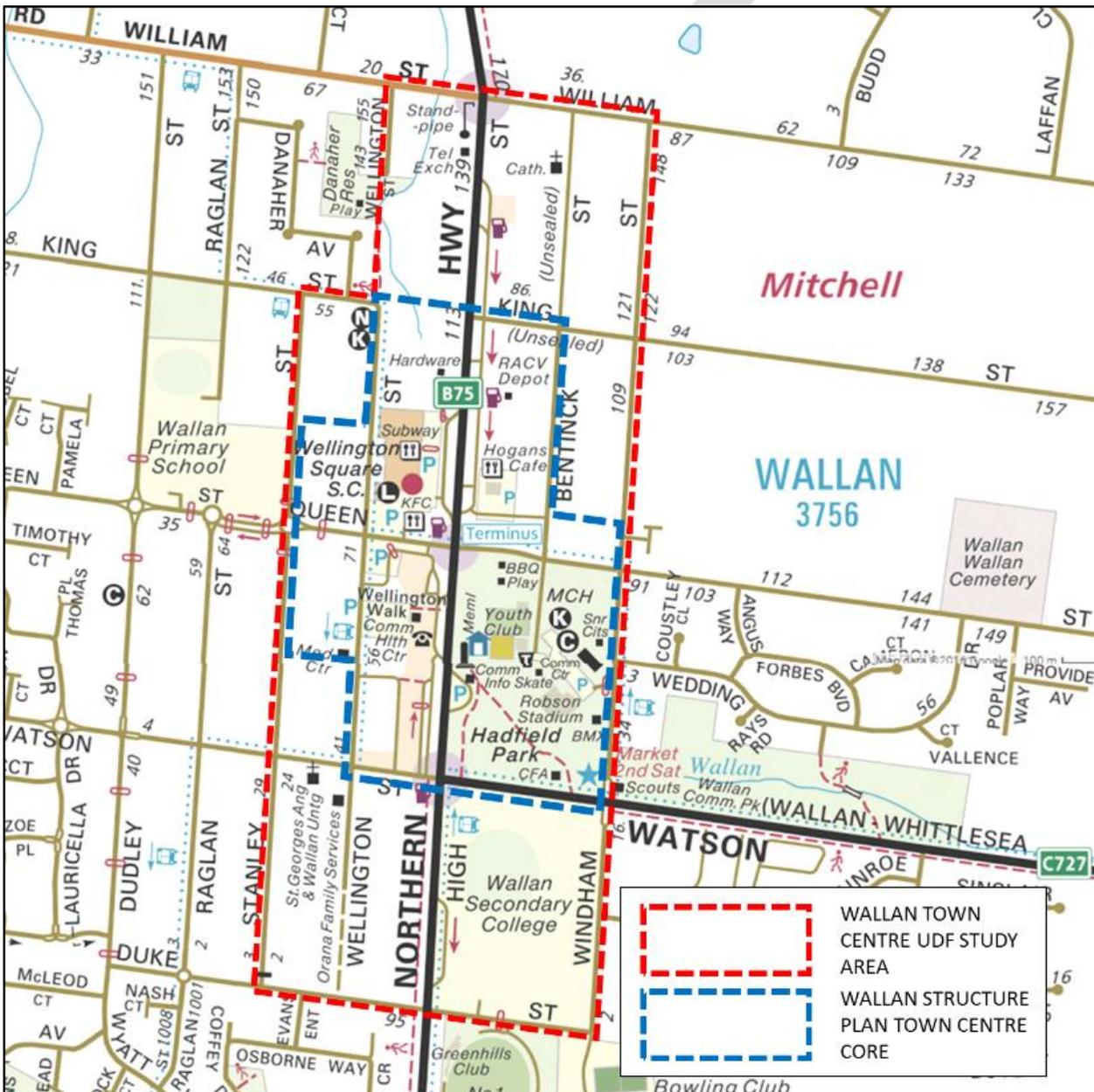
### 3 Wallan Town Centre

#### 3.1 Introduction

As discussed, a key element of the Wallan Structure Plan is to renew and revitalise the town centre area in a manner that will provide a vibrant retail and commercial hub in order to encourage and support the expected growth in the region. The development of the town centre will also maintain and enhance the access to the open space and educational facilities within the town centre.

The Wallan Town Centre Masterplan and UDF area has been expanded from the core town centre boundary identified in the Structure Plan, as shown in Figure 3-1.

**Figure 3-1 Wallan Town Centre Structure Plan and UDF Study Areas**



This section outlines the existing transport network and land uses within the study area, and then briefly describes the proposed land use precincts as proposed under the Wallan Town Centre Masterplan and UDF.

### 3.2 Existing Transport Network

The Wallan town centre retail and commercial area is currently located along High Street (Northern Highway) between Duke Street and King Street.

The strategic road links accessing the town centre are Northern Highway (B75) which becomes High Street as it enters Wallan, and Wallan-Whittlesea Road (B727), that becomes Watson Street as it enters Wallan. The remaining streets within and surrounding the town centre are Local Access Streets, with the exception of William Street west of High Street (Northern Highway), which is classified as a Connector Street.

Wallan is served by a regional V/Line rail service that terminates at Southern Cross station in Melbourne's CBD. Trains run 7 days a week, with 1 service per hour, increasing to every 30 minutes during the weekday peak periods. Wallan station is located off Wallan – Whittlesea Road, approximately 2.5 kilometres east of the town centre.



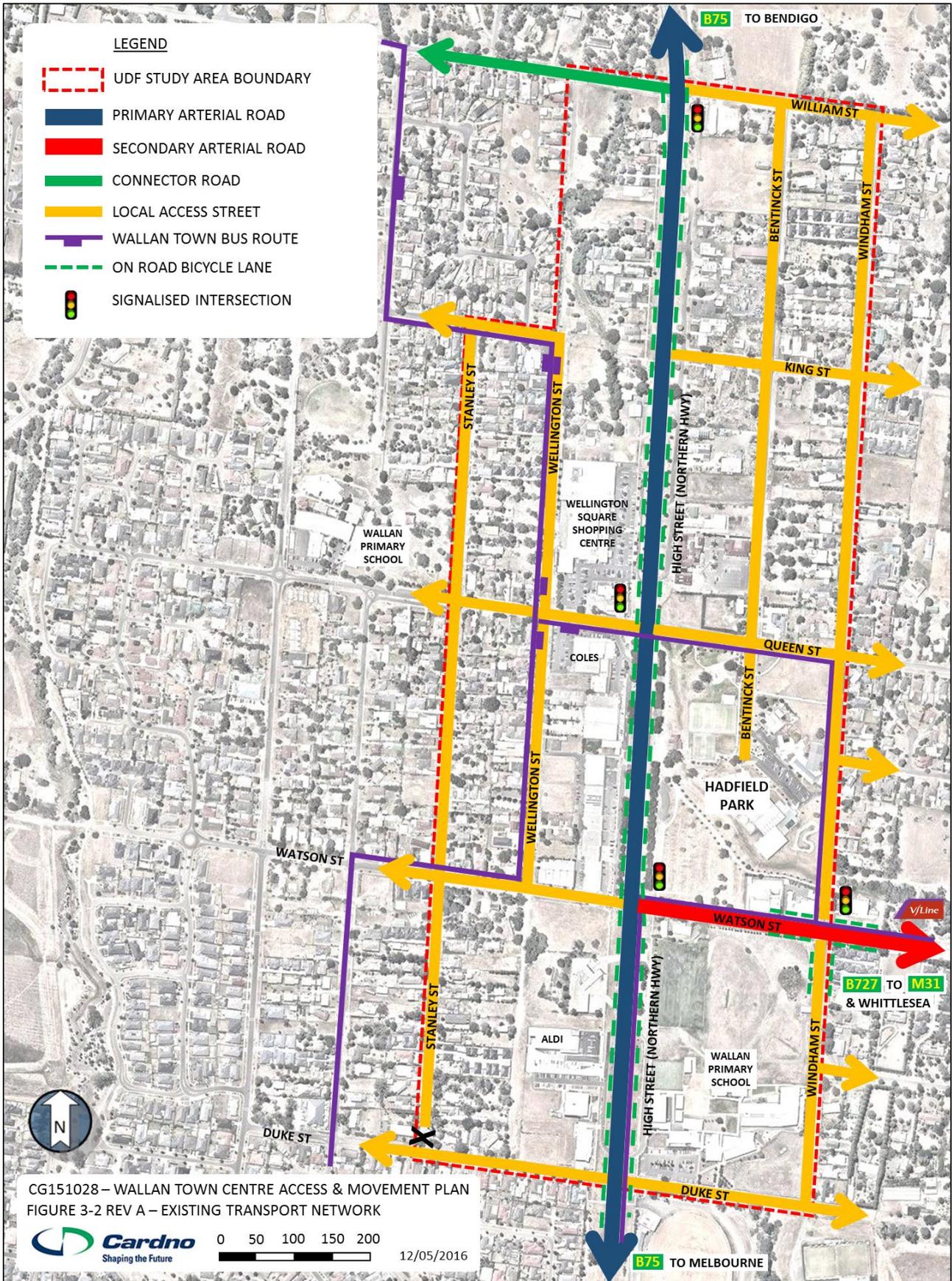
Two rural V/Line bus services operate once a day, Monday to Friday, with one service between Melbourne and Deniliquin, and the other between Melbourne and Barham. A local town bus service also runs Monday to Friday during the morning and evening peak periods, generally coinciding with the 30 minute peak hour train intervals.

On-road cycle lanes with advance stop lines are provided at the signalised intersections along High Street (Northern Highway) through the town centre, and also on Watson Street east of High Street (Northern Highway). Otherwise, hard shoulders are provided for cyclists along High Street (Northern Highway) north and south of the town centre.

Pedestrian facilities are limited within areas of the town centre, with certain streets having no footpaths or a path only on one side of the road. Connectivity is generally poor, particularly across High Street (Northern Highway) with crossings only provided at the signalised intersections.

Figure 3-2 identifies the existing transport network around Wallan town centre, with a more detailed analysis provided in the Wallan Town Centre Access and Movement Plan – Background Report (April 2016), included as Appendix A to this report.

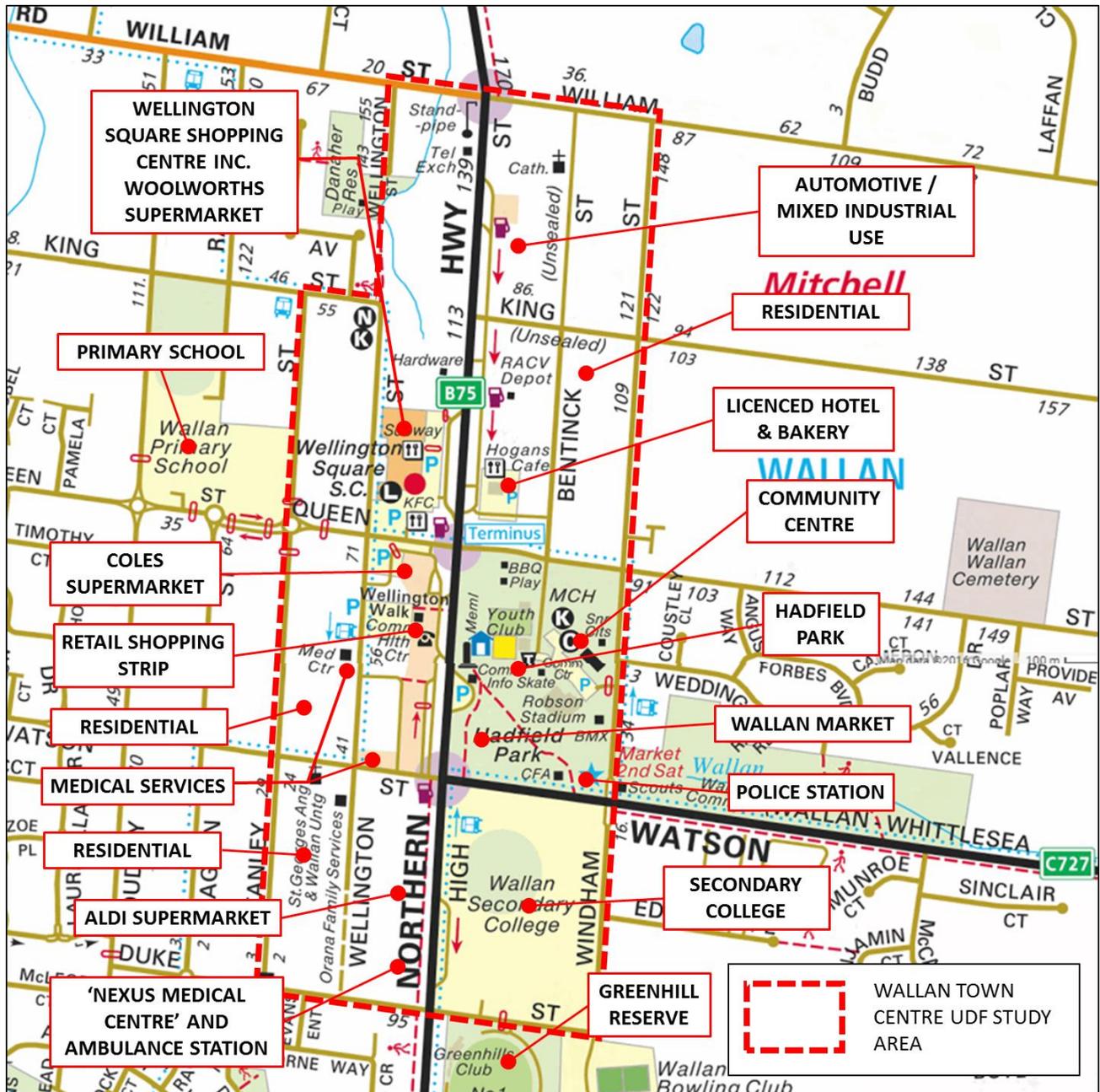
**Figure 3-2 Existing Transport Network**



### 3.3 Existing Land Use

The town centre includes a range of land uses of varying intensities. The retail offerings of the town centre are primarily located on the western side of High Street (Northern Highway). Hadfield Park, the Wallan Community Centre and Wallan Secondary College are located on the eastern side of High Street (Northern Highway). Existing land uses are highlighted on Figure 3-3.

Figure 3-3 Existing Key Land Uses



Key land uses in the Wallan Town Centre include:

- > Educational facilities – Wallan Secondary College;
- > Retail offerings – Wellington Square Shopping Centre that includes Woolworths, Strip retail, and standalone Aldi and Coles Supermarkets;
- > Medical / Health Care – Wallan Medical Centre, Wallan Pharmacy, Nexus Primary Health;
- > Government uses – Mitchell Shire Council Office, Wallan Police Station;
- > Industrial/commercial area – low level strip automotive;

- > Environmental values and community/recreational assets – Hadfield Park;
- > Residential land (low density);
- > Dining/Entertainment – Hogan’s Pub, Pretty Sally Bakery, proposed family restaurant (north of Queen Street); and
- > Civic uses – Wallan Multi-Purpose Community Centre, R B Robson Stadium.

The Wallan Scout Group Market takes place on the second Saturday of each month, and is held in the south and west of Hadfield Park.

Notable land uses and trip generators further afield include:

- > Wallan Primary School (200m east of the town centre); and
- > Wallan Recreational (Greenhill) Reserve (immediately south of the town centre).

The areas surrounding the town centre are typically low density residential lots, with medium density developments becoming increasingly prevalent.

