

# Doncaster Hill Pedestrian & Cycling Plan



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# 1. Background

An action arising from the Doncaster Hill Strategy is to prepare a Pedestrian & Cycling Plan for Doncaster Hill.

Part A of the strategy outlines the vision for a Sustainable Urban Village, an essential element of which is an 'Attractive Village'. Within the context of an 'Attractive Village' it is noted that such a village will contain high quality urban design and amenity, boulevard treatments and pedestrian activity.

One of the seven key elements of a Sustainable Urban Village noted in the strategy is 'Access & Circulation' and it is this section that provides the strategic background for the Doncaster Hill Pedestrian & Cycling Plan. In order to fully appreciate this context the relevant parts of the section are noted below.

## ***Access & Circulation***

*Pedestrian and bicycle users' amenity and accessibility will be a priority in the development of any circulation networks proposed for Doncaster Hill.*

*Further pedestrian crossing opportunities will be provided along major roads. Bicycle paths will be created to provide easy access to all areas of Doncaster Hill, with adequate bicycle facilities provided.*

*Vehicle crossings will be limited and strictly controlled to minimise any potential conflicts with pedestrian activity areas.*

*The Strategy Objectives that underpin the key element 'Access & Circulation' are:*

*1.1. Adopt an integrated approach to transport and traffic planning to provide genuine travel choice and reduce levels of car dependency. This includes applying the car parking policy and car parking rates to support changed travel behaviour and a sustainable transport future.*

*1.2. To design development that minimises vehicle trips and supports walking to daily activities including shops, work, schools, public transport, community facilities, services and other destinations.*

*1.3. To ensure development facilitates a permeable, safe and comfortable pedestrian environment adjacent to the proposed boulevard and with strong linkages within Doncaster Hill.*

*1.4. To ensure development is designed to meet the needs of people with varying mobility levels, recognising that the needs of people with a disability may change across their lifespan, ensuring that an environment of access and equity is created.*

*1.5. To establish a framework of streets and public spaces that:*

- create a vibrant pedestrian environment on Doncaster Hill including active street frontages, particularly along major boulevards;*
- provide a high degree of connectivity and permeability giving a choice of routes;*
- and*

- *can be supervised by residents, visitors and workers of surrounding buildings to make the precinct feel safe.*

1.6. *To provide a movement network that:*

- *provides connectivity between and within all precincts;*
- *integrates pedestrian, bicycle and vehicle circulation;*
- *encourages multi-purpose trips;*
- *encourages walking and bicycling;*
- *provides linkages to passive and active open space areas within and nearby to Doncaster Hill, these networks should prioritise links to facilities such as Westfield Shoppingtown Doncaster, Aquarena, Ruffey Lake Park, the Koonung Creek Trail and the main Yarra River Trail;*
- *minimises the impact of through traffic.*

The Doncaster Hill Pedestrian and Cycling Plan has been prepared in the context of, and to be consistent with, the Doncaster Hill Parking Precinct Plan and Doncaster Hill Traffic Modelling and Analysis Reports prepared by GTA Consultants as well as the Doncaster Hill Urban Masterplan.

## 2. Networks

Pedestrians, with their high level of manoeuvrability, are often able to tolerate a wide range of network types including informal paths, stairs, ramps, sealed footpaths and shared pedestrian/bicycle paths. However, given the desire to ensure a high level of accessibility for all members of the community, it is anticipated that the pedestrian network on Doncaster Hill will, where practical, consist of sealed footpaths and shared pedestrian/bicycle paths.

With regard to cycling, Bicycle Victoria, in its document 'The 4 Networks Challenge', outlines the following major types of bicycle network needs:

- Main Roads
- Local Roads
- Shared Pedestrian/Bicycle Paths
- Rail Trails

Each type of facility is suitable for a different purpose and often caters for cyclists with different abilities and desires.

It is envisaged that cycling access in Doncaster Hill will include a mixture of main roads, local roads and shared paths.

### 2.1 Main Roads

#### 2.1.1 Background

For pedestrians and cyclists to be an integral part of transport on Doncaster Hill it is essential that upgraded pedestrian facilities and adequate cycling facilities be included on the main roads in the area, particularly on Doncaster Road. The main roads provide the most direct and

accessible method of travelling between the precincts within Doncaster Hill and to the adjoining areas.

Doncaster Road consists of at least 3 through lanes of vehicle traffic in each direction with additional left and right turning lanes at major intersections. There is also a narrow section of nature strip and a 1.5 metre wide concrete path on each side of the road. The through traffic lanes are very close to the minimum width suitable for a road with a 70km/h speed limit. Traffic modelling undertaken by GTA Consultants indicates that, during peak periods, it is essential that the 3 lanes in each direction be retained to ensure that the roads do not become saturated.

