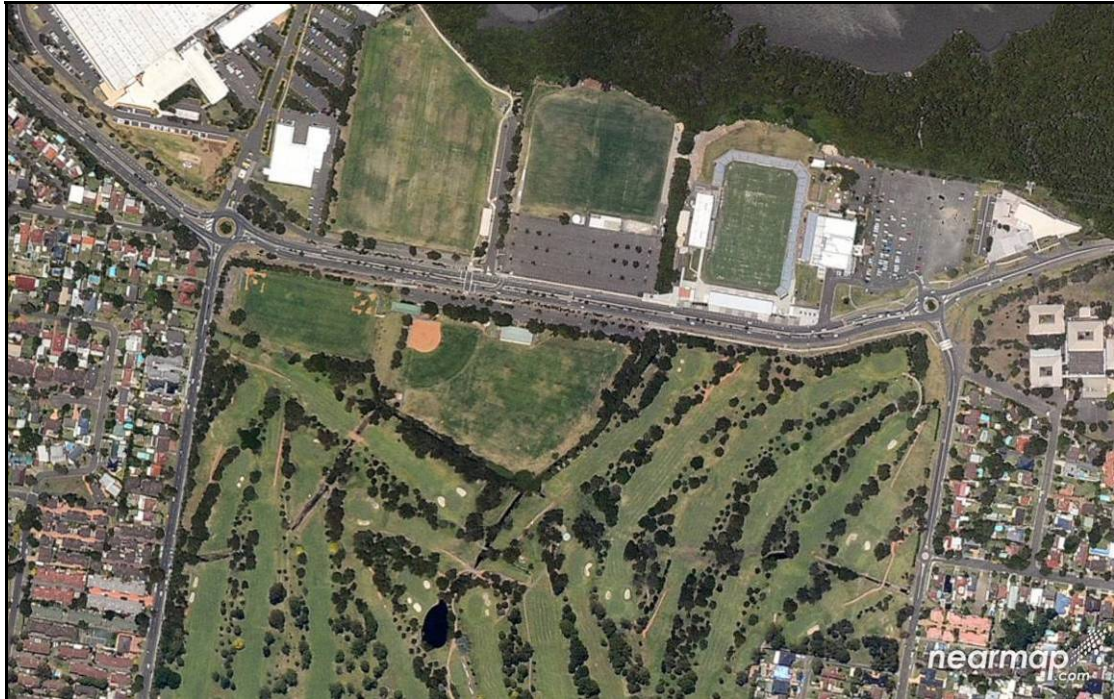




CRONULLA SHARKS REDEVELOPMENT

SEPTEMBER 2011



GAME DAY SATELLITE PARKING PLAN

M^CLAREN TRAFFIC ENGINEERING
LEVEL 1, 29 KIORA ROAD, MIRANDA, NSW 2228
PH (02) 8543-3811 FAX (02) 8543-3849
Email: mclarenc@ozemail.com.au
Web: www.mclarentraffic.com.au



TABLE OF CONTENTS

1. INTRODUCTION	1
2. THE SITE & SURROUNDING ENVIRONS.....	1
2.1 EXISTING PARKING SUPPLY	2
2.2 PUBLIC TRANSPORT SERVICES	2
3 FUTURE SITE PARKING & ACCESS ARRANGEMENTS.....	3
3.1 PROPOSED PARKING	3
3.2 PROPOSED ACCESS	3
3.3 IMPROVED PEDESTRIAN SAFETY	3
3.4 PROPOSED PUBLIC TRANSPORT IMPROVEMENTS	4
3.4.1 Consultation with NSW Department of Transport	4
4 GAME DAY TRAFFIC MANAGEMENT	6
4.1 GAME CROWD CHARACTERISTICS	6
4.2 EXISTING PARKING & TRAFFIC MANAGEMENT	6
4.3 PROPOSED PARKING & TRAFFIC MANAGEMENT	7
4.3.1 Woollooware High School Grounds	9
4.3.2 New Cronulla High School Parking	9
4.3.3 Wanda Beach Parking	10
4.3.4 Seymour Shaw Public Parking & RTA Road Reservation	10
4.3.5 Other Parking Areas	11
4.3.6 Shuttle Bus Services.....	12
4.3.7 Other Parking & Transport Arrangements	14
5 CONCLUSIONS	16

1. INTRODUCTION

M^CLaren Traffic Engineering was commissioned in November 2010 to undertake a revised game day parking plan as a result of a proposed redevelopment by the Cronulla Sharks. This document reports on how game day peak parking will be managed.

It is expected that there will be **13** peak events per year. Of these 80% will occur at night typically on a Friday or Saturday evening, and 20% will occur during a Saturday or Sunday afternoon.

Previous versions of this report have been discussed with Sutherland Shire Council planning & engineering staff and to date there has been no formal resolution on the way forward in terms of an appropriate Game Day Parking Management Strategy. This report is prepared in order to assist resolution of the matter.

2. THE SITE & SURROUNDING ENVIRONS

Cronulla Sharks football field, also known as Toyota Stadium, is located off Captain Cook Drive, Woollooware. The location of Toyota Stadium is shown in the image below.



Located opposite the site is Woollooware Golf Course and Captain Cook Oval, which is primarily used for softball and baseball. To the east of the site, on the south eastern corner of the roundabout at Woollooware Road North is Woollooware High School. To the east of the sharks car park is Fitness First and a petrol station. West of the site is Solander playing fields and Toyota Motor Corporation.



