This arrangement will reduce the reliance on this route for through access, whilst maintaining access via Jetty Road to serve the local area.

When the north-south primary road is duplicated, its intersection with Coriyule Road should be designed as a left-in/left-out arrangement to avoid the need to install a roundabout at this cross-intersection. This will further reduce the attractiveness of the road being a through route.

As a consequence of this design, a more circuitous route would be required (via other local streets) for vehicles to continue to travel via Coriyule Road, which achieves Council’s objectives for this road.

5.3.2. Access Road to Jetty Road South of Griggs Creek

A ‘temporary access’ to Jetty Road immediately south of Griggs Creek will provide access to the Aldinga land prior to the development of the Wyndham Street extension. The Panel for Amendment C152 recommended that a performance oriented criteria be developed to assess the operation of the intersection of this temporary road with Jetty Road, rather than the development of an arbitrary number of lots (150 lots as suggested in the Jetty Road Infrastructure Plan).

In our assessment, this road link also provides a satisfactory outcome as a permanent road connection. Our previous assessments of this issue suggested that in the order of 2,000-2,200 vehicles per day could be accommodated on the temporary access road.

The assessment concluded that adequate sight distance was available at this location in accordance with the relevant standards, which was previously given as a reason by Council for not supporting this link as a permanent connection. However, in more recent times Council’s “Traffic Strategic and Planning” department has confirmed that sight distance is satisfactory.

Therefore, we suggest that a traffic volume criteria of 2,200 vehicles be considered which would be consistent with the full development/occupation of approximately 250 lots. This daily volume provides a 800 vehicle ‘buffer’ to the theoretical environmental capacity of an Access Road – Level 2 and is a satisfactory outcome in our opinion.

The retention of this link in the ultimate scenario is also consistent with one of the recommendations of the Panel for Amendment C152 in the event that no other east-west connection is ultimately provided to Jetty Road between Wyndham Street and Bay Shore Avenue.

Not only will this permanent access connection ensure traffic volumes on local roads will operate at manageable levels by effectively distributing traffic along Jetty Road, but it is sufficiently located from the future signals at Wyndham Street (approximately 175m to the north) in an operational perspective, and will assist in minimising unnecessary internal routes that would otherwise be needed to access the external road network and is often a cause of speeding in local areas.

The location of the access to the north of Wyndham Street is itself unattractive to much of the ultimate non-local traffic given that: the majority of future traffic will travel to/from the south of Wyndham Street along Jetty Road, and we are satisfied that appropriate internal traffic controls can be provided in consultation with Council to further make the route an unattractive one for potential ‘rat runners’.

5.4. ROAD CROSS-SECTIONS

5.4.1. Relevant Standards

Table C1 (Design of Roads and Neighbourhood Streets) in Standard C21 of Clause 56.06-8 (Residential Subdivision) of the Planning Scheme sets out relevant road classification and design
aspects for local roads. This table provides guidance on the design considerations, road function and associated environmental capacity characteristics of various road types.

In selecting the relevant cross-section of roads, the plan also needs to have regard to:

- *Jetty Road Urban Growth Area, Infrastructure Plan* (February, 2010). This document may require wider local streets than permitted under Clause 56.06-8.

- *Public Transport: Guidelines for Land Use and Development* (September, 2008) released by the Department of Transport. This document sets out particular requirements for the provision of public transport services within new developments as well as road cross-section requirements along public transport routes within subdivisions. The road cross-section requirements (traffic lane, bike lane and parking lane combinations) of this standard vary from relevant Austroads design standards (e.g. bicycle planning guidelines) that have historically been used by Council.

Greater Geelong City Council also has design standards for new subdivisions, which have varying cross-section requirements to those permitted under Clause 56.06-8. However, it is considered that the requirements specified in the *Jetty Road Urban Growth Area, Infrastructure Plan* represent Council's current requirements.

A summary of the key requirements of Clause 56.06-8 and any comments on any relevant variations are set out in the table below.

