19. Pedestrian and cycle access

19.1 Introduction

Quality cycle and pedestrian access to transport infrastructure facilitates greater use of public transport. The Pedestrian Council of Australia comments that 'walking is a fundamental and direct means of access to most places and to the goods, services and information available at those places' and that 'walking can be an ideal substitute for short car trips, including those to public transport stops. Those short trips contribute disproportionately to air pollution: the more they can be avoided, the better for us all'.[2] Likewise, the Australian National Cycling Strategy 2005–2010 (Australian Bicycle Council 2008) notes that 'Australians are becoming increasingly aware of the convenience, enjoyment and widespread health and environmental benefits of cycling'.

The busway extension will serve areas that are heavily car dependent due to low-density housing development and as such cycle and pedestrian access needs to be attractive, safe, convenient and accessible for all users in order to promote cycling and walking as viable modes of access to the stations. This will reduce the demand for park 'n' ride and kiss 'n' ride facilities at the stations and improve the integration of the stations with the local land uses. This has the added benefit of improving pedestrian and cycle facilities for local trips.

19.2 Methodology

The methodology for this report involved:

- a desktop analysis of the existing cycle and pedestrian network in the study area using previous studies and planning including:
  - Pedestrian Access and Mobility Plan (Department of Main Roads 2006)
  - Background Report — Springwood Town Centre Master Plan (Buckley Vann)
  - South East Queensland Principle Cycle Network Plan (Queensland Transport 2007)
  - South East Queensland Infrastructure Plan and Program Cycle Network Program Capital Grant Projects (Logan City Council)
  - Guide to Traffic Engineering Practice — Bicycles
- identifying potential pedestrian and cycle demand vectors for trips accessing the South East Busway extension from Rochedale to Springwood and local trips that cross the corridor
- identifying potential impacts and opportunities with strategies to manage the issues and opportunities surrounding cycle and pedestrian access during construction and operation of the busway extension
- developing a conceptual pedestrian and cycle route network related to the extension corridor and specify standards for cycle and pedestrian infrastructure to be provided in support of the extension.

[2] Pedestrian Council of Australia (1999) The Australian Pedestrian Charter.

19.2.1 Previous investigations

Pedestrian Access and Mobility Plan — Pacific Motorway Transit Project Sections A, B and C

Connell Wagner prepared a Pedestrian Access and Mobility Plan through an investigation of the existing pedestrian and cyclist networks adjacent to the Pacific Motorway within Logan City as an input into the preliminary design of the upgrade of the Pacific Motorway for the Pacific Motorway Transit Project Sections A, B and C. The plan had particular emphasis on the provision of the Veloway, a high-standard bicycle route between Brisbane and the Gold Coast.

The plan identified several key issues that are relevant to the planning for the South East Busway extension from Rochedale to Springwood. These include:

- the severance of the land uses by the Pacific Motorway
- the significant distance between pedestrian and cycle crossing locations
- the need for wider footpaths in areas such as the Springwood Road underpass and Fitzgerald Avenue underpass
- the need for surveillance and appropriate lighting on bridges.

Background Report — Springwood Town Centre Master Plan

Logan City Council engaged a number of consultants to initiate a new master planning process for Springwood. Buckley Vann produced a report in 2006 that outlines the current status of planning, the issues and related implications for the study area.

The key issues identified as relevant to the extension planning include improved connectivity, safety and amenity for pedestrians and cyclists. Specific issues that were identified relating to pedestrian and cyclists in the Springwood area included:

- identification of limited facilities for cyclists
- improved connectivity required between the existing bus station and the surrounding areas
- lack of connectivity through shopping centre car parks
- lack of connectivity and safety for pedestrians crossing major roads
- conflict between pedestrians and vehicles occurs along Fitzgerald Avenue
- no footpaths along Fitzgerald Avenue between Rochedale Road and the shopping centres
- grade differences are difficult to traverse, particularly for elderly or disabled persons.

