

WYONG SHIRE COUNCIL

**S.H.30 CENTRAL
COAST HIGHWAY**

**Provision of 4 lanes
& turning bays
through Long Jetty**



**CONCEPT DESIGN
PROPOSALS
DISCUSSION
DOCUMENT**

Doug Darlington

January 2010

I have lived in Long Jetty since 1975 and love the Shire and I am personally very enthusiastic about being able to contribute to ensuring that the Planning of Long Jetty is able to proceed with a solution to the widening of the Central Coast Highway through Long Jetty.

I have 43 years experience with the DMR/RTA as a Road Designer. In presenting this discussion paper I bring to the table my considerable expertise in urban road design.

Doug Darlington

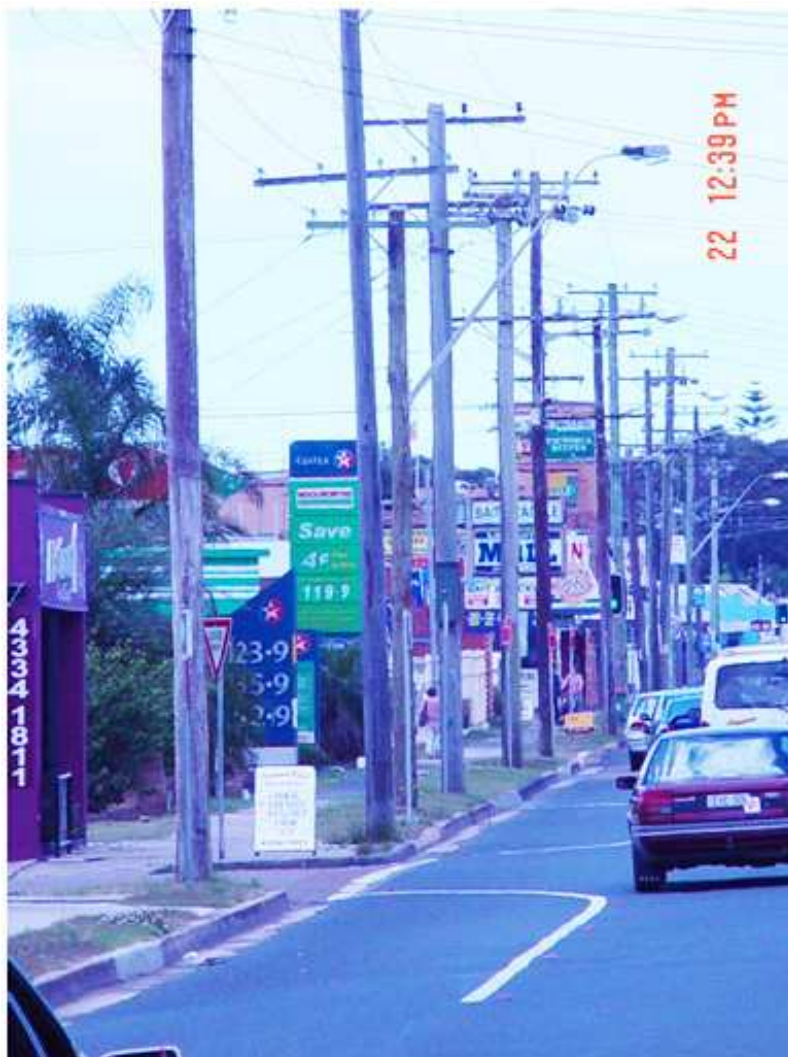
PURPOSE

The purpose of this report is to present a discussion document on the need to widen the Central Coast Highway through Long Jetty. I believe that the uncertainty of the future widening of The Central Coast Highway through Long Jetty has led to the depressed nature of many of the business along the Highway in Long Jetty.

The Concept Design has been divided into a number of sections that reflect the widening at the intersections nominated to have dedicated turning bays.

The report makes no recommendations because the designs are layouts drawn on aerial photos only. The concept layouts were prepared without the rigor of detail engineering survey and detailed utility investigation. The choice between options can only be made following a review of the environmental factors and estimates of cost prepared.

One of the objectives of The Entrance Peninsula Planning Strategy is to improve the amenity of the public domain. The major visual impact of the Central Coast Highway through Long Jetty is the power pole. It is considered that the undergrounding of this utility is essential if a high level of visual amenity is to be achieved in Long Jetty.



On The Central Coast Highway through Long Jetty, Residents and visitors alike are greeted by a wall of power poles, garnished by a mishmash of advertising signs that blight the streetscape.