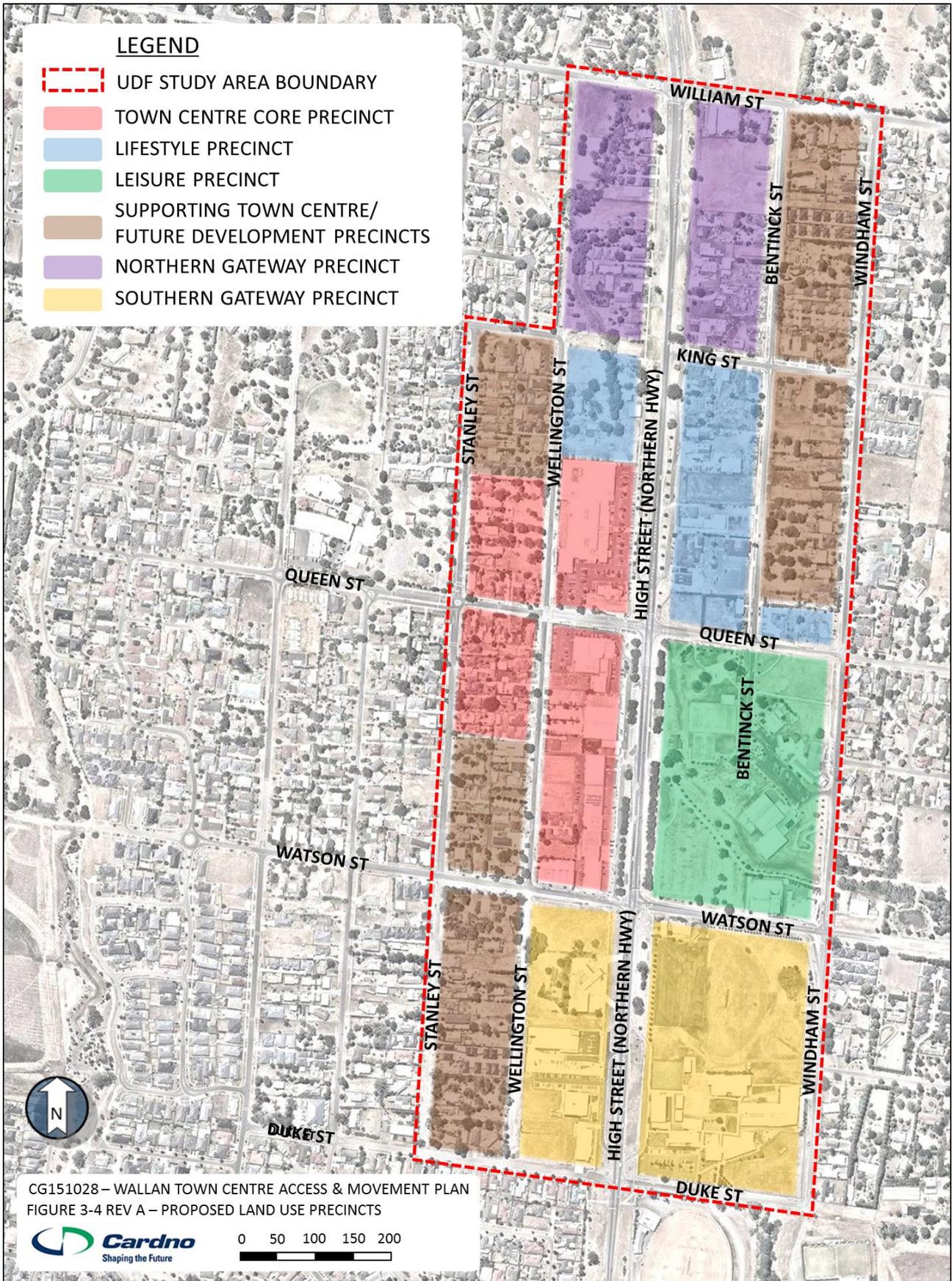
### **3.4 Future Land Use and Town Centre Precincts**

Part C of the Wallan Structure Plan identifies a number of land use ‘Precincts’, based on a number of factors, including:

- > The existing land use;
- > Potential for and the nature of new development;
- > Existing and potential street network and access options;
- > Integration between land use precincts and neighbouring residential areas; and
- > Consistency in general character (existing and potential future)

The precincts that were identified in the Structure Plan have been revised and expanded in the development of the Wallan Town Centre Masterplan and UDF, as shown in Figure 3-4.

Figure 3-4 Proposed Land Use Precincts



The following Town Centre Precincts have been identified in the development of the Masterplan and UDF, and the access and movement proposals throughout all precincts are described in the following sections, with the integration of these proposals in the Core Town Centre Precinct described in further detail in Section 9 of this report.

**Town Centre Core Precinct** – is focused on the existing retail areas along the western side of High Street (Northern Highway), and proposed retail and commercial opportunities along Queen Street, between High Street (Northern Highway) and Stanley Street.

**Lifestyle Precinct** – is located either side of High Street (Northern Highway), north of the Town Centre Core Precinct to King Street. It is intended to provide for a variety of land uses including commercial, larger scale retail, dining and entertainment, leisure, and medium density residential where appropriate. It is also intended to provide greater vehicle and pedestrian permeability through this precinct.

**Leisure Precinct** – focuses on Hadfield Park and its frontages to the surrounding road network. The park currently provides facilities for formal and informal recreation purposes, with facilities accessed off both Windham and Bentinck Streets. There are a number of pedestrian paths through the park, connecting all frontages. A Saturday Market generally located in the southeast corner of the park is held every second Saturday of the month. The park will be subject to a separate Masterplan exercise as per Priority Project No. 5 identified in the Wallan Structure Plan – Part D Making it Happen.

**Northern Gateway Precinct** – is located on High Street (Northern Highway) between King and William Streets. It is intended that a high quality road frontage be provided to form a visually pleasing entry to the town through a mix of commercial sites and residential developments.

**Southern Gateway Precinct** – will play a similar role to the Northern Gateway in providing a definitive entry from the south. It is bound by Wallan Secondary College along the eastern frontage of High Street (Northern Highway), and a number of varying land uses along the western side including Ambulance Victoria, Nexus Health, Aldi, and a service station.

**Future Development Precincts** – Three additional areas have been identified for future development within the periphery of the study area as shown on Figure 3-4. The intention for these precincts is to provide a 'buffer' between the core town centre land uses and the surrounding residential areas, through land uses that would support small businesses and multi residential developments.

### 3.5 VicRoads Network Proposals

The population growth forecast in the Wallan Structure Plan the town, and further analysed in Council's 2016 Northern Growth Corridor Sequencing Study<sup>1</sup>, as well as the role that the Wallan Town Centre will play as a major activity centre in the North Growth Corridor, means that there will be substantial increase in traffic demand, particularly local traffic, within the town centre. Accordingly, proposals have been identified for capacity upgrades of arterial roads within the town centre, which will be required. The VicRoads controlled roads within the town centre are High Street (Northern Highway) and Watson Street east of High Street.

#### 3.5.1 High Street (High Street (Northern Highway))

Capacity upgrades along High Street (Northern Highway) will be required to ensure the future proofing the Wallan Town Centre Masterplan. This plan ensures that capacity upgrades are integrated with other pedestrian friendly public realm measures identified in response to the intended town centre context, and include:

- > The provision for signalised intersections at key intersections as Wallan grows and local traffic volumes grow;
- > The provision of high quality pedestrian crossing facilities – including signalised pedestrian crossings, coordinated such that vehicular traffic is not adversely impacted;
- > The staged and continuing upgrade of adjoining areas of public realm; and

<sup>1</sup> Mitchell Shire Council. 2016. *Potential Development Sequencing, Northern Growth Corridor, Final Version*. April 2016

- > The full protection of the existing Avenue of Honour between Watson Street and Queen Street, as well as extending the Avenue of Honour to the north to William Street and south to Duke Street (subject to detailed design and layout considerations).

### **3.5.2 Watson Street (east of High Street (Northern Highway))**

Capacity upgrades of Watson Street to the east of the High Street intersection in association with the construction of the Hume Freeway southern ramps will also be required.

### **3.5.3 Relevant Regional Context**

Recommendations made within this report have taken the capacity upgrades on High Street Northern Highway) and Watson Street into account, and are made to complement these proposals.

It is noted that these capacity upgrades are intended to form part of a package of regional transport network improvements, including:

- > The construction of the Hume Freeway / Watson Street Southern Ramps and associated capacity upgrade to Watson Street; and
- > The Kilmore-Wallan Bypass, on the basis of evidence which shows that a capacity upgrade will be required in the short to medium term due to the growth in local traffic volumes and subsequent demand.

## **3.6 Consideration of Proposed Transport Network Improvements**

In order to identify a coherent and integrated set of transport network improvements throughout the town centre study area, a number of factors should be taken into consideration. These include but are not limited to:

- > The existing transport network, in particular the strategic and local roles;
- > Deficiencies and opportunities for improvement around the existing transport network;
- > Existing land uses and their interaction with the surrounding transport network;
- > The nature of proposed land use options and access requirements;
- > Integration between the various modes of transport accessing the town centre;
- > Existing and proposed parking demand and provision; and
- > Proposed streetscape and public amenity throughout the various study area precincts.

The following sections identify a proposed transport network for each mode that takes into account these factors. Each section summarises the existing issues and opportunities that were previously identified and detailed in the 'Wallan Town Centre Access and Movement Plan – Background Report (April 2016)', provided as Appendix A to this report, and details a comprehensive set of measures for each mode to provide for the future development of the Wallan Town Centre.

## 4 Pedestrian Movement

### 4.1 Existing Issues and Opportunities

#### 4.1.1 Wider Study Area

The current pedestrian connectivity within the Wallan Town Centre study area and the wider network is considered to be inadequate, with footpaths provided in an ad-hoc manner. Certain streets have no footpath provision or they are provided along one side of the street only or only extend a small distance along the street in some locations.

Pedestrian crossings are provided at each of the signalised intersections, however there is often poor connectivity accessing these intersections. As the blocks are very long in nature at approximately 350 metres between intersections, mid-block connectivity is also very poor, particularly along High Street (Northern Highway). This is exacerbated by the number and layout of the service roads either side of the highway.

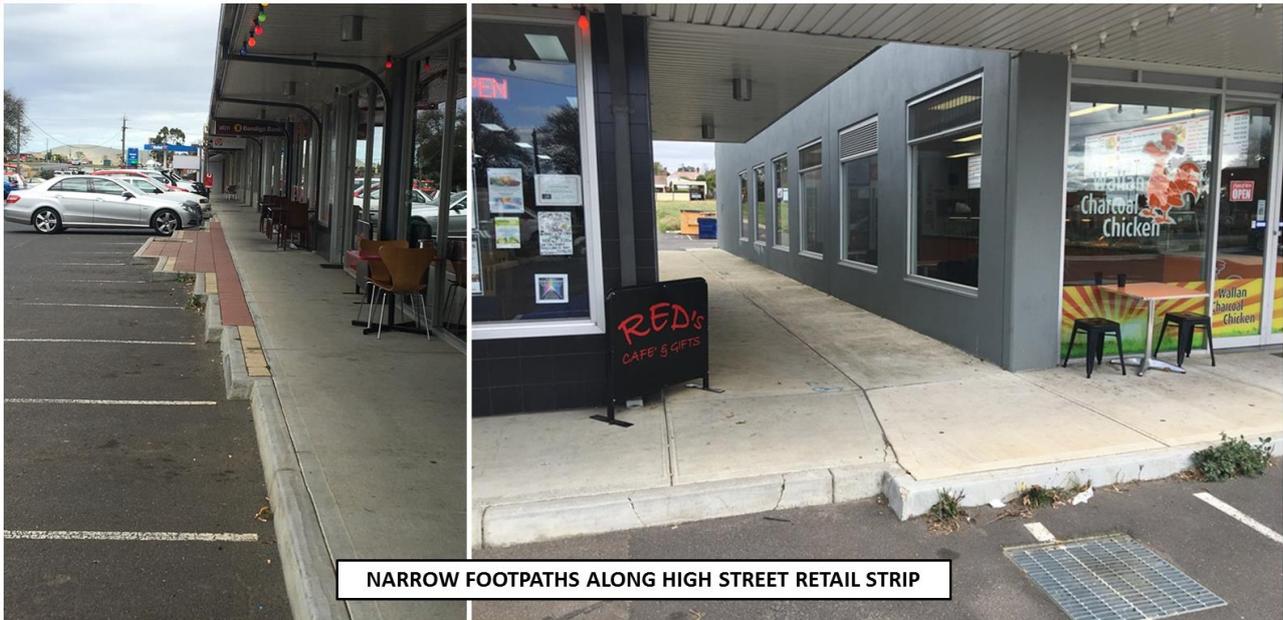


A more detailed analysis of the existing pedestrian connectivity within the study area is provided in the 'Wallan Town Centre Access and Movement Plan – Background Report (April 2016)', provided as Appendix A to this report. This analysis identified two key locations within the existing retail area to be very poor in terms of pedestrian connectivity.

#### 4.1.2 High Street / Watson Street, West of High Street (Northern Highway)

It was observed that the interface between this intersection and the retail shopping strip is poor for pedestrians. Pedestrians were observed to be subservient to a large number of conflicting vehicle movements into the service road and parking areas. These conflict points are in close proximity to the signalised intersection which may lead to drivers exhibiting reduced awareness of pedestrians.

The footpath along the frontage of the retail strip is also quite narrow and does not encourage or attract pedestrian movements from the service road and parking areas.



It was also identified that the southern side of Watson Street (between High Street (Northern Highway) and Wellington Street) is a popular route for school children, despite the absence of a footpath. This is primarily a result of the complexity and inherent safety risks of navigating the northern side of Watson Street and the retail and service road access points.

A more detailed analysis of the pedestrian connectivity at this location is provided in the 'Wallan Town Centre Access and Movement Plan – Background Report (April 2016)', provided as Appendix A to this report.

#### 4.1.3 High Street / Queen Street, West of High Street (Northern Highway)

There are currently a number of uncontrolled vehicle access conflict points to car parks and service roads immediately to the west of the signalised intersection at High Street (Northern Highway) and Queen Street. This is coupled with very poor pedestrian connectivity accessing the signal controlled pedestrian crossings at the intersection. This is particularly evident on both sides of Queen Street on the western side of High Street (Northern Highway).



Pedestrian movements through this area are not prioritised over the vehicle movements and pedestrians are in direct conflict with the numerous possible vehicle movements whilst navigating the area. This is also a particular concern for pedestrians that wish to use the signalised crossing at the intersection as there are currently very poor connections accessing the crossing. This results in pedestrians crossing Queen Street at other mid-block locations that are also in conflict with a number of uncontrolled vehicle movements.

There is a key pedestrian desire line between Coles and nearby shops to the south of Queen Street and the southern entrance to Wellington Square Shopping Centre on the northern frontage. There is currently no provision for pedestrians wishing to cross Queen Street at this location.

A more detailed analysis of the pedestrian connectivity around this area is provided in the 'Wallan Town Centre Access and Movement Plan – Background Report (April 2016)', provided as Appendix A to this report.