South East Queensland Principle Cycle Network Plan

The Department of Transport and Main Roads has developed a guide for the planning and provision of principle cycle infrastructure in south-east Queensland, the South East Queensland Principle Cycle Network Plan. This plan guides the future development of cycle infrastructure. The future cycle network for Springwood can be seen below in Figure 19-1. Blue dotted lines indicate future cycle paths. These future cycle paths will improve cycle access to Springwood bus station.

Figure 19-1: Future cycle paths for Springwood

Source: South East Queensland Principle Cycle Network Plan (Queensland Transport 2007)

South East Queensland Infrastructure Plan and Program Cycle Network Program Capital Grant Projects

Logan City Council is undertaking the detailed design for the construction of Stage 2 of the Logan Central Bicycle Route from Tygum Lagoon at Waterford West to Springwood bus station. Stage 2 will link Logan Central and Springwood and is a total length of 2.6 km. This path will provide a vital link in the future cycle network of Springwood. Figure 19-2 illustrates the alignment of this route.

Logan City Council applied for funding for the construction of the path under the South East Queensland Infrastructure Plan and Program Cycle Network Program Capital Grant Project for 2007–08. The project is included as one of the 'round one' projects.

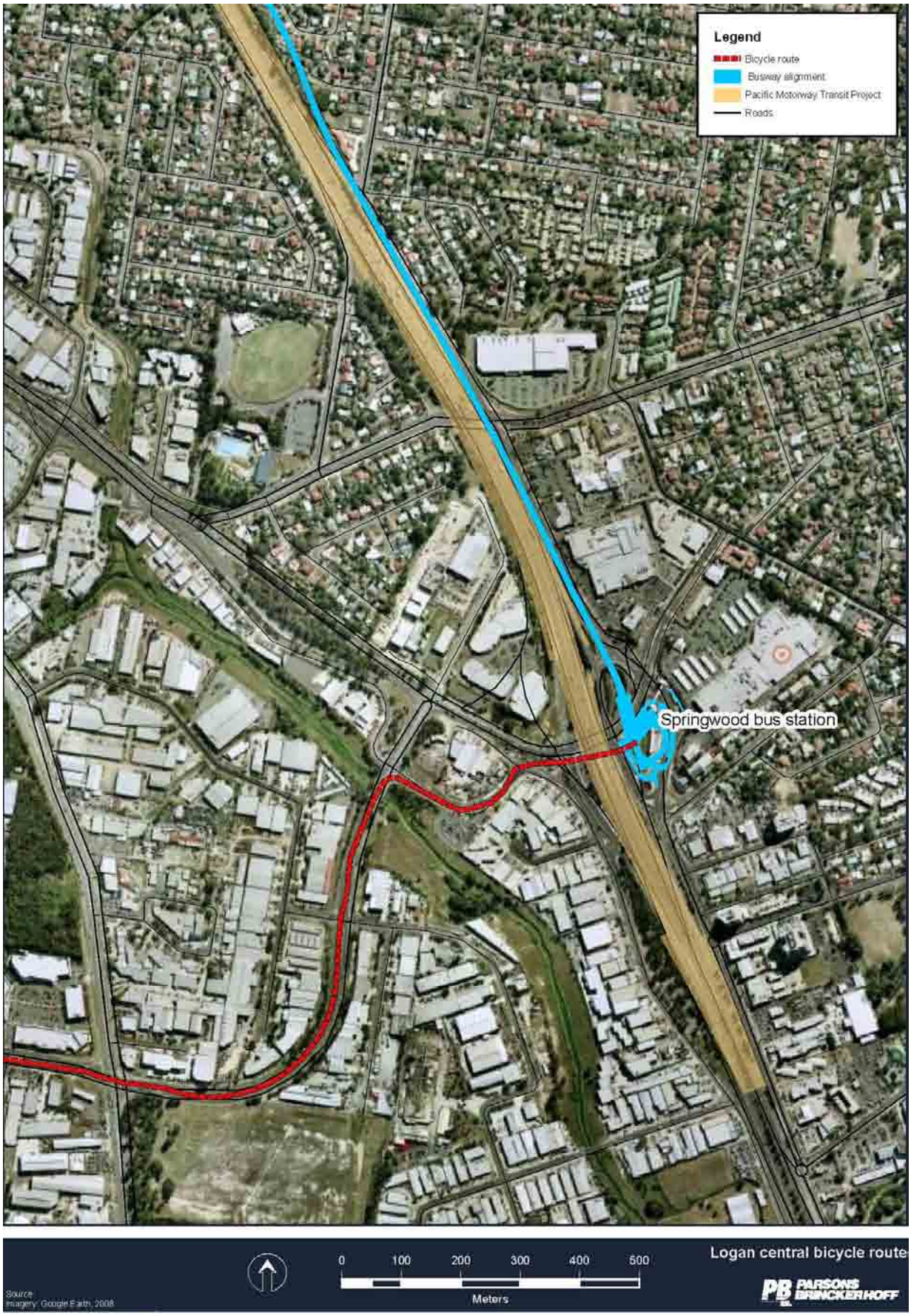

Figure 19-2: Logan Central Bicycle Route

19.2.2 Additional investigations

A desktop analysis of the current situation along the corridor was undertaken using information from previous studies, aerial photographs and internet resources.

19.3 Preliminary analysis

19.3.1 Existing situation

Within the area of interest local government (Logan City Council) is responsible for providing and maintaining the existing pedestrian and cycle network, which consists of off-road shared pathways and both sealed and unsealed footpaths. The Department of Transport and Main Roads are responsible for providing regional cycle corridors, including the Veloway cycleway along the western side of the Pacific Motorway (more information about the Veloway is provided in Section 19.3.3). There are no on-road cycle facilities serving the existing Springwood bus station. The environment surrounding the station is dominated by vehicles, making it difficult for pedestrians and cyclists to easily access the station.