The proposed cross-sections ensure that each street will have sufficient capacity to comfortably accommodate the expected traffic volumes, travel by other road users (pedestrians and bicyclists) on each street and allow for on-street parking to be adequately provided.

The recommended cross-sections are also consistent with the requirements and traffic volumes outlined at Clause 56 of the Planning Scheme.
## Table 2: Street Functions and Design Elements (Table C1, Standard C21, Clause 56.06-8 of the Planning Scheme)

<table>
<thead>
<tr>
<th>Type and Function</th>
<th>Indicative Max. Volume (Target Speed)</th>
<th>Carriageway Width</th>
<th>Parking Provision</th>
<th>Relevant Variations</th>
</tr>
</thead>
</table>
| Access Place      | 300 to 1,000 vehicles/day (15 km/h)  | 5.5m, with on-street parking | 1 hard standing space per 2 lots with scope for additional spaces. Not required if serving 5 dwellings or less, or 1.5m wide, off-set 1m from the kerb. (on one side). | Jetty Road Urban Growth Area, Infrastructure Plan  
Local Street - 16m road reserve, 7.5m carriageway, footpath both sides |
| Access Street – Level 1 | 1,000-2,000 vehicles/day (30 km/h) | 5.5m, with on-street parking | 1 hard standing space per 2 lots with scope for additional spaces. 1.5m wide footpaths required (on both sides), off-set 1m from the kerb. Footpaths should be widened to 2.0m in vicinity of a school, shop or other activity centre. | Jetty Road Urban Growth Area, Infrastructure Plan  
Local Street - 16m road reserve, 7.5m carriageway, footpath both sides |
| Access Street – Level 2 | 2,000-3,000 vehicles/day (40 km/h) | 7-7.5m (with parking required on both sides) | Parking on carriageway 1.5m wide footpaths required (on both sides), off-set 1m from the kerb. Footpaths should be widened to 2.0m in vicinity of a school, shop or other activity centre. | Jetty Road Urban Growth Area, Infrastructure Plan  
Secondary Road - 23m road reserve, 13.0m carriageway, footpath both sides  
Refer also to Public Transport: Guidelines for Land Use and Development |
<p>| Connector Street – Level 1 | 3,000 vehicles/day (50 km/h, 40km/h at schools and 20km/h at designated pedestrian or bicycle crossing points) | 3.5m minimum lane width in each direction of travel. 4.0m minimum lane width at approaches to and departures from roundabouts and T-intersections. For on-street cycling, increase the minimum clear carriageway in each direction by: 0.7m where the trafficable carriageway is shared by cyclists but no dedicated bicycle lane is marked on the carriageway; or 1.5m where a trafficable carriageway is shared by cyclists but no dedicated bicycle lane is marked on the carriageway and there is a single lane in each direction separated by a raised trafficable median of at least 2.0m in width with mountable kerbs; or 1.7m where a dedicated 1.7m wide bicycle lane is marked on the carriageway. Bus stops at the kerbside not indented within the verge. | An additional dedicated parking lane or indented parking within the verge must be provided where street parking is required. A parking lane width of 2.3m is required where parallel parking is provided. 1.5m wide footpath on both sides. Footpaths should be widened to 2.0m in vicinity of a school, shop or other activity centre. |</p>
<table>
<thead>
<tr>
<th>Type and Function</th>
<th>Indicative Max. Volume (Target Speed)</th>
<th>Carriageway Width</th>
<th>Parking Provision Footpath Provision</th>
<th>Relevant Variations</th>
</tr>
</thead>
</table>
| Connector Street – Level 2 | 3,000-7,000 vehicles/day (60 km/h)  | 3.5m minimum lane width in each direction of travel. 4.0m minimum lane width at approaches to and departures from roundabouts and T-intersections. 7.0m minimum carriageway width in each direction of travel where there are two lanes in each direction separated by a non-trafﬁcable central medium. 8.0m minimum carriageway width at approaches to and departures from roundabouts and T-intersections where there are two lanes in each direction separated by a non-trafﬁcable central medium. For on-street cycling, increase the minimum clear carriageway in each direction by: 0.7m where the trafﬁcable carriageway is shared by cyclists but no dedicated bicycle lane is marked on the carriageway; or 1.7m where a dedicated 1.7m wide dedicated bicycle lane is marked on the carriageway; or 0.3m where there are two trafﬁcable lanes in each direction separated by a non-trafﬁcable central median and the carriageways are shared by cyclists but no dedicated bicycle lane is marked on the carriageway; or 0.5m where there are two trafﬁcable lanes in each direction separated by a non-trafﬁcable central median and a 1.7m wide dedicated bicycle lane is marked on the carriageway. Bus stops at the kerbside not indented within the verge. | An additional dedicated parking lane or indented parking within the verge must be provided where street parking is required. A parking lane width of 2.3m is required where parallel parking is provided. Footpaths as follows: 1.5m wide footpath on each side and 1.7m bicycle lanes on the carriageway; or 2.5m wide shared foot and cycle path on both sides and no dedicate bicycle lanes marked on the carriageway. Footpaths widened to a minimum of 2.0m in the vicinity of a school, shop or other activity centre. | Infrastructure Plan  
Secondary Road - 23m road reserve, 13.0m carriageway, footpath both sides  
Refer also to Public Transport: Guidelines for Land Use and Development |
| Arterial Road             | Greater than 7,000 vehicles/day (as determined by relevant road authority) | (as determined by relevant road authority) | 2.5m wide shared footpaths required (on both sides) or as otherwise required by relevant road authority                                                                                                                                                                                   | Jetty Road Urban Growth Area, Infrastructure Plan  
Road Parts B & C - 32m road reserve, divided road 7.5m wide each, 1.5m footpath on one side, 2.5m shared path on other  
Refer also to Public Transport: Guidelines for Land Use and Development |
Noticeably, the cross-sections as set out in the current Jetty Road Urban Growth Area, Infrastructure Plan are now consistent with the recently adopted Public Transport: Guidelines for Land Use and Development as recommended in the previous iteration of this report. In particular, through lanes on bus routes are identified as 3.5m in width with exclusive 1.7m wide on-street bicycle lanes adjacent to 2.3m wide on-street parking lanes on the principle bicycle routes. A similarly suitable combined 4.2m wide shared bicycle/through lane is identified adjacent to 2.3m wide on-street parking lanes for the ‘secondary loop road’.