## **4.2 Pedestrian Network Improvement Recommendations**

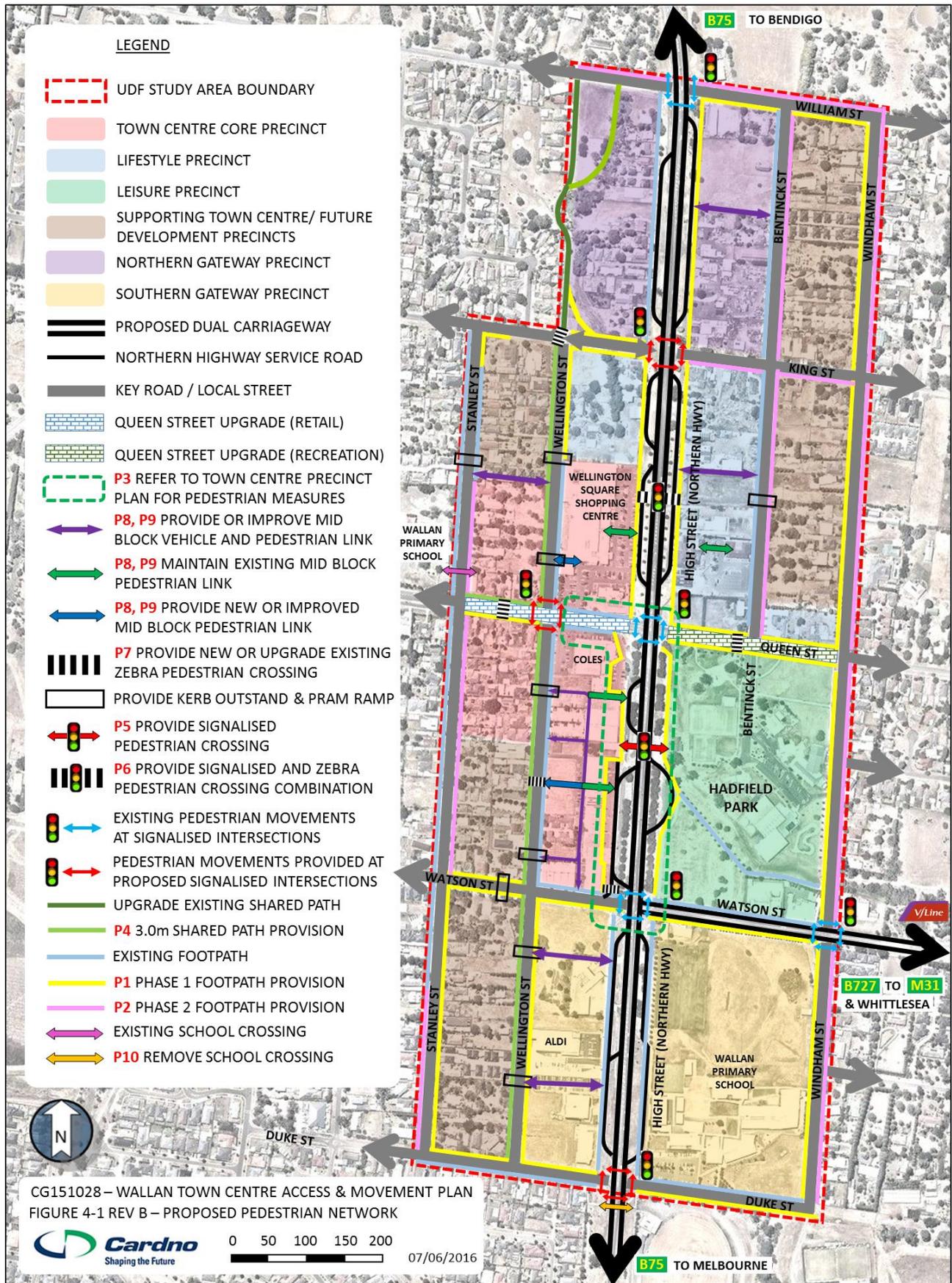
Two primary objectives have been considered in developing a set of recommendations for the pedestrian network within the study area. These being:

- 1) Providing adequate connectivity throughout the study area to facilitate pedestrian movements between the various existing and future land uses and precincts;
- 2) Ensuring the safety of pedestrians as they move throughout the study area network.

As mentioned, these recommendations have been developed ensuring that they are integrated with and complement the proposals identified for the other transport modes.

The following sub-sections identify and outline the various recommendations to provide for pedestrians to be implemented in a prioritised and staged manner as the town centre develops. These proposals have also been identified on Figure 4-1, with the High Street measures illustrated in greater detail in Section 9 of this report. The staging of implementing these recommendations is provided in the Implementation Plan provided in Section 10 of this report.

**Figure 4-1 Proposed Pedestrian Network**



#### 4.2.1 Footpath Upgrades and Future Provision

It has been identified that a significant number of street frontages throughout the study area have partial or no formal paved footpaths. As development progresses, it will become increasingly important to provide footpaths on both sides of the road on all streets throughout the study area.

It is recognised that it may not be appropriate to provide an entire footpath network in the short term. It is therefore recommended that the footpaths be provided and/or upgraded in phases, with those in and linking to the Town Centre Core Precinct and those fronting other sites that will be developed in the short to medium term be implemented as 'Phase 1'. Footpaths further away or in areas to be developed at a later stage are recommended to be implemented as 'Phase 2', unless funding can be secured earlier.

As discussed later in this report, the service road and car parking arrangements along the western side of High Street (Northern Highway) are recommended to be modified to improve the connectivity and amenity of the High Street retail area and to improve pedestrian access. It is recommended that the footpaths be widened to extend from the shop fronts to the edge of the car park kerb throughout the retail area.

- P1 Upgrade and provide new footpaths along priority 'Phase 1' street frontages**
- P2 Upgrade and provide new footpaths along 'Phase 2' street frontages as development increases**
- P3 Extend footpaths out to the realigned kerbs from the shop frontages along the High Street retail strip**

Figure 4-1 identifies those footpaths that should be upgraded or provided under each phase.

#### 4.2.2 Shared Path Provision on Wellington Street

A shared path is recommended along the length of Wellington Street, connecting the existing shared path north of King Street, south to Duke Street. There is currently a lack of footpath provision along the extent of the western side of Wellington Street, and it is also recognised that there is no cycle path facility running north south through the study area other than that on High Street (Northern Highway).

- P4 Provide a 3.0 metre shared pedestrian and cycle path along the western frontage of Wellington Street between King Street and Duke Street**

It is intended that the 3.0 metre shared path form part of the peripheral cycle network bypassing the High Street to cater for the less confident cyclist, as well as providing a pedestrian facility along the western side of Wellington Street. It is also recommended to provide a shared path branch on Queen Street, connecting Wellington Street and the primary school on the corner of Stanley Street. Figure 4-1 identifies the extent of the proposed shared path.

#### 4.2.3 High Street (Northern Highway) Pedestrian Crossings

It is recognised that the Wallan Town Centre street blocks are very long in the north-south direction at approximately 350m, and reasonably narrow east-west. Currently, pedestrian crossings are only provided at the signalised intersections at Watson Street, Queen Street and William Street.

There is currently a strong pedestrian desire line from the retail area between Watson and Queen Streets and Hadfield Park at the Free Library site. The proposed Town Centre Heart will increase the demand for an additional pedestrian link across High Street (Northern Highway) at this location. It is therefore recommended that a signalised pedestrian crossing be installed at the Town Centre Heart providing a safe connection across High Street (Northern Highway) to the Free Library Plaza and Hadfield Park as identified on Figure 4-1.

The traffic signals at the Queen Street intersection and the proposed pedestrian crossing signals on High Street (Northern Highway) will be linked to minimise delays along the highway. Traffic modelling analysis

indicates that the provision of these signals will have minimal impact on the operation of the surrounding road network.

**P5 Provide signalised pedestrian crossing across High Street (Northern Highway) between the proposed Town Centre Heart and the Free Library Plaza in Hadfield Park**

Consideration should also be given to a second signalised pedestrian crossing on High Street (Northern Highway) providing access between key land uses either side of High Street (Northern Highway) between Queen Street and King Street. There is currently an internal pedestrian crossing through the car park providing access from Wellington Square shopping mall to the footpath on High Street.

The nature of existing and future development on the eastern side of High Street (Northern Highway) will also generate a considerable demand for a controlled crossing on the highway between Queen and King Streets in the longer term. It would be recommended that in the future, signals be installed across the main highway carriageway, with zebra crossings over the service roads either side as identified on Figure 4-1.

**P6 Provide signalised pedestrian crossing across High Street (Northern Highway) mid-block between the Queen Street and King Street intersections**

It is noted that the Wallan Structure Plan provides for an additional pedestrian crossing on High Street (Northern Highway) mid-block between Watson Street and Duke Street. With the existing pedestrian signals at Watson Street and the proposed signals at Duke Street, it is suggested that an additional crossing between these two intersections is unnecessary. Students accessing the school from areas of Wallan west of the highway will walk via either Watson or Duke Street, and there will be minimal desire to access the west side of the highway mid-block with the land use at that location.

**4.2.4 Queen Street Pedestrian Crossings**

Queen Street west of High Street (Northern Highway) is intended to become a very active retail and commercial precinct. There is an existing pedestrian desire line over Queen Street between the southern entrance to Wellington Square on the north and Coles supermarket on the south sides of the road. It is recognised that the nature and layout of the proposed redevelopment of Queen Street in this location will increase the pedestrian demand to cross Queen Street. Whilst there will be signalised crossings at High Street (Northern Highway) and Wellington Street intersections, the mid-block desire line will continue to exist. With this in mind, it is recommended to provide pram ramps and a safe pedestrian refuge on Queen St immediately to the west of the Wellington Square car park entrance.

It is also recommended that a crossing facility be provided on Queen Street east of High Street (Northern Highway), which will provide a formal connection between the retail / leisure / residential land uses in the Lifestyle Precinct on the northern side of Queen Street to Hadfield Park on the southern side.

Similarly, it is recommended that a pedestrian crossing facility be provided on Queen Street between Wellington and Stanley Streets, at the location of the existing speed hump to provide additional connectivity between key land uses either side of the road.

**P7 Provide a formal mid-block pedestrian crossing on Queen Street between Stanley Street and Wellington Street and between High Street (Northern Highway) and Bentinck Street. Provide an informal pedestrian access between Wellington Street and High Street (Northern Highway)**

These Queen Street crossing location recommendations are as identified on Figure 4-1, with the location of the pedestrian crossing between Wellington Square and Coles illustrated in more detail on Figure 9-2 in Section 9 of this report.

**4.2.5 Mid-Block Pedestrian Connections**

There are currently two mid-block pedestrian connections through the block bound by High Street (Northern Highway), Queen Street, Wellington Street, and Watson Streets. These connections provide access between the High Street retail area and the car parking areas within the western side of the block. Otherwise there is

currently very little permeability for pedestrians through other blocks within the study area. Pedestrian permeability throughout the town centre is required in order to encourage pedestrian activity rather than short car journeys, which will assist in reducing congestion and provide health benefits.

It is therefore recommended that mid-block connections be provided in the following locations, with appropriate crossing facilities provided where these connections meet the road. These locations are identified on Figure 4-1.

**High Street (Northern Highway) to Wellington Street, between Watson and Queen Streets** – It is proposed to maintain the through links, but also to further improve or provide a formal extension through to Wellington Street as part of the future car park extension and built form proposals along Wellington Street.

These connections will provide access from Wellington Street and beyond to High Street, either side of the proposed Town Centre Heart. It would be recommended to provide a zebra pedestrian crossing on Wellington Street in line with the proposed Scaffidi Way link to allow a prioritised crossing mid-block. It would also be recommended to provide a less formal kerb outstand and pram ramp crossing arrangement that lines up with the Wellington Walk pedestrian link to cater for pedestrians that may cut down Wellington Street from Queen Street to access High Street.

**High Street (Northern Highway) to Wellington Street, between Nexus and Aldi** – An existing partly unformed pedestrian link is provided off the High Street (Northern Highway) service road along the Nexus car park frontage. It is recommended that this path be formalised to be DDA compliant and connect through to Wellington Street. An informal pedestrian crossing is recommended to be provided across Wellington Street at this location, by means of a kerb outstand and pram ramps.

**High Street (Northern Highway) to Wellington Street, between the service station and the proposed commercial development on the southern frontage of Watson Street** – A second link through this block is recommended in order to provide access from both street frontages through to the proposed mid-block car park and the internal frontage of the proposed commercial development on Watson Street. An informal pedestrian crossing as described above is also recommended to be provided across Wellington Street at this location.

**High Street (Northern Highway) to Bentinck Street, between Queen and King Streets** – It is recommended that a formal pedestrian link be provided through the proposed car park as shown on Figure 4-1. This will provide a link that will continue the mid-block east west link connected to the recommended pedestrian crossing over High Street (Northern Highway) at this location.

**High Street (Northern Highway) to Bentinck Street, between King and William Streets** – It is recommended that a pedestrian link be provided further north within the Northern Gateway Precinct connecting the residential precincts to the land use areas on High Street (Northern Highway)..

**Wellington Street and Stanley Street, between Wellington Square and the Primary School** – It is recommended that a formal pedestrian link be provided with the proposed connection alongside the northern boundary of the proposed car park at this location, providing an additional connection to the school crossing on Stanley Street.

*Where pedestrian connections are integrated with vehicle access links, clear delineation between the pedestrian path and the road way is required, with clear sight lines and adequate lighting to ensure the connection is safe for pedestrians.*

**P8 Maintain and improve existing mid-block pedestrian links through the High Street retail strip between Watson Street and Queen Street and connect to Wellington Street**

**P9 Provide high quality, safe, and inviting mid-block pedestrian links at identified locations to improve pedestrian permeability through the town centre area**

#### 4.2.6 Other Pedestrian Measures

As discussed later in this report, a number of intersections are proposed to be signalised, at Queen Street and Wellington Street, and at High Street (Northern Highway) and Duke Street. As such, signalised pedestrian crossings will be provided on all arms of these intersections.

Of particular note, the signalisation of the High Street (Northern Highway) and Duke Street intersection will remove the requirement for the existing school crossing on High Street (Northern Highway) immediately south of the intersection. It is proposed to investigate the potential for relocating this school crossing potentially to Duke Street, at the pedestrian link into the Secondary School approximately half way between High Street (Northern Highway) and Windham Street.

**P10 Remove the existing school crossing on High Street (Northern Highway) south of Duke Street intersection when the Duke Street intersection becomes signalised, and explore the possibilities to relocate the crossing to mid-block on Duke Street between the Secondary College and the recreation reserve at a later time (subject to further investigation)**



## 5 Cycling Provision

### 5.1 Existing Issues & Opportunities

The bicycle network within the study area is currently limited and provides little connectivity or dedicated infrastructure for cyclists. The bicycle infrastructure that has been delivered in Wallan is centred around High Street (Northern Highway) with on-road cycle lanes and head start or advance stop line marking provided at the signalised intersections with Watson Street, Queen Street and William Street. Similar facilities have also been provided at the Watson Street / Windham Street intersection as it was signalised.

Other than the provision of the cycle measures on the approaches to the signalised intersections, High Street (Northern Highway) does not provide a continuous cycle lane through the town centre. This results in a situation at some mid-block sections, whereby cyclists are required to merge with traffic, utilise the shoulder of High Street (Northern Highway) or seek an alternate route.



Cyclists riding between the town centre and the rail station are likely to use Watson Street. Once cyclist pass through the intersection of Watson Street / Windham Street, the bicycle lane terminates, with no clear alternative route for cyclists other than merging with the traffic lane. A footpath is provided on the southern side of Watson Street approximately 1.5m wide, which is insufficient to operate as a shared bicycle/pedestrian path.

Otherwise, cyclists use the local streets leading to and within the study area whereby cyclists are able to share the traffic lane with vehicles, with low traffic volumes and speeds observed.

A more detailed analysis of the current cycling provisions around the study area is provided in the 'Wallan Town Centre Access and Movement Plan – Background Report (April 2016), in Appendix A to this report.