BACKGROUND

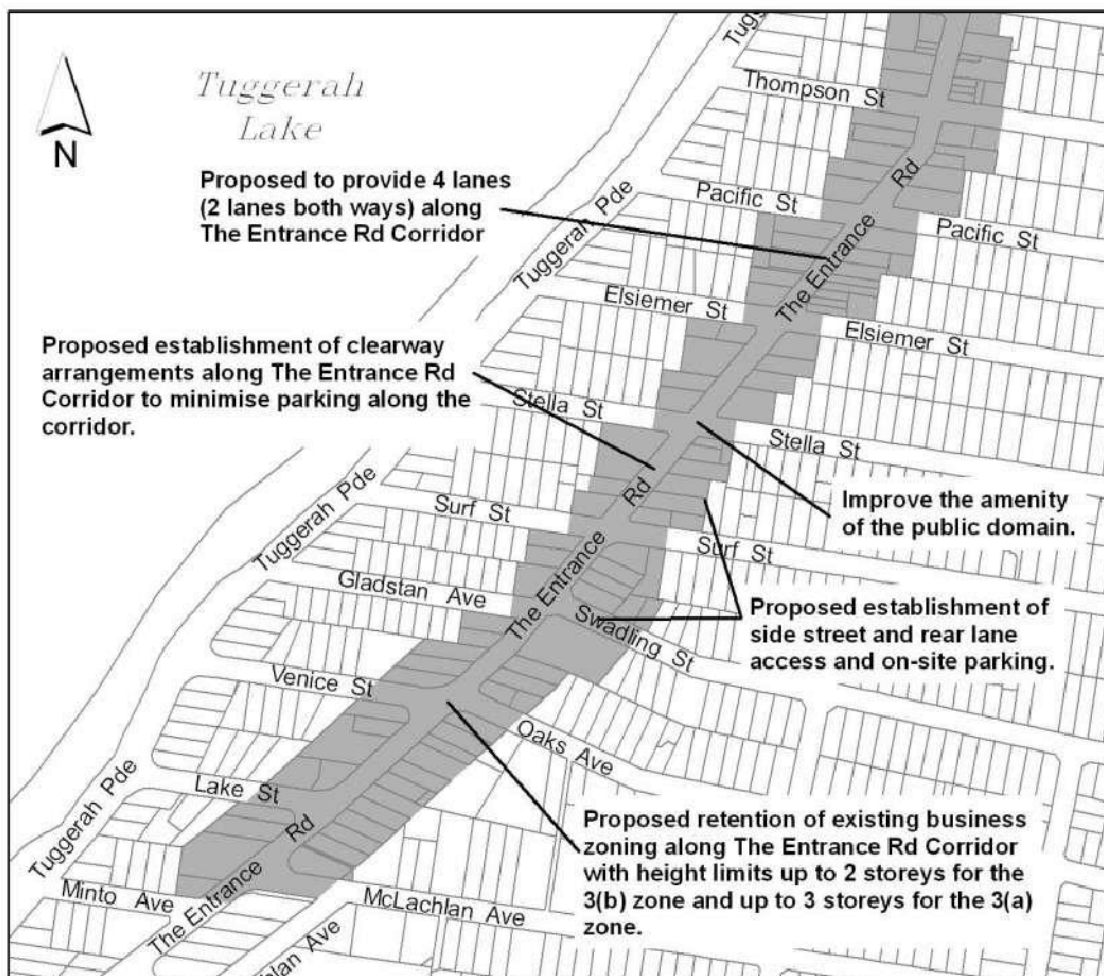
The need to widen the Central Coast Highway has been established by statements made by the RTA and the Wyong Shire Council's "**The Entrance Peninsula Planning Strategy**" document. An extract from the document is included below.

The Entrance Peninsula Planning Strategy Chapter 2 Strategies

The Entrance Road, Parking and Access

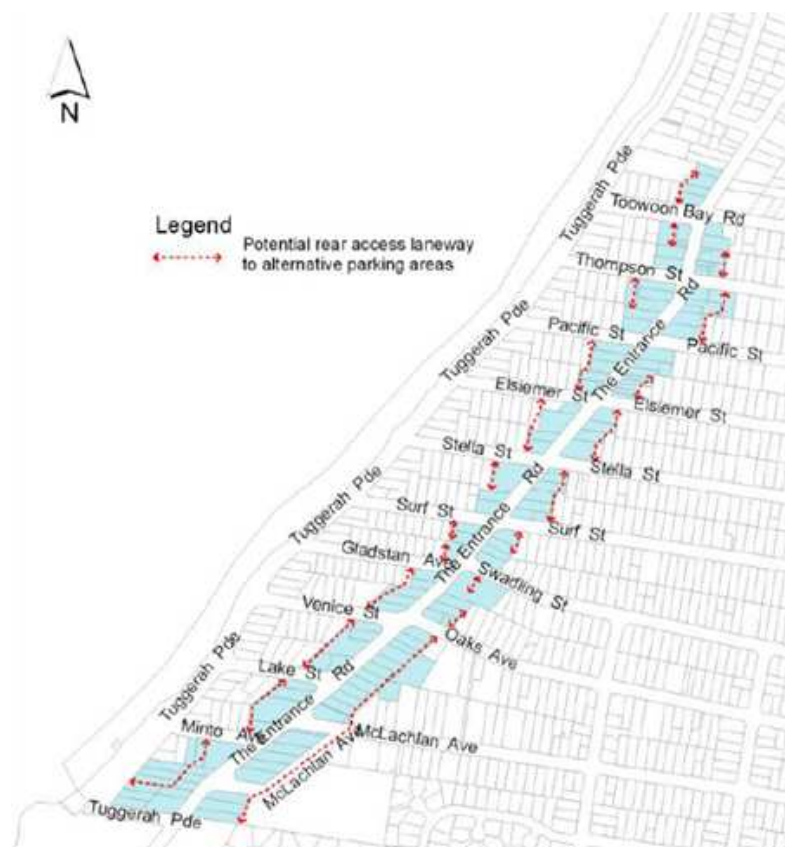
- To provide four lanes, two lanes in both directions, with some intersection improvements and the abolition of kerbside parking (at least within a clearway arrangements) and direct access (where possible).

Recent (2007-2008) traffic modelling, carried out by Council in conjunction with the RTA, to identify the spread of demand across the existing and future network for a number of scenarios (ie. various route options), concludes that the most practicable option is to upgrade The Entrance Road (the Central Coast Highway) as proposed.



- Introduce clearway arrangements along The Entrance Road during peak times (eg. peak hours, special events, special days, etc). These arrangements are to be monitored/reviewed regularly to ascertain their success; need to be modified; or otherwise.
- For all zones along The Entrance Road, wherever possible, vehicle parking is to be off-street, accessible only from rear lanes accessed via side streets. Refer to Map 12, a conceptual plan showing potential future access and parking arrangements for Long Jetty. Individual developments will be required to, wherever possible, provide adequate on-site parking, accessible from side streets, or accessible from rear lanes, accessed from side streets.
- Some vehicle parking will, where absolutely necessary, remain available along The Entrance Road, but will be subject to clearway arrangements in peak times.

Map 12: Potential Parking and Access along The Entrance Road Corridor



Provision Of Rear Lane Access For Off Street Parking

The provision of rear lane access for off street parking is investigated in Appendix No 2. It appears that the above sketch is only an indication of the idea with no investigation behind it. Council should investigate a laneway system. Prepare concepts and zone the land road and include it in the planning scheme if it is found to be feasible

ASSUMPTIONS

The concept designs shown shows a proposed widening scheme based on The Entrance Peninsula Planning Strategy and has made the following design criteria assumptions:

- **Minimal Impact on Property:**

The preferred proposals have a minimal impact on properties. To achieve this it is proposed to introduce a clearways on both sides of the Central Coast Highway between Wyong Road and Oaklands Avenue. This will provide two lanes of traffic in both direction at peak times. Widening will be restricted to intersections where it is considered turning bays are required.

