

6. PUBLIC TRANSPORT SERVICES

Changes to the road system will require some modification to the existing bus services operated by Interline through the area.

Routes 870 and 876

These services follow the same route through the northern part of the area at present. It is envisaged that these routes will divert further southerly to use the new Stafford Street link to connect back to the collector road to the north. This change will increase accessibility for residents without any adverse outcomes.

Route 872

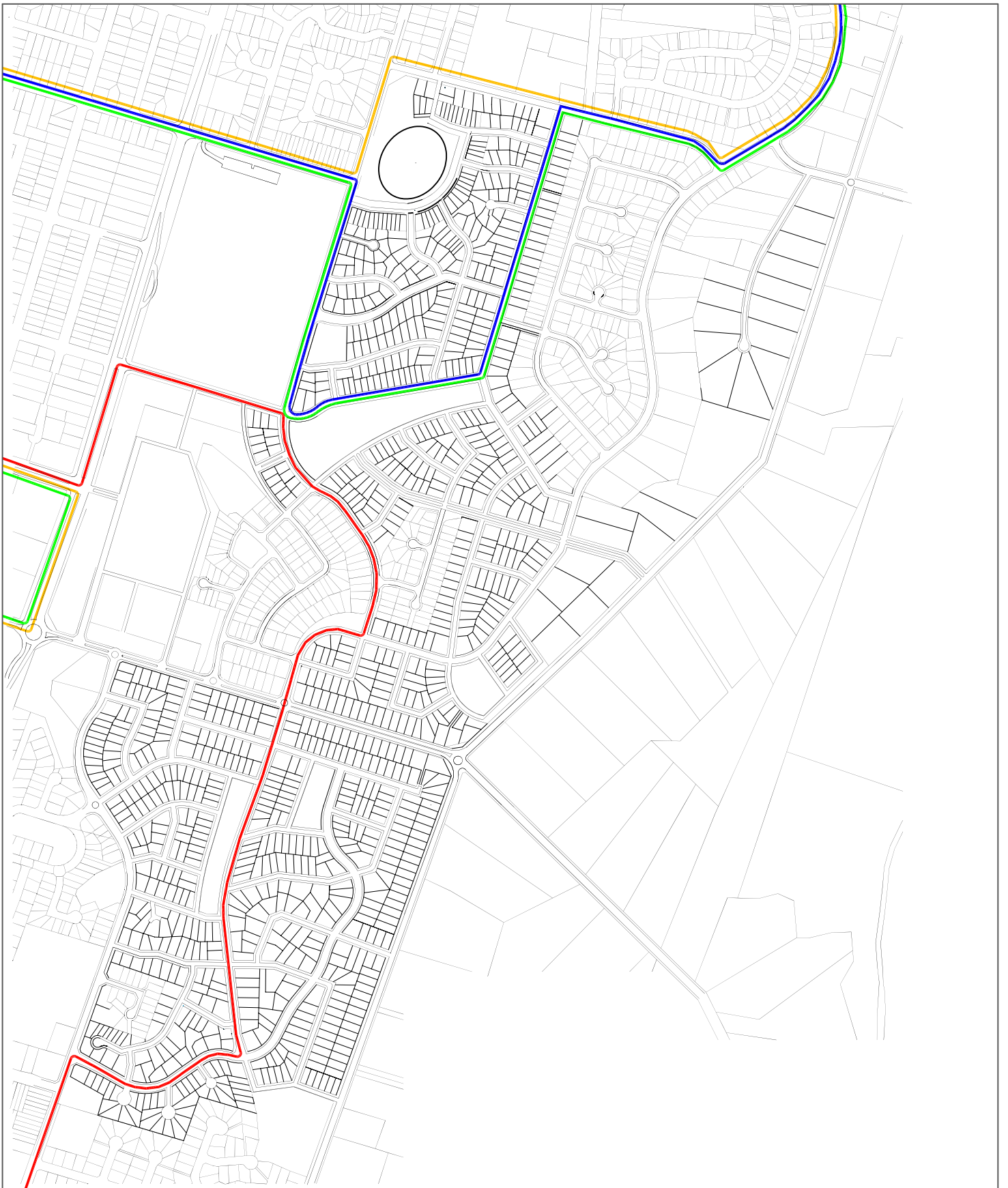
This service will most likely continue along its existing route through the northern part of the area.