2.1 Existing Parking Supply

The following total parking numbers are currently available for game days within the Sharks landholdings:

Eastern car park	532
Western car park	511
Field 3	<u>67</u>
Total	1,134

Past conditions (as documented in the *“Statement of Environmental Effects: Traffic and Parking Management & Landscaping Proposal”* dated February 1999, prepared by *Planning Collaborative* in association with *M^CLaren Traffic Engineering, Trott Tench Architects & Landscan*) identified that a minimum of 1,134 spaces be provided on-site. The current 2011 provision is 24 short of this figure.

2.2 Public Transport Services

The site is located within a 1.2 kilometre walking distance from the football field to Woollooware Railway Station.

The following two bus route services previously operated at or near the site, and will be discussed with Veolia Transport in order to seek re-instatement of the service either in part or a supplementary service:

- Route 987, which operated along Captain Cook Drive between Miranda Railway Station, Cronulla Rail Station and the Kurnell Peninsula via a bus stop at the Cronulla Sharks Leagues Club.
- Route 984, which operates along Woollooware Road North and Sturt Road (at stops within 400 metres of the Cronulla Sharks Leagues Club) linking to Woollooware Rail Station, Caringbah & Cronulla centres.

Previously, preliminary discussions with bus operators (i.e. Buslink/Crowthers) indicated that they would be prepared to consider an expanded service dependent upon new developments and patronage. Discussions have yet to be undertaken with Veolia Transport management who now control the bus routes in the area.

The NSW Government Transport website indicates that there are no existing bus services which run along Captain Cook Drive in front of the site. See the image below for a diagram of bus routes in the area.



3 FUTURE SITE PARKING & ACCESS ARRANGEMENTS

As a result of a DA at the Sharks site (residential & retail), parking and access arrangements will be improved.

3.1 Proposed Parking

The development proposal includes a new residential development and retail development where existing parking areas are located near the Sharks stadium. However new parking areas will be constructed.

On site parking at the Sharks site will be increased to approximately 1,534 parking spaces. Of these, 651 will be allocated to retail/commercial/club use. During weekend games some parts of the retail development will still operate and require parking, however many parts of the retail development will be closed at night and as such much of this on site parking will be available to spectators for night games. A dynamic parking management system is recommended to be installed that illuminates the available number of parking spaces in each parking level for the convenience of entering drivers.

3.2 Proposed Access

The retail/residential development application includes plans to upgrade Woollooware Road North roundabout to signals, and include 1 or 2 new signals closer to Toyota Stadium to improve access arrangements.

3.3 Improved Pedestrian Safety

Currently pedestrian safety across Captain Cook Drive is a significant concern. There is no facility to assist pedestrians crossing this road east of the site, and pedestrians wishing cross near Woollooware Road North roundabout have to dash between cars across four lanes of traffic, which is quite dangerous. During game day events there is a significant volume of pedestrians wishing to cross Captain Cook Drive on their way to the stadium.



The new signalised access points will provide signalised pedestrian crossings, greatly improving pedestrian access and safety.

The additional indented bus bays will minimise conflicts between vehicles and pedestrians needing to cross Captain Cook Drive, as spectators will be able to be dropped off by buses in front of or near the stadium.

To improve pedestrian safety across Gannons Road near the roundabout, the RTA has suggested that a signalised pedestrian crossing be constructed across Gannons Road south of the roundabout. The pedestrian paths will need to be diverted to this crossing and a fence installed to encourage pedestrians to safely cross Gannons Road at the pedestrian lights.

3.4 Proposed public transport improvements

As a result of a residential / retail DA prepared by the Sharks, public transport improvements have been considered. The DA proposal includes upgrading public transport services to the site, including adding several new indented bus bays along Captain Cook Drive. Ultimately indented bus bays will be located along the front of Toyota Stadium (5 x 12.5m buses), just west of Toyota Stadium (6 x 12.5m buses), east of Toyota Stadium (6 x 12.5m buses), and an indented bus bay on the southern side of Captain Cook Drive for at least 6 x 12.5m buses opposite Toyota Stadium.

3.4.1 Consultation with NSW Department of Transport

Meetings in May 2011 discussed various options of bus transport initiatives, and the options discussed are as follows.

Divert Route 477 past Sharks Development

Under this option the existing Route 477 will divert from Taren Point down to the Sharks development site, turn around within the Sharks site and then return to Miranda Station. See the image below for the possible new route (dotted path (**RED**) indicates proposed route 477 modification).





This option is not deemed desirable due to the inconvenience caused to existing patrons of the 477 route. Instead of the route travelling directly to Miranda Train Station and shopping district, it will instead be diverted **4.9km** to the Shark's site.

Divert Route 969 past Sharks Development

Under this option the existing Route 969 will divert from the Kingsway up Gannons Road, past the Sharks site and then rejoin the existing route on Sturt Road off Woollooware Road North before continuing on to Cronulla Station. See the image below for the possible new route (dotted path (**BROWN**) indicates proposed route 969 modification).



Create New Bus Route

The best option would be for a new route to be implemented. This is because diverting existing routes past the Sharks development would inconvenience existing customers.