### 5.2 Bicycle Network Improvement Recommendations

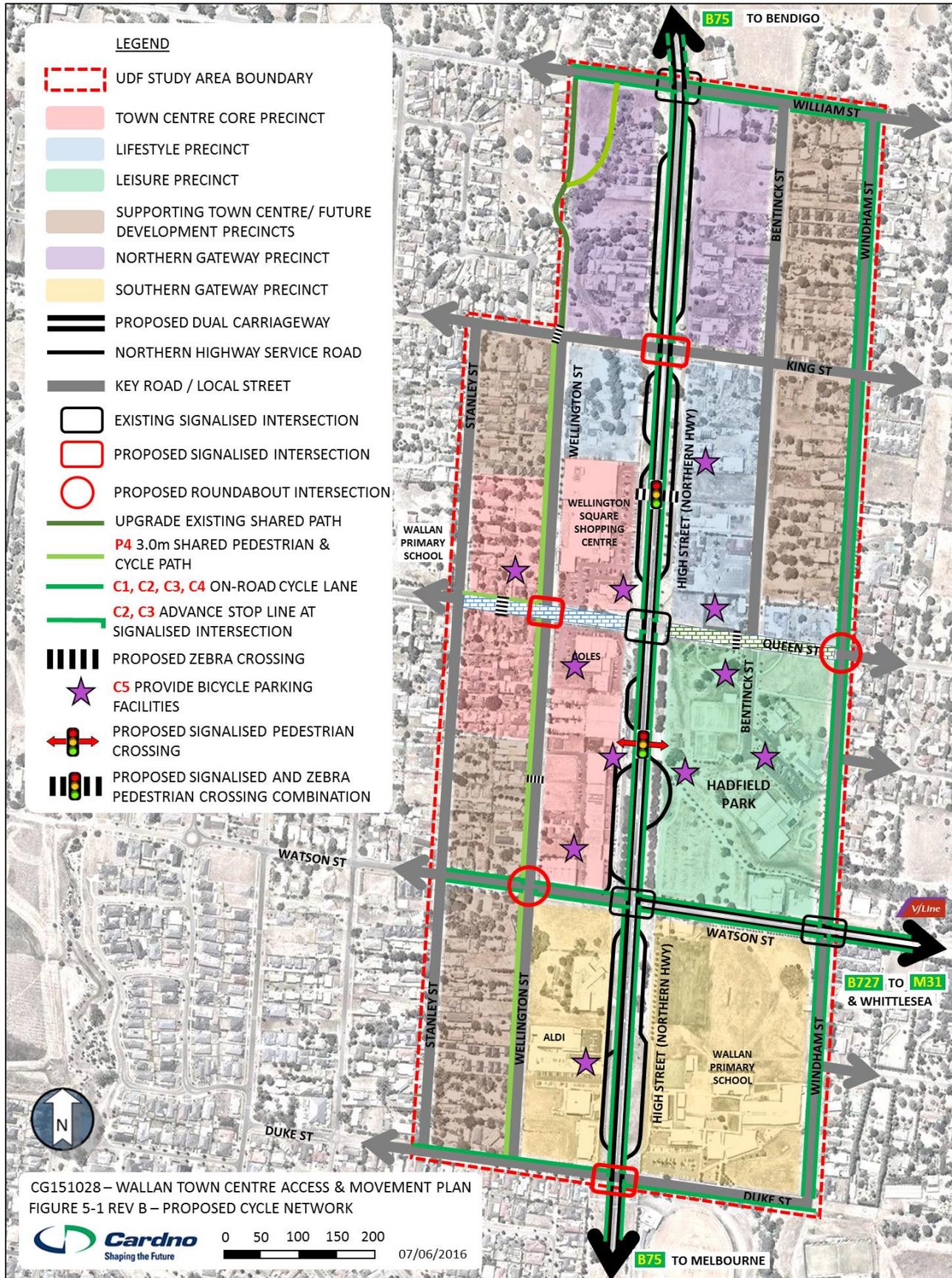
In considering recommendations regarding the provision for cyclists, it is recognised that all levels of cycling ability need to be addressed. This may range from younger primary school aged children through to experienced commuter cyclists. As such, a range of on road and off road cycle provisions have been identified to move cyclists into the town centre and through or around the core retail precinct to access local destinations such as schools, or more strategically along High Street (Northern Highway) or east along Watson Street to the rail station.

In addition to the recommendations that provide for the movement of cyclists, 'end-of-trip' facilities have also been considered, with appropriate locations identified.

The cycle network proposals have been considered in closely with the pedestrian and road network recommendations to ensure an integrated approach.

The following sub-sections identify and outline the various recommendations to provide for cyclists as the town centre develops. These proposals have also been identified on Figure 5-1.

**Figure 5-1 Proposed Cycle Network**



### **5.2.1 High Street (Northern Highway) On-Road Cycle Lanes**

As discussed, there are currently cycle lanes and advance stop lines provided on the approaches to each of the existing signalised intersections along High Street (Northern Highway). It would be recommended to continue these lanes along the existing carriageway in both directions through the town centre in the short term. It would also be recommended to provide full cycle lanes and advance stop lines through the town centre as the highway is upgraded to a divided highway in the future.

**C1 Improve existing cycle lanes along High Street (Northern Highway) to provide full connectivity through Wallan town centre**

**C2 Provide for continuous cycle lanes and advance stop lines at signalised intersections in both directions in any proposed capacity upgrade of High Street (Northern Highway) through Wallan town centre**

### **5.2.2 Watson Street On-Road Cycle Lanes**

Similar to High Street (Northern Highway), there are currently cycle lanes and advance stop lines provided on the approaches to each of the existing signalised intersections on Watson Street. Given that Watson Street provides the link to the rail station, it is recommended that on-road cycle lanes are extended between the intersections, and further east to the rail station. The provision of cycle lanes on Watson Street would also provide a link through the town centre from the west and north of the town centre via Wellington Street for cyclists that do not wish to cycle down High Street (Northern Highway).

**C3 Provide continuous cycle lanes and advance stop lines at signalised intersections in both directions on Watson Street east of High Street (Northern Highway) to the rail station and residential development areas further east. Provide on-road cycle lanes on Watson Street west of High Street (Northern Highway).**

### **5.2.3 Town Centre Peripheral On-Road Cycle Lanes**

It is recommended that on-road cycle lanes be provided on William Street and Windham Street. This will provide an alternate link for cyclist to bypass town from the north and west to the precincts east of High Street (Northern Highway) and through to the rail station.

**C4 Provide on-road cycle lanes on the peripheral road network around the Town Centre Core Precinct, except where cycle provision will be by way of an off-road shared path facility**

It is noted that the recommended shared path along Wellington Street and Queen Street between Wellington Street and Stanley Street as described in Section 4 also forms part of the recommended cycle network, providing a key north / south link parallel to High Street (Northern Highway).

### **5.2.4 End-of-Trip Facilities**

In order to encourage residents to access the town centre by bike, it is recommended that cycle parking facilities are provided at key locations throughout the town centre. Suggested locations are illustrated on Figure 5-1 and include:

- > Wellington Square;
- > Retail and restaurant locations along Queen Street;
- > Proposed Town Square / Town Centre Heart;
- > Car parks behind the retail strip, accessed off Wellington Street between Queen and Watson Street;
- > Proposed car park within the Lifestyle Precinct, east of High Street (Northern Highway);
- > Within the Aldi and/or Nexus car parking areas; and
- > Locations within Hadfield Park.

It would also be recommended to provide cycle parking facilities at the proposed bus interchange location.



As part of any larger scale future development within the town centre, it would be recommended that Green Travel Plans be required under the planning permit conditions, that will encourage employees and customers to cycle, walk or take public transport to work or shop.

- C5** Provide end-of-trip cycle parking facilities at key destinations including the proposed bus interchange, within Wallan town centre study area to encourage cycling to the town centre
- C6** Encourage the implementation of Green Travel Plans for all new larger scale developments within the Wallan town centre study area



## 6 Public Transport

---

### 6.1 Existing Issues & Opportunities

As previously outlined in Section 3 of this report, existing public transport services accessing and within Wallan are very limited, with the V/Line rail station located approximately 2.5 kilometres east of the Wallan Town Centre, and the provision of a limited connecting bus service through Wallan.

The rail service terminates at Southern Cross station in Melbourne's CBD. Trains run 7 days a week, with 1 service per hour, increasing to every 30 minutes during the peak periods.

The Wallan Town Service bus route operates from Monday to Friday with services typically timetabled to correspond to morning (5.30am-8.00am) and evening peak (4.30pm-7.30pm) train services. During these peak periods, services depart at approximately 30 minute intervals. Outside of these times no bus service is provided. The Wallan Town Service bus route generally services the area immediately surrounding the Wallan town centre.

It is noted that the town bus route operates in a loop around the town centre, and that the connectivity around some locations may be limited and therefore restrict the patronage of this service.

Bus shelters are typically provided at each bus stop within the bounds of the study area. Footpath links are provided to and from the bus shelters which connect into the wider pedestrian footpath network. Given that only a single bus service is provided to service the Wallan Town Centre, gaps in service provision exist where the bus stops are not provided in proximity to residential areas.

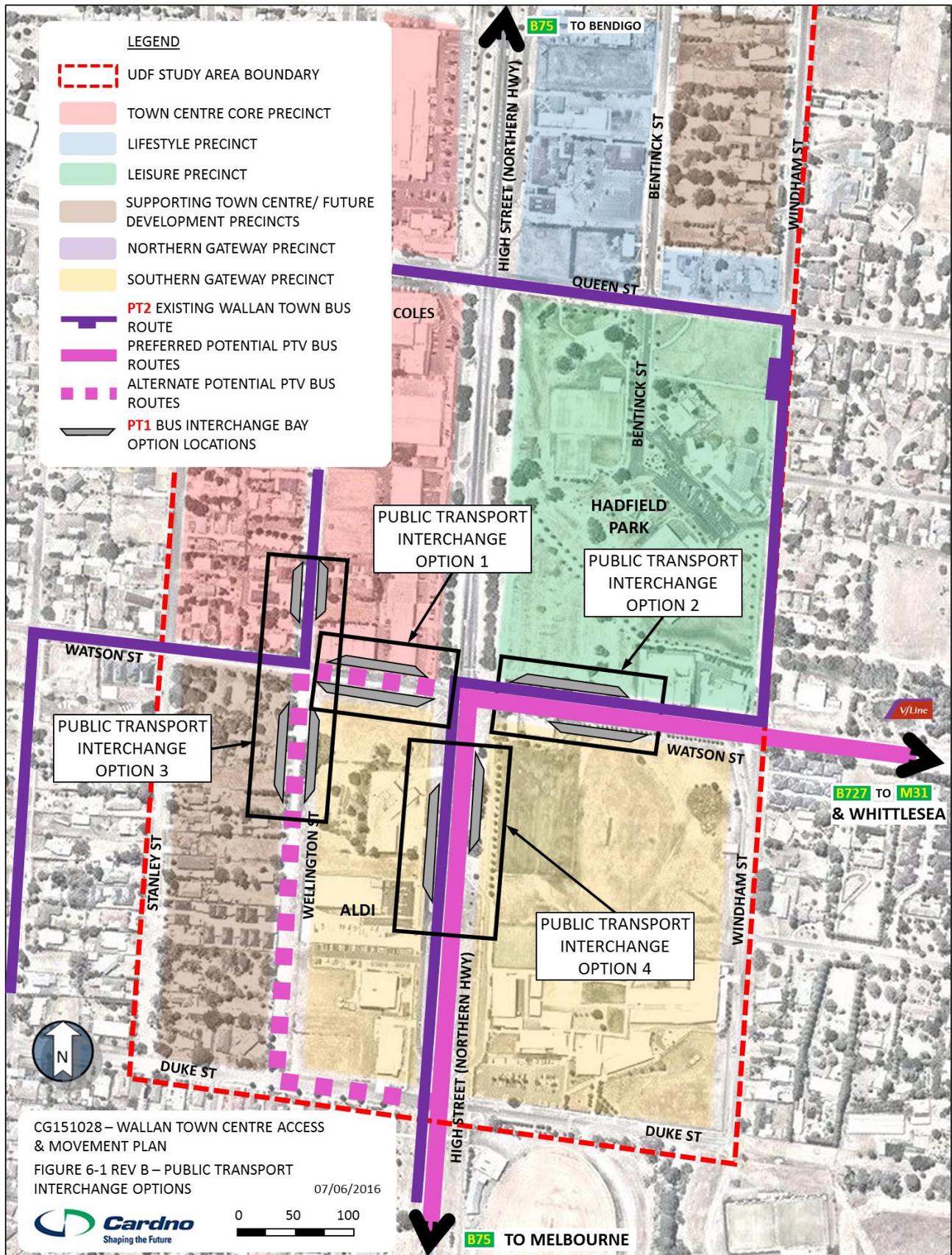
A more detailed analysis of the current public transport provision around the study area is provided in the 'Wallan Town Centre Access and Movement Plan – Background Report (April 2016)', provided as Appendix A to this report.

### 6.2 Public Transport Improvement Recommendations

In determining the appropriate recommendations for the public transport network, consultation was undertaken with PTV, VicRoads and Mitchell Shire Council. PTV have provided an indication of potential future strategic bus service routes that have been taken into consideration when recommending potential public transport infrastructure. The Wallan Structure Plan also identifies potential local bus service routes for consideration.

The following sub-sections identify and outline the various recommendations to improve public transport services and accessibility as the town centre develops. These proposals have also been identified on Figure 6-1.

**Figure 6-1 Public Transport Interchange Options**



### 6.2.1 Existing Town Service Review

Given the restricted nature of the timetable and the one-way nature of the route, particularly around the town centre area, it would be recommended to undertake a full review of the existing town service in consultation with PTV. Consideration may be given to:

- > Extending the service through the weekend, potentially with 1 hour frequency;
- > Extending the service between the peak periods and later into the evening, with a 1 hour service to coincide with the hourly train services;
- > Review the route in order to provide a service that gives greater accessibility to the town centre from a wider catchment in the surrounding residential areas; and
- > Providing adequate shelter and service information at existing and proposed bus stops along the route.

