

Our Ref CE008678

Contact John McCormack



26 May 2009

GMP Management
Level 5
91 Scarborough Street
Southport Qld 4215

Attention: Mr Ian Pert

Dear Sir,

**TWIN TOWNS SERVICES CLUB EXPANSION
RESPONSE TO DEPARTMENT OF PLANNING TRAFFIC AND PARKING ISSUES**

Reference is made to the Department of Planning's (DOP) summary of submissions and key issues dated 8 April 2009 relevant to the proposed expansions to the Twin Towns Services Club at Tweed Heads.

In response to the DOP issues, this letter reviews the modifications proposed to the ground floor layout plan and provides additional information to supplement our preliminary evaluation (dated 14 November 2008) and subsequent response letter (dated 18 February 2009) which considered the application currently being assessed. These more recent documents also rely upon earlier assessments of traffic and car parking matters relevant to the club which include:

- Twin Towns Services Club Expansion Parking Report (30 October 2006);
- Tweed Heads Twin Towns Response to Request for Further Information, (30 May 2007);
- Twin Towns Services Club – Development Traffic Impacts Design Note (30 May 2007).

A copy of the previous Cardno Eppell Olsen assessments outlined above is attached for your reference.

The traffic and transport issues raised in the following parts of the recent DOP correspondence have been addressed herein:

- Attachment 1, Point 1 – Pedestrian Access to the Club from Jack Evans Boat Harbour;
- Attachment 1, Point 3 – Traffic and Car Parking Assessment;
- Attachment 3, Tweed Shire Council comments;
- Attachment 3, NSW Roads and Traffic Authority comments.

Cardno Eppell Olsen Pty Ltd

ABN 82 095 614 154

**Transportation and
Traffic Specialists**

Level 2, Emerald Lakes
Town Centre
1/3321 Central Place
Carrara QLD 4211
PO Box 391
Nerang Queensland 4211
Australia

Telephone: 07 5502 1585

Facsimile: 07 5502 1586

International: +61 7 5502
1585

eop@eo.com.au

www.cardno.com.au

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Each of the above issues has been addressed within the following main sections:

- Car Park Layout;
- Car Parking Requirements;
- Traffic Operations;
- Access and Servicing.

1. Car Park Layout

The proposed ground floor car parking layout has been modified to reflect the configuration preferred by the DOP. The DOP referred to this configuration as option 2 in earlier correspondence at it understood that this layout is compatible with proposed locations of pedestrian footpaths within the Jack Evans Boast Harbour (JEBH) master plan. The modifications to the ground floor car parking layout will include the following key improvements in order to better integrate the Twin Towns club entry with the JEBH:

- Creation of a second pedestrian entry to the south of the existing stairs and lift structure;
- Widening of the footpath between the main access from JEBH to the club access;
- Removal of 5 car parking bays located directly adjacent to the pedestrian footpath within the vicinity of the JEBH access point;
- The modified pedestrian connections within the ground car park will further reduce traffic speeds as a result of additional slow points created.
- Improved sight distances and vehicle speeds will effectively improve the management of pedestrian/vehicle interactions within the ground floor car park.

It should be noted that structural piers located within the car park will have appropriate signage markings in accordance with the MUTCD to ensure they are clearly identifiable.

2. Car Parking Requirements

Car Parking Demands

The CEO response dated 18 February 2009 describes the following development yield increases which were applied in order to establish the required car parking quantum:

Table 1 *Twin Towns Services Club
Redevelopment Yield Increases*

Land Use	GFA/Seating capacity
new cinemas and meeting rooms	280 seat capacity;
new function centre	400 seats and 10 staff;
club (level 2 expansion)	226sq.m lounge 600sq.m auditorium (external terraces)

It is confirmed that the cinema/meeting room will have a 280 seat capacity. Drawing DA2-10.23C indicates that the cinema will hold 40 seats per room (80 seats) and the meeting rooms will hold 100 people per room (200 seats).