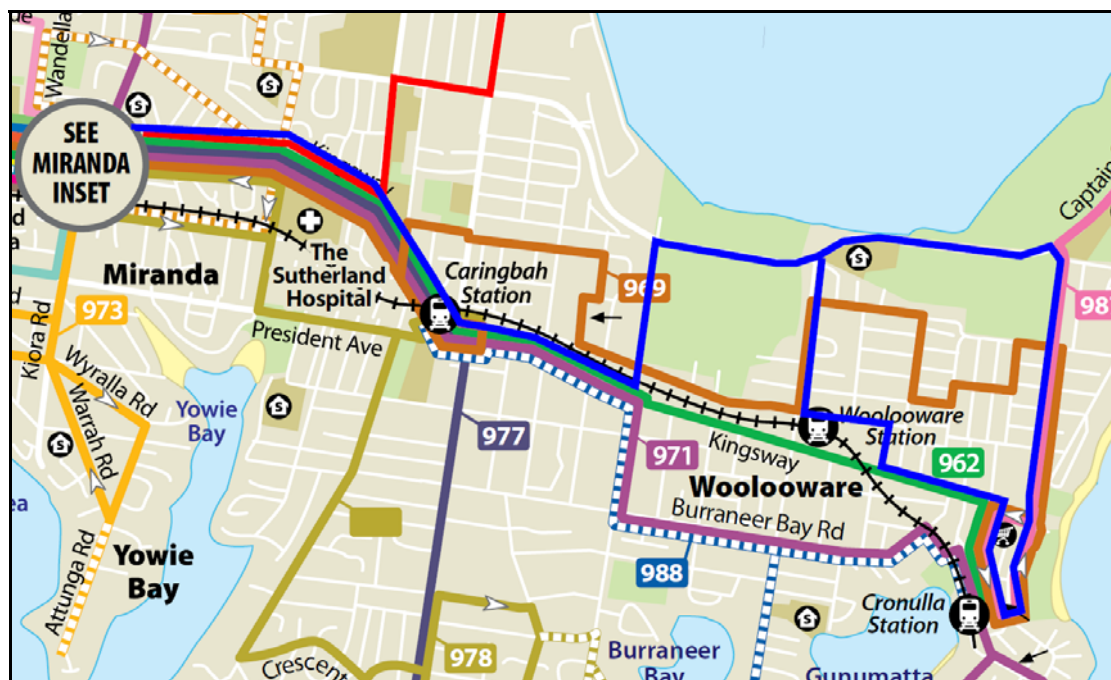
Discussions have been held with the Dept. of Transport who have agreed “in-principle” with the provision of a new bus service that will operate between Miranda to Cronulla rail stations via The Kingsway, Caringbah Train Station, Gannons Road, Captain Cook Road and Elouera Road.

Indented bus bays will be provided along the northern side of Captain Cook Drive in front of the proposed retail and residential land parcels as well as an indented bay on the southern side opposite the retail parcel linked via the proposed traffic signals close to Toyota Stadium that serves the retail development.



Further, there has been a recent large residential subdivision approved at Kurnell, just east of Elouera Road, which is only serviced by 1 bus route which runs only once every hour. A new bus route could provide an additional service to this new subdivision at Kurnell as well as servicing the proposed Sharks development.

A possible route for this new service is shown in the diagram below (Blue Route).



4 GAME DAY TRAFFIC MANAGEMENT

4.1 Game Crowd Characteristics

The existing football field accommodates a total combined fixed seating capacity of some 9,091 seats within various spectator areas of the field.

The grassed areas within the spectator viewing areas further increase the spectator capacity of Toyota Stadium. The total ground capacity (seated plus standing) is approximately 20,000 spectators. The 2006 spectator levels at the NRL Rugby League matches at Toyota Stadium ranged from 9,025 to 18,845 with an average crowd of 13,105 spectators up until July 2006, and current crowd numbers will be assumed to be similar.

It is expected that there will be **13** peak events per year. Of these 80% will occur at night typically on a Friday or Saturday evening, and 20% will occur during a Saturday or Sunday afternoon.

4.2 Existing Parking & Traffic Management

Currently some parking spaces are provided on site for visitors during game days, and the remaining vehicles are required to park elsewhere on street or travel by public transport.



As a result of the proposed development 511 formalised car spaces will be lost or used as retail/commercial parking. The aim of the proposal is to maintain existing conditions, by at least replacing these existing 511 on-site formalised parking spaces elsewhere during game events.

4.3 Proposed Parking & Traffic Management

The 511 car spaces will be replaced by a management plan that encourages a shift from private car travel to public transport services. The primary elements of the management plan include the following:

1. Provision of new regular bus service along Captain Cook Drive linking to Miranda and Cronulla rail stations.
2. Retain existing Game Day shuttle bus services to and from Woollooware Train Station.
3. Game Day bus shuttle services from a number of train stations including Engadine, Sutherland, Cronulla & Caringbah.
4. Game Day bus shuttle services from Menai Marketplace and Sylvania Hotel.
5. Identification of appropriate Game Day satellite car parking areas within Sutherland Shire with bus shuttle services.
6. Undertake detailed consultation with Sutherland Shire Council to implement local precinct(s) traffic and parking management plans that are intended to prohibit Game Day car parking within these precinct(s) and to maintain efficient and safe traffic flow.
7. Public education campaigns to advertise the intention to reduce car parking demand for the 13 Game Days per year.
8. Detailed advertising of the Game Day bus shuttle services, identified satellite car parking areas and to advise that Game Day car parking will be prohibited within residential precinct within an 800m radius of Toyota Stadium by various controls and fines.
9. Advertising by Club & sports websites. See Parramatta Eels website (<http://www.parraeels.com.au/default.aspx?s=getting-there-parramatta>) for an example.
10. Implement incentives to encourage use of public transport services outlined above by incorporating free bus travel with game day ticket price.