Route 876





This route could potentially turn northwards from Pembroke Road to use the Stafford Street link before travelling southerly along Guernsey Road and across Ben Lomond Road along the new collector route to Westmoreland Road.

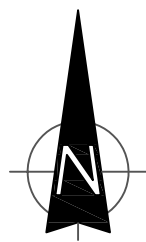
It is apparent that the changes to the road system will be beneficial in facilitating greater penetration by buses into the area as shown on Figure 11. The proposed roundabout at the Ben Lomond Road/Collector Road intersection will assist bus movements as would the potential provision of traffic signals at the Pembroke Road/Durham Street intersection (as favoured by Council).

Careful detail planning will be required to determine the location of bus stops within the kerbside parking treatments.



LEGEND

-  ROUTE 870
-  ROUTE 872
-  ROUTE 874
-  ROUTE 876



**FUTURE
BUS SERVICES**

FIG 11

7. PEDESTRIANS AND CYCLISTS

A principal objective of the renewed scheme is to ensure the provision of a network of pedestrian and cycle routes throughout the area which connect open space areas and community facilities. This provision will optimise safety and amenity of pedestrians and cyclists and encourage these modes of travel.

Pedestrians

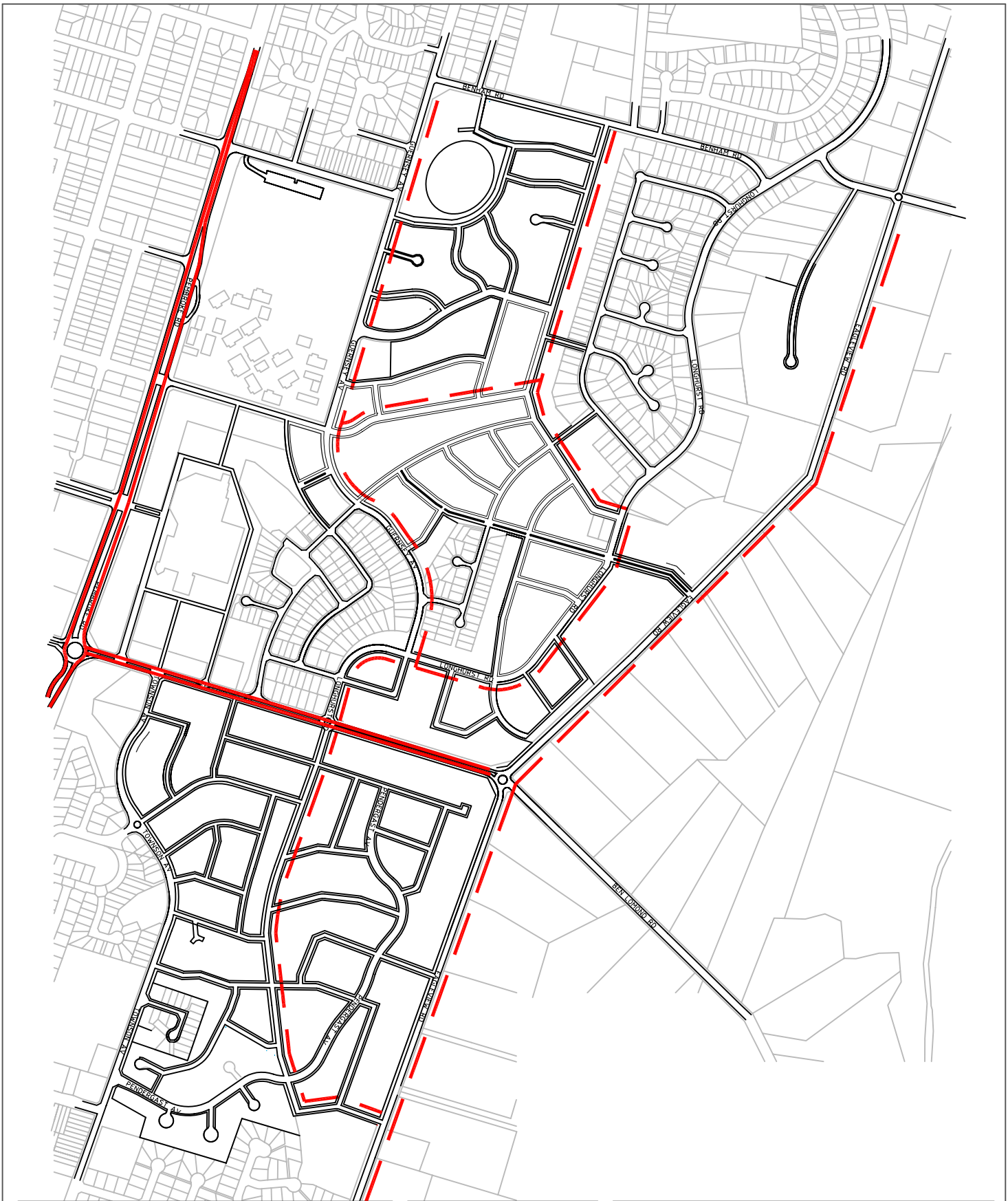
The proposed system for pedestrians is very comprehensive with wider footpaths provided where the heavier demands will occur on the major desire lines. The existing pedestrian crossing on Mossglen Street will be incorporated into the new Stafford Street link with a 40 kmph school times speed restriction.