**PT1 Review the existing local town bus service with the aim of increasing service frequency and coverage**

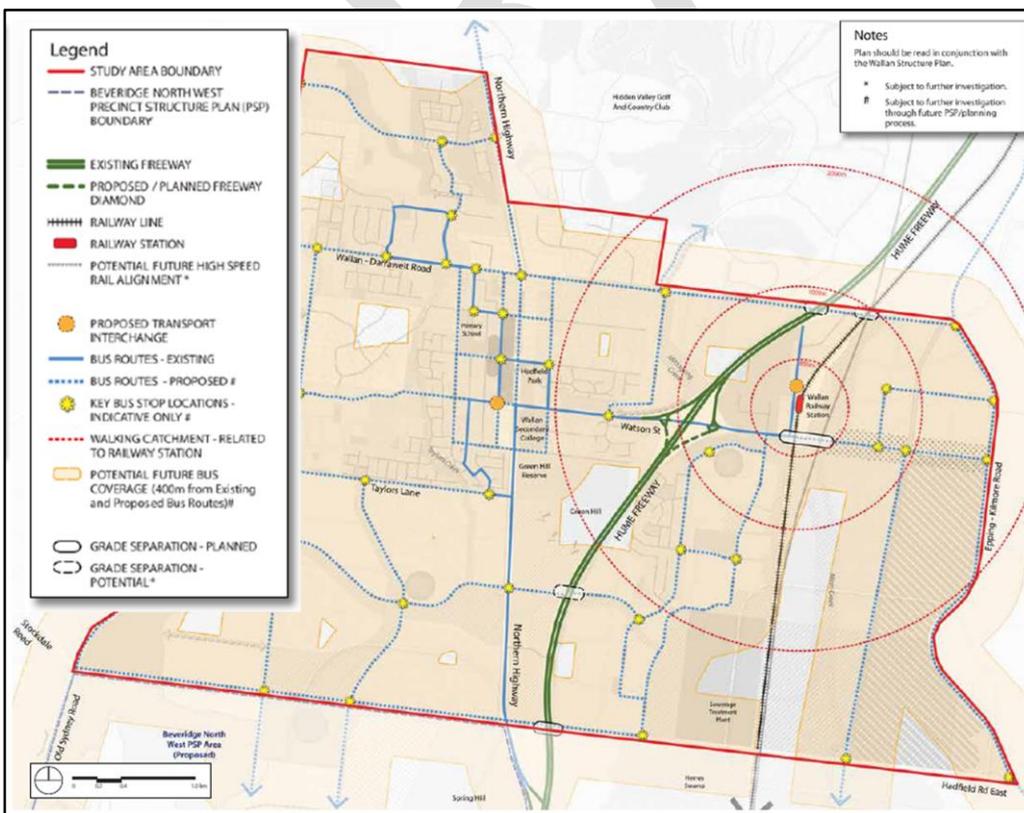
### 6.2.2 Review of Routes Proposed Within the Structure Plan

It would be recommended that a periodic review be undertaken in consultation with PTV as development in the PSP area increases, of the potential bus routes identified in the Structure Plan that provide access to the town centre, and the possible timing of their introduction.

Aspects to consider include future trip generators such as schools, residential estates, aged care facilities etc, and the development of the road network to support bus services. Consideration should also be given to developments in the Principle Public Transport Network (PPTN). Bus service routes identified in the Structure Plan have been included in Figure 6-2.

**PT2 Undertake future periodic reviews of the demand for potential bus service routes providing access to Wallan town centre identified in the Wallan Structure Plan, considering the Principle Public Transport Network (PPTN) as development increases**

**Figure 6-2 Potential Bus Routes in PSP**



### 6.2.3 Town Centre Bus Interchange

Given that PTV have provided an indication of the routes of potential bus services, primarily from the south on High Street (Northern Highway), and heading east on Watson Street toward the rail station, it is recommended that a bus interchange be provided within the town centre. This will allow passengers to transfer from these strategic routes to potential local services outlined in the Structure Plan.

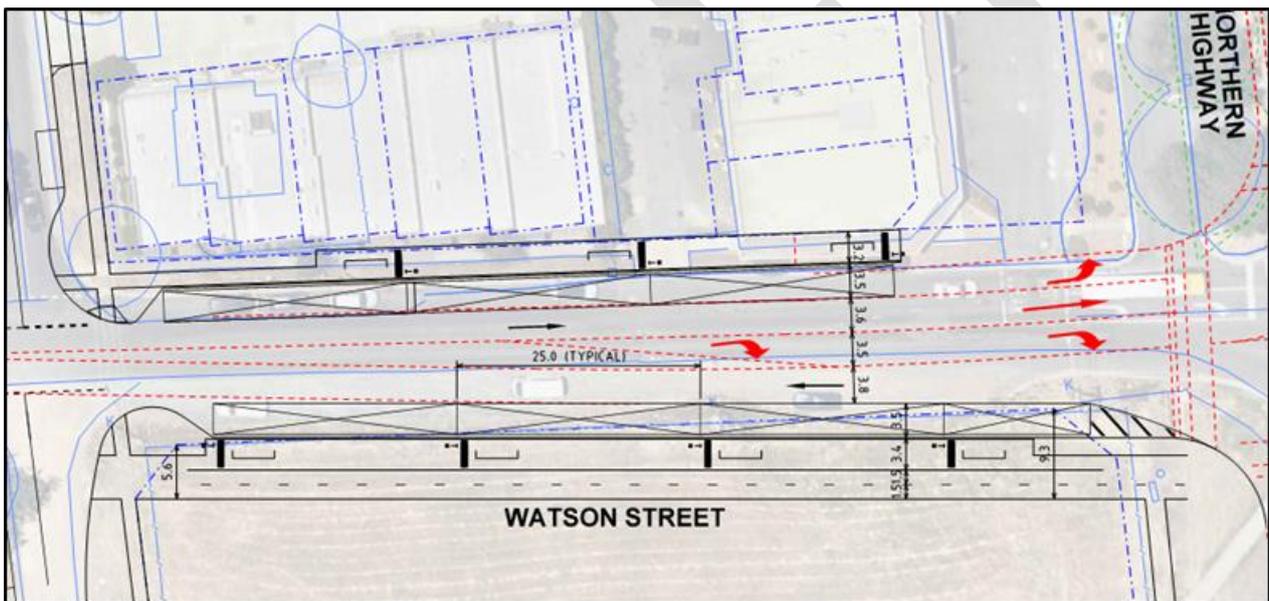
**PT3 Provide a bus interchange at an appropriate location within Wallan town centre to provide for proposed strategic PTV bus services and existing and future local bus services**

At this stage a number of potential bus interchange locations have been considered. These have been shown on Figure 6-1, with more detailed proposals outlined in this section.

#### 6.2.3.1 *Option 1 – Watson Street (West of High Street (Northern Highway))*

Due to the current undeveloped nature of the southern side of Watson Street, opportunity exists to provide a bus interchange on Watson Street between High Street (Northern Highway) and Wellington Street. This is currently the most preferable option in terms of accessibility to the Town Centre Core Precinct. A concept drawing of this proposal is shown in Figure 6-3.

**Figure 6-3 Bus Interchange Option 1 (Watson Street West of High Street (Northern Highway)) Concept Plan**



The advantages and disadvantages of this option are summarised below.

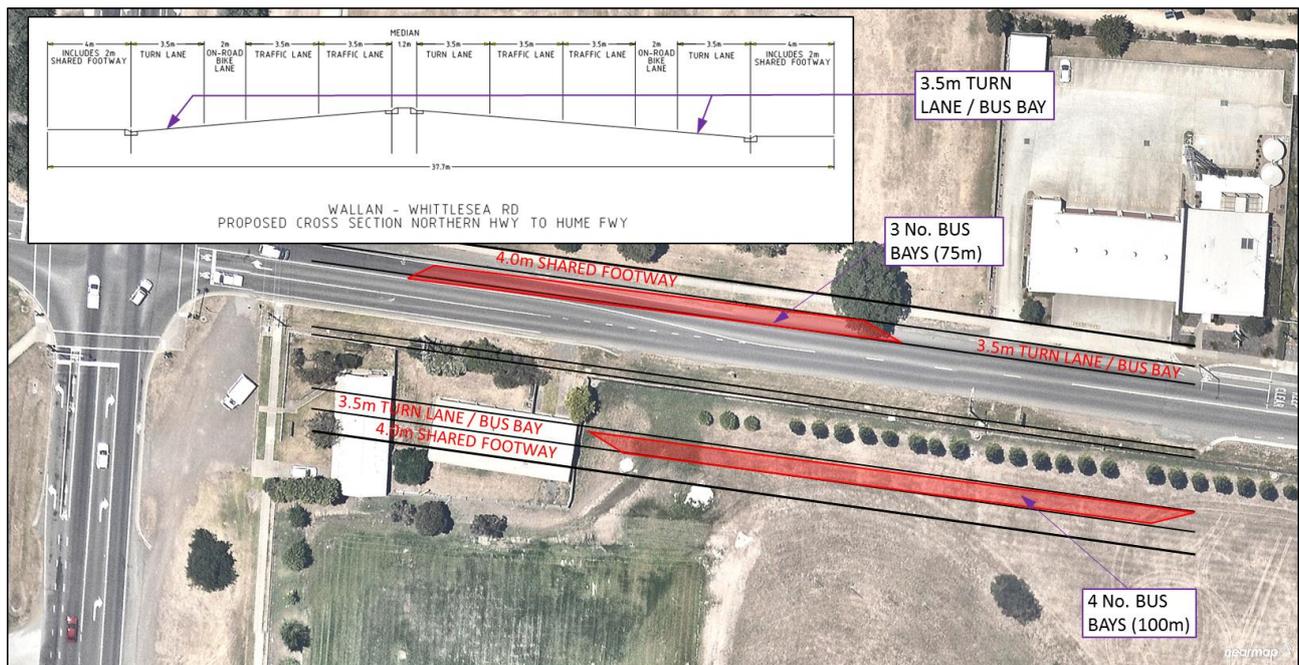
Advantages	Disadvantages
Highly accessible to the Town Centre Core Precinct	Car parking would need to be removed along the northern side of Watson Street
Undeveloped land to the south could be acquired	Land acquisition likely to be required
Clear of traffic on High Street (Northern Highway) and Watson Street, but still conveniently accessed by the arterial roads	Steeper section of Watson Street approaching Wellington Street may be a deterrent for some passengers
Minimal deviation for potential PTV services	

### 6.2.3.2 Option 2 – Watson Street (East of High Street (Northern Highway))

The second option for consideration is on Watson Street, immediately east of High Street (Northern Highway) intersection, which is the preferred option of PTV. Again, it would be proposed to locate it as close to the intersection as practicable so that passengers requiring to cross the highway to change services or access the High Street don't have to deviate from the desire line significantly to cross the road at the signals.

A significant amount of land acquisition would be required for this proposal as shown on the concept drawing Figure 6-4 however this land would be acquired as part of the capacity upgrade of Watson Street in any case.

**Figure 6-4 Bus Interchange Option 2 (Watson Street East of High Street (Northern Highway)) Concept Plan**



The advantages and disadvantages of this option are summarised below.

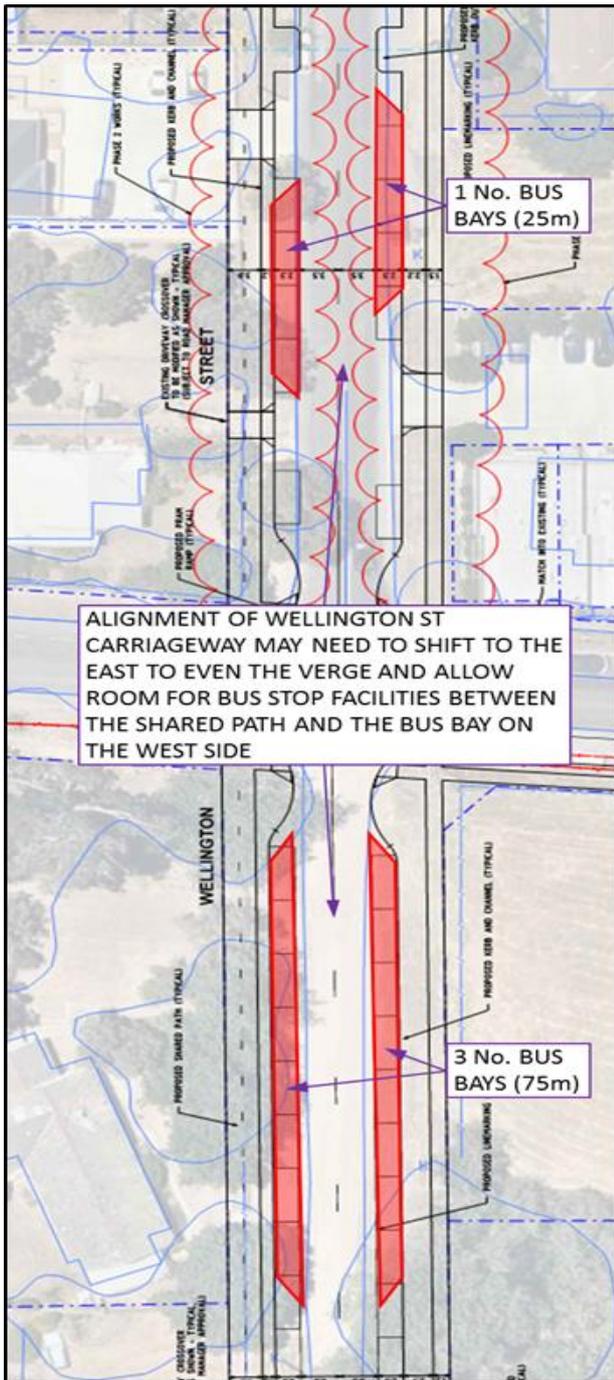
Advantages	Disadvantages
Convenient to the Secondary College and Hadfield Park	Need to cross Watson Street in some instances to transfer to other bus services
Ability to capitalise on land acquisition required for the capacity upgrade of Watson Street	Potentially two road crossings and increased walking distance required to access the Town Centre Core Precinct
No deviation from preferred potential PTV service routes	Land acquisition would be required along the southern boundary of the road.

### 6.2.3.3 Option 3 – Wellington Street (at Watson Street)

The fourth option for consideration is on Wellington Street, primarily to the south of Watson Street to cater for the strategic PTV services, but with a bay either side of the street north of Watson Street to cater for the existing and proposed local services.

A certain amount of on street parking which would otherwise have been proposed, would be required to be removed to cater for this bus interchange option. A concept drawing of this proposal is shown in Figure 6-5.

Figure 6-5 Bus Interchange Option 3 (Wellington Street at Watson Street) Concept Plan



The advantages and disadvantages of this option are summarised below.

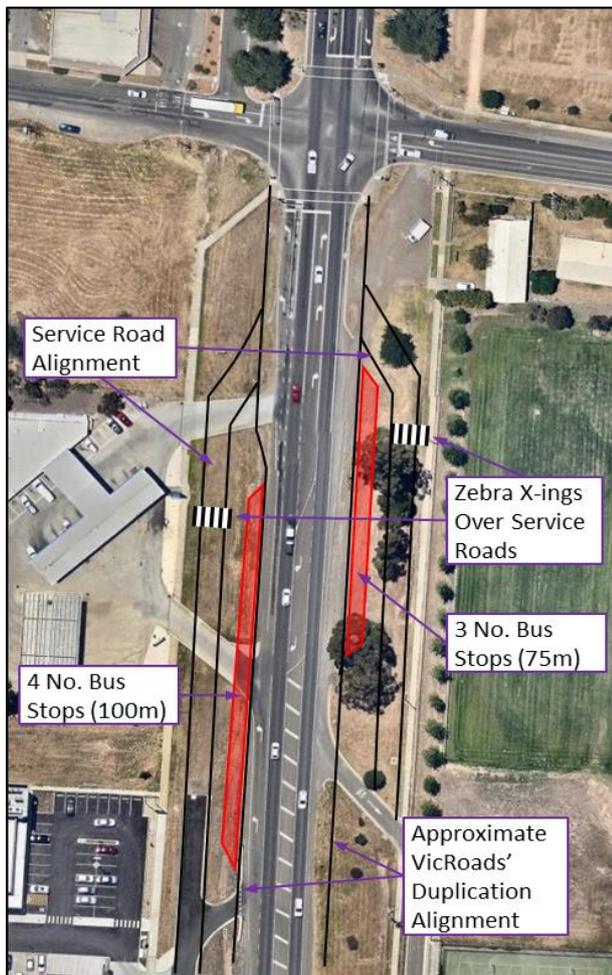
Advantages	Disadvantages
Little deviation for potential PTV services	Loss of on street parking that would otherwise have been proposed
Increased accessibility to the Town Centre Core Precinct	Interchange split into 4 sections instead of 2
Clear of traffic on High Street (Northern Highway) and Watson Street, but still conveniently accessed by the arterial roads	Potentially two road crossings and increased walking distance required to access the Town Centre Core Precinct
Little to no land acquisition required	

### 6.2.3.4 Option 4 – High Street (Northern Highway) (South of Watson Street)

The fourth option is to provide the bus interchange on High Street (Northern Highway) south of the Watson Street intersection. It would be proposed to locate it as close to the intersection as practicable so that passengers requiring to cross the highway to change services don't have to deviate from the desired line too much to cross the road.