Crossings of the Pacific Motorway are illustrated in Figure 19-3. There are three crossing points along the South East Busway extension from Rochedale to Springwood. The distances between these crossing points are 2 kilometres between Underwood Road and Springwood Road underpasses, and 0.6 kilometres between Springwood Road and Logan Road underpasses. The motorway creates a largely impermeable barrier to pedestrians and funnels cyclists wanting to cross the motorway onto busy roads.

The Underwood Road overpass crosses over the Pacific Motorway and has narrow walkways, approximately 1 metre in width, either side of Underwood Road. There are no specific bicycle facilities at this crossing. The bridge is not lit and there are no surveillance cameras in the immediate area. Casual surveillance is provided from passing cars, with little opportunity for surveillance from adjacent housing.

The Springwood Road underpass consists of four lanes of general traffic and has a footpath located on both sides of the road. The footpaths are approximately 4 metres wide and are lit.[3] The eastern approach to the underpass is via a signalised intersection. This approach was identified in the Pacific Motorway Transit Project's Pedestrian Access and Mobility Plan as hazardous to pedestrians due to the absence of line markings on the northern side of the intersection and the jutting out of the median into the pedestrian crossing path.

The Fitzgerald Avenue/Logan Road underpass, which is the nearest underpass to Springwood bus station, consists of four lanes of general traffic and two bus lanes entering and exiting the station. A footpath, separated from traffic by fences is located only on the southern side of the underpass, between the general traffic lanes and the bus lanes, and connects to a signalised crossing at its western end. While tactile ground surface indicators are located at the intersection, the Pedestrian Access and Mobility Plan identified this area as a potential high stress area and possibly confusing due to the lack of visual cues on the western approach.