Therefore it is not possible to significantly widen the footpath, upgrade the footpath to a shared path or install permanent bicycle lanes on Doncaster Road if the road reserve is to be maintained at its current width.

However, it is noted that an objective of the Strategy is to encourage a boulevard type atmosphere on Doncaster Road. It is envisioned that this would include cafes and outdoor facilities accompanied by on-street parking in off-peak periods.

In order to achieve the desired objectives of encouraging a boulevard type atmosphere, providing improved facilities for pedestrians and cyclists, and retaining the current traffic capacity of Doncaster Road during peak periods, it is proposed to incorporate the front 2 metres of each property into a widened footpath as development occurs on Doncaster Road (as well as Williamsons Road and Tram Road). This path will be at least 2.7 metres wide at any point and generally 3.6 metres wide. Current plans provide for 1.2 metres of low planting or additional paving between this path and the existing road.

### **2.1.2 Proposals**

This arrangement provides 2 realistic options for pedestrian and cycling facilities:

#### *Option 1:*

The widened footpath will be of adequate width to become a shared pedestrian/bicycle path in accordance with the 'Austroads Guide to Traffic Engineering Practice Part 14 – Bicycles' and would simply require signing as such.

#### Positives:

- Shared paths are able to be used by cyclists with a wide range of abilities and experiences.
- The path would provide direct access to businesses and residences.
- There would be no alteration required to the construction of Doncaster Road and hence the expense of the works would be minimised.

#### Negatives:

- There is potential for conflict between cyclists and pedestrians and corresponding concerns with safety, particularly for more experienced cyclists who travel at higher speeds.
- As a result, shared paths in areas such as Doncaster Hill are not suitable for commuter or longer-distance type cyclists who would likely still use the normal traffic lanes on the

main roads and hence are likely to continue to have concerns with safety due to the lack of separation between competing uses.

- The long-term nature of the development on the main roads and hence the differing timing of the availability of the 2 metre strip outside each property would result in the footpath being of different widths outside different properties in the short to medium term and hence may not be suitable for being a shared path for some time.

#### *Option 2:*

The main roads could be widened to remove the proposed 1.2 metre nature strip and include that land within the road by moving the kerbs. This would allow an on-road bicycle lane and 3 motor vehicle lanes in each direction in peak periods with a parking lane, a bicycle lane, and 2 motor vehicle lanes in each direction in off-peak periods.

#### Positives:

- There would be separation between pedestrians, cyclists and motor vehicles ensuring the highest level of safety for each user group.
- The bicycle lane would cater for cyclists undertaking short and long trips.
- The removal of the nature strip would provide direct access between parked vehicles and the footpath, providing greater encouragement for on street parking. (This is similar to other major café strips i.e. Lygon St, Brunswick St)
- The provision of on-road bicycle lanes rather than a shared path is consistent with other major shopping strips in Melbourne (i.e. parts of Chapel Street).
- The construction of an on-road bicycle lane would be in accordance with the VicRoads Principal Bicycle Network (PBN) and hence funding may be available from VicRoads to help with the construction costs.

#### Negatives:

- The works to alter the width of the main roads would require significant expense.
- The long-term nature of the development on the main roads and hence the differing timing of the availability of the 2 metre strip outside each property could create difficulties with the continuity of the bicycle and parking facilities in the short to medium term.
- On-road bicycle lanes are not suitable for young cyclists. However, under the Road Rules, children under 11 and accompanying adults are able to ride on the footpath anyway.
- The widening of the main roads in Doncaster Hill may appear contrary to the general policy of encouraging the use of modes of transport other than the private motor car and improving the visual amenity of the area.
- There may not be enough room to install the front row of trees along the boulevards with compromising clearance for trucks travelling along the adjacent road lane.

In order to minimise expense, avoid complication, and not increase the width of the main roads, it is recommended that the first option, that of the use of the wide boulevard path as a shared path, be implemented.

It is noted that the width of the existing nature strip on the eastern side of Williamsons Road, and the likely need to not provide on-street parking given the adjacent parking in Doncaster Shoppingtown, may provide an opportunity for the installation of a bicycle lane through road

widening into the nature strip. Room should also be available for a shared path on this side of the road should that be the preferred option and it is noted that such a path is included in the preliminary development plans for the Westfield Doncaster Shoppingtown redevelopment.

## 2.2 Main Road Crossings

Precinct 8 of Doncaster Hill is the area of the intersection of Williamsons Road, Tram Road and Doncaster Road. The vision for this area is clearly indicated in the Doncaster Hill Strategy as below.