5.4.2. Recommended Cross-Sections

In the context of the new standards and other traffic engineering considerations, Figures 19 to 21 set out the recommended typical cross-sections as per the current Jetty Road Urban Growth Area, Infrastructure Plan.

Figure 19. Secondary Arterial Road (‘primary road’) Cross-Section
Footpaths should be widened to a minimum of 2m in the vicinity of a school, shop or other activity centre.

Figure 20. Connector Street – Level 2 (‘secondary loop’) Cross-Section

Footpaths should be widened to a minimum of 2m in the vicinity of a school, shop or other activity centre.

Figure 21. Local Road Cross-Section

Whilst we are satisfied that the standard cross-sections identified in the current Jetty Road Urban Growth Area, Infrastructure Plan meet all relevant traffic engineering requirements in terms of through movements (including on bus routes), on-street bicycle provisions and on-street parking, the following sets out the recommended cross-sections for specific streets within the Jetty Road Growth Area.
'Parks Edge' Local Roads (Access Streets)

We believe it would be satisfactory for the 16m wide Jetty Road Urban Growth Area, Infrastructure Plan local road cross-section to be reduced by at least 2m when adjacent to development on one side only as presented below.

![Diagram of PARK EDGE ROAD]

Footpaths should be widened to a minimum of 2m in the vicinity of a school, shop or other activity centre

Figure 22. Recommended ‘Parks Edge’ Cross-section – Local Roads

Figure 23 sets out a possible Connector Street – Level 1 cross-section as discussed in greater detail at Section 5.1 of this report.