As illustrated in DA1-10.22C the level 2 building works will increase the club internal floor area by 378sq.m. The lounge area (226sq.m) reported at Table 1 represents the additional gross floor area proposed on level 2 excluding void and balcony areas.

The external terraces will comprise of a beer garden/outdoor smoking area and will form part of the calculations to establish the expected parking demand for the club. The auditorium rate has been applied to external terraces as it is considered this will reflect a lower patronage density as compared to the main indoor club area since it will be mainly used as a breakout area. Therefore it is considered reasonable to apply a lower generation rate for this particular area.

Car Parking Assessment

In order to accurately establish existing demands brought onto the site, patronage door counts and questionnaire surveys were undertaken. Customer surveys were undertaken in 2006, although this information is somewhat dated it is unlikely to reflect a significant change compared to current operations. This methodology involved a first principles approach based upon expected maximum patron occupancy and information on arrival mode and vehicle occupancy identified by previous surveys for the existing club facilities. It is considered reasonable to calculate additional car parking requirements for the proposed new uses in accordance with criteria documented within the DCP Section A2 – Site Access and Parking Code. It should be noted that the proposal does not strictly accord with the DCP, given the uniqueness of the land use, an alternate assessment technique is considered appropriate. The detailed analysis has been presented previously within CEO report (dated 17 November 2008) and subsequent response (dated 18 February 2009).

Parking provision has been supplied to ensure sufficient car parking capacity is supplied for peak period use. The proposed cinemas and functions rooms make up a large part of the additional demand on car parking. Considering that these facilities have a fixed seating plan, and set capacity it is not expected that the additional demands brought about by the proposed new facilities will adversely impact upon the car parking now and into the foreseeable future.

The information presented in the CEO Information Request response (dated 18 February) concludes that the expected car parking demand generated by the proposed expansion will be approximately 128 spaces. Therefore, the total parking demand envisaged for the club will be 743 spaces representing the sum of the previous demand calculations (615 spaces for the existing club facilities) and the requirements of the new uses (128 spaces).

The summary outlined 18 February 2009 tabulation indicates that the parking supply exclusively available to the services club is 744 spaces. Based on the calculated car parking demand of 743 spaces, the club is expected to have a surplus of one car parking space.

The modifications to the ground floor car park recommended by the DOP will further enhance pedestrian accessibility between the JEBH and the club by providing higher quality linkages. In providing these pedestrian access improvements, a further five car parking spaces will be lost reducing the total car parking provision to 739 spaces. The development will then be some four parking spaces deficit of the estimated peak demand. This is not considered to be significant in the context of the proposed supply or the accuracy of the parking demand predictions.

On-street parking has not been originally included within the design. As previously stated that In providing the JEBH pedestrian access improvements a deficit of three car parking spaces has been determined compared to the car parking quantum identified within CEO's previous response. It is considered that the reduced car parking provision to 739 spaces which is a reduction of approximately less than 1% is not considered to be a significant shortfall.

Based on our revised assessment it is considered that the proposed supply will meet the demands of the expanded club.

Bus Set-Down Facilities

Designated bus set down areas are currently provided to ensure tourist coach requirements are met. These facilities are provided as follows:

- Boundary Street – Directly east of the club access. This is not a formal arrangement but has been used informally for an extended period. Buses utilise this facility to rank until called upon to pick up groups at the club's main entrance. The buses rank at this location in order to minimise any unnecessary congestion near the club entrance on Wharf Street and Wharf St/Boundary St roundabout;
- Stuart Street – Aligning the western boundary of Twin Towns Resort;
- Griffith Street – Directly fronting the Twin Towns Resort;
- Wharf Street – Service club bus and public transport set down.

Cyclist Provision

Bicycle parking is provided in racks under the club. There are currently 20 spaces in two banks at each end of the club. 13 bays are located under the current fire egress stairs at the rear of the existing members building on the harbour side. 7 bays are to the right hand side, looking from the harbour, at the rear of the main reception area, hard up against the building.