[3] Path widths stated in this report are as per the Pacific Motorway Transit Project's Pedestrian Access and Mobility Plan

Figure 19-3: Crossing points along the Pacific Motorway

Figure 19-4: Nearby residential homes and their proximity to Springwood bus station

19.3.2 Pedestrian access routes

Pedestrian access routes to Springwood bus station currently consist of a pedestrian overpass over Rochedale Road and an underpass of the Pacific Motorway parallel with Logan Road. Pedestrians accessing the station from the west and south cross the bus access roads at grade at zebra crossings.

Springwood bus station is surrounded by residential and commercial land uses and is located in the centre of a major road interchange. The closest residents are just over 100 metres from the station; however, the vast majority of residents are more than 400 metres from the station (see Figure 19-4). All access routes are along footpaths adjacent to heavily trafficked roads. The combination of these issues limits the extent to which walking can be used as a mode of access to the station, this is even more pronounced for the residents west of the Pacific Motorway.

A far greater number of residents east of the motorway can access the station by foot. To access the station, residents to the east of Springwood bus station have a circuitous route with three at-grade crossings of major roads and the bus station access road.

Residents to the north-east of Springwood bus station constitute the main catchment for pedestrian access. After a relatively long walk they gain access to the station using the pedestrian overpass.

19.3.3 Cycle access routes

Accessing the current station by bicycle requires cyclists to cross busy roads. Cyclists from the west and north-west either cross Rochedale Road at-grade with general traffic or would need to share the pedestrian overpass. During peak periods cyclists boarding lifts with their bikes take up a large amount of space and create capacity issues in the lift for peak hour commuter flow.

The Veloway planned along the western side of the Pacific Motorway will form a linear route along the motorway suitable for both recreational and commuter cycling traffic. The intention is to provide a connection from Brisbane to the Gold Coast, which will form part of a national cycle network. The completion of the Veloway is expected to occur prior to implementation of the South East Busway extension from Rochedale to Springwood.

19.3.4 Managing issues and opportunities

Improving links to regional cycle and pedestrian networks

The Department of Transport and Main Roads is responsible for providing connections to the broader pedestrian and cycle network within its immediate area of works impact. Any additional connections provided will be subject to negotiation based upon project-specific budget and construction opportunities.

Although local government is responsible for the local pedestrian and cycle network, the Department of Transport and Main Roads has an interest in promoting connective, high-quality networks that encourage walking and cycling to public transport stations and stops. Ongoing communication will be needed between the Department of Transport and Main Roads, the TransLink Transit Authority and Logan City Council to ensure an integrated outcome.

Encouraging cyclist and pedestrian activity

The internal pedestrian and cycle networks and facilities planned as part of the South East Busway extension from Rochedale to Springwood will meet all standards and guidelines for the design of this infrastructure, with a focus on accessibility and continuity.

Detailed design of the Springwood bus station needs to take into consideration the location of cycle parking in relation to cycle and pedestrian access routes to the busway platforms. The design needs to limit conflicts between cyclists and pedestrians along these access routes and cycle access routes should avoid lifts.

Cycle parking should be located in a safe, highly visible area in close proximity to the busway platforms. Placing cycle parking too far from the platforms will result in cyclists parking illegally in a more convenient position. Similarly, locating bicycle parking where there is limited passive surveillance will limit the use of the parking. Cyclists should not need to use elevators and narrow overpasses to access parking.

Adequate space for cyclists on access routes needs to be provided. Figure 19-5 identifies cycle access routes that will require improvements in order to easily access cycle parking on the pedestrian concourse and underneath the station. Where pedestrian and cycle volumes are high this may require separation of pedestrians and cyclists.

Future investigations into the provision of cycle facilities at the Rochedale busway station (and access routes to these facilities) will be required.

The Veloway as an access route to Springwood and Rochedale stations

There is an opportunity for the Veloway along the western edge of the motorway to provide a high standard of cycle access to the Springwood and Rochedale busway stations. To realise this potential it is important to ensure that the linkages from the Veloway to the stations across the motorway are to a high standard. The current footpath along Fitzgerald Avenue/Logan Road is inadequate and would require widening to a continuous width of at least 3 metres to provide the standard required. This should be considered in the future by Logan City Council, in consultation with the Department of Transport and Main Roads.