A list of potential bus shuttle services is presented below:

Sharks Shuttle - Bus Services	
Route 1	Engadine Station
	Seymour Shaw (The Boulevard)
	Sharks
Route 2	Menai Market Place
	Miranda RSL
	Sharks
Route 3	Sutherland Station (SUS Club)
	Gymea Tradies
	Sharks
Route 4	Sylvania Hotel
	Taren Point Bowling Club
	Sharks
Route 5	Cronulla Station
	Wanda (Eleoura Rd)
	Sharks
Route 6	Caringbah Station
	Woolooware Station
	Sharks

The areas nominated as potential satellite parking areas include Woolooware & Cronulla High School grounds (limited to paved areas only with no parking on sports fields / grassed areas), Wanda beach northern parking area and parking areas associated with the RTA's road reservation space in Miranda. There are sufficient parking spaces in these areas to more than accommodate the 511 lost formalised parking spaces at the Sharks site.

It is also noted that during night games much of the proposed new retail development at the Sharks site will not be operating. While the supermarket component will still be operating, the specialty stores and mini-majors will not except on Thursday nights. Therefore the **253** parking spaces nominated for use by the specialty retail / mini-major stores will be used by spectators during night games.

Notwithstanding this, as part of the lease agreements the tenants of the retail centre will make up to 400 spaces of the 651 total available for game day parkers within the complex. This could occur also during day games on



weekends, with signs at the front of the site indicating game day parking. Spectators are likely to use the retail before and after games. The balance, 251 parking spaces, will still be available for other users of the club, medical centre and a proportion of the supermarket and retail staff. This will be allocated under a car park management system. The lower car park level will be used entirely for spectators and 75 parking spaces on the upper level towards the eastern end of the car park will also be allocated to spectators.

A discussion of potential game day parking areas is presented below for further detailed consultation with Sutherland Shire Council, notwithstanding that the intention is to educate and provide measures that will encourage patrons to shift from private car travel to public transport services.

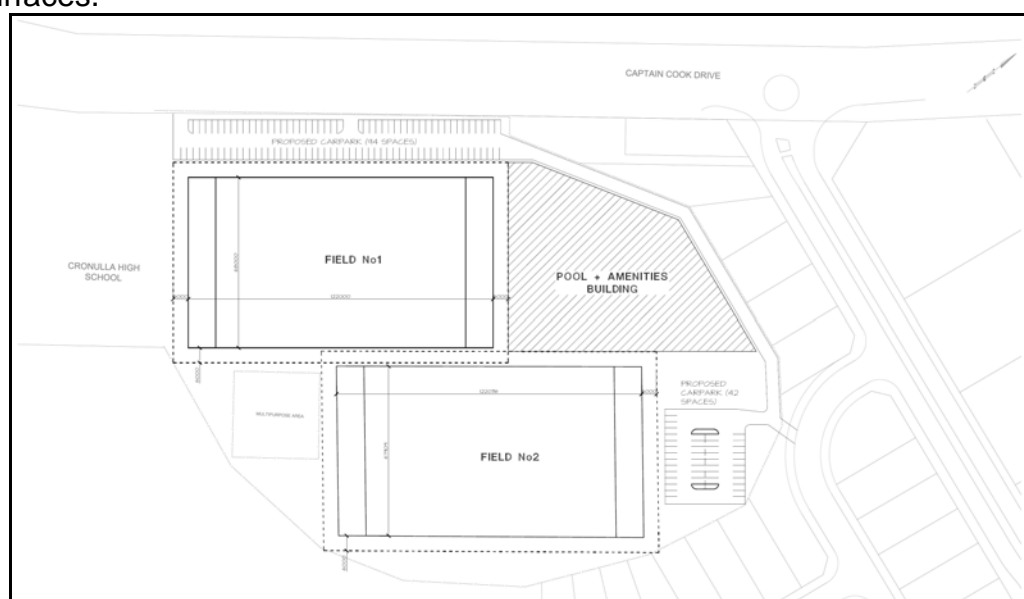
4.3.1 Woollooware High School Grounds

Previous discussions and agreements with the school principal indicated that the Woollooware High School grounds could be used for peak event parking. Parking will not be permitted on playing fields, and will be restricted to existing formalised parking areas and asphalt netball courts.

Visitors parking in this area would be able to walk to the game, a 300-400m walk along well formed pedestrian paths with signalised crossings across Captain Cook Drive at the proposed new signalised intersection of Woollooware Road North / Captain Cook Drive.