3. Traffic Operations

Further consideration of the impact of additional traffic generated by the development has been made based on the revised layout shown on the most recent plans dated 30 January 2009 prepared by Bayden Goddard Designs.

Figure 1 shows an excerpt from the previous design note (30 May 2007) which outlines the potential traffic generated by the proposed redevelopment.

Figure 1

Excerpt: Design Note dated 30 May 2007

Development Traffic Generation

The peak hour traffic generation associated with the net increase in redevelopment yields has been estimated in accordance with parking survey findings outlined in the Cardno Eppell Olsen correspondence titled *Twin Towns Services Club – Parking Requirements* dated 30 October 2006.

The peak patronage occupancy counts and interview surveys identified the following key arrival characteristics for trips generated by the Services Club:

- 51.3% - percentage of Club patrons who arrive via private car;
- 2.21 - average vehicle occupancy of trips generated by Club.

Twin Towns Services Club

Table 1

Redevelopment Generated Traffic (net increase)

Land Use Component	Yield	Person Trips Via Private Car	Vehicle Trips
Cinema/Meeting Room	280 seats	144 (i.e. 280*51.3%)	65 (i.e. 144/2.21)
Ballroom	400 seats	205 (i.e. 400*51.3%)	93 (i.e. 205/2.21)
Total	680 seats	349 persons	158 Vehicles

Figure 1 demonstrates the expected cinema, meeting room and function centre are likely to generate 158 vehicles during the peak hour periods. The lounge and auditorium areas were not included within the previous assessment. Table 2 indicates the expected traffic to be generated by the development based on the revised plans will be in the order of 211 vehicles per peak hour.

Twin Towns Services Club

Table 2

Updated Redevelopment Generated Traffic (net increase)

Land Use	Development Yield	Base Parking Rate (DCP2)	Previous Vehicle Trips	Proposed Vehicle Trips	Additional Vehicles
Cinema/Meeting Room	280 seats	Previous extensive surveys	65	65	
Function Centre	400 seats 10 staff	Previous extensive surveys	93	93	
Lounge	226sq.m GFA	1 space/10sq.m GFA		22.6	23
External Terraces	600sq.m GFA	1 space/20sq.m GFA		30	30
Total			158	211	53

The additional traffic generated by the proposed expansion has been calculated in accordance with extensive surveys undertaken within the existing development and criteria documented in RTA – *Guide to Traffic Generating Developments (2002)*.

The main club room (Level 2) will include the external terraces as part of the expected traffic generated by the club as it is expected these terraces will have a higher utilisation based on their location. Despite this higher utilisation, the external terraces will have a lower patronage density as compared to the main indoor club area since it will be mainly used as a breakout area. As previously mentioned it is considered reasonable to apply a lower traffic generation rate for this particular area.

Given the location of the services club within the Tweed Heads CBD area, availability of regular bus services, the proximity to surrounding accommodation opportunities and extensive promotion of accommodation packaging undertaken by Twin Towns, it is likely that a high proportion of patrons to the proposed facilities will also be patrons of surrounding land uses including particularly the Harbour and Ocean resort towers. The traffic generated by the new facilities is therefore likely to be significantly lower than the isolated rates documented within the RTA Guide to Traffic Generating Developments.

The additional 53 vehicle trips (from that previously assessed) will result in a minor increase in peak hour development traffic utilising the surrounding intersections, equating to less than a 5% increase upon any approach leg. The additional traffic will not adversely impact upon the existing or future road network operations. Further analysis to that previously assessed (8530.070530.TTassessmentpackage) is therefore not considered to be warranted.