*Precinct 8 comprises the major physical barrier of the Doncaster Road and Williamsons Road intersection.*

*This precinct provides an opportunity for the development of an iconic sculpture above the current roadway level of Doncaster and Tram Roads linking pedestrian zones developed in each of the individual precincts as well as providing potential direct links to landmark buildings abutting the intersection.*

*The precinct includes the upgrading work associated with the development of the proposed Doncaster Boulevard.*

### ***Vision***

*It is envisaged that Precinct 8 will have greatly increased pedestrian safety and amenity, connecting all precincts abutting the Doncaster Boulevard & Williamsons Road intersection with the provision of a landmark iconic infrastructure piece which is fully integrated with Doncaster Hill.*

As previously indicated, the Strategy also calls for increased signalised crossings at a number of other locations along the main roads within Doncaster Hill and it is anticipated that these will be able to accommodate the required demand for the crossing of these roads by both pedestrians and cyclists. The design of the intersections should include crossings of adequate width for the expected levels of usage by both pedestrians and cyclists. Consideration should be given to including a bicycle phase in the traffic signal sequence at these intersections where appropriate and ensuring that the length of the pedestrian phase is adequate for pedestrians of all abilities.

New signals are to be installed at the following intersections:

- Doncaster Road & Bayley Grove
- Doncaster Road & Beaconsfield Street/Rose Street
- Doncaster Road & Tower Street
- Elgar Road & Carawatha Road Extension
- Tram Road & Merlin Street

## 2.3 Local Roads

The local roads within Doncaster Hill are generally of insufficient width to allow for the installation of on-road bicycle lanes and where the width is sufficient for bicycle lanes the installation of such lanes would require the removal of on-street parking.

The Draft Doncaster Hill Parking Precinct Plan suggests that parking be removed from some streets in the Doncaster Hill area and restricted in others.

Where parking is to be removed there is opportunity for the road surface to be slightly narrowed and a shared path with a nature strip to be installed on one side of the road. It is suggested that this be undertaken on strategic bicycle routes such as those that link main roads with important community facilities.

Also, given the significantly lower vehicle speeds and volumes in local roads than main roads, it is common for cyclists to share the roadway with motor vehicles. Under the Road Rules, children under 11, and those accompanying them, are able to ride on footpaths anyway. So it is anticipated that these arrangements will apply for the less strategic bicycle routes that do not have formal shared pedestrian/bicycle paths.

One of the major on-road routes in the Doncaster Hill area is down Whittens Lane from Doncaster Road to the Koonung Creek Trail, from which cyclists can ride to the City and surrounding areas. Whilst neither a shared path or on-road bicycle facilities are able to be provided for Whittens Lane, cyclists in the eastern end of Doncaster Hill should still be encouraged to use this route, given its low speed environment. A route should also be provided to access the Koonung Creek Trail by Walker Street and the route through Schramms Reserve and local streets to Ruffey Lake Park should be upgraded to shared path standard.

Consideration should be given to improving access for cyclists in the western end of Doncaster Hill to the Koonung Trail through the service roads along the southern section of Doncaster Road or converting the left lane of that section of Doncaster Road to a shared bus/taxi/bicycle lane.

As a result of the recommended actions, all roads within Doncaster Hill will have sealed pedestrian paths on both sides of the road, some of which will also act as shared paths.



## 3. End of trip Facilities

All new developments will be required to include end-of-trip facilities for cyclists.

These include:

- Secure rails for short-term visit locations such as restaurants, cafes and shops.
- Accessible, ground-floor lockers for residential developments to avoid having to carry bicycles on lifts/stairs.
- Shower and locker facilities for commercial developments with significant numbers of workers/employees to enable them to ride to work.

The installation of such facilities helps to justify the inclusion of fewer car parking spaces within developments than would usually be required.

Public drinking fountains will also be included at various locations in Doncaster Hill.

## 4. Specific Treatments

Given the discussion above, the following are the intended treatments for pedestrians and bicycles in each of the precincts.

### 4.1 Precincts 1, 3 & 4

Precincts 1, 3 and 4 are situated adjacent to each other, north of Doncaster Road between Williamsons Road and the Municipal Offices. The major activity nodes within these precincts are Doncaster Shoppingtown and the Municipal Offices. The redevelopment of Shoppingtown will likely result in the termination of the existing section of Tower Street to the north of Doncaster Road, therefore Council Street will provide an important link between Doncaster Road and the area to the north. Council Street and Goodson Street are both wider than required for 2 traffic lanes and 2 parking lanes and thus can be narrowed to accommodate a shared path on one side of the road with an appropriate width nature strip to accommodate the planting of canopy trees.