- **Rationalise the Number of Intersections with Right Turn Bays:**

The number of intersections where widening for the provision of turn bays would be necessary has been rationalised on the basis that all these intersections would require Traffic Control Signals (TCS), however the Oaklands Avenue roundabout would remain.

Wyong Shire Council has a Proposed Traffic Management Plan¹ for The Entrance District. Council has slowly been implementing the proposal. Examples of this are the closures of Thompson and Elsiemer Streets and numerous Roundabouts. It also proposed traffic control signals and partial road closures at a number of intersections along The Central Coast Highway. It proposed Traffic Control Signals at the following intersections:

- McLachlan Avenue
- Swadling Street
- Pedestrian TCS at Long Jetty
- Pacific Street
- Thompson Street
- Archbold Road
- Pedestrian TCS at Diggers Club.

Roundabouts were proposed for Tuggerah Parade and Toowoong Bay Road. However roundabouts are not conducive to smooth traffic flow and Traffic Control signals are proposed for these intersersections. Traffic Control Signals have three main major advantages over roundabouts:

1. They provide for safe pedestrian crossings.
2. They allow TCS sites to be co-ordinated to achieve improved travel time.
3. They platoon traffic and the resultant gaps allows safer access for vehicles from driveways.

¹ Wyong Shire Council's Drawing Registered No 12296. See Appendix 1

PROPOSED STAGING

The Central Coast Highway Concept design has been divided into six separate sections. This allowed the consideration of more than one option for the section. It also allows each section to be constructed as separate projects.

SECTION 1 WYONG ROAD TO MINTO AVENUE

The Concept Design for this Section is shown on Sheets 2 to 5. It involve providing three north bound lanes from Wyong Road to Tuggerah Parade.

Design Objectives

This Section is where northbound traffic, bound for The Entrance, from Gosford and Tuggerah merge. The existing TCS at Tuggerah Parade is already a bottleneck with vehicles queuing back to the roundabout, making merging difficult for north bound traffic. The objective is to improve the merge and make this section of the road safer. Improve the operation of the Tuggerah Parade intersection by providing a dedicated left turn lane for north bound traffic. For southbound traffic the objective is the reduction in the delays caused by right turning traffic.



Long Jetty Mail Delivery Centre

Design Constraints

Section 1 has a number of design constraints. There is the Australia Post's Long Jetty Delivery Centre on the north western corner of the intersection with Tuggerah Parade. In addition the major utilities are located on the western side including large Telstra Pits and overhead power lines.



Northbound showing existing merge road.

Design Proposal

Provision of a third northbound lane will eliminate the merge. Providing three north bound lanes from Wyong Road to Tuggerah Parade is achieved by narrowing the existing median for most of the length. (See Sheet No 2 of Concept Drawings.) The proposal provides a longer distance for north bound traffic to change lanes rather than have to suddenly merge. This results in a much safer

A dedicated left turn lane into Tuggerah Parade is provided by widening 3.5m on either the eastern or western side to provide. A right turn bay has been provided for

south bound traffic to turn into Tuggerah Parade by widening by 3.5m on the eastern side. It requires modifying the existing TCS at this intersection.

OPTIONS AT THE TUGGERAH LAKES PARADE INTERSECTION.

The widening to provide a dedicated left turn lane into Tuggerah Lakes Parade requires widening on either the western or eastern side. The traffic control signals would require the same modification for both options.

The Western Side Option: (See Sheet No 3 and 4 of Concept Drawings.)

- Involves widening into Saltwater Creek Park.
- Minor widening required in Lions Park.
- Has less impact on properties than eastern side option.
- Major impacts on the utilities.
- Provides good alignment of traffic lanes through the intersection.
- Has less new road construction than the eastern option.



Panorama of Western Side

The Eastern Side Option: (See Sheet No 5 of Concept Drawings.)

- Does not involves widening into Saltwater Creek Park.
- Major widening into Lions Park
- Has more impact on properties than western side option.
- To achieve good alignment of traffic lanes through the intersection the Carriageway has been offset at the north east corner of Tuggerah Parade to align the northbound lanes through the intersection.
- Less impacts on the utilities.
- Has more new road construction than the western option.



Panoramas of Eastern Side

Minto Avenue (See Sheet No 4 of Concept Drawings.)

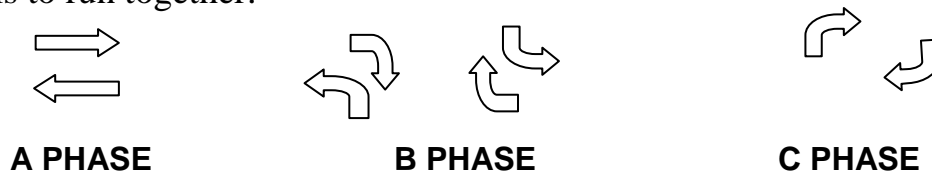
Existing right turn into Minto Avenue is banned in favour of Lake Avenue. The reasons for this are addressed in Section 2. A continuous median barrier should be considered between Tuggerah Parade and Minto Avenue to prevent traffic turning into driveways.

SECTION 2 MINTO AVENUE TO OAKS AVENUE

The Concept Design for this Section is shown on Sheets 6 to 8.

Design Objectives

The objective was to provide a right turn bay for both north and south bound carriageways. The need to provide a northbound right turn bay at McLachlan Avenue is self evident and historically proposed by Wyong Shire Council. The provision of a southbound right turn bay for south bound traffic presented a different choice to the existing right turn bay at Minto Avenue. It is considered that TCS's at Tuggerah, Minto and Lachlan would result in three sets that are too close together to be safe or operate in a satisfactory manner. Therefore it was necessary to close the existing right turn into Minto Avenue. The proximity of Lakes Avenue, just north of McLachlan Avenue, lends itself to combining both these intersections to operate as one set of traffic control signals. It would allow the phases of the signals to run together:



Design Constraints

On the Western Side The old "Pizza Hut" restaurant is impacted. The site had a Bulky Goods And Restaurant DA approved in 1 May, 2008, (DA/78/2007) that has an approved footprint right to the existing road boundary. In addition most of the utilities are on this side.