Detail intersection design will provide suitable kerb ramps and control provisions while traffic management measures will have regard for speed constraint at the principal crossing locations.

Cyclists

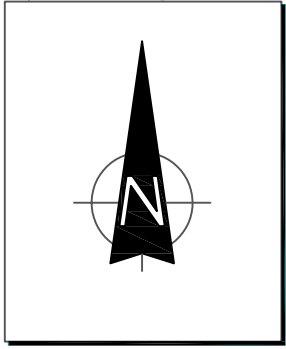
The proposed network makes provision for on-road and off-road routes. The on-road provision (for commuters) will be along Ben Lomond Road connecting with the existing provision along Pembroke Road. The off-road provision will be on shared pathways along the collector road system and along the eastern side of Eagleview Road.

The off-road routes in particular will link the community facilities (eg schools, retail and open spaces) and provide ready access to/from the local streets. The proposed cycle route provisions are shown on Figure 12.



LEGEND

- ON ROAD
- - - OFF ROAD



**FUTURE
CYCLE ROUTES**

FIG 12

8. TRAFFIC MANAGEMENT

There are numerous design guides which relate to the planning of subdivision road systems and the principle of limiting vehicle speeds in residential subdivisions is established in the following:

- * RTA Development Guidelines - Section 7 Residential Subdivisions:
 - maximum speed should be limited to 40 kmph
 - speed limits should be self enforcing by attention to the connectivity of road and LATM treatments.

- * Amcord (1990) and Streets Where We Live (Landcom 1984)
 - recommends that speeds should be limited to 30 kmph in residential subdivisions.

Self enforcing speed control can be achieved by a range of road geometry and traffic facility measures. It is apparent that detail assessment and design will be required to achieve the desirable speed control on the proposed new road system. Generally speeds on 'access streets' will be constrained by road width and parking as well and the limited length of these streets. This is not the case however with the minor collector roads and the longer sections of access streets which cross the collector roads.

The most palatable contemporary form of speed control is the roundabout and these also serve to alleviate intersection accidents. Horizontal and vertical geometry constraints (eg slow points, speed humps etc) present urban design and noise generating problems as well as difficulties for property access and bus services.

It is apparent that the application of roundabouts should be a general feature of vehicle slowing and intersection control along the collector routes while there may

also be the opportunity to locate 'centre blisters' particularly along open spaces frontages where property accesses permit.

The spacing of speed constraints is important and indications to these requirements are provided by:

Towards Traffic Calming (WSROC)

Spaces at more than 200 metres significantly decreases speed constraint effectiveness.

RTA Development Guidelines (Section 7)

Desirable spacing of devices 70 metres.