4.3.2 New Cronulla High School Parking

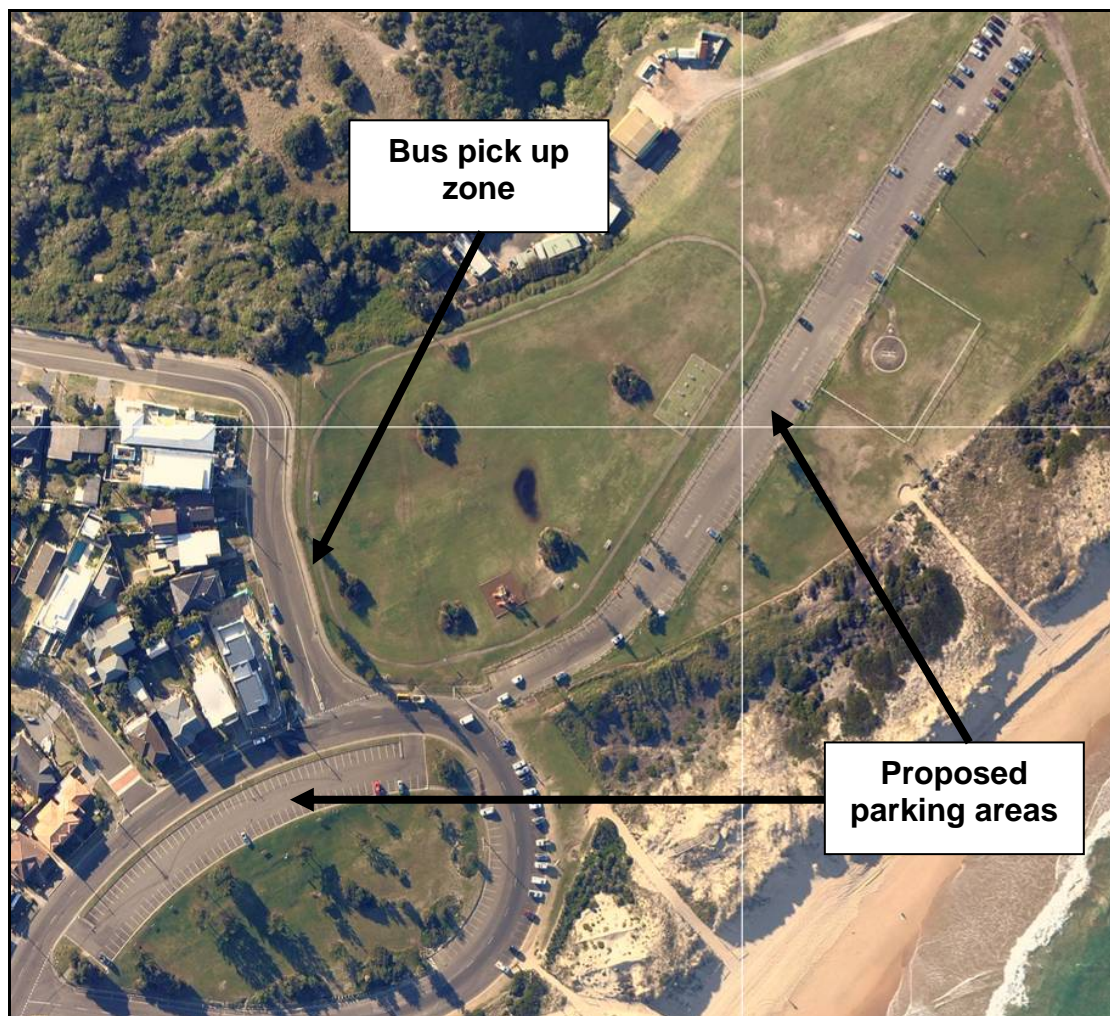
Cronulla High School grounds are under redevelopment plans to improve the sports facilities and increase the number of parking spaces on site. These parking spaces will not be used on weekends, and will be used as a satellite parking area. There are **136** parking spaces at this location. A shuttle bus will drive visitors to/from the game, picking up from the kerbside of Captain Cook Drive adjacent to the school near the proposed parking areas. The plans for the new facilities are shown in the following image. Cars will not be permitted to park on the playing fields, to ensure no damage is done to the playing surfaces.



4.3.3 Wanda Beach Parking

During peak attendance events the northern most parking areas of Wanda Beach could be used as a satellite parking area. This would be subject to consent from Council, and it is understood that lighting may need to be upgraded for pedestrian safety and security.

This area would be used during night games, when parking use in these areas is very minimal. There are over **400** parking spaces in this area. The shuttle bus service which picks up attendees from Cronulla High School will also drive down to Wanda Beach.



4.3.4 Seymour Shaw Public Parking & RTA Road Reservation

If required, on-street public parking areas around Seymour Shaw Ovals (Miranda) could be used when the ovals are not in use by sports clubs. Parking around these playing fields is contained within Council car parks as well as on street angle parking. There are approximately **300** car parking spaces associated with the immediate vicinity of the Seymour Shaw playing fields. Parking in this area would only be permitted in formalised parking areas, and not on fields or grassed areas.

In addition, the use of parking on RTA road reservation (which exceeds a further supply of approximately 200 parked cars as shown in the diagram

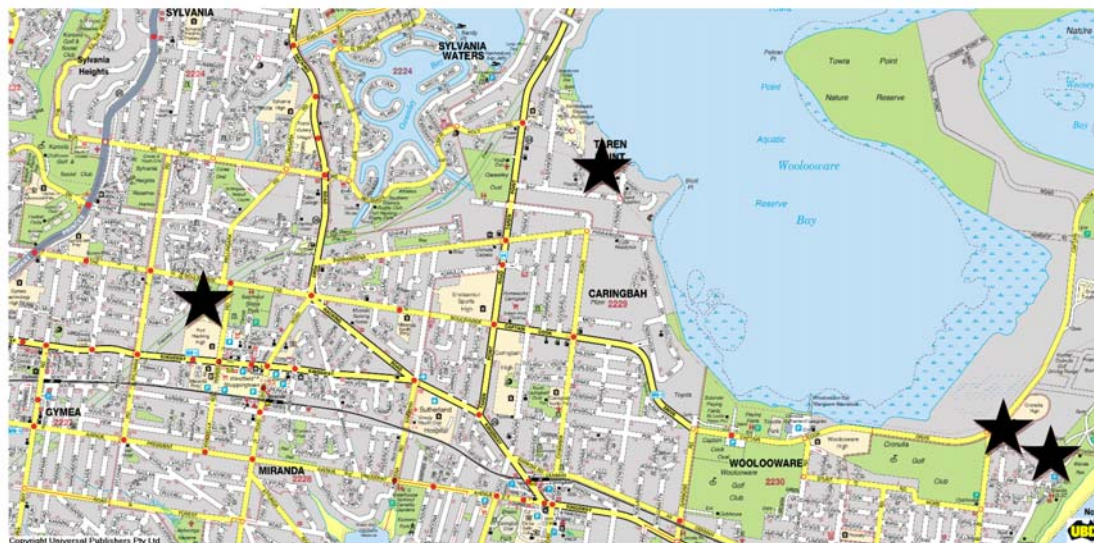


below) will be investigated and is subject to approval from the RTA and Sutherland Shire Council's local traffic committee in terms of traffic, parking and pedestrian management.