On the Eastern Side most buildings are on the existing boundary and are impacted by the 3.5m widening required. See photos below showing impacts on Craig Green Smash Repairs, J.A. Doors, The Motel and Eagles Plumbing.



Buildings impacted by eastern side widening option.



Buildings impacted by eastern side widening option.

Design Proposal

The design shows 3.5m widening to provide right turn bays at McLachlan Avenue and Lake Avenue. A median is provided between McLachlan Avenue and Lake Avenue separates the two carriageways. This allows the two intersections to act as one and ensure smooth traffic flow through this section.

SECTION 2 OPTIONS.

The traffic control signals would require the same for both options.

The Western Side Option: (See Sheet No 6 and 7 of Concept Drawings.)

- Minor impact on improvements.
- Major impacts on the utilities.
- Provides good alignment of traffic lanes through the intersection.

The Eastern Side Option: (See Sheet No 8 of Concept Drawings.)

- Major impact on improvements.
- Minor impacts on the utilities.
- Provides good alignment of traffic lanes through the intersection.

SECTION 3 SWADLING STREET INTERSECTION

The Concept Design for this Section is shown on Sheet No 9.

Design Objectives

The preferred proposals have a minimal impact on properties while providing turning bays to ensure two through lanes in each direction and a median separating the carriageways.

Design Proposal

Widening on the western side impacts on the service station and was not considered as it did not meet the stated objectives.

- The design shows 3.5m strip widening on the eastern side to provide a right turn bay at Swadling Street.
- It avoids impacting improvements and requires only strip acquisition. It ensures smooth traffic flow through this section.
- The traffic control signals would have to be modified.
- A continuous median provided from Lake Avenue to Stella Street



Panorama of Eastern Side

SECTION 4 SURF STREET TO PACIFIC STREET

The Concept Designs for this Section is shown on Sheets No 10 to 13.

Design Objectives

The objective in this section was to retain the uncontrolled right turn at Stella Street as well as the mid block pedestrian traffic control signals while providing a turning bays to ensure two through lanes in each direction and a median separating the carriageways and have a minimal impact on properties

Design Proposal

SECTION 4 OPTIONS.

The objective of having a minimal impact on properties in this section is not to meet.

The Western Side Option: (See Sheet No 10 and 11 of Concept Drawings.)

- Major impact on improvements, though less than the eastern side. It requires reconstruction of the Service Station and modification to the Marine Centre.
- Major impacts on the utilities.
- Provides good alignment of traffic lanes through the intersection.
- The existing median remains between the Pedestrian Traffic Control signals and Pacific Street.
- The right turn into Pacific Street is banned. The reasons for this are addressed in Section 5.

The Eastern Side Option: (See Sheet No 12 of Concept Drawings.)

- Major impact on improvements. It impacts on the Stella Arcade and the old shops on the south east corner.
- Minor impacts on the utilities.
- Provides good alignment of traffic lanes through the intersection.
- A median is provided between between the Pedestrian Traffic Control signals and Pacific Street.
- The right turn into Pacific Street is banned.



Panoramas of Western Side



Panoramas of Eastern Side

SECTION 5 PACIFIC STREET TO TOOWOON BAY ROAD

The Concept Designs for this Section is shown on Sheets No 14 and 15.

Design Objectives

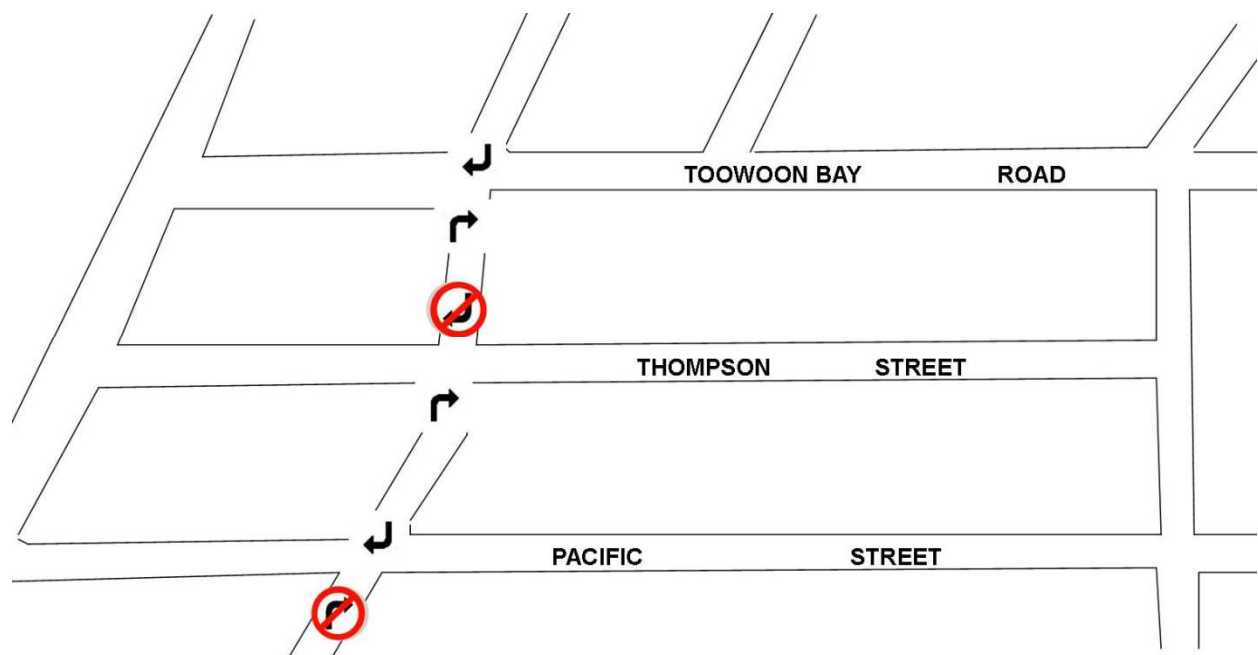
It has been identified that Traffic Control Signals are required at the three intersections; Pacific Street, Thompson Street and Toowoon Bay Road. The objective in this section was to providing a turning bays to ensure two through lanes in each direction.