It is proposed to extend the east-west linkage of Goodson Street with a shared path through the northern section of Doncaster Primary School to more easily link Doncaster Shoppingtown with the Municipal Offices and the path down Council Street.

Linkage is also expected along Doncaster Road and to the rear of the Mobil site between Council Street and Tower Street.

The major regional open space near Doncaster Hill is Ruffey Lake Park. This reserve provides a number of important recreational facilities and hence should be linked to Doncaster Hill for both pedestrians and cyclists. Whilst there is an existing path on the eastern side of Schramms Reserve, and a signed bicycle route between Schramms Reserve and Ruffey Lake Park, it is considered that this link should be upgraded through the widening of the existing paths along

one side of the intervening roads to shared path status and the investigation of a possible crossing of George Street near Astran Place.

Therefore the proposed actions within precincts 1, 3 and 4 are:

- Construction of a 2.5 metre wide shared path on the eastern side of Council Street between Doncaster Road and Goodson Street, including the relocation of the kerbing in order to accommodate this path and the maintenance of the nature strip width of 1.5 metres.
- Construction of a 2.5 metre wide shared path on the southern side of Goodson Street between Doncaster Shoppingtown and Council Street including the widening of the nature strip to 1.5 metres and the subsequent relocation of the kerbing.
- Extension of the Goodson Street path on the eastern side of Council Street through the northern section of Doncaster Primary School leading to the Municipal Offices precinct and connecting to existing paths within that precinct.
- Removal of the existing brick wall on the Doncaster Road frontage of Doncaster Primary School and the widening of the path through this area.
- Construction of a path to the rear of the Mobil site on Doncaster Road between Council Street and Tower Street utilising the existing laneway at this location.
- Widening of the existing path along the eastern side of Schramms Reserve and along one side of the streets between Schramms Reserve and Ruffey Lake Park, and investigation of the possibility of a crossing of George Street near Astran Place.

## 4.2 Precinct 2

Precinct 2 is the area to the south of Doncaster Road and east of Tram Road. Important linkages within this precinct are between Doncaster Road and the nearby public open space.

It is proposed to create a new reserve in Hepburn Road. This will be linked to the west through a new road connecting Hepburn Road with Clay Drive and further extended to reach Frederick Street. Pedestrians and cyclists will then be able to travel down Frederick Street and Merlin Street to reach Tram Road. Access from the new reserve to Doncaster Road will be via a shared path along Short Street.

It is expected that cyclists and pedestrians would be able to access the Koonung Creek area using either Walker Street or Whittens Lane, both of which carry low volumes of traffic at low speed.

Therefore the proposed actions within precinct 2 are:

- Construction of a 2.5 metre wide shared path on the eastern side of Short Street between Doncaster Road and Hepburn Road including the widening of the nature strip to 2.0 metres and the subsequent relocation of the kerbing.
- Construction of a new road as an extension to Hepburn Road between Walker Street and Frederick Street including the provision of a paved 2.5 metre wide shared path on one side and a 1.5 metre wide footpath on the other.

- Widening of the existing concrete footpath to 2.0-2.5 metres on one side of Frederick Street between Doncaster Road and Merlin Street, and Merlin Street between Frederick Street and Tram Road.
- Construction of a 2.0 metre wide footpath along one side of Walker Street between Hepburn Street and Whittens Lane.

### **4.3 Precincts 5 & 6**

Precincts 5 & 6 are located to the north of Doncaster Road and west of Williamsons Road. Important linkages within these precincts are between the main roads and the nearby public open space at Lawford Street Reserve.

It is intended to provide pedestrian and bicycle connection between the main roads and Lawford Street Reserve along the full lengths of Bayley Grove and Lawford Street.

Therefore the proposed actions within precincts 5 & 6 are:

- Construction of a 2.5 metre wide shared path on one side of Bayley Grove between Doncaster Road and Lawford Street Reserve.
- Construction of a 2.5 metre wide shared path on one side of Lawford Street between Williamsons Road and Lawford Street Reserve.
- Construction of a new road as an extension to Meader Street between Lawford Street and Williamsons Road including the provision of a paved 2.5 metre wide shared path on one side and a minimum 1.5 metre wide footpath on the other.

### **4.4 Precinct 7**

Precinct 7 is the area to the south of Doncaster Road and west of Tram Road. Whilst this precinct does not contain any major activity nodes it is important to provide linkage to the Carawatha Street reserve from the main roads.

Therefore the proposed actions within precinct 7 are:

- Widening of the existing concrete footpath by 0.5-1 metre (depending on site constraints) along Carawatha Road from Caringal Avenue to Rose Street and along Rose Street from Carawatha Road to Doncaster Road.
- Construction of a new road as an extension to Carawatha Road between Rose Street and Elgar Road including the provision of a paved 2.5 metre wide shared path on one side and a 1.5 metre wide footpath on the other, depending on the width of the new road reserve.
- Construction of a new road as an extension to Bayley Grove between Doncaster Road and Carawatha Road including the provision of a paved 2.5 metre wide shared path on one side and a 1.5 metre wide footpath on the other.