4.3.5 Other Parking Areas

The use of the above four parking areas would be more than sufficient to maintain existing conditions. However other satellite parking areas could be used, subject to individual agreements with landowners, at areas such as the F6 corridor land at Miranda to the SW of The Boulevard / Wandella Road junction behind the child care centre and vacant private land within the Taren Point to the NE of the Bay Rd / Production Rd junction. Other areas can also be investigated with close consultation with Sutherland Shire Council. These potential areas are shown in the diagram below.



SATELLITE PARKING LOCATIONS FOR GAME DAYS



4.3.6 Shuttle Bus Services

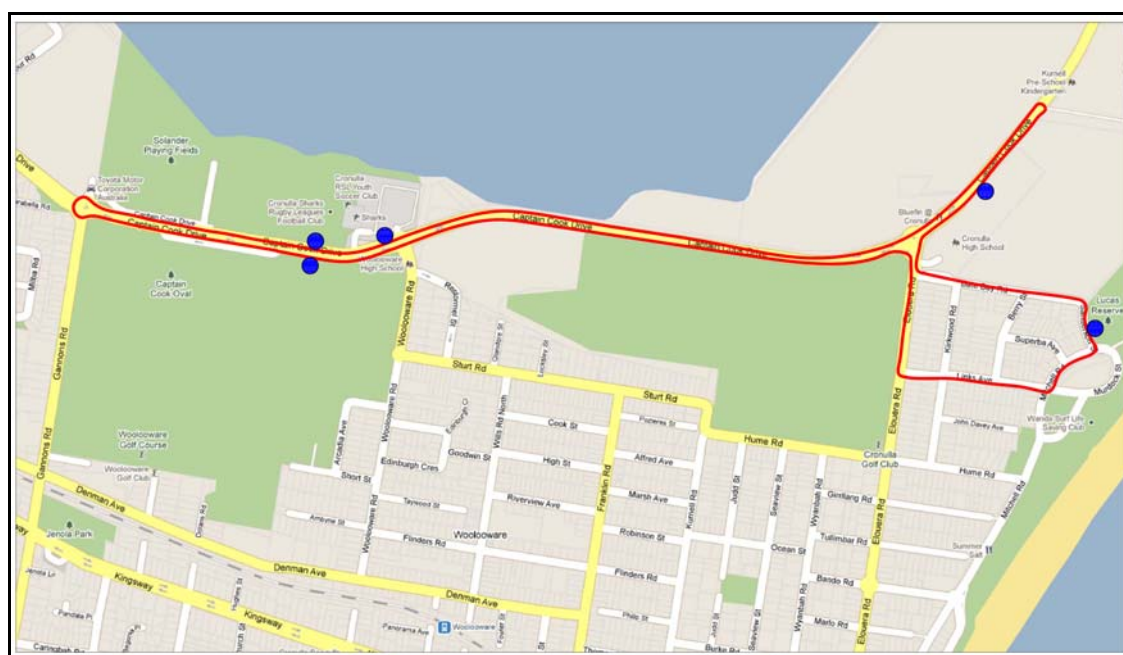
Existing shuttle services operate from Cronulla & Woollooware Train Stations to and from Toyota Stadium on game days by Crowthers Coaches. These services could be improved by greater promotion and extended to link some of the satellite parking areas mentioned above.

Additional shuttle bus services will be implemented during game events. Crowthers Coaches have indicated that they would consider new shuttle services to transport people from public transport hubs and satellite parking areas throughout the Sutherland Shire.