![Diagram of Connector Street – Level 1 Cross-section]

Footpaths should be widened to a minimum of 2m in the vicinity of a school, shop or other activity centre

Figure 23. Potential ‘Connector Street – Level 1’ Cross-section

In the event that the finer-grain local network also utilises any rear-lane arrangements, a rear-lane arrangement that provides an 8m road reserve with a 6m carriageway would be appropriate and provide opportunities for landscaping and the placement of waste bins on collection days. This arrangement would also accord with Council’s local design standards.

Main Streets (within NAC)

A Masterplan for the NAC has been prepared by David Lock Associates, February 2011, noting that it will be the subject of future approval.
The NAC is developed as a street-based activity centre organised around a 'main street' concept. An indicative east-west ‘main street’ orientation cross-section is provided in the figure below.

(source: DLA, NAC Masterplan, February 2011)

Figure 24. Recommended Cross-section – Main Street (Secondary Arterial Road) through NAC

These streets have active frontages, on-street parking, and a median on the major north-south ‘main street’ alignment providing linear pedestrian crossing opportunities consistent with a street-based activity centre. Specific pedestrian crossing provision is also provided on key desire lines with the NAC Master Plan. Bicycle lanes are also provided.

Traffic signals are provided at the intersection of the two primary roads to provide a safe pedestrian crossing to and from the hilltop park and other routes.

Local streets provide additional routes (ring roads) into the centre from all directions. A ring road is effectively provided to the east and west of the NAC to enable local traffic accessing the residential areas to the north to bypass the NAC at peak activity times. The Ring Roads should adopt the minimum cross-section of the Connector Streets – Level 2.

Jetty Road upgrade

Whilst the cross-sections set out in the current Jetty Road Urban Growth Area, Infrastructure Plan have been updated to reflect current requirements as per our recommendations, consideration should also be had for the ultimate cross-section of Jetty Road, which includes an existing public bus route in sections. The issue of non-compliance principally relates to the width of the bicycle lanes, where 1.5m is still proposed and 1.7m would now be required based on the current DOT Guidelines and Planning Scheme requirements.

Although a referral to the DOT for these works may not be triggered under Clause 52.36 of the Planning Scheme, Council should have regard to these guidelines. A potential cross-section for Jetty Road, as prepared by TGM Group, is attached at Appendix C.

5.5. MAJOR TRAFFIC CONTROL ITEMS FOR KEY INTERSECTIONS

The major traffic control items for key intersections are shown on the TGM layout provided at Appendix D to this report and include:

- Intersection traffic signals at:
  - Geelong-Portarlington Road/North-South Arterial Road,
o Internal intersection of North-South and East-West Arterial Roads within the NAC (whilst a roundabout would be satisfactory to accommodate the predicted traffic volumes, signalisation of this intersection would facilitate controlled pedestrian movements in what is likely to be the most pedestrianised area of the estate), and

o East-West Arterial Road/Wyndham Street and Jetty Road.

• Roundabouts will be required at local street cross-intersections to manage traffic flows and speeds along any straight sections of road.

Subject to detailed assessment/design as part of a future application, a roundabout or standard T-intersection treatment is likely to be provided at the intersection located at the south-east corner of the NAC site.

It is expected that other works would be undertaken by VicRoads at the intersection of Jetty Road and Geelong-Portarlington Road, which would be funded under other programs.

Similar to the development of a performance oriented criteria recommended by the Panel for the ‘temporary access’ to Jetty Road immediately south of Griggs Creek, a similar approach would be appropriate for the signalisation of the Wyndham Street extension with Jetty Road.

It is recognised that the cost of this treatment is significant for the Land Owners Group to meet in the initial stages of the development. It is considered that an unsignalised cross-intersection arrangement would be suitable up to a recorded traffic volume of 3,500 vehicles per day along the new road, or until such time as Council is not satisfied with the safety performance of the intersection.