## 4.5 Precinct 8

Precinct 8 is the intersection of Doncaster Road and Williamsons Road/Tram Road.

Whilst being the focal point of Doncaster Hill, it has been noted that this intersection is not particularly pedestrian friendly. Given the above, as mentioned previously, it is proposed to install an iconic structure at the intersection that will also serve as a pedestrian overpass. This structure may provide a direct link to the first floor of the buildings surrounding the intersection.

It is anticipated that the construction of this structure would also include modification to the existing left turn lanes at the intersection as most of these are longer than necessary.

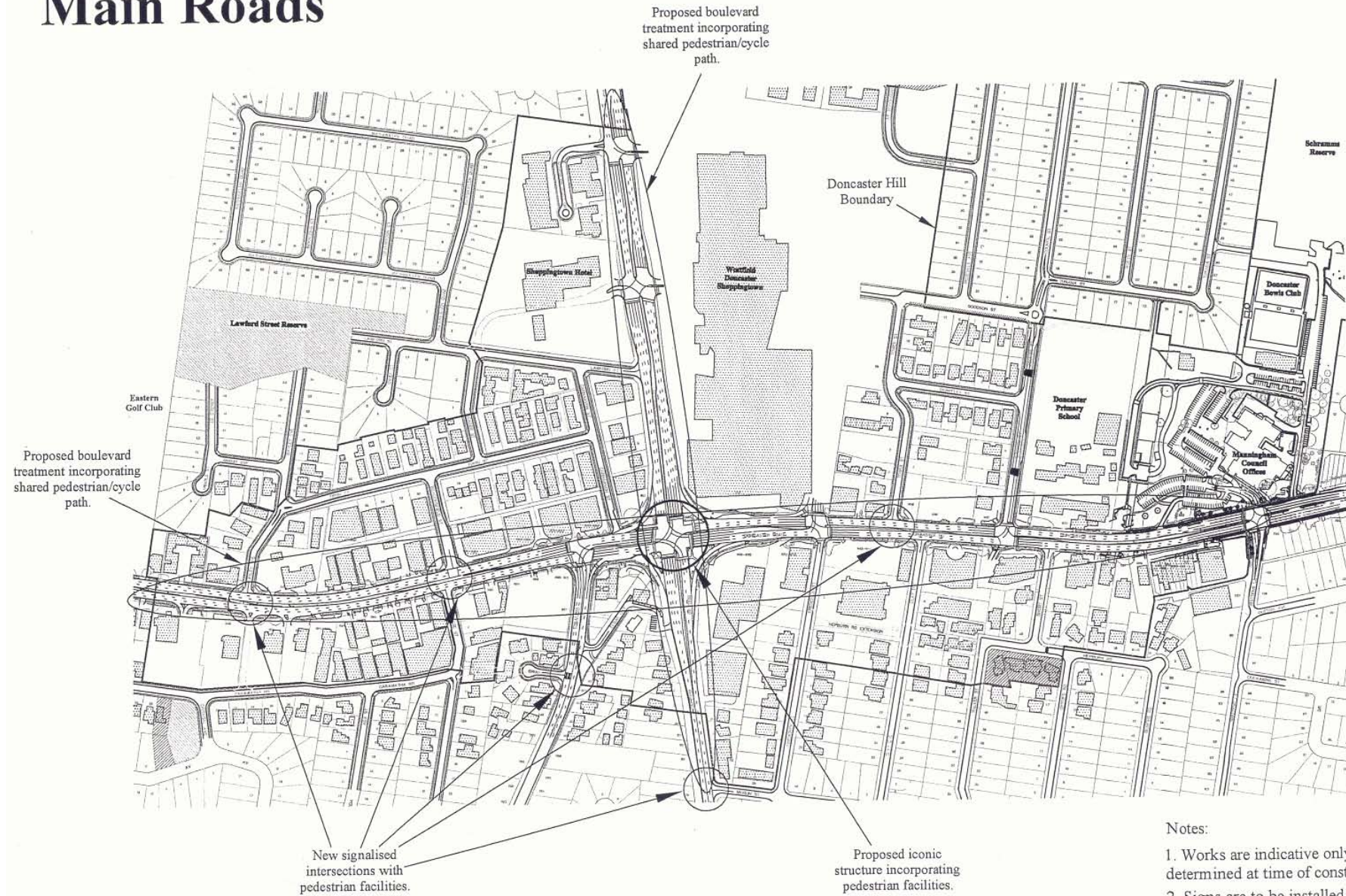
## 5. Conclusions

The need to provide adequate facilities for pedestrians and cyclists on Doncaster Hill is paramount to achieving the aims of the Doncaster Hill Strategy.