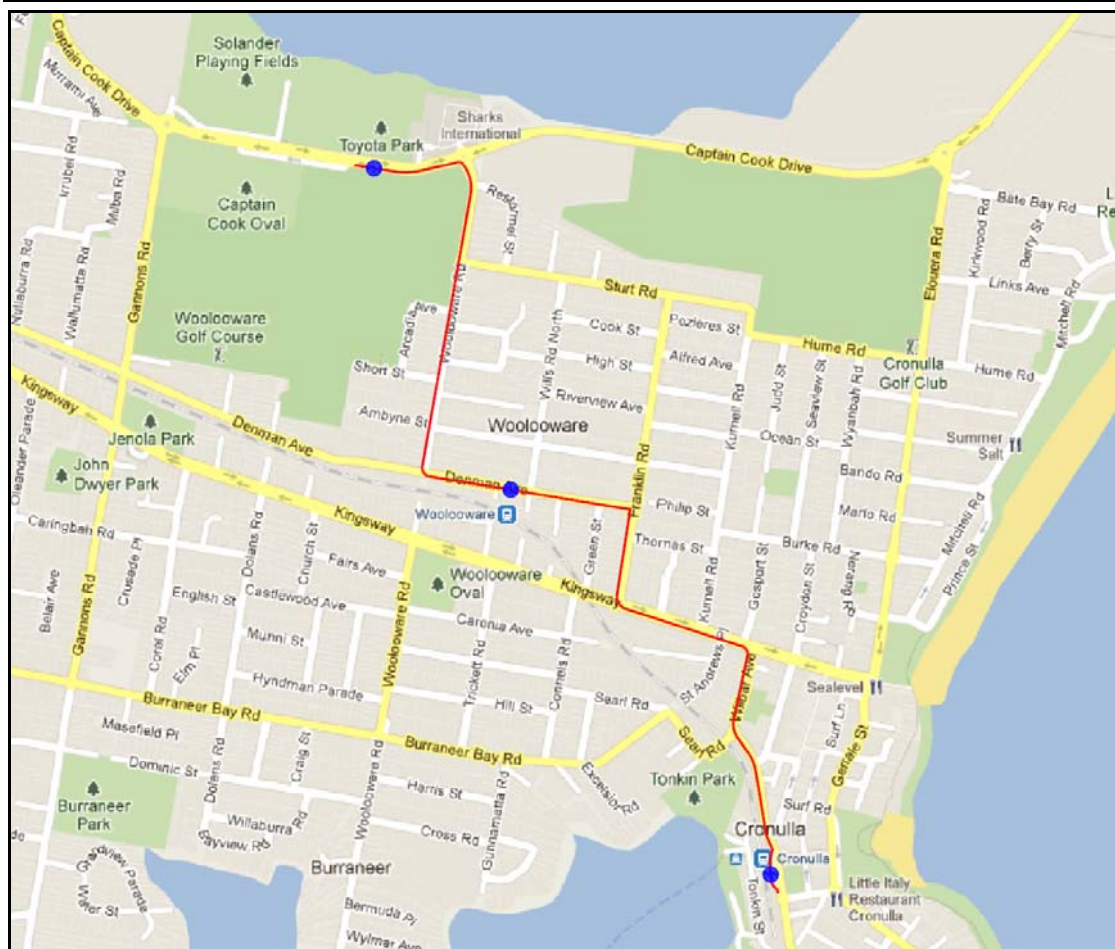
Additional shuttle bus services will also be investigated to provide a link from nearby transport hubs, namely Engadine, Sutherland, Cronulla and Caringbah train stations, as well as Menai Central, Sylvania Hotel and Taren Point Bowling Club. These shuttle services would allow public transport access for the local population around these stations, plus train users and patrons who may drive to and park at the commuter parking areas at these train stations (that are expected to exhibit low utilisation at night & on weekends). These services would operate 1.5 and 2.5 hours before game time and be parked in the created indented parking bays or elsewhere under a management plan at the end of the game for express departure from the area.

Additional bus services will be provided from nearby transport hubs, namely Sutherland, Miranda and Cronulla train stations. These additional bus routes will be operated on game days by Veolia Transport.

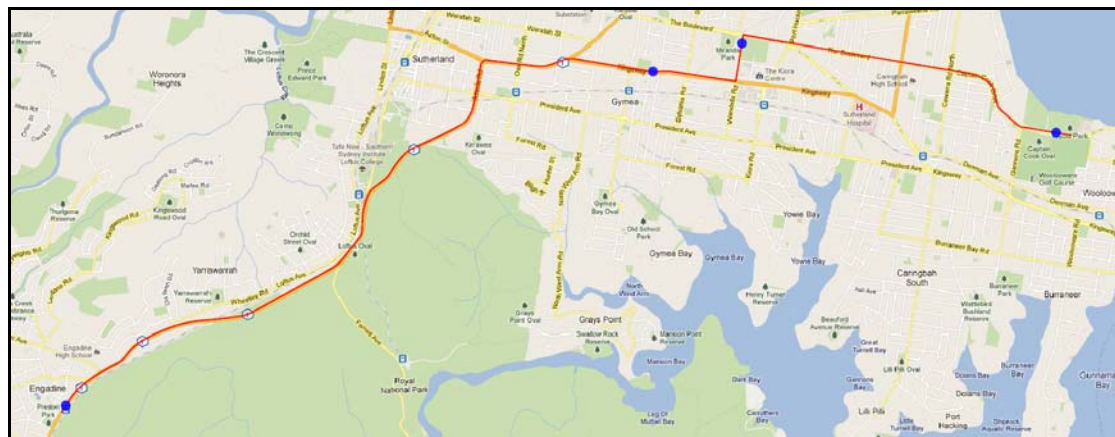
The following diagrams show conceptual routes for proposed shuttle bus routes throughout the Sutherland Shire.



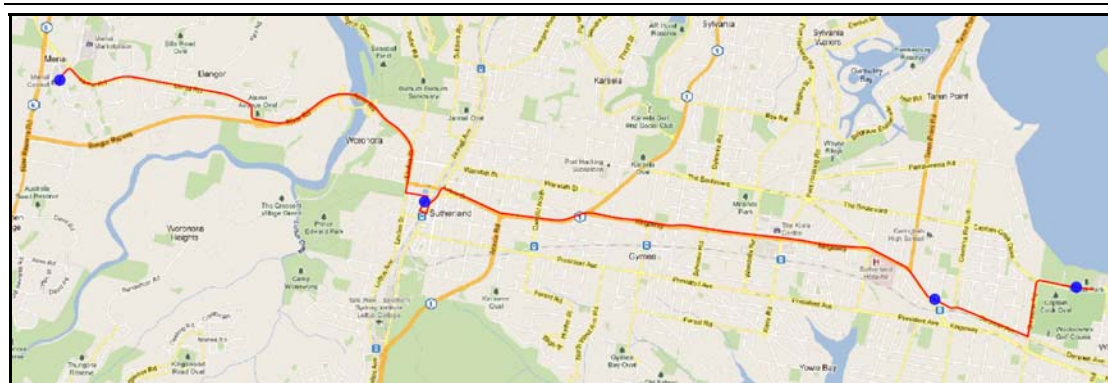
Route 1: Wanda, Eloura Road (north), Captain Cook Drive, Sharks