It is noted that there have been no reported casualty crashes at the intersection of Wyndham Street and Jetty Road in the past 5 years of available crash data.

An agreement could be worded which requires that the signalisation works to be undertaken within 6 months of the traffic volumes reaching this figure, or the intersection being identified as performing poorly from a road safety perspective (i.e. increase in reported casualty crashes).

5.6. LOCAL STREET NETWORK

5.6.1. Design Considerations

The DPO requires an internal road network that provides a high level of access within the development for all vehicular and non-vehicular traffic, which responds to the topography of the land and provides opportunities for and encourages the use of public transport.

The roads and associated intersections within the subject site will need to be designed in accordance with the speed controlling objectives of Clause 56.06 of the Planning Scheme and current practice. The key design considerations from speed management and safety perspective include:

• Provide street blocks that are generally between 120 metres and 240 metres in length and generally between 60 metres to 120 metres in width to facilitate pedestrian movement and control traffic speed.

• Provide a minimum 5 metre by 5 metre corner splay at junctions with arterial roads and a minimum 3 metre by 3 metre corner splay at other junctions unless site conditions justify a variation to achieve safe sight lines across corners.

As a general rule, cross-intersections should be avoided unless treated with roundabouts.

It is expected that roundabouts will be used as the main form of traffic management along Connector Streets (i.e. the secondary loop road) as a means of controlling traffic speeds and providing for efficient crossing movements.

Any roundabouts or other form of traffic management located on bus routes within the growth area should be designed to accommodate bus movements (in addition to service and emergency vehicles, etc).
Where possible, street lengths should be limited to no more than 240m, as a length of 240m reduces the need to install speed controlling devices. Where required, an integrated approach to traffic management with offers speed control, pedestrian crossing and landscaping opportunities (road narrowings, slow points, etc) should be used as opposed to road humps, etc in isolation to create a more pedestrian friendly, low speed environment.¹

It is noted that vehicle crossings of the Bellarine Rail Trail will only be permitted at Jetty Road and the north-south Primary Road. Appropriate investigations would need to be undertaken to ensure sufficient land is available for the grade separation to occur prior to the approval of any allotments in the vicinity of the rail reserve. We could provide assistance in terms of preparing functional grade separation layout designs following receipt of details regarding the likely configuration, etc, if required.

5.6.2. Bay Shore Avenue

The plan requires the extension to Bay Shore Avenue across Griggs Creek to be designed as a local connection. The objective is to achieve local permeability between the new and established residential areas as well as the foreshore area for all road users (vehicles, cyclists, pedestrians), whilst also recognising the environmental capacity of this local street. The plan states that construction traffic will not access the growth area via Bay Shore Avenue.

The western section of Bay Shore Avenue extends in an east-west direction from a dead end at Griggs Creek in the west to Clifton Springs Road in the east. West of Jetty Road, Bay Shore Avenue is a local street with a pavement width of approximately 7.3m and a road reserve of approximately 20m. No footpaths are provided and the default urban speed limit of 50km/h applies to this road.

It is suggested that Council may need to consider the construction of a footpath on one or both sides of this street to ensure Bay Shore Avenue satisfies the design requirements for an Access Street Level 1 under Clause 56 of the Planning Scheme.

The staging of the development would also need to carefully manage the impacts on Bay Shore Avenue. It is suggested that not more than 150 lots would be contained within any catchment that is captive to using Bay Shore Avenue.

As shown in the figure below, the local road network providing a connection between the Jetty Road Growth Area and Bay Shore Avenue has been designed to be sufficiently circuitous to discourage through traffic use of this link, whilst still maintaining local access.

¹ Consider design suggestions set out in Guidelines for Walkable Coastal Environments and Clause 56 Walkability Toolkit, which were prepared in consultation with the City of Greater Geelong.
5.7. PEDESTRIAN AND BICYCLE ACCESS

The proposed road reservations and associated verge widths are sufficient to accommodate footpaths adjacent to the development, with greater verge widths provided on various streets to accommodate shared paths where necessary.