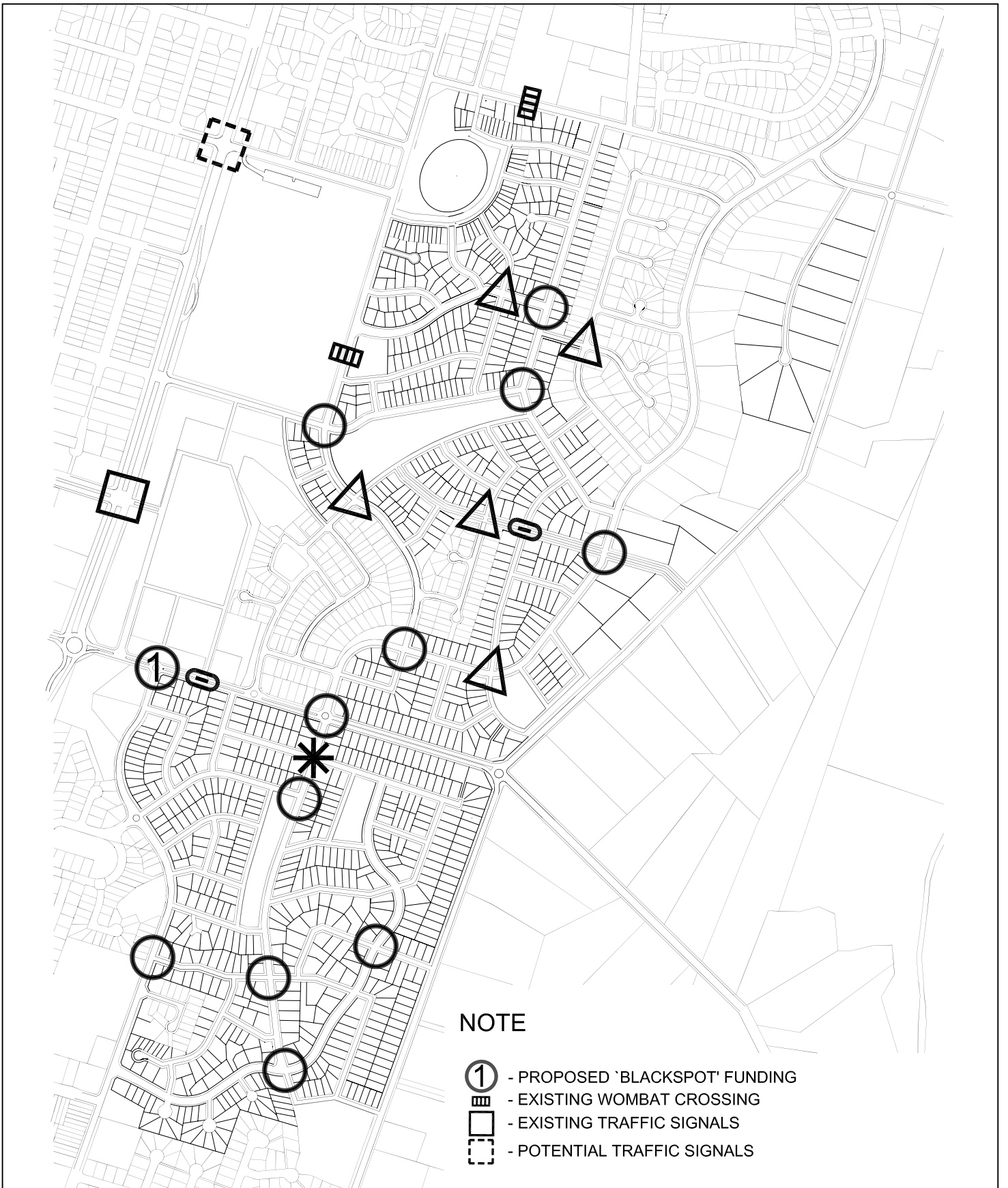
Amcord

Speed at device 25 kmph spacing 80 metres.

Details of roundabout and centre blister treatments integrated with the road construction and the streetscape outcome are reproduced from the WSROC document overleaf.

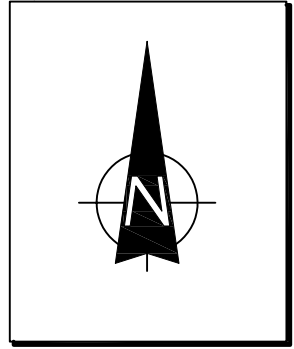
The recommended strategy for traffic management treatment is shown on Figure 13. This option presents speed controls through the use of roundabouts at intersections. As stated above a number of alternative options exist for speed control, including a combination of roundabouts and central blister islands. The specific speed control measures for each stage of the Minto Renewal Project shall be presented during the detailed design processes.