Cyclists accessing the Springwood and Rochedale busway stations would have a safe off-road cycle route to the station along the Veloway. Figure 19-6 and Figure 19-7 show the desire lines for cyclists in the area to access the stations. The Veloway could form an important spine of access to the stations if there is sufficient and legible access routes from the local road network. The cycle catchment areas considered are within 4 kilometres from the Springwood bus station (approximately a 15-minute ride).

Access to the stations from the north-east

The Veloway provides a high-standard route for cyclists to access the Springwood and Rochedale stations; however, the Veloway is not accessible to residents north-east of Springwood wishing to access the station. Access to the Veloway for cyclists to the east of the motorway is limited to the existing intersections.

There is an opportunity for a cycle link to be provided on the eastern side of the extension between Underwood Road and Rochedale Road. This would adequately cater for pedestrians and cyclists north-east of Springwood wishing to access the stations.

For cyclists accessing the Springwood bus station from the north-east the most direct route would be along Rochedale Road. Currently there is limited road width available and traffic volumes are high. A shared pedestrian and cycle path along the eastern side of Rochedale Road would provide a more direct route to the station. Improving cycle access to the station from the north-east may also avoid the need for cyclists to use the lifts to access cycle parking.

The provision and design of these new pedestrian and cycle paths will be investigated in future planning phases.

Improved access with future redevelopment

The current planning by Logan City Council to redevelop the Springwood town centre presents an opportunity for providing a high standard of pedestrian and cycle access to Springwood bus station from the south-east.

New pedestrian links between the town centre and Springwood bus station would need to allow provision for cyclists accessing the station. Cyclists wishing to access the Veloway should be provided with an alternative route to avoid conflicts between high-speed long-distance commuter cyclists and pedestrians and cyclists accessing the station.

Construction impact

Construction of the South East Busway extension from Rochedale to Springwood is likely to have a major impact on existing pedestrian and cycle movements along the corridor and access to Springwood bus station. The construction plan would need to ensure that any impacts to pedestrian and cycle movements would be minimised and that the existing bus interchange continue to operate efficiently.

Pedestrian and cyclist conflicts

The pedestrian and cycle access routes to the Springwood bus station are proposed along shared paths. This could be an issue if insufficient width is provided. To minimise conflict, cyclists accessing other destinations should have alternative routes available and these should avoid the busy entrances and pedestrian access routes to the station. The Veloway serves this purpose and routes connecting to the Veloway should not require cyclists to go through Springwood bus station.