The provision of footpaths on both sides of the Access Streets is considered important where dwellings abut both sides. Footpaths should be constructed a minimum of 1.5m wide in accordance with Clause 56.

Off-road bicycle/pedestrian trails will also be provided within the growth area as described in the Pedestrian and Bicycle Network Plan.

5.8. PREDICTED TRAFFIC VOLUMES

We understand that the ultimate lot yield for the Jetty Road Growth Area is approximately 3,300 as per the previous assessment for Amendment C129.

The following sets out the predicted daily traffic volumes, which has been based on previous traffic distribution models presented to the panel for Amendment C129. The key assumptions are detailed in the following.

The development plan requires that provision is made for an east-west road link between Jetty Road and the growth area in the vicinity of the Clifton Springs Primary School.

The distribution model considers the predicted daily traffic volumes on the roads nearby to the NAC under the scenario that an east-west road connection to Jetty Road is provided north of Wyndham Street (i.e. through Algo land either south of Griggs Creek crossing or Jetty Road or in vicinity of Clifton Springs Primary School). The preference is for this link to be located as far north as possible to balance the spacing of access points along Jetty Road. However, this access connection is most likely to be taken immediately south of Griggs Creek through the Algo land which is the most appropriate location given our understanding that no alternative options are considered to be viable at this time due to resistance from other land owners.

The information and assumptions include:

1) Various daily volume predictions set out at Section 5.6.1 of the TTM report, dated 27th March, 2008,

2) Various daily volume predictions set out at Figure 5 of the Cardno Grogan Richards report, 27th March 2008,

3) An assumed 1,000 daily vehicle trip ends on the Wyndham Street extension (immediately west of Jetty Road) in association with externally traffic generated by the proposed NAC,

4) An assumed 5,000 daily internel vehicle trip ends associated with the NAC, with the distribution of this traffic being proportional with the likely residential allotment catchment throughout the site,

5) 45% of a catchment of 800 allotments generally located towards the northeast of the site would access the external road network via an additional east-west connection to Jetty Road (i.e. link north or Wyndham Street),

6) An assumed average residential generation rate of 9-10 vehicle trip ends per allotment as per the agreed position as adopted throughout the Panel process by TTM and Cardno Grogan Richards (note that this corresponds with an external generation rate of in the order of 6 vehicle trip ends per allotment as also agreed throughout the Panel process),

7) Increasing the volumes referred to in dot points 1) and 2) above by a factor of 1.09 to represent a 9% ‘buffer’ (note that this equates to a conservative generation rate of in the order of 9.81-10.9 vehicle trip ends per allotment), and
8) Predictions of desirable traffic routes to and from the NAC and residential allotment catchment for both internal and external trips.

The predicted daily traffic volumes or the roads nearby to the NAC is presented in Figure 25.

In the absence of the northernmost Jetty Road connection (let's say through the Algo land), the volume on the Wyndham Street extension would increase by approximately 2,200 vehicles per day, and the volume in Bay Shore Avenue would likely be higher than Council had envisaged in its planning.

**NAC and Main Road Traffic Volumes**

The ring road to the east of the NAC is predicted to carry higher traffic volumes as it will serve as a principal access to the main parking areas for the centre (including the supermarket), and accordingly, will accommodate a reasonable proportion of the activity centre traffic in addition to local residential traffic bypassing the Main Street at busy times arriving to/from Jetty Road via the Wyndham Street connection.

The ring road to the west of the NAC travels around the hilltop park and will accommodate local residential traffic bypassing the Main Street at busy times arriving from Geelong-Portarlington Road to/from the south.

Traffic volumes within the Main Street and local streets of the NAC will operate at acceptable levels.