There is adequate space between the main carriage way after capacity upgrade and the service roads on either side of the road to include bus bays. A concept drawing of this proposal is shown in Figure 6-6.

**Figure 6-6 Bus Interchange Option 4 (Wellington Street at Watson Street) Concept Plan**



The advantages and disadvantages of this option are summarised below.

Advantages	Disadvantages
Available space in the existing road reserve and hence no land acquisition required	Subject to traffic conditions on High Street (Northern Highway)
No deviation for potential PTV services	Need to cross High Street (Northern Highway) in some instances to transfer to other bus services
Moderately accessible to the Town Centre Core Precinct	Additional zebra crossings required on the service road to provide access to the interchange
Convenient to the Secondary College	

## 7 Road Network

### 7.1 Existing Issues & Opportunities

#### 7.1.1 Road Network Gaps

It has been observed that there are a number of gaps in the road network within the Wallan Town Centre study area, and these are identified as follows.

**Wellington Street, between Watson Street and Duke Street** – This section of road is currently unpaved south of Watson Street, and provides access to a small number of residential lots. Wellington Street currently does not connect through to Duke Street.

**King Street, between Wellington Street and High Street (Northern Highway)** – There is currently no road provided through this road reserve across Wallan Creek.

**High Street (Northern Highway) Service Roads** – The service roads either side of High Street (Northern Highway) within the study area are currently incomplete in some sections, with dead ends and/or gravel sections. Whilst the section through the retail strip has had recent improvements in order to try and stop undesirable turning movements, there are still a number of conflict points.

**Stanley Street, at Duke Street** – Stanley Street currently terminates in a dead end immediately north of Duke Street, providing no access at this location from and to Duke Street. It is understood that this is a traffic management measure to prevent ‘rat running’ along this route.



#### 7.1.2 High Street (Northern Highway) Retail Strip Service Road Access

There are currently a number of vehicle access issues surrounding the service road and car parking areas between High Street (Northern Highway) and the retail strip between the Watson Street and Queen Street intersections. A summary of these issues is provided below, with more detailed analysis provided in the ‘Wallan Town Centre Access and Movement Plan – Background Report (April 2016)’, provided as Appendix A to this report.

##### 7.1.2.1 High Street (Northern Highway) Mid-Block Access

The overall access to properties on the retail strip between Watson Street and Queen Street in the northbound direction from High Street (Northern Highway) is provided via a one way service road with multiple ingress movements but with the only egress points permitted towards the Queen Street end. This results in increased traffic volumes along the length of the service road as any vehicle which enters from Watson Street must exit approximately 300 metres north of Watson Street, near the intersection of High Street (Northern Highway) with Queen Street.

There are also a number of vehicle conflict points along the service road at entry and exit points to the various car parking areas along the retail frontage. These conflict points are made more dangerous due to the angular nature that vehicles approach the access points, restricting sight lines to approaching vehicles.



#### 7.1.2.2 *Watson Street Access*

The service road and car parking arrangement for the retail strip near High Street (Northern Highway) / Watson Street intersection presents issues as vehicles entering from Watson Street are provided with two options to access the retail strip parking. These being either via the service road or directly into the car park. As Watson Street is the minor leg at the intersection with High Street (Northern Highway), vehicles tend to queue leading up to the intersection impeding right turning movements into the retail strip parking, and hence blocking back into High Street (Northern Highway) intersection.



#### 7.1.2.3 *Queen Street Access*

The interface with the retail traffic access points on both sides of Queen Street west of High Street (Northern Highway) results in a multitude of vehicle turning movements and conflict points both on Queen Street and within the service roads accessing the parking areas.

The access to the retail area within the south-west corner of the Queen Street / High Street (Northern Highway) signalised intersection is located quite close to the departure side of the intersection. Vehicles slowing to turn into these areas may inadvertently slow following traffic through the intersection. Additionally, the access to the Coles section of the car park is provided with minimal setback to Queen Street and as such, access could be blocked if more than one vehicle was queuing to exit to Queen Street.

The potential for confusion for motorists in this area is compounded by the lack of defined pedestrian crossing points in this area, as outlined in Section 5 of this report.



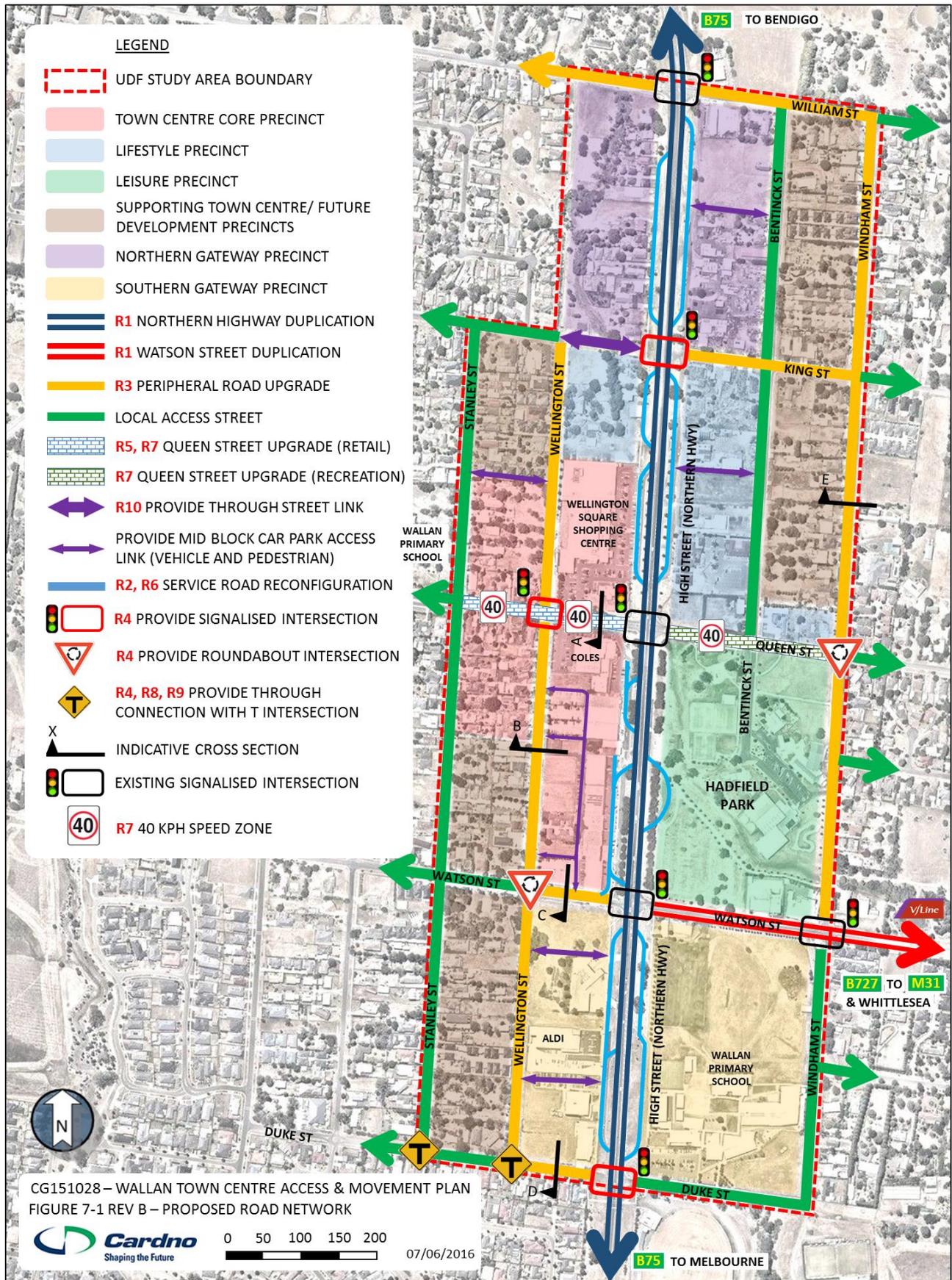
## 7.2 Road Network Improvement Recommendations

In determining the appropriate recommendations for the road network, considerable consultation was undertaken with the responsible road authorities in VicRoads and Mitchell Shire Council. VicRoads were able to outline longer term proposals and aspirations for the State controlled roads; High Street (Northern Highway), and Watson Street east of the highway. Council were able to provide information regarding plans and aspirations throughout the town centre on the local road network.

Extensive stakeholder and community consultation was undertaken during the development of the Wallan Structure Plan. Additional stakeholder consultation was undertaken in January 2016 with community groups and organisations.

The following recommendations have been determined through this consultation, observed issues on the existing network, and taking into consideration the future land uses throughout the town centre. All recommendations for the road network are illustrated on Figure 7-1, and are detailed further in the following sections.

**Figure 7-1 Proposed Road Network**



### 7.2.1 High Street (Northern Highway) and Watson Street Capacity upgrade

As mentioned, VicRoads have advised that there are aspirations to upgrade capacity to two lanes in each direction along both High Street (Northern Highway) through Wallan Town Centre and Watson Street east of High Street (Northern Highway) through the PSP area.

It is recommended that these improvements be made, ensuring that the local access and amenity through the town centre is fully integrated into the capacity upgrade. This will help traffic flow through the town centre, particularly through traffic, which will assist in maintaining the operation of the service roads and intersections. As outlined in Section 5, full cycle lane and advance stop lines should be incorporated into these works. Capacity upgrade will also improve the safety for all road users along these roads.

Key factors to consider along High Street (Northern Highway) will be integrating the access points to and from the service roads on both sides, and also ensuring that the existing and proposed 'Avenue of Honour' is maintained and allowed for. The integration of public transport facilities will also need to be considered on both roads.

**R1 Support VicRoads plans to upgrade capacity on both High Street (Northern Highway) and Watson Street east of High Street through Wallan town centre**

### 7.2.2 High Street (Northern Highway) Service Roads

As discussed, there are a number of service roads on both sides of High Street (Northern Highway) that need improving through the extent of the study area.

The staging of improving the connectivity of the service roads will depend largely on the timing of the capacity upgrade of High Street (Northern Highway). The recommended ultimate configuration of the service roads is shown on Figure 7-1, and this should be incorporated into the highway works.

Should significant development progress before the capacity upgrade, it is recommended that in the shorter term, improvements be made to the service roads in line with the ultimate scenario. As development along High Street (Northern Highway) progresses and formal access is required, the service roads should be constructed in a similar nature to that already undertaken to access the Nexus Primary Health Clinic site and Aldi.



It would also be recommended that should the highway not be upgraded when the core retail strip between Watson and Queen Streets are upgraded, that the ultimate service road configuration be constructed with

the retail strip improvements, as the alignment of the main roadway will continue to be within the existing Avenue of Honour trees that currently separate the main roadway and the service roads.

An important aspect of the service road upgrades is the provision of wayfinding signage and line marking. It should be made clear upon entry and exit, and along the service roads what is accessed within and from each road.

**R2 Improve and connect the service roads either side of High Street (Northern Highway) through Wallan town centre in a staged approach as development progresses up to full construction upon capacity upgrade of the roadway**

### 7.2.3 Peripheral Road Network

The Wallan Structure Plan identifies a 'peripheral road network', around the Town Centre Core Precinct, that provides access to car parks and other key services within the town centre. The peripheral network has been modified to reflect the study area and land use precincts and is illustrated on Figure 7-1, which includes Watson Street, Wellington Street, King Street, William Street and Windham Street.

Extending the peripheral road network in the north east corner of the study area to run down Windham Street to Queen Street rather than down Bentinck Street reduces the number of turning movements for vehicles while also reducing through vehicle trips on the eastern section of Queen Street near Hadfield Park and the new wet and dry integrated play space.

A number of measures have been identified that will support this network, and have been highlighted in the appropriate recommendations outlined in the following sections of this report.

**R3 Provide a peripheral road network around Wallan Town Centre Core Precinct to ease the pressure on High Street (Northern Highway) and to allow access to car parks and key services, with emphasis on Wellington Street (See R8)**

### 7.2.4 Intersection Upgrades

In order to support the peripheral road network, a number of intersections are recommended to be upgraded. Three additional intersections within the town centre have been identified to be signalised, and a roundabout proposed at one intersection.

It is recommended that the intersections on Wellington Street with Queen Street be fully signalised, including pedestrian crossing facilities on all legs of the intersection. This will ensure vehicles are able to move in a north-south direction smoothly and access the precincts either side.

The upgrade of the Wellington Street and Watson Street intersection to a roundabout is also recommended initially, with a further upgrade in the future to a signalised intersection should the PPTN incorporate this intersection.

It is also recommended that the intersection on High Street (Northern Highway) at Duke Street be signalised. This will allow greater access from the west side of the highway, and also provide permanent pedestrian crossing, and so remove the need for the limited hours school crossing on High Street (Northern Highway) immediately south of this intersection, as discussed in Section 5 of this report.

The intersection on Windham Street at Queen Street is recommended to be upgraded to a roundabout. This is expected to assist traffic flows through the intersection, particularly movements from the Queen Street leg to help protect this leg from queuing and maintain the pedestrian friendly nature of Queen Street.



QUEEN STREET / WELLINGTON STREET INTERSECTION

**R4 Upgrade key intersections to support ease of movement around the peripheral road network, including the provision of signals at Wellington Street / Queen Street, and High Street (Northern Highway) / Duke Street, and a roundabout at Windham Street / Queen Street and Wellington Street / Watson Street, unless it becomes part of the PPTN**

### 7.2.5 Queen Street

Queen Street is expected to play a key role in providing east / west traffic movements through the core retail precinct. It is also proposed that it becomes a pedestrian friendly corridor with land uses that support active street frontages, outdoor dining, and pedestrian friendly access to leisure facilities in Hadfield Park. Given that vehicle movements and pedestrian activities are both high priorities along Queen Street, a balance in the physical form of the street will need to be provided.

A number of recommendations are proposed to help achieve this, including:

- > Signalisation of the intersection of Queen Street and Wellington Street;
- > Provision of a roundabout at Windham Street;
- > Provision of an informal pedestrian crossing facility on Queen Street providing access between Wellington Square and Coles;
- > Provision of pedestrian crossing facilities on Queen Street between Stanley and Wellington Streets, and near the Bentinck Street intersection;
- > The provision of a central reservation between Wellington and High Streets, with right turn lanes on Queen Street approaching both intersections and the entry to Wellington Square car park, to improve safety for all road users and maximise through traffic movements;
- > Provision of better pedestrian connectivity along the extent of Queen Street, particularly around High Street (Northern Highway) intersection, and provide a wider footpath / street frontage on the northern side of Queen Street to allow for streetscaping and encourage pedestrian activity;
- > Closure of existing vehicle access to the High Street service road and the Coles parking areas on the southern side of Queen Street in favour of improved access to car parking from Wellington Street; and
- > Provision or extension of a 40kph speed zone from the school zone at Stanley Street.

A number of these recommendations have been identified elsewhere in this report, but are integrated with the road improvement recommendations to achieve the overall aim for Queen Street. A proposed cross

section for Queen Street between Wellington Street and High Street (Northern Highway) is provided in Appendix B.