Design Constraint.

The Long Jetty Hotel is considered of historical importance to Long Jetty and as a result widening on the western side was not a viable option. The Telstra Tower on the south east corner limits widening on this corner.

Design Cosiderations

The objective of having a minimal impact on properties in this section is not to meet.



The objective was to provide as many opportunities to turn as possible in this section.

- At Pacific Street the north bound right turn was banned because the Telsra Tower and the shops on the south west corner made widening to provide a turn bay difficult. There remains other options for north bound traffic to access Pacific Street east. Traffic can make a G turn at Elsiemer Street or travel around the block via Thompson Street.

SECTION 6 ARCHBOLD ROAD

The Concept Design for this Section is shown on Sheets 16 and 17.

Design Objectives

The objective was to provide an exclusive right turn bay for both north and south bound carriageways

Design Proposal

- The design shows 3.5m widening to provide right turn bays at Archbold Avenue.
- A median is provided between Toowoon Bay Road and Oakland Avenue.
- Access to "Diggers" RSL Club from the north will be by Archbold Road and the Gallipoli Road access.
- The existing mid block pedestrian signals at Diggers are unchanged.
- Anzac Road has right turns banned and becomes left in and out only.

SECTION 2 OPTIONS.

The Western Side Option: (See Sheet No 17 of Concept Drawings.)

- Minor impact on improvements.
- Major impacts on the utilities.



Utilities on north west corner of Archbold Road

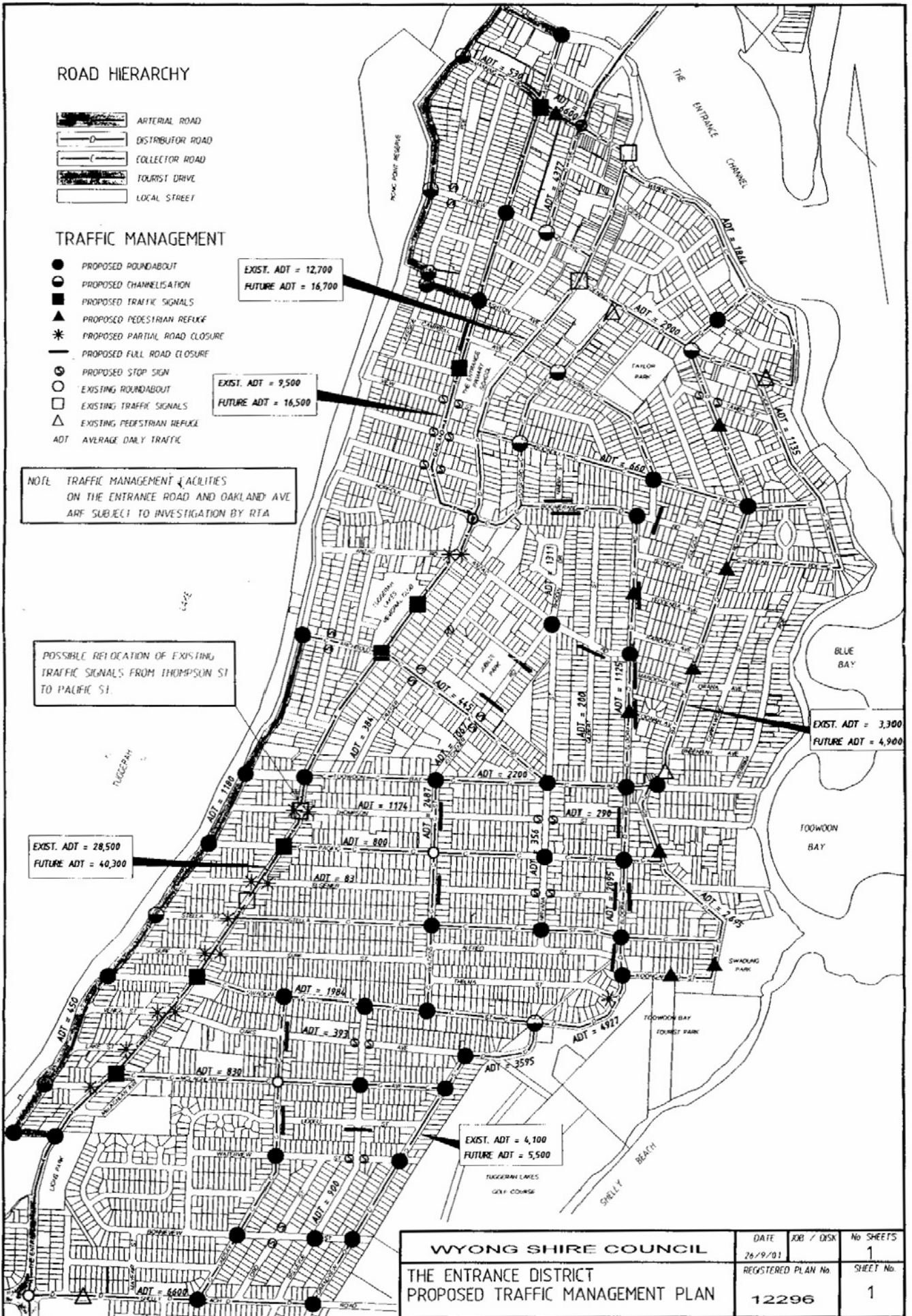
- Provides good alignment of traffic lanes through the intersection.

The Eastern Side Option: (See Sheet No 8 of Concept Drawings.)

- Major impact on improvements.
- Minor impacts on the utilities.
- Provides good alignment of traffic lanes through the intersection.