The pedestrian and cycle plan, whilst recognising the competing demands of different modes of travel, the space limitations, the need for safety and the cost of providing new facilities, provides a comprehensive framework for ensuring that the aims of the Strategy, with regard to pedestrians and cyclists, are met.

# Appendices

# Main Roads

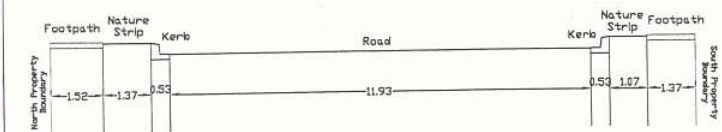


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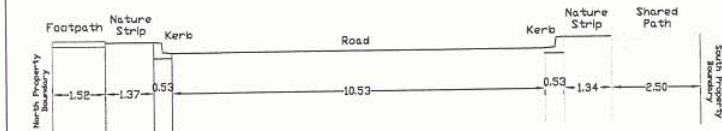
1. Works are indicative only. Exact details to be determined at time of construction.
2. Signs are to be installed in accordance with relevant Australian Standards.



## Goodson St: Cross Sections

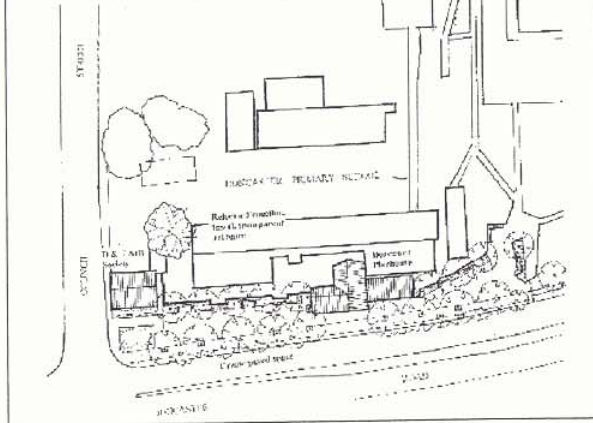


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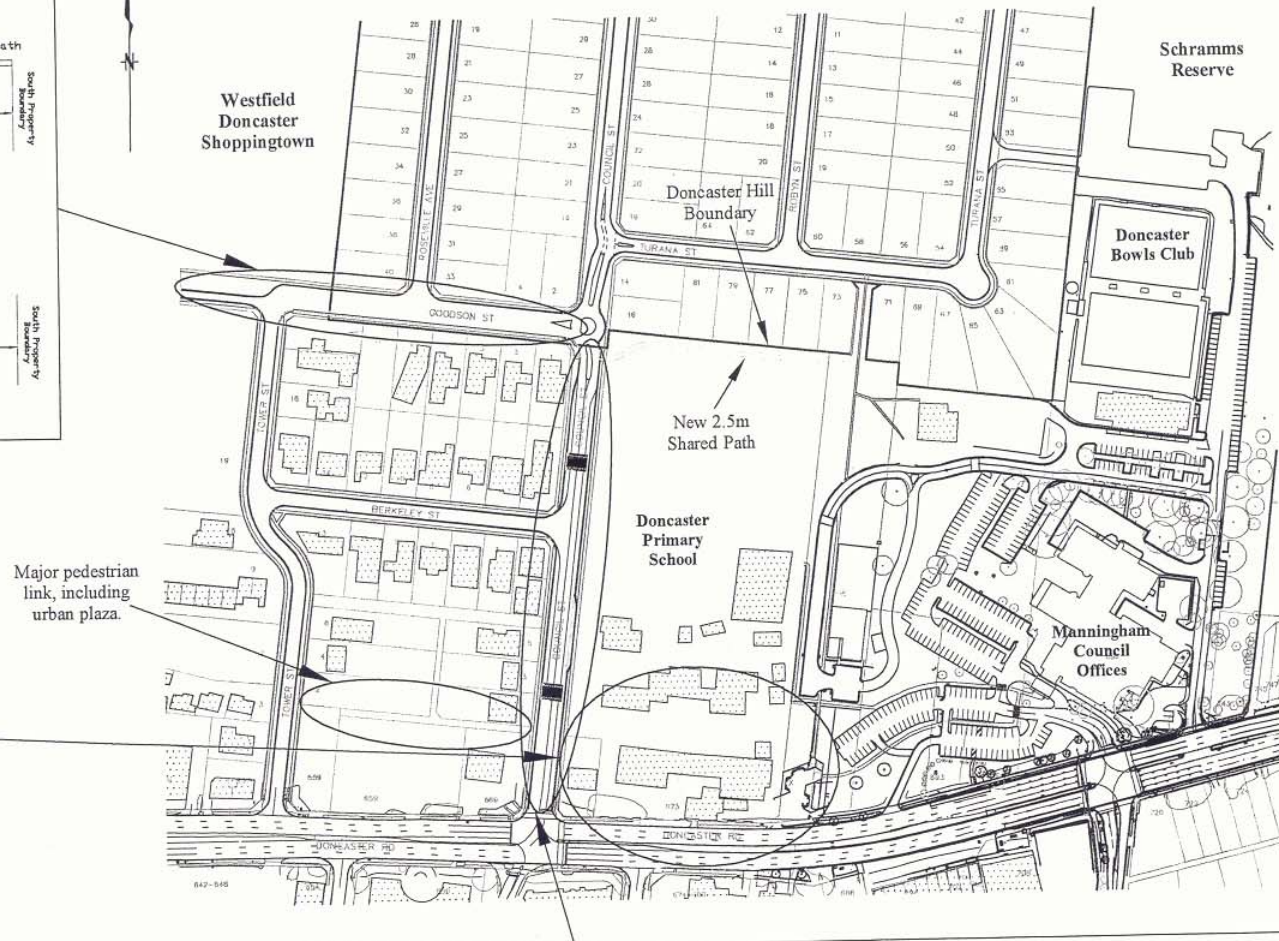