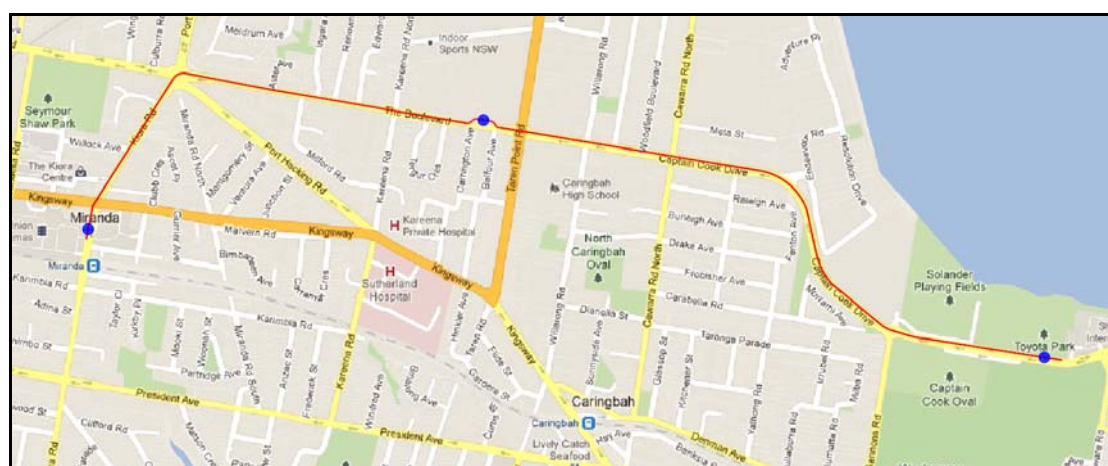
Route 2: Cronulla Station, Woolooware Station, Sharks



Route 3: Engadine Station, Gynea Tradies, Seymour Shore, Sharks



Route 4: Menai Central, Sutherland Station, Caringbah Station, Sharks



Route 5: Miranda station, Endeavour High, Sharks

Bus service fees will be included in event ticket price. Event public transport and shuttle service / satellite parking areas will be advertised on the Club's website, NRL website and at point of purchase (eg Ticketek website). Spectators will be encouraged to use the new shuttle bus services and use public transport to visit the site on game days, to reduce car movements to the ground. Information flyers could be handed out at the first few games of the season to inform visitors of the available parking and transport options.

4.3.7 Other Parking & Transport Arrangements

Other special event parking/transport arrangements will include:

1. Maintain local bus service from Woollooware Train Station.
2. Extend bus set-down / pick-up bays along the northern side of Captain Cook Drive frontages to the proposed residential, Toyota Stadium and Retail developments.
3. Utilise available on-site retail car parking supply particularly for night games when some of the retail tenancies will be closed. Night games could occur on any night of the week except Thursdays if use of the spare retail parking areas is to be encouraged. Dynamic signage of available spaces would improve the efficiency and use of the retail parking areas for entering patrons.



-
4. Localise use of Solander Field car park and Captain Cook oval car parking for night games when local sports games are not occurring.
 5. Night use of proposed loading dock for layover of coaches that deliver and collect players. Possibly event game event staff parking could occur in this area.
 6. Pre-advertising of event public transport and shuttle service / satellite parking on Club's website, NRL website and at point of purchase (eg Ticketek website).
 7. Electronic billboard signs on approaches to the satellite parking areas and on approaches to Toyota Stadium to encourage drivers to use the satellite parking areas.



5 CONCLUSIONS

The key findings of this report are summarised below:

- ❑ The proposed retail / residential development at the Sharks site have resulted in a need to reassess game day parking and access arrangements.
- ❑ The redevelopment will significantly improve pedestrian safety across Gannons Road and Captain Cook Drive by providing a signalised pedestrian crossing across Gannons Road and providing new signalised intersections on Captain Cook Drive near Toyota Stadium
- ❑ Public transport to the site will be improved by providing new indented bus bays on Captain Cook Drive and a new bus route to the site.
- ❑ Discussion of potential game day parking areas, transport arrangements and local parking restriction plans in local residential precincts will occur with close consultation with Sutherland Shire Council. It should be noted that the primary intention is to educate and provide measures that will encourage patrons to shift from private car travel to public transport services.
- ❑ **Game Day Arrangements:**
 - Satellite parking will be provided at key locations near the site, mainly Woollooware High School grounds, new Cronulla High School parking areas, Wanda Beach car park and the RTA's road reservation space in Miranda.
 - Potential parking spaces will exceed the current game day parking capacity. Additional satellite parking areas have also been nominated, if required. This is a significant improvement on current conditions.
 - Private shuttle bus services will be provided to transport spectators between Toyota Stadium and the satellite parking areas and various train stations / other nominated sites. These services will be included in game ticket prices.



SITE LOCATION

GAME DAY PARKING PLAN



**FIGURE 1:
SITE LOCATION**

PREPARED FOR: CRONULLA
SUTHERLAND LEAGUES CLUB

BY: M^CLAREN TRAFFIC ENGINEERING