APPENDIX 1

THE ENTRANCE DISTRICT PROPOSED TRAFFIC MANAGEMENT PLAN



APPENDIX 2

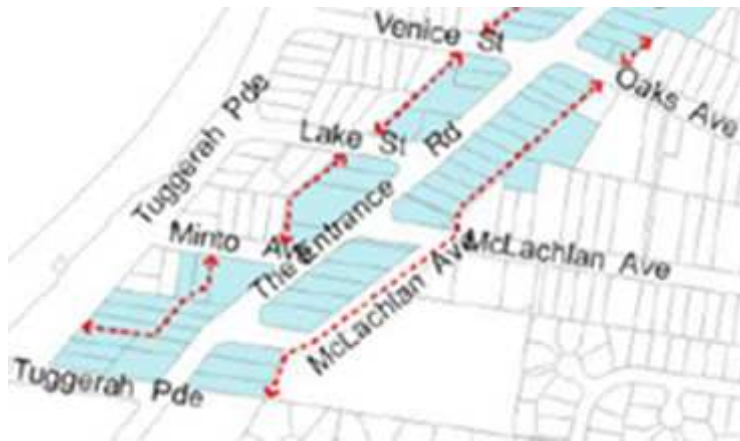
THE PROVISION OF REAR LANE ACCESS FOR OFF STREET PARKING

THE PROVISION OF REAR LANE ACCESS FOR OFF STREET PARKING

The Entrance Peninsula Planning Strategy calls for new individual developments, wherever possible, to provide adequate on-site parking, accessible from side streets, or accessible from rear lanes, accessed from side streets.

This appears to be a long term planning strategy. New development will follow the widening of The Central Coast Highway, not the other way around. As a result there will be a parking problem in the short to median term that is not addressed by the Planning Strategy. A lot more study is needed in the short term to address the loss of parking during clearway times. Parking in the side streets is one option.

SECTIONS 1 & 2



Potential Parking and Access



Western Side

- Lakeview Tourist Park 491-497 The Entrance Road, Long Jetty, have an approved DA 887/2009 that involves an new internal Road connecting Minto Avenue through the site to The Entrance Road
- Between Minto Avenue and Lake Street on the western side the proposed Bulky Goods And Restaurant (Approved DA/78/2007) has access from Lake Avenue
- The garage on the corner of Minto Avenue provides off street parking

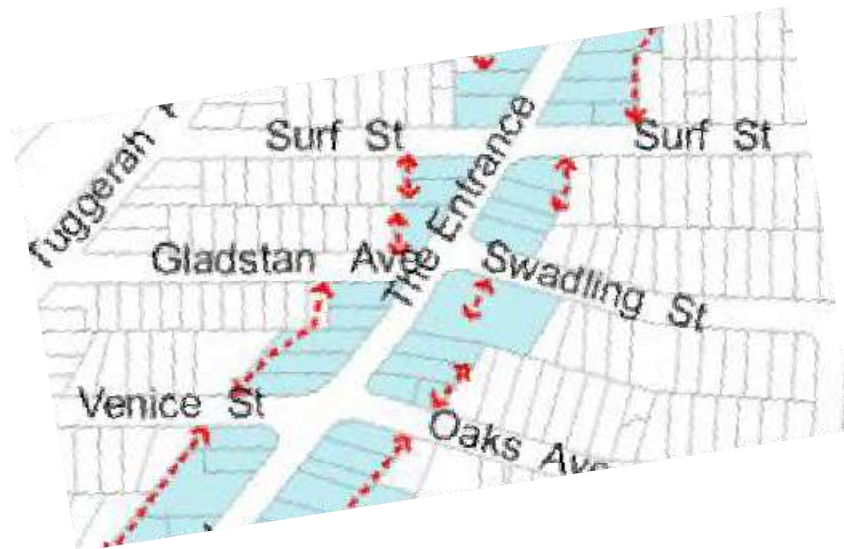


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Eastern Side

- All properties to the south of McLachlan Avenue have existing rear access from McLachlan Avenue. Lakeland Ice Cream and Tradelink have good off street parking and a clearway would have minimal impact.
- Between Lake Street and Venice Street the existing businesses have good off street parking

SECTION 3



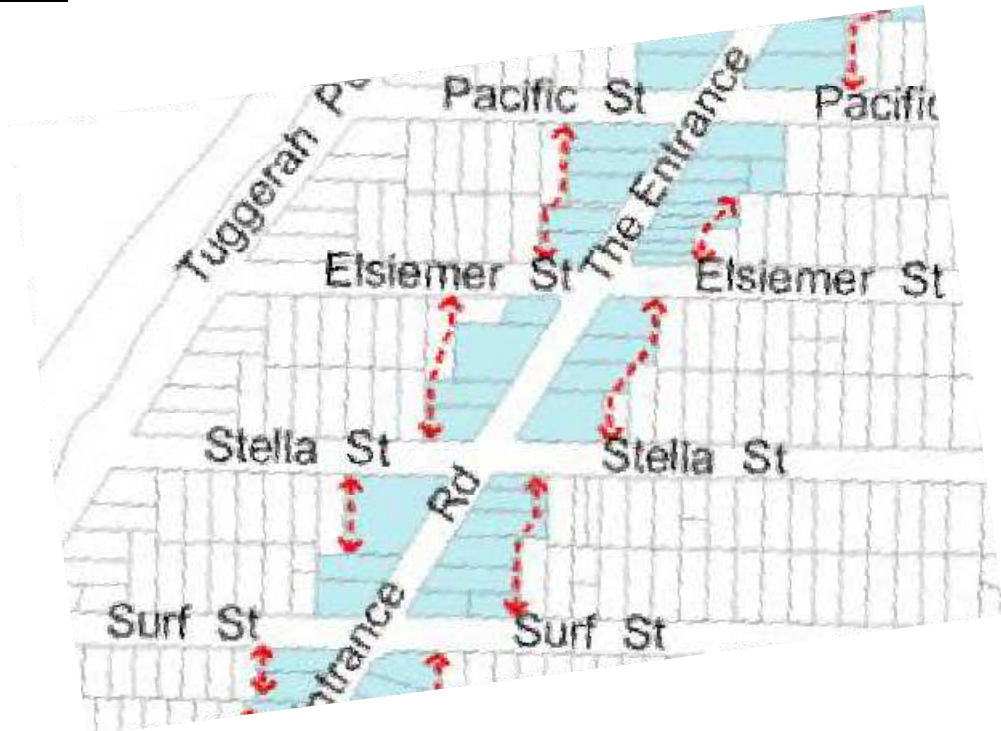
Western Side

- Venice Street to Gladstone Avenue could easily be included in planning approvals
- A rear access laneway between Gladstone Avenue to Surf Street is unlikely in the medium term as the meat retailer and child care facility are well established.