Of note is that the total traffic conservatively predicted within the NAC catchment is in excess of 28,000 vehicles per day which represents a factor of more than 80% of all traffic predicted to be generated by Stage 1 of the Jetty Road Development Plan area (based on the assumption of 10 vehicle trip ends for each of the 3,300 allotments and when also considering some external traffic will be generated by the NAC as discussed earlier in this section of the report). This clearly demonstrates that the volume predictions presented in Figure 25 are more likely to be on the high side rather than the low side.

It is further noted that the predicted traffic volumes on the roads surrounding the NAC warrant nothing more than standard T-intersection and roundabout treatments in order to adequately accommodate the predicted traffic movements. However, in order to provide a 'balanced' outcome for all user groups in the vicinity of the NAC, a signalled intersection is proposed at the corner of the north-south Primary Road and the Wyndham Street extension. Not only will signals provide a controlled crossing scenario at an ideal location within the NAC, but they will supplement other pedestrian crossing points and vehicle turning movements to the north and south by providing breaks in traffic flow.

The identified intersection controls surrounding the NAC will adequately cater for the expected user groups and associated volumes and are considered to be an appropriate outcome in our opinion.

**Local Roads**

Traffic volumes on the balance of local roads will remain well within the accepted environment capacities of these roads.

As indicated previously, a Connector Street - Level 1 classification may need to apply to the east-west connections to Jetty Road, which include Coriyule Road and a link in the vicinity of Clifton Springs Primary School (across the Algo land). These connections will supplement the east-west 'primary' route and provide access to the local streets in the immediate environs of these links. Traffic volumes along these roads in the vicinity of Jetty Road would be between 2,000-3,000 vehicles per day.

**5.9. TOPOGRAPHY OF THE LAND**

Our observations of the site suggest that it is generally reasonably flat and we expect that the key roads which will accommodate buses, etc have been identified on land that can accommodate roads with grades that are to the relevant requirements. Similarly, other (generally local) roads within the site would need to be designed in
accordance with the relevant requirements of the CFA, Clause 56 of the Planning Scheme, etc. The actual grades and other associated aspects would be undertaken by others during the detailed design stage.
Note.
An east-west connection north of Wyndham Street would carry approximately 2,160 vehicles/day.

Figure 25. Predicted Traffic Volumes (NAC Masterplan is Subject to Future Approval)
6. CONCLUSIONS

Having reviewed the requirements for the Road Network and Traffic Management Plan for Stage 1 of the Jetty Road Development, Drysdale, we are of the opinion that:

a) the recommended road reservations and carriageways are consistent with current practice and will ensure that appropriate integration is possible with the existing and proposed roads surrounding the site. The recommended road reservation will provide sufficient on-street parking, and pedestrian and bicycle provisions for the specified function of each road;

b) the likely volume on each of the proposed roads will be consistent with the volumes recommended for the various road types;

c) an ultimate vehicle connection should be provided to Jetty Road between Wyndham Street and Bay Shore Avenue to ensure traffic volumes will operate at management levels by effectively distributing traffic to the external road network. The provision of this connection immediately south of Griggs Creek is a suitable outcome in a safety and operational sense;

d) appropriate intersection and traffic management treatments need to be accommodated at the detailed design stage to ensure satisfactory speed and traffic control to, from and throughout the site, and

e) the layout of the proposed development plan area is consistent with Jetty Road Growth Area Urban Growth Plan in terms of road hierarchy and associated location, and connections to the higher order road network.
APPENDIX A

JETTY ROAD URBAN GROWTH PLAN
This plan is a representation of some of the key principles within the Jetty Road Urban Growth Plan. While the plan will guide the general form of development, it does not indicate exact locations which will require detailed design work and future development approval.
APPENDIX B

INDICATIVE LOT LAYOUT PLAN
APPENDIX C

POTENTIAL JETTY ROAD CROSS-SECTIONS
Jetty Road - No Service Road

Jetty Road - Service Road Inside Development
APPENDIX D

MAJOR TRAFFIC CONTROL ITEMS FOR KEY INTERSECTIONS