Proposed

## Doncaster Primary School: South Side



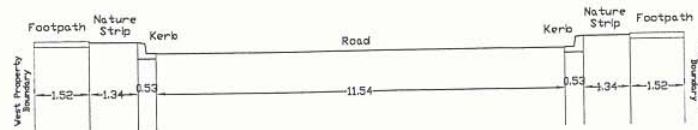
# Precincts 1, 3 & 4



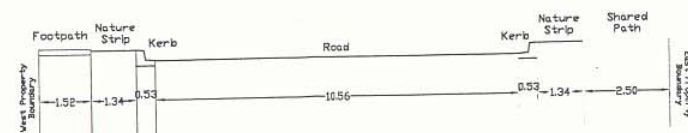
### Notes:

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## Council St: Cross Sections



Existing

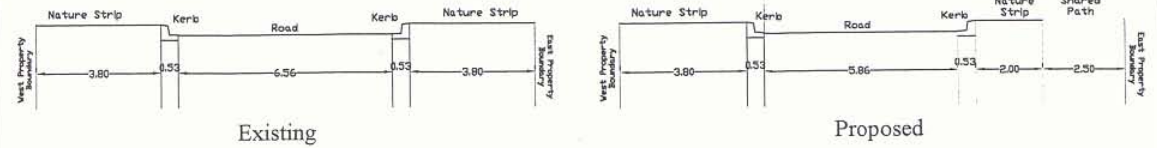


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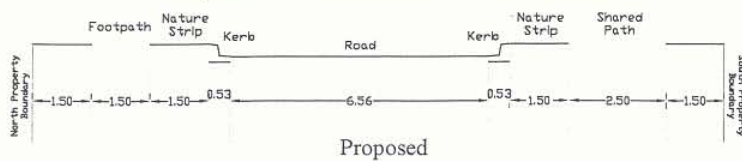


# Precinct 2

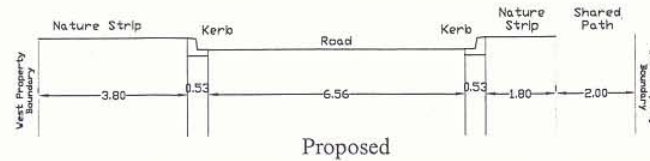
## Short St: Cross Sections



## Hepburn Rd Extension: Cross Section



## Walker St: Cross Section



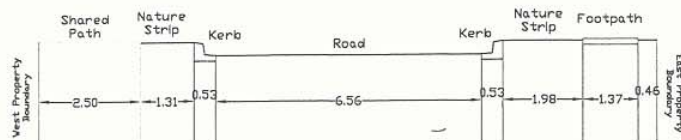
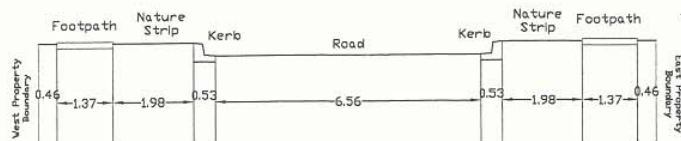
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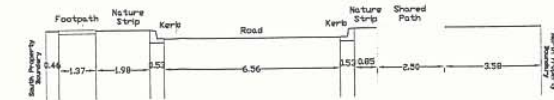
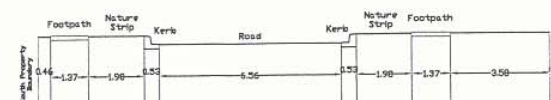