Eastern Side

- The section Oaks Avenue to Surf Street is residential and is likely to remain so on the medium term. Rear lane planning is considered not feasible here.

SECTION 4



Western Side

- Surf Street to Stella Street could easily be included in planning approvals
- A rear access laneway between Stella Street to Elsiemer Street is unlikely in the medium term. The Long Jetty Mall and the Marine Centre have off street parking
- Elsiemer Street to Pacific Street could easily be implemented in the short term

Eastern Side

- Surf Street to Elsiemer Street are sections where there is a definite need for Council to adopt a planned laneway at the rear of the businesses as part of the planning scheme.
- Elsiemer Street to Pacific Street; the future development of the site on the corner of Elsiemer Street should have access from Elsiemer Street.

SECTION 5



The planning of rear access laneways for this section is completely inadequate and needs to be addressed in the Long Jetty master Plan.

APPENDIX 3

LONG JETTY VILLAGE CENTRE EXTENSION PROPOSALS

Submission made to Wyong Shire Council by the author in 2008



COMMUNITY INPUT BY DOUG DARLINGTON ON THE REZONING OF THE LONG JETTY BUSINESS CENTRE

Precinct 8
Long Jetty Business Centre

This proposal supports the Design Objectives to consolidate and revitalise the Long Jetty Centre as a vibrant, viable local urban retail and residential village centre.

It rejects the proposal to orientate it toward Tuggerah Lake.

Introduction.

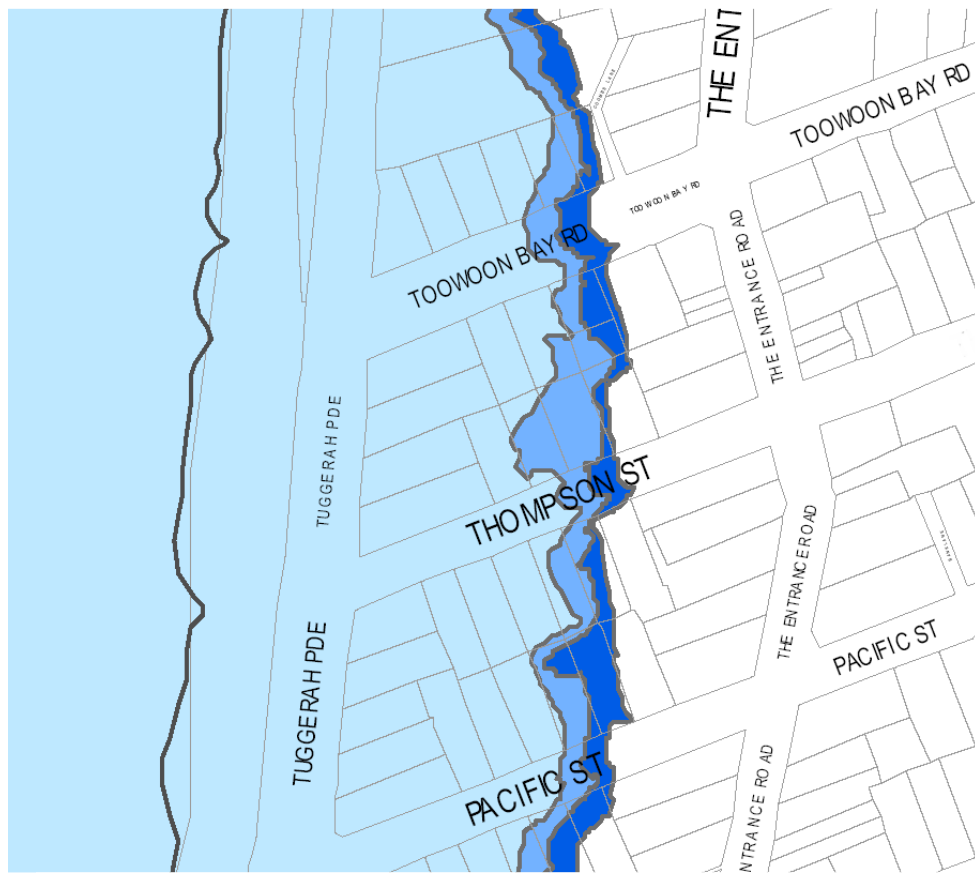
Wyong Shire Council is to be commended for putting forward a radical plan to improve the appearance of Long Jetty. For the past twenty years Long Jetty has been Council's forgotten suburb with problems that were always put in the "too hard basket", because Council's lack of will to commit funds to improve the suburb.

In particular Long Jetty was hit by two almost simultaneous events: Firstly Council approved the Stockland Bay Village Shopping Centre, without considering the impact on Long Jetty. Council failed at this time to take measures to ensure that Long Jetty would not degenerate into the depressed business centre it is today, with half of its shops empty. The rents are so low that people without the necessary capital to sustain a good business commence trading. These trashy unsustainable businesses open up and close within a few months because the business district is so depressed. The second almost simultaneous event was the closing of the banks in Long Jetty, a blow from which the business centre never recovered.

The planning strategy to consolidate the business centre is a good one. The decision to locate it between Tuggerah Lakes and The Entrance Road was poorly thought out. The following sets out my objections to the proposal and puts forward a much more viable alternative.

Disadvantages of the Planning Strategy’s Long Jetty Business Centre location:

- Tuggerah Parade floods making it unsuitable for a business frontage.