Based on the previous assessment the following conclusions were made regarding traffic matters associated with the proposed development and are still relevant to the current application:

- the intersection of Stuart Street and Griffith Street will operate below capacity at 2019 assessment horizon for the “With Development” scenario assuming motorists accept a leading gap of 4.5 seconds. No upgrading works are considered necessary to negate the development traffic impacts;
- the intersection of Stuart Street and Bay Street will operate below capacity at the 2019 design horizon for the “With Development” assessment scenario. No upgrading works are considered necessary to negate development traffic impacts;
- the intersection of Wharf Street and Bay Street already operates above capacity with existing “No Development” traffic demands. The addition of development traffic has a minimal impact on the operation of the intersection and does not bring about the need for additional upgrading works;
- the Wharf Street/Boundary Street/Griffith Street/Clark Street roundabout intersection will exceed capacity (i.e. DOS>85%) by the year 2009 for the “No Development” assessment scenario. The addition of development traffic has a minimal impact on the operation of the intersection but does not bring about the need for additional upgrading works;
- the construction of additional circulating lanes or ultimate signalisation of the roundabout is required to provide additional capacity at the 2019 design horizon;
- Allowing vehicles to exit via Wharf Street access will effectively reduce the impact upon the operation of Wharf St/ Boundary St roundabout. Permitting vehicles to turn left out at Wharf Street will also alleviate traffic congestion onto Boundary Street and reduce on-site vehicle manoeuvres;
- Contributions are payable to Council based on the current Section 94 contribution scheme.

4. 4.0 Access and Servicing

Pedestrian Access

The existing pedestrian crossing facility on Wharf Street is proposed to remain in its current position. The driveway width at the property boundary shall remain at its current width (approximately 10m). In order to accommodate the AV swept path the driveway width at the kerb has been extended by approximately 2.5m (approximately 12.5m). As demonstrated previously, the landscaped planter box shall be slightly tapered back to ensure the service vehicle can enter the development.

A proposed entry treatment sketch (SK-A-101) has previously been issued which demonstrates the reconfiguration of the planter box on Wharf Street and the provision of contrasting pavement to distinguish the driveway crossover. It is deemed that the revised access arrangements shall not adversely impact upon pedestrians compared to the existing crossover arrangement.

Servicing Arrangements

The loading dock area is identified to/from Wharf Street as shown within previous CEO response (18 February 2009) which outlines the operation and safety measurements for vehicle and patron traffic. The existing loading dock adjacent to the Boundary Street is provided to service the cellar operation for this end of the building. Given the size and nature of the development it is important to have separate cellars.

It has been recommended that signage be installed at the Wharf Street entry to the service area advising that the entry is for service vehicles only. Additionally, appropriate signage in accordance with the MUTCD should be installed at the customer car park exit into the service vehicle area advising that the area is a service vehicle area and to warn both patron vehicles and pedestrians of the presence of service vehicles. Further details of the car parking and circulation layout design are documented within CEO's response dated 18 February 2009.

Although it would be desirable to fully separate the loading and general vehicle operations, fencing and signage will be installed to facilitate the shared use of this area (ie. during peak event times when no servicing is taking place, club visitor traffic will be able to exit via the loading dock area which will relieve operations at the other access location. Approval conditions should be appropriately worded to ensure that these aspects were adequately addressed in the detailed design stage.

Sight Distance

It has been recommended that the art wall along the Wharf Street frontage be set back further to improve pedestrian safety. However, it is understood that this wall has significant community value and screens all of the fire infrastructure for the club (hydrants, pumps and pipe work) which may present significant constraints to modification. It is also noted that the service vehicle access has operated without incident for some years. It must be recognised that the access sight lines will therefore not achieve the recommended standards established in Austroads and therefore other treatments including signage and pavement surfacing should be utilised to provide an area of high driver and pedestrian alertness

All Transport Planning related aspects of the information request have been addressed, either by amending the plans as per Council's request, or by providing background information to further justify the aspects in question.

Please call should you have any queries in relation to this matter.

Yours faithfully

A handwritten signature in blue ink, appearing to read 'J. McCormack'.

John McCormack
Senior Traffic Engineer
for **Cardno Eppell Olsen**