Figure 19-5: Major cycle and pedestrian paths into Springwood bus station

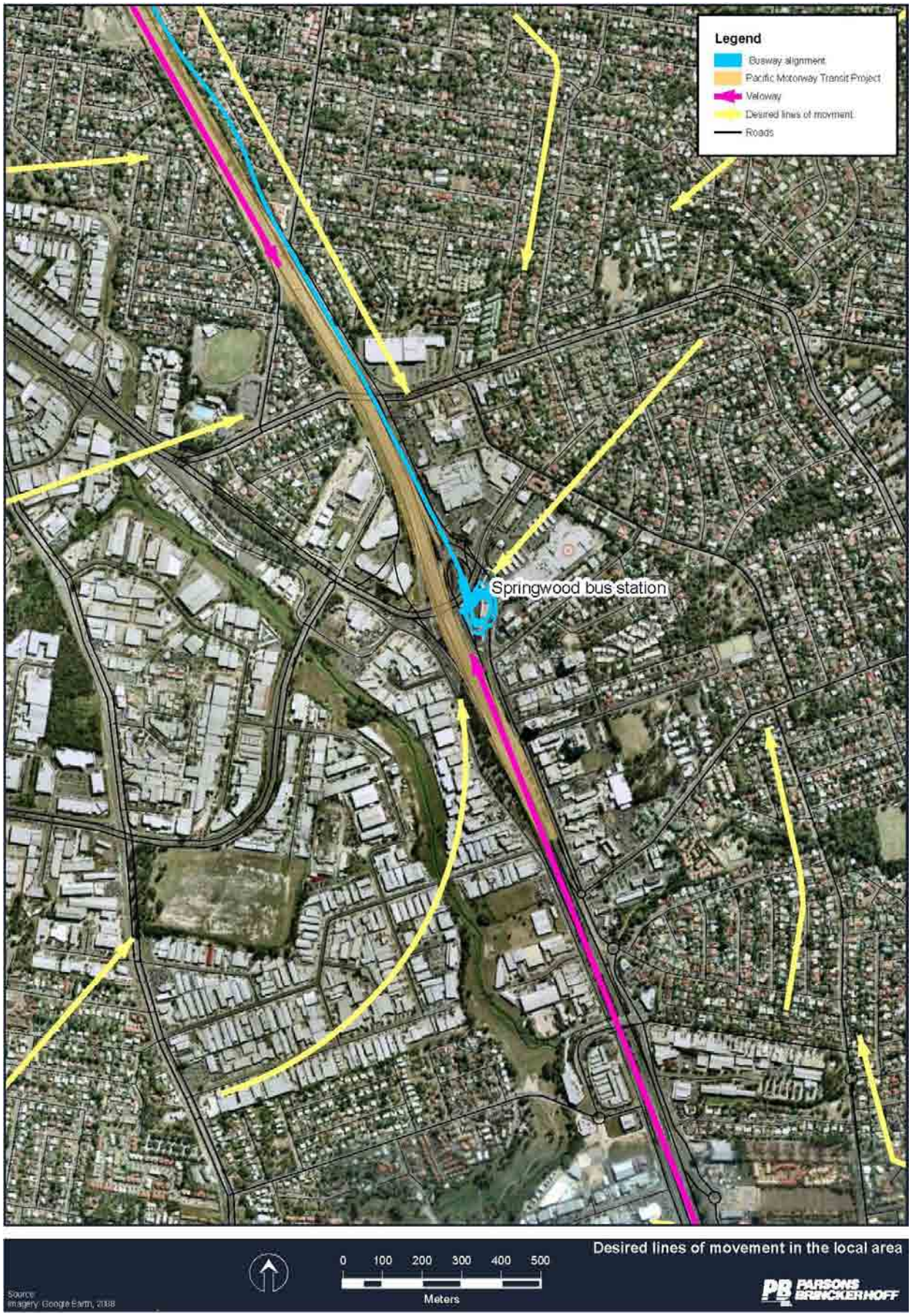

Figure 19-6: Desired lines of movement in the local area

Figure 19-7: Main desired cycle and pedestrian movements for accessing Springwood bus station

19.4 Future investigations

A future site visit would verify the desktop assessment and identify any new opportunities and constraints. A survey may be required at the existing Springwood bus station to quantify the extent of walking and cycling as a mode of access to the station. This would identify the paths of access taken by cyclists and pedestrians currently using Springwood bus station and identify any constraints and opportunities identified by current users. This would provide valuable data to inform the development of future impact management planning phases.

Recommendations on the preferred vision for pedestrians and cyclists were developed in consideration of the current concept design. These recommendations should be taken forward in future planning phases for further investigation. In the case of future changes to the concept design, a revision of the pedestrian and cyclist recommendations will be required.

There is also the need to examine what opportunities exist south of Springwood bus station to accommodate cyclists accessing the station.

19.5 References

Australian Bicycle Council 2008, Australian National Cycling Strategy 2005-2010, viewed 14 August 2008, < http://www.austroads.com.au/abc/index.php?type=main&id=2>

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