**R5 Provide a central reservation along Queen Street between Wellington and High Streets, with right turn lanes on Queen Street approaching both intersections and the entry to Wellington Square car park to maximise through traffic movements**

**R6 Close the existing vehicle access on Queen Street to the High Street service road and the Coles parking areas on the southern side of Queen Street to improve safety and pedestrian connectivity. These works should be incorporated into the implementation of High Street (Northern Highway) and Queen Street improvement recommendations, and improvements to the car parks off Wellington Street**

**R7 Extend the 40kph speed zone from the school zone at Stanley Street east to High Street**

### 7.2.6 Wellington Street

As Wellington Street will form a key part of the peripheral road network and provide significant pedestrian access to the Town Centre Core Precinct, it is recommended that the full extent of Wellington Street between King Street and Duke Street be upgraded.

In addition to the proposed signalised intersection at Queen Street and the roundabout at Watson Street, it is proposed that the street be upgraded to reflect the cross section provided in Appendix B, and that the section of Wellington Street between Watson Street and Duke Street be fully constructed with access to Duke Street.



It is also proposed that the pedestrian crossing and shared path facilities be provided as outlined in Section 4.

It is also recommended that after the Wellington Street connection to King Street is provided, Council investigate whether Stanley Street should also be opened to provide an intersection with Duke Street, allowing all turning movements, and further relieve the town centre network of through traffic movements.

**R8 Stage an upgrade of Wellington Street between King Street and Duke Street and provide a through connection at Duke Street as a priority**

**R9 Investigate the benefits of providing direct access from Stanley Street to Duke Street with a standard 'T intersection', following the provision of a direct link from Wellington Street to Duke Street**

**7.2.7 King Street**

As discussed, there is currently a key link on King Street missing that crosses Wallan Creek between Wellington Street and High Street (Northern Highway).

As King Street will form part of the peripheral road network, it is strongly recommended that this link be provided to the standard of the rest of the peripheral road network. This link will provide a direct link from the west across High Street (Northern Highway) to the peripheral road network to the east, and compliment the Wellington Street upgrades by reducing traffic flows along this street

These works should include the provision of the recommended pedestrian crossing that would link the proposed shared path on Wellington Street with the existing path that follows Wallan Creek north of King Street.



**R10 Provide a link over Wallan Creek on King Street to connect between the top of Wellington Street and High Street (Northern Highway) to provide a complete peripheral road connection**

**7.2.8 Additional Network Connections**

A number of additional network connections have been identified at mid-block locations, generally designed to provide access to car parks from both sides of the block, and to provide pedestrian permeability throughout the town centre. The locations of these links have been discussed in Section 4, but are also highlighted on Figure 7-1.

## 8 Car Parking and Loading Areas

### 8.1 Existing Parking Provision and Utilisation

There is currently a very good level of on street and off street car parking provided that is dispersed throughout the town centre study area. It has been observed through a series of parking surveys that this provision is adequate during the week and on weekends to cater for the current level of development, and with a significant amount of spare capacity (58% spare capacity at peak weekday times, and 60% spare capacity on weekends).

The exception to this is on Market days, where car parking occupancy during this period was notably higher than any other day of the month, including the non-market Saturdays. Overspill car parking was observed on the residential streets surrounding Hadfield Park, and informal car parking took place on the eastern side of High Street (Northern Highway) between Queen Street and the Wallan Secondary School.

As previously discussed, it has been identified that access to and the layout within the off street parking areas along the retail strip on High Street (Northern Highway) are less than ideal, and have been addressed in earlier sections of this report.

A more detailed analysis is provided in the 'Wallan Town Centre Access and Movement Plan – Background Report (April 2016)', provided as Appendix A to this report.

### 8.2 Proposed Parking Provision

Future parking demand has been estimated based on the proposed land use scenario throughout the town centre study area. Table 8-1 summarises the anticipated car parking demand across the study area and the proposed parking provision

**Table 8-1 Future Parking Demand and Provision Summary**

Car Park Location	Nature	Spaces Provided	Parking Demand	Surplus/ Shortfall
Coles Block	Modified	125	173	-48
Wellington St / Retail Strip (North Block)	Modified	160	174	-14
Wellington St / Retail Strip (South Block)	New	245	155	90
East of Wellington Street (North Block)	New	200	290	-90
East of Wellington Street (South Block)	New	39	62	-23
South of Watson St	New	123	142	-19
South of Watson St (Behind Service Stn)	New	83	55	28
South of Watson St (North of Duke St)	New	46	39	7
Wellington Square	Modified	253	256	-3
On-Street (Town Centre Core)	Modified	200		200
Hadfield Park (South of Free Library)	New	40		40
Hogans Car Park	Existing	115	112	3
Aldi Block	Existing	90	48	42
<b>Total Surplus Parking Spaces</b>				<b>213</b>

It is shown that in general, the existing off street car parking areas, some of which will be reconfigured to accommodate proposed built form will have a short fall of spaces. The provision of the car parking block between the High Street retail strip and Wellington Street, to the north of Watson Street, will assist in making

up for this shortfall. It is also shown that there is a shortfall in spaces in the retail/office location west of Wellington Street, however there is significant future provision for on-street parking on Wellington Street.

The provision of additional car parking areas within the Wallan Town Centre reflects the current underutilisation of the existing car parking provision, whilst providing for the development into the future. Overall, it is anticipated for there to be an excess of approximately 215 spaces during the peak parking periods.

Figure 8-1 illustrates the recommended parking provision locations and proposed access points to these car parks. These locations integrate the existing parking areas with the proposed locations. Existing and proposed on-street parking provision is also highlighted on the plan.

It is also recommended to undertake a review of the parking provision and demand patterns throughout the study area as development progresses to monitor the adequacy of the provision and determine the need for a potential 'Parking Management Plan' for the town centre.

**CP1 Provide on and off street car parking throughout the Wallan Town Centre study area in the locations identified to cater for the additional demand created by the proposed land use scenarios**

**CP2 Review the parking provision and demand patterns as development progresses to determine the need for a potential Parking Management Plan**

### 8.3 Loading Areas

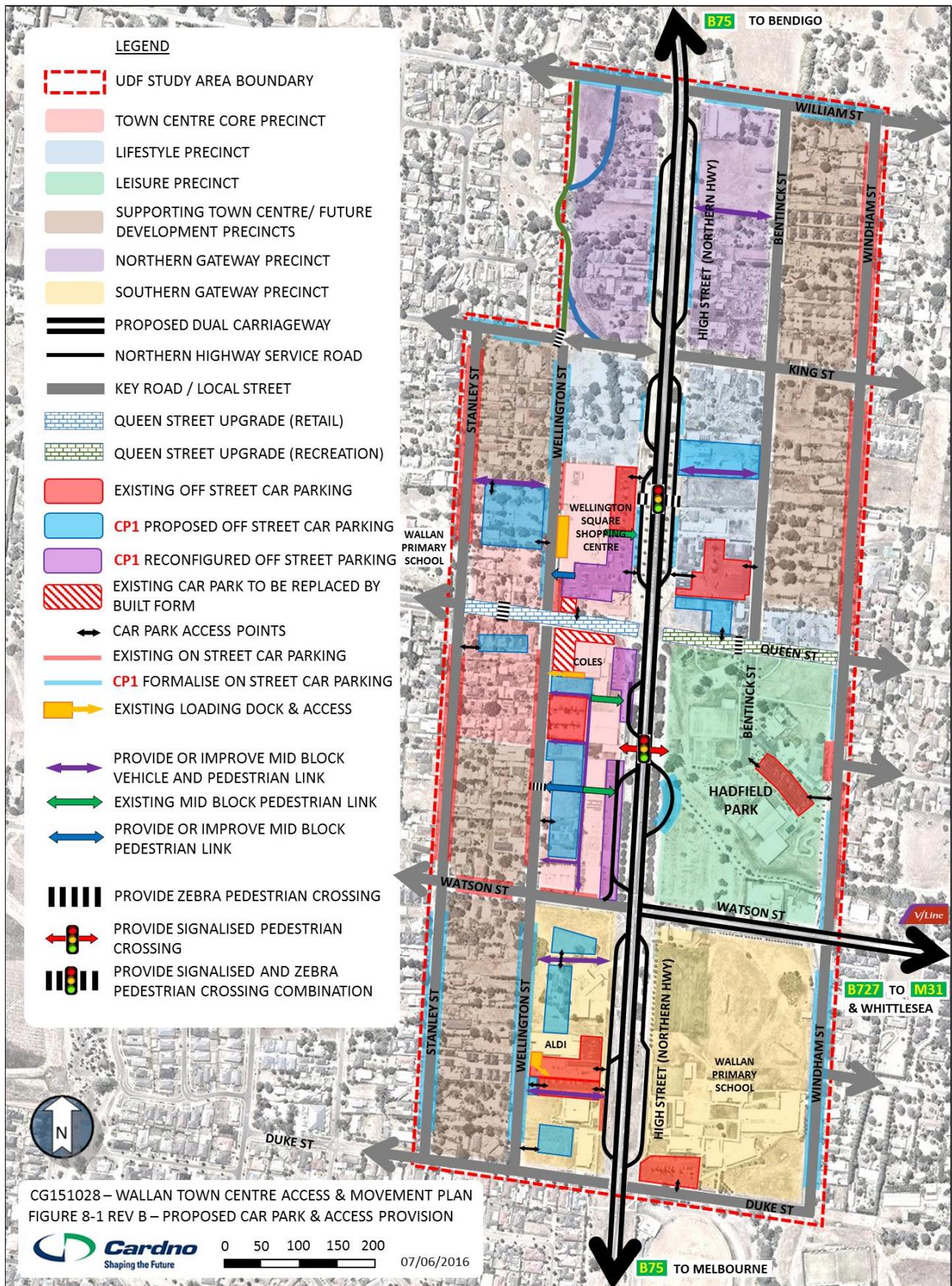
Dedicated loading dock areas are currently provided on site at each of the three supermarkets, accessed from the local street network. The major supermarkets are responsible for the internal access arrangements under property ownership or lease agreements with the shopping centre. The loading dock locations and access arrangements are indicated on Figure 8-1.

Proposed street layout arrangements and parking restrictions should ensure that adequate access is provided to the loading dock areas at each of the existing and any future properties where appropriate.

The existing road between the car park and the rear of the main retail strip currently provides access for loading and waste collection for the retail strip tenants. The recommended upgrades for the car park and this access road should ensure that this area remains accessible for small goods vehicles and refuse collection vehicles. Dedicated loading spaces should be provided along this access road with the appropriate line marking and restriction signage.

Potential loading zone locations are indicated on Figure 9-1 and Figure 9-2 in the following section.

**Figure 8-1 Proposed Car Park and Loading Dock Access Provision**



## 9 Integration of Town Centre Core Precinct Transport Recommendations

---

### 9.1 Overview

It is important that the recommendations identified for each mode are fully integrated and complement each other, so that a proposal for one particular mode does not have a detrimental effect on other road users.

Whilst the recommendations across the study area are fully integrated, there is a concentration of recommended proposals within the Town Centre Core Precinct in particular that integrate proposals across all modes. The following subsections illustrate this in detail.

### 9.2 Watson Street and High Street Recommendations

A number of issues were highlighted around High Street (Northern Highway) / Watson Street intersection and the access to the service road and parking area along the retail strip frontage of High Street. These issues are exacerbated by the poor pedestrian provision throughout this area.

The proposed reconfiguration of High Street (Northern Highway) service road and parking areas between the Watson Street and Queen Street intersections has provided an opportunity to enhance pedestrian accessibility throughout the area whilst improving the general amenity of the streetscape.

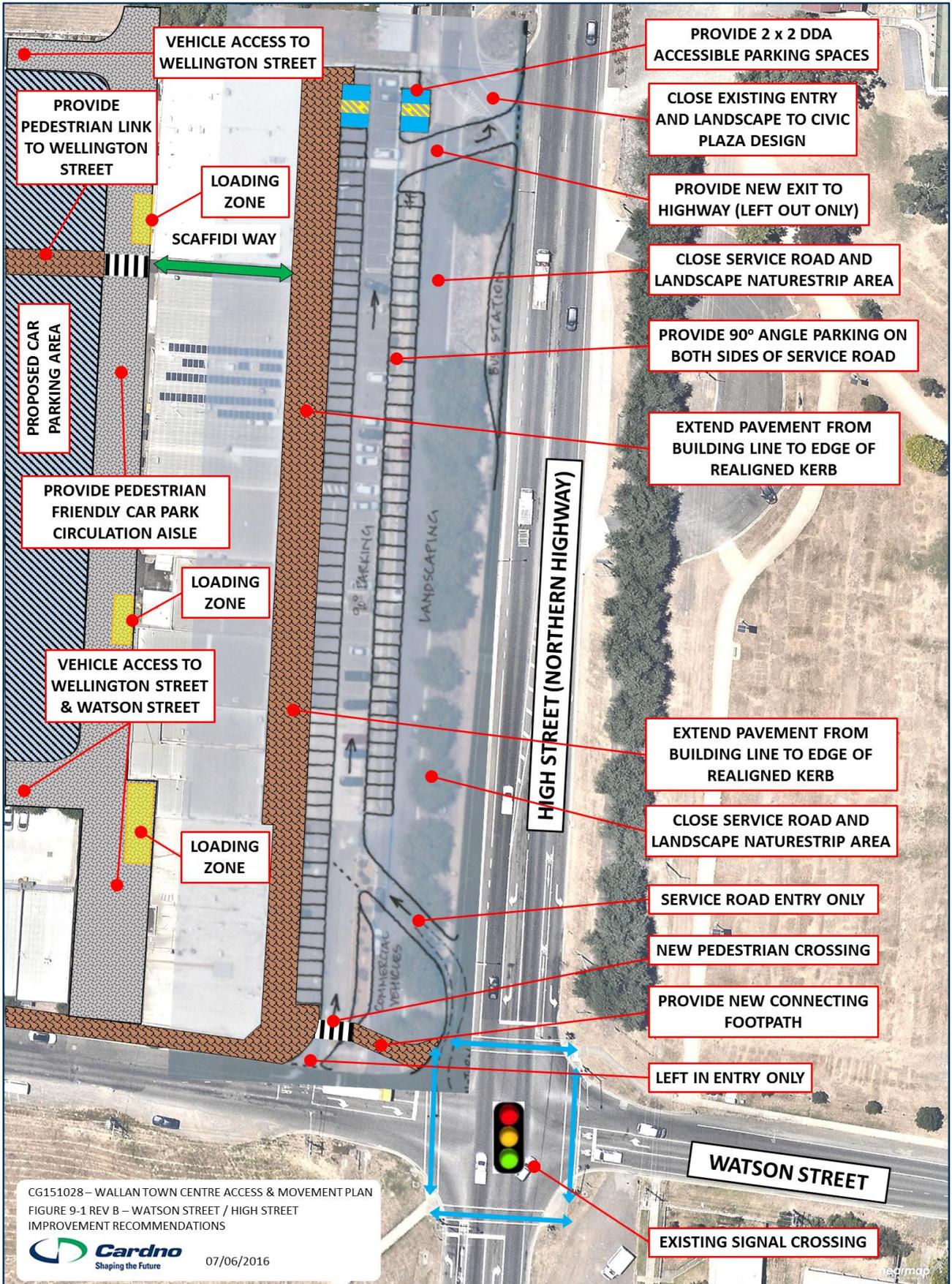
As discussed, a Town Square / Town Centre Heart area is proposed around the 59 High Street address which will include a signalised pedestrian crossing over High Street (Northern Highway) to the Free Library area in Hadfield Park.