# Precincts 5 & 6

## Bayley Gve: Cross Sections



## Lawford St: Cross Sections

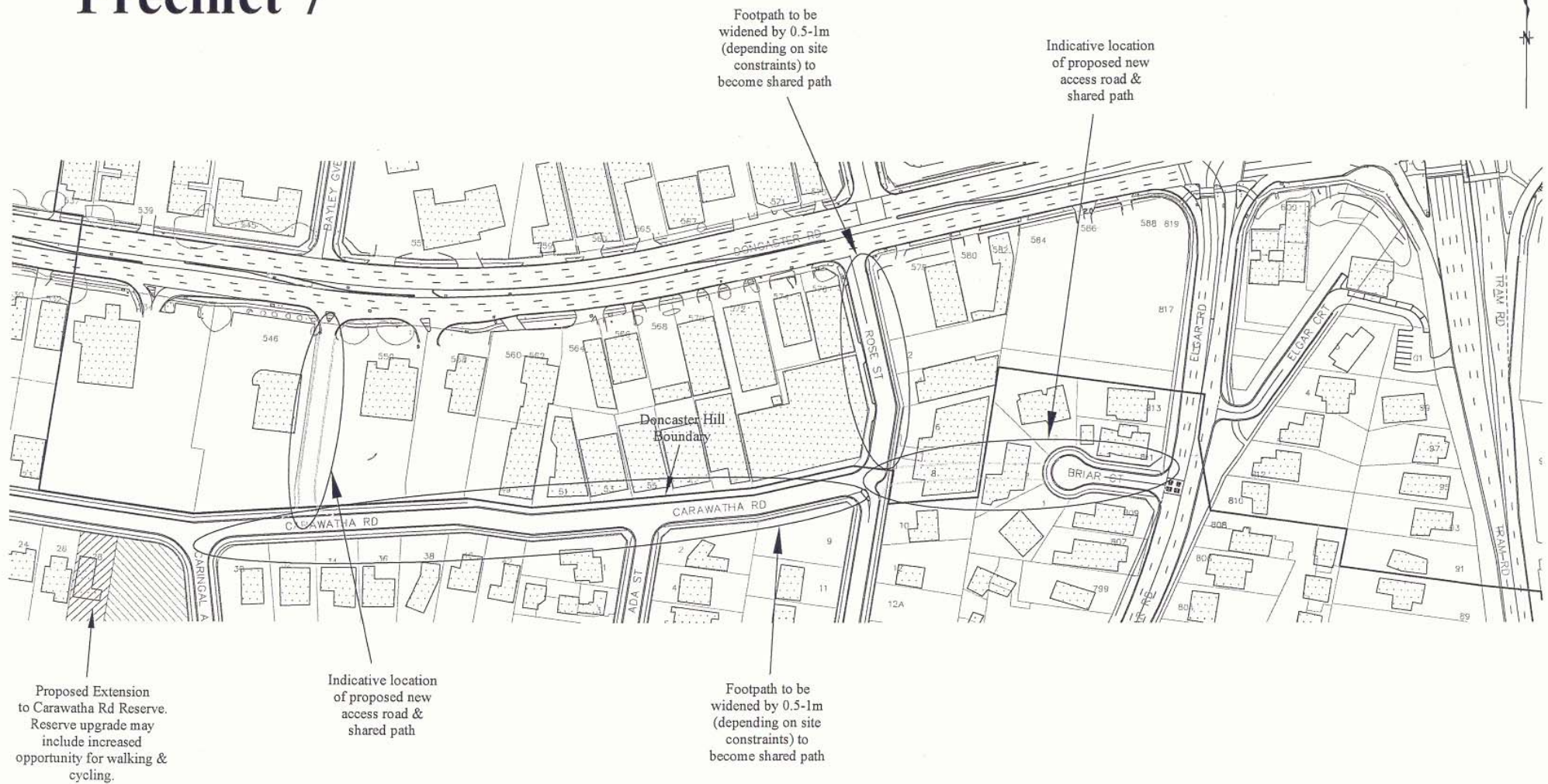


### Notes:

1. Works are indicative only. Exact details to be determined at time of construction.
2. Signs are to be installed in accordance with relevant Australian Standards.



# Precinct 7



## Notes:

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2. Signs are to be installed in accordance with relevant Australian Standards.