Legend

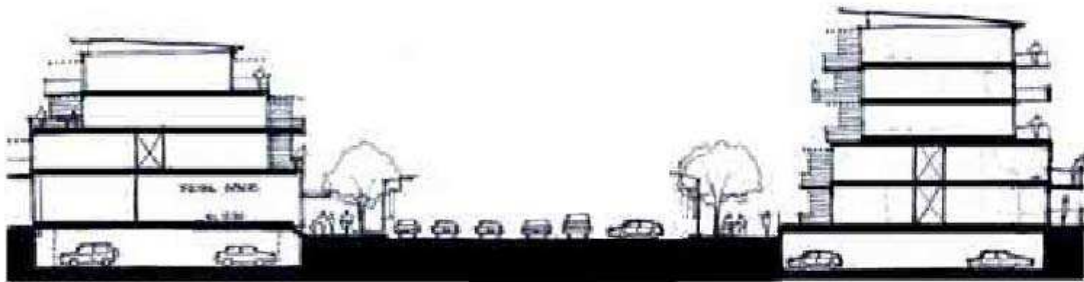
- Current estimated 1% AEP flood affected area
- Anticipated additional flood affected area up to year 2050
- Anticipated additional flood affected area between year 2050 up to year 2110

It is clear council did not consider the risk and it's liability in drafting this proposal

- Toowoon Bay Road has a steep grade between The Entrance Road and Tuggerah Parade making it unsuitable for shop fronts.
- Long Jetty has a seventy percent plus permanent population that live to the east of the Entrance Road. The proposed location is made difficult to access because of the necessity to cross The Entrance Road to get to it.
- The increase in cross traffic will have a big impact on the traffic flow on the Entrance Road. The short time needed for the pedestrian phases at Toowoon Bay Road, Thompson Street and Pacific Street traffic control signals to avoid traffic gridlock will have two impacts. It will still increase the traffic delay on The Entrance Road and will cause pedestrians to avoid the new business centre because crossing The Entrance Road will be difficult due to necessary short pedestrian phases.
- The location would not allow for the necessary widening of The Entrance Road to provide an additional lane for right turn bays.
- There is no possibility of providing on street parking in The Entrance Road.

A Better Alternative is to orientate the Business Center on the eastern side of The Entrance Road. It has the following advantages:

- It avoids flooding.
- It is closer to the residential area.
- It minimizes the traffic impact on The Entrance Road allowing it to be widened for the provision of a right turn lane and right angle parking.
- Allows Fraser Road to be extended to provide a circular route for business traffic that would take the pressure off The Entrance Road by providing an alternative route for turning traffic.
- It allows a greater set back from The Entrance Road avoiding the canyon effect that the existing strategy has.



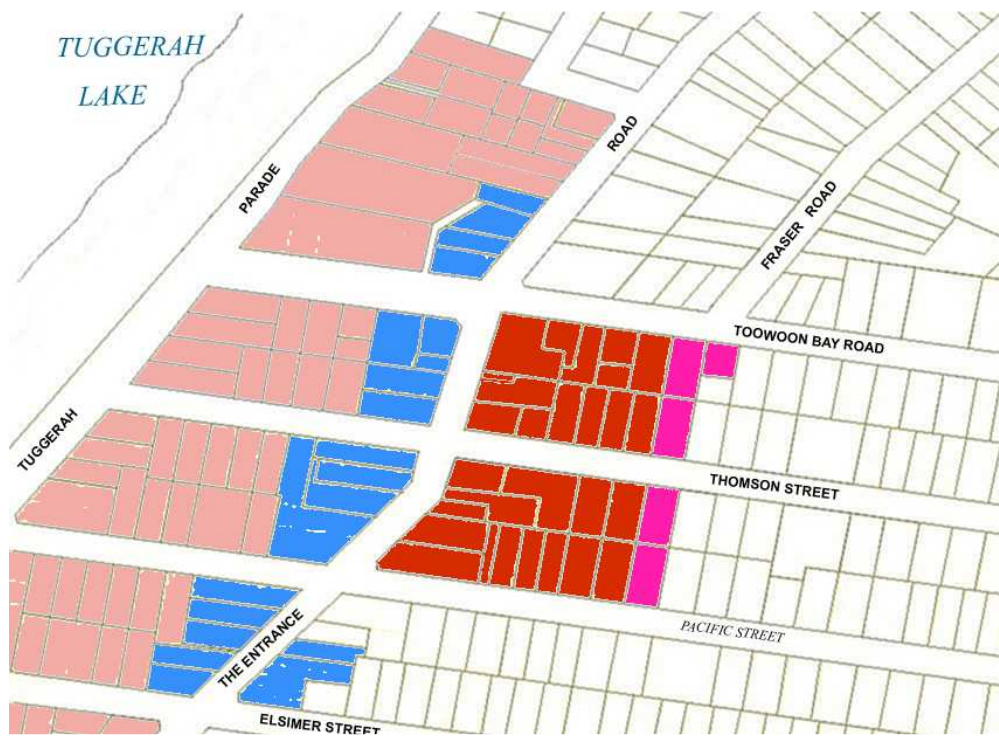
PROPOSED BUSINESS CENTRE LOCATION



Impacts:

- Purchasing the four properties for the Fraser Road Extension. This need only happen as the properties become available in much the same way Jubilee Park was established.
- All existing businesses being rezoned residential will be at an immediate disadvantage, not being able to expand or sell their business and with the only redevelopment option being residential development. Council may have to acquire some of the businesses and on sell them. To ensure that a good start is made to the Planning Strategy, Federal and State funding for urban renewal should be sought. Additional funding to finance the strategy in the medium term, (being the next twenty years) is essential.
- While there is no short term (five year) proposals to widen The Entrance Road by the RTA, Council should ensure that new development set backs are large enough to accommodate future widening and possible street parking in the Business Centre.

REZONING PROPOSAL AND POSSIBLE LAYOUT



LEGEND

- Rezoned Road
- Rezoned 3(a)
- Rezoned 2(c)
- Rezoned 2(c)



Conclusion

If the Long Jetty Business Centre is to have a viable, sustainable future then drastic zoning changes involving consolidation of the area is not a desirable option but an essential one. I commend this proposal to Council.

Doug Darlington