It is proposed to reconfigure the service road arrangement between Watson Street and the plaza area such that the service road and car park is combined, and set back from the shop frontage. This will allow for a significantly wider footpath and pedestrian area along the retail frontage.

There are currently 157 car park spaces, with a surveyed utilisation of approximately 30% on an average weekday and 35% on a non-market Saturday. The proposed reconfiguration of this area will see a provision of 122 spaces, which will adequately cater for both existing and future car parking demand.

Vehicular access from Watson Street and High Street (Northern Highway) will also be simplified to remove conflict points both on the main road carriageways and within the service road area. Pedestrian access into and throughout the High Street retail area and Town Centre Heart will also be significantly improved. The service road entry and exit points are intended to be located so that they will run and be aligned between the existing street trees on the western side of the road (subject to an arborist inspection). The recommendations throughout this area are shown on Figure 9-1.

Figure 9-1 Watson Street / High Street Improvement Recommendations



### 9.3 Queen Street and High Street Recommendations

It was highlighted that there are a considerable number of conflict points between vehicles and others vehicles, and vehicles and pedestrians on both Queen Street and the High Street service road to the south of Queen Street. There are a number of vehicle access points to the service road and car parks off Queen Street.

The lack of priority rules accessing the service road and the Coles' car park, and the close proximity to the signalised intersection, provide significant potential for collisions. The risk to pedestrians is exacerbated by the very poor footpath connectivity around the signalised intersection.

It is intended to provide a service road access from High Street (Northern Highway) immediately north of the proposed Town Centre Heart, and reconfigure the existing car park near Wellington Walk. It is proposed to maintain the existing exit from the service road back out to High Street (Northern Highway).

It is however intended to close the direct access from the service road through to Queen Street and Coles car park. This will remove a number of conflict points and congestion areas. It will significantly increase the ability to provide much improved pedestrian connectivity along the southern side of Queen Street to both the High Street retail frontage and the signalised intersection pedestrian facilities.

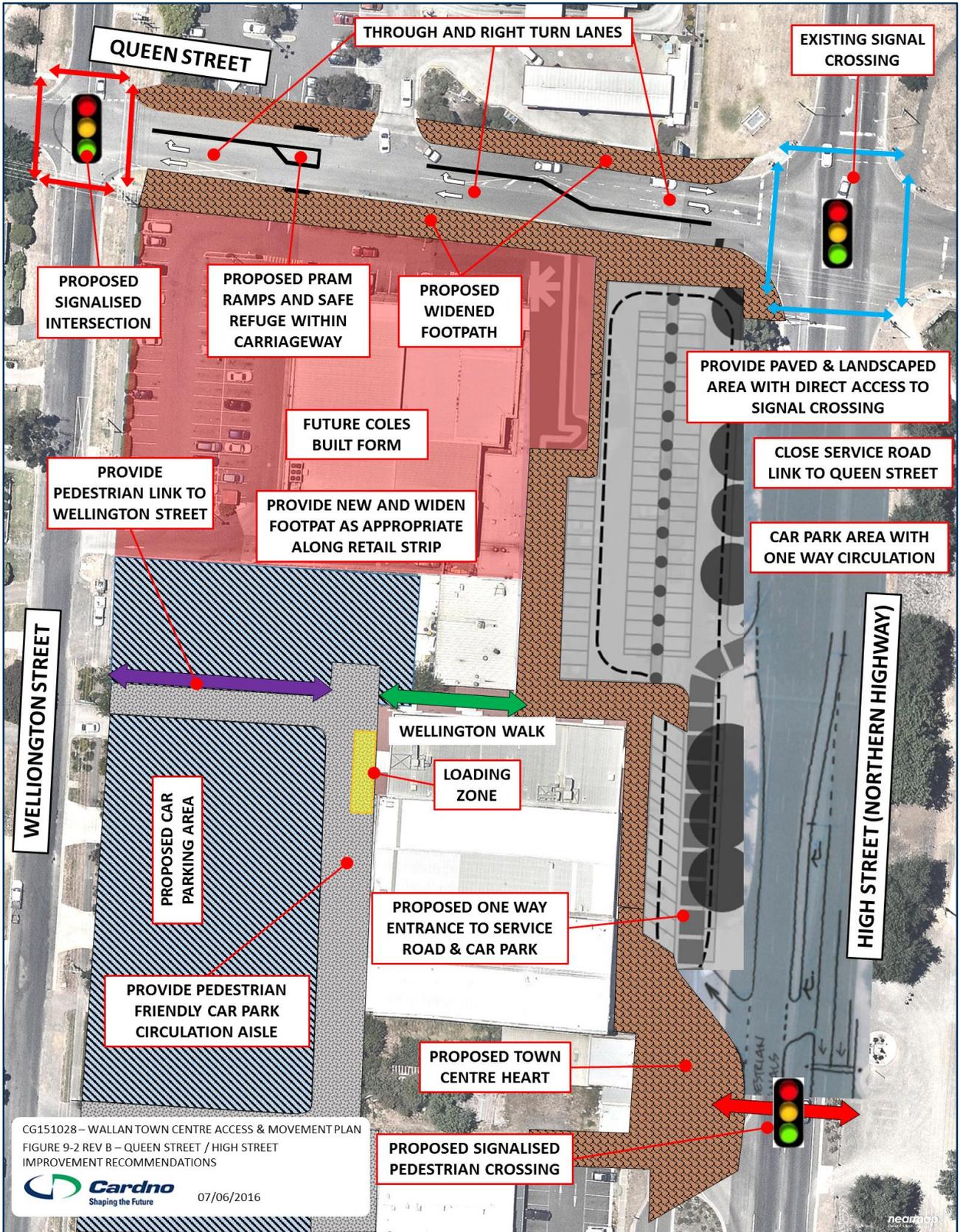
It is also proposed to close the second access on the southern side of Queen Street, as or when the built form of the Coles building extends out to the property line. Vehicular access to the Coles car park would be provided off Wellington Street. Similarly, as the built form extends out to the kerb along the northern frontage of Queen Street, the access from the existing service station would be able to be closed, allowing for a widened footpath along the northern side of the street.

The Queen Street carriageway will be wide enough to provide a single through lane of traffic in each direction, and provide right turn lanes on the approach to both the Wellington Street and High Street (Northern Highway) intersections and also the entrance to the Wellington Square car park from the eastern approach.

As previously discussed, it is recommended that provision be made for a pedestrian crossing facility mid-block on Queen Street in recognition of the strong pedestrian desire line between Wellington Square and Coles. This may be in the form of pram crossings and a pedestrian refuge within the carriageway immediately to the west of the Wellington Square car park access.

The recommendations throughout this area are shown on Figure 9-2.

Figure 9-2 Queen Street / High Street Improvement Recommendations



## 10 Implementation Plan

Each of the recommendations provided for each mode throughout this report have been grouped in the following tables, with an indication of the implementation timeframes. The responsible authority for the implementation, and the level of community benefit, has also been identified for each recommendation. Table 10-1 provides an indication of the priority timeframes for delivery.

**Table 10-1 Priority Timeframes**

Priority	Timeframe
Short Term	Within 5 Years
Medium	5 to 10 Years
Long Term	10 to 20 Years

### 10.2 Pedestrian Network Recommendations

Table 10-2 summarises each of the pedestrian network recommendations identified in Section 4 of this report, along with the implementation plan for each of these recommendations.

**Table 10-2 Pedestrian Network Recommendations and Implementation**

Item Ref	Project Description / Recommendation	Responsibility	Priority	Community Benefit
P1	Upgrade and provide new footpaths along priority 'Phase 1' street frontages.	Mitchell Council	Shire Short Medium Term	to Medium
P2	Upgrade and provide new footpaths along 'Phase 2' street frontages as development increases	Mitchell Council	Shire Medium Long Term	to Medium
P3	Extend footpaths out to the realigned kerbs from the shop frontages along the High Street retail strip	Mitchell Council	Shire Short Medium Term	to Medium High
P4	Provide a 3.0 metre shared pedestrian and cycle path along the western frontage of Wellington Street between King Street and Duke Street	Mitchell Council	Shire Short Medium Term	to High
P5	Provide signalised pedestrian crossing across High Street (Northern Highway) between the proposed Town Centre Heart and the Free Library Plaza in Hadfield Park	VicRoads Mitchell Council	/ Shire Short Term	High
P6	Provide signalised pedestrian crossing across High Street (Northern Highway) mid-block between the Queen Street and King Street intersections	VicRoads Mitchell Council	/ Shire Medium Term	Medium
P7	Provide a formal mid-block pedestrian crossing on Queen Street between Stanley Street and Wellington Street and between High Street (Northern Highway) and Bentinck Street. Provide an informal pedestrian access between	Mitchell Council	Shire Short Medium Term	to Medium

Item Ref	Project Description / Recommendation	Responsibility	Priority	Community Benefit
	Wellington Street and High Street (Northern Highway)			
P8	Maintain and improve existing mid-block pedestrian links through the High Street retail strip between Watson Street and Queen Street and connect to Wellington Street	Mitchell Council	Shire Short to Medium Term	Medium
P9	Provide high quality, safe, and inviting mid-block pedestrian links at identified locations to improve pedestrian permeability through the town centre area	Mitchell Council and Developers	Shire and Long Term	Medium
P10	Remove the existing school crossing on High Street (Northern Highway) south of Duke Street intersection when the Duke Street intersection becomes signalised, and explore the possibilities to relocate the crossing to mid-block on Duke Street between the Secondary College and the recreation reserve at a later time (subject to further investigation)	Mitchell Council	Shire Short to Medium Term	Medium

### 10.3 Cycle Network Recommendations

Table 10-3 summarises each of the pedestrian network recommendations identified in Section 5 of this report, along with the implementation plan for each of these recommendations.

**Table 10-3 Cycle Network Recommendations and Implementation**

Item Ref	Project Description / Recommendation	Responsibility	Priority	Community Benefit
C1	Improve existing cycle lanes along High Street (Northern Highway) to provide full connectivity through Wallan town centre	VicRoads	Short Term	Medium High
C2	Provide for continuous cycle lanes and advance stop lines at signalised intersections in both directions in any proposed capacity upgrade of High Street (Northern Highway) through Wallan town centre	VicRoads	Long Term	Medium High
C3	Provide continuous cycle lanes and advance stop lines at signalised intersections in both directions on Watson Street east of High Street (Northern Highway) to the rail station and residential development areas further east. Provide on-road cycle lanes on Watson Street west of High Street (Northern Highway).	VicRoads / Mitchell Council	Shire Medium Term	Medium High
C4	Provide on-road cycle lanes or shared paths on the peripheral road network around the Town Centre Core Precinct, except where cycle provision will be by way of an off-road shared path	Mitchell Council	Shire Short to Medium Term	Medium High

Item Ref	Project Description / Recommendation	Responsibility	Priority	Community Benefit
	facility			
C5	Provide end-of-trip cycle parking facilities at key destinations including the proposed bus interchange, within Wallan town centre study area to encourage cycling to the town centre	Mitchell Council	Shire Medium Term	Medium High
C6	Encourage the implementation of Green Travel Plans for all new larger scale developments within the Wallan town centre study area	Mitchell Council	Shire Short to Medium Term	Medium High

## 10.4 Public Transport Network Recommendations

Table 10-4 summarises each of the public transport network recommendations identified in Section 6 of this report, along with the implementation plan for each of these recommendations.

**Table 10-4 Public Transport Network Recommendations and Implementation**

Item Ref	Project Description / Recommendation	Responsibility	Priority	Community Benefit
PT1	Review the existing local town bus service with the aim of increasing service frequency and coverage	PTV / Mitchell Shire Council	Short Term	High
PT2	Undertake future periodic reviews of the demand for potential bus service routes providing access to Wallan town centre identified in the Wallan Structure Plan and Principle Public Transport Network as development increases	PTV / Mitchell Shire Council	Medium to Long Term	Medium
PT3	Provide a bus interchange at an appropriate location within Wallan town centre to provide for proposed strategic PTV bus services and existing and future local bus services	PTV / Mitchell Shire Council	Medium to Long Term	High

## 10.5 Road Network Recommendations

Table 10-5 summarises each of the road network recommendations identified in Section 7 of this report, along with the implementation plan for each of these recommendations.

**Table 10-5 Road Network Recommendations and Implementation**

Item Ref	Project Description / Recommendation	Responsibility	Priority	Community Benefit
R1	Support VicRoads plans to upgrade capacity on both High Street (Northern Highway) and Watson Street east of High Street through Wallan town centre	VicRoads / Mitchell Shire Council	Medium to Long Term	Medium
R2	Improve and connect service roads either side of High Street (Northern Highway) through Wallan town centre in a staged approach as development progresses up to full	VicRoads / Mitchell Shire Council	Short to Medium Term	Medium High

Item Ref	Project Description / Recommendation	Responsibility	Priority	Community Benefit	
	construction upon capacity upgrade of the roadway				
R3	Provide a peripheral road network around Wallan Town Centre Core Precinct to ease the pressure on High Street (Northern Highway) and to allow access to car parks and key services, with emphasis on Wellington Street (See R8)	Mitchell Council	Shire	Short to Medium Term	Medium High
R4	Upgrade key intersections to support ease of movement around the peripheral road network, including the provision of signals at Wellington Street / Queen Street, and High Street (Northern Highway) / Duke Street, and a roundabout at Windham Street / Queen Street and Wellington Street / Watson Street, unless it becomes part of the PPTN	VicRoads Mitchell Council	/ Shire	Short to Medium Term	Medium High
R5	Provide a central reservation along Queen Street between Wellington and High Streets, with right turn lanes on Queen Street approaching both intersections and the entry to Wellington Square car park to maximise through traffic movements	Mitchell Council	Shire	Short to Medium Term	Medium High
R6	Close the existing vehicle access on Queen Street to the High Street service road and the Coles parking areas on the southern side of Queen Street to improve safety and pedestrian connectivity. These works should be incorporated into the implementation of High Street (Northern Highway) and Queen Street improvement recommendations, and improvements to the car parks off Wellington Street	Mitchell Council	Shire	Short to Medium Term (Subject to Redevelopment)	Medium
R7	Extend the 40kph speed zone from the school zone at Stanley Street east to High Street	Mitchell Council	Shire	Medium Term	Medium
R8	Stage an upgrade of Wellington Street between King Street and Duke Street and provide a through connection at Duke Street as a priority	Mitchell Council	Shire	Short to Medium Term	Medium
R9	Investigate the benefits of providing direct access from Stanley Street to Duke Street with a standard 'T intersection', following the provision of a direct link from Wellington Street to Duke Street	Mitchell Council	Shire	Medium to Long Term	Medium
R10	Provide a link over Wallan Creek on King Street to connect between the top of	Mitchell Council	Shire	Medium Term	Medium High

Item Ref	Project Description / Recommendation	Responsibility	Priority	Community Benefit
	Wellington Street and High Street (Northern Highway) to provide a complete peripheral road connection			

## 10.6 Car Parking Recommendations

Table 10-6 summarises the car parking recommendations identified in Section 7 of this report, along with the implementation plan for each of these recommendations.

**Table 10-6 Car Park Recommendations and Implementation**

Item Ref	Project Description / Recommendation	Responsibility	Priority	Community Benefit
CP1	Provide on and off street car parking throughout the Wallan Town Centre study area in the locations identified to cater for the additional demand created by the proposed land use scenarios	Mitchell Council	Shire Medium Term	High
CP2	Review the parking provision and demand patterns as development progresses to determine the need for a potential Parking Management Plan	Mitchell Council	Shire Medium to Long Term	Medium

DRAFT