The provision of a connection between Monaghan Street and Guernsey Avenue does not present a new intersection demand circumstance as vehicles currently make this connection at present through the Minto Mall carpark. No perceptible increase of traffic is foreseen particularly if the provision of signals at the Pembroke Road/Durham Street intersection proceeds as requested by Council.



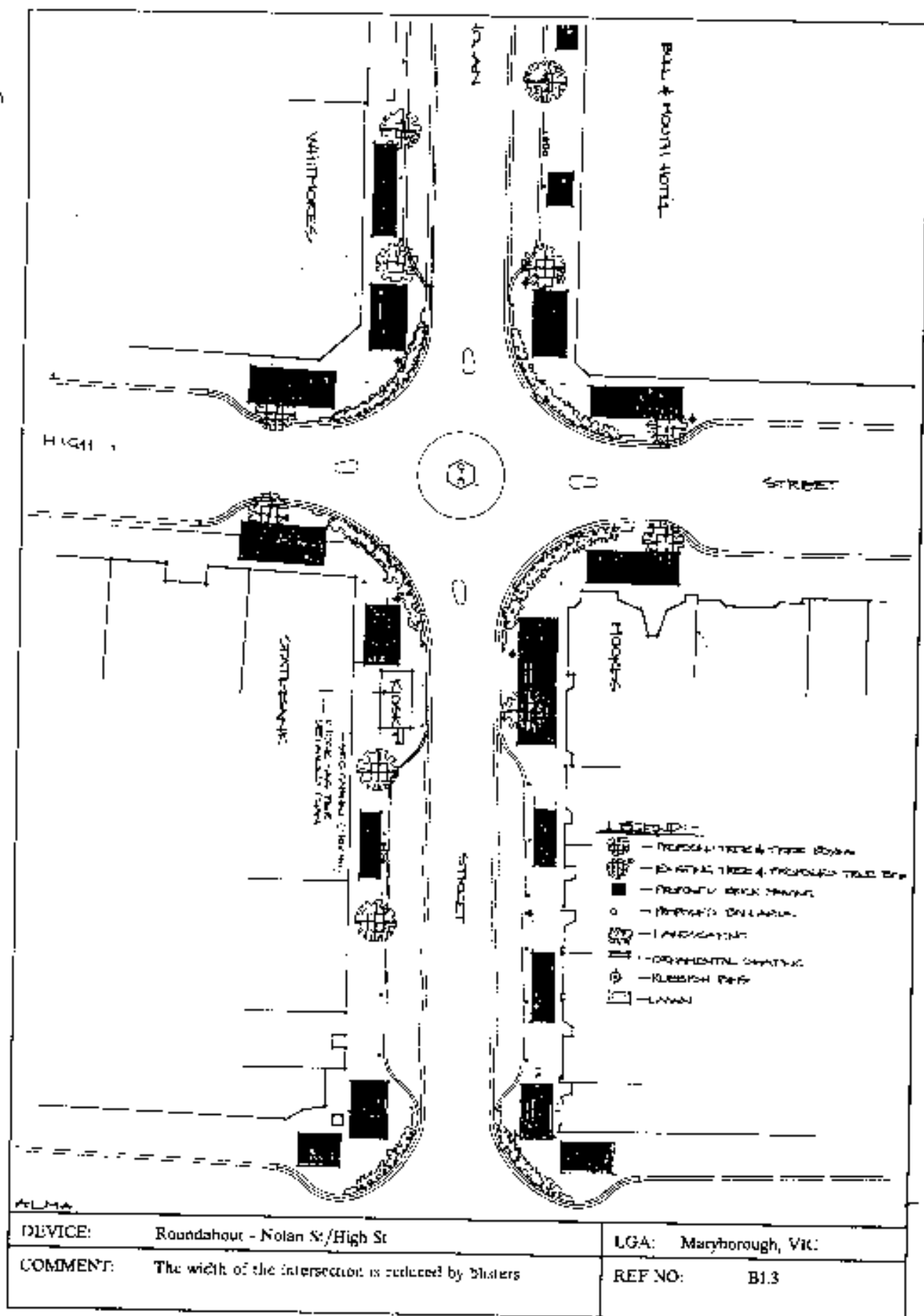
LEGEND

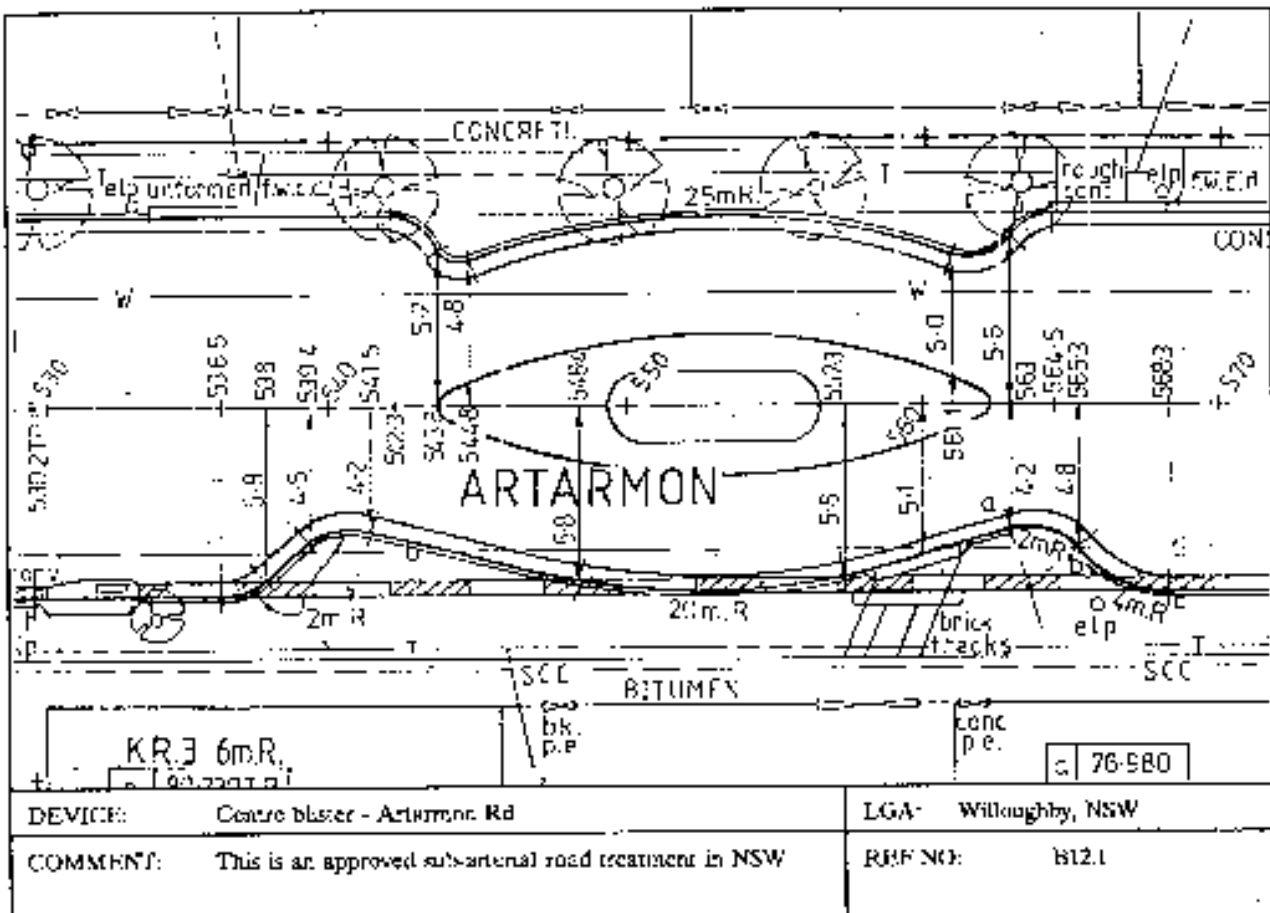
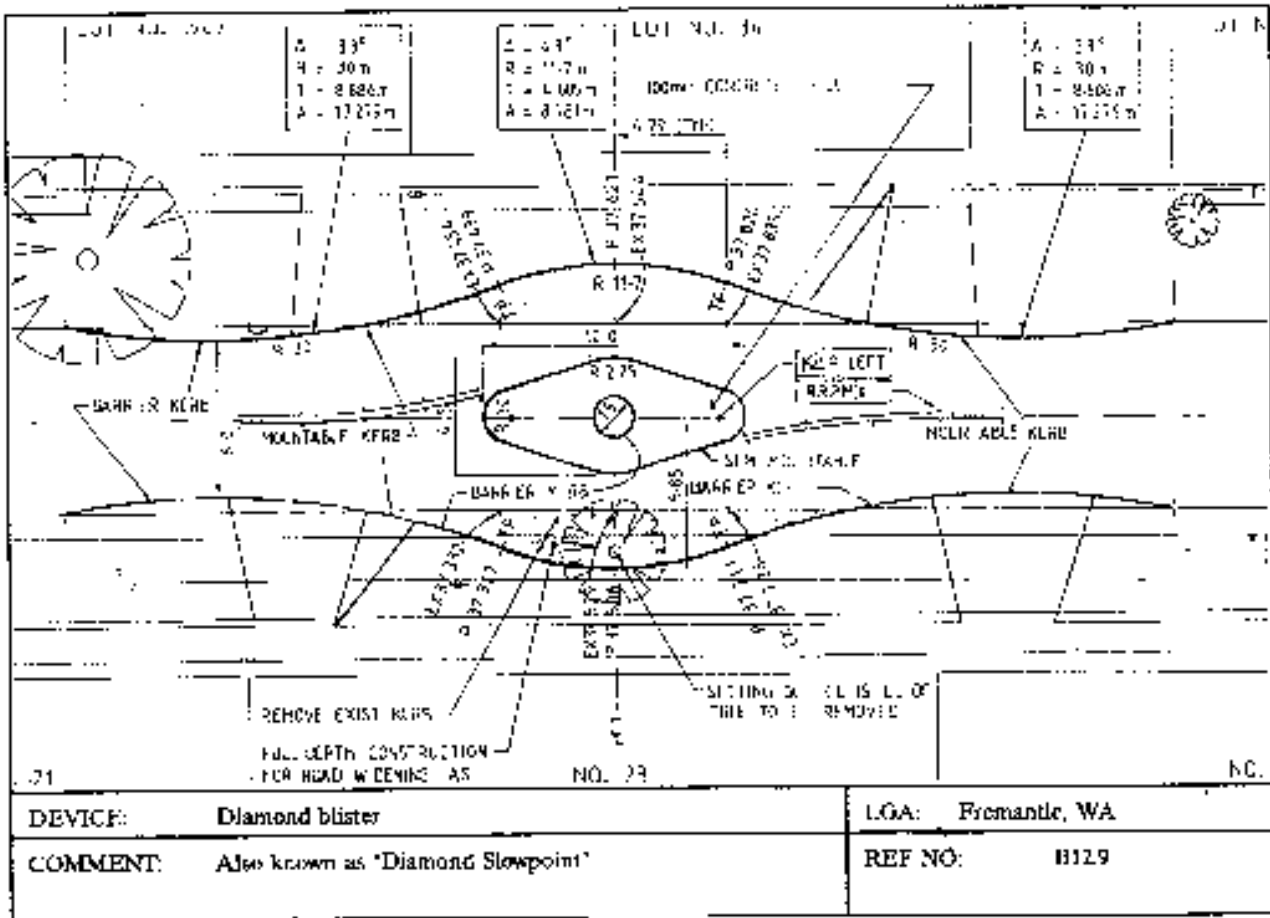
- - ROUNDABOUT
- ⊖ - MEDIAN CLOSURE
- * - REVIEW CONNECTIVITY
- △ - GIVE WAY CONTROL



**RECOMMENDED
TRAFFIC MANAGEMENT**

FIG 13





9. CONCLUSION

The proposed Minto Renewal Scheme will provide 1,118 new residential dwellings within a substantially revised road system. The proposed subdivision road system essentially accords contemporary design criteria and the principles establish for the Development Control Plan with the benefit of Landcom extensive experience with subdivision design. This assessment has involved a strategic analysis of the potential road, traffic and transport implications and it is concluded that:

- * the proposed road system will be suitable, safe and appropriate
- * there will not be any unsatisfactory road capacity or traffic related environmental implications
- * the traffic flows and speeds can be constrained to appropriate levels with further detail design development
- * there will be adequate and suitable arrangements for site access and servicing
- * there will be adequate and suitable arrangements made for pedestrians and cyclists
- * there will be adequate and suitable arrangements made for bus services and on-street parking.