

Mark Carlon File Ref: LP03/332127

12 December 2011

PCU029037

Sam Haddad Director General NSW Department of Planning and Infrastructure GPO Box 39 SYDNEY NSW 2001

Attention: Mark Brown

Dear Sir

Cronulla Sutherland Leagues Club - Sharks - MP 10 0229 [In response, please quote File Ref: LP03/332127]

On the 5th December 2011 Council resolved to make a formal submission on the proposed Cronulla Sutherland Leagues Club's State Significant Development Proposal. The Sharks Development in its present form is not supported by Council.

Council is concerned that the proposed new centre is a significant change to the current land use of the site and the hierarchy of centres within the Shire. Whilst there is potential for centres to grow and change in the Shire, the proposal to essentially create a new centre around the Sharks' grounds has a number of significant failings. These relate to the relationship of the site relative to surrounding land uses and its ability to integrate into the future urban structure of Sutherland Shire, as well as issues that arise from the proposed form and intensity of the development proposed, in addition to weakness in the resolution of the design in relation to architectural, environmental and traffic considerations.

I refer you to the attached relevant Council report (EAP094-12) for further information regarding Council's concerns.

The Department has been committed to a "comprehensive community engagement process" (DOPI letter dated 6 August 2011) and as a result, there has been significant community interest in the proposed development. Council understands that there have been over 5,000 public submissions (to 5 December 2011).

It should be noted that Council also resolved (EAP094-12) that a further submission to the Department be made once the public exhibition has concluded and Council has had an opportunity to consider the issues raised in public submissions. Departmental Officers have advised that a summary of all submissions will be available on 15 December for Council's further consideration.

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Given Council's meeting cycle (last meeting 5th December 2011, first meeting 30 January 2012) and the complexity of the number public submissions, it is unlikely that the shortened timeframes envisaged by the Department can be met by Council. Consequently an additional submission will be made upon further consideration of all public submissions

Council seeks your support in ensuring that the views of the local Council area are considered by the Department in determination of this application.

For further information please Mark Carlon, Manager Environmental Planning, on 9710 0523.

Yours faithfully

John Brunton Director Environmental Services for J W Rayner General Manager

Special Environment and Planning

28/11/2011 EAP094-12

Part 3A Application State Significant Development Cronulla Sutherland Leagues Club, 461 Captain Cook Drive, Woolooware File Number: LP/03/332127 Director: Environmental Services (BM:MC) Report Item

(The attachment to this report is available electronically only).

REPORT IN BRIEF

Purpose

The purpose of this report is to provide a summary of the issues surrounding the Cronulla Sutherland Leagues Club's State Significant Development Proposal in order for Council to make a submission in relation to the exhibited concept design.

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Summary

The Part 3A Concept Plan application by Cronulla Sutherland Leagues Club seeks approval for a mixed use development. The concept includes:

- building envelopes for eight (8) residential buildings ranging in height from 8 to 14 storeys (above a car park podium);
- a combined retail, medical and leisure centre;
- upgrades to Toyota Stadium;
- upgrades and changes to the Cronulla Sutherland Leagues Club building;
- internal and external road works;
- on and off site parking including parking for major events / game day parking arrangements;
- landscaping and foreshore embellishment, including a cycle way and pedestrian paths;
- associated infrastructure works; and
- staging of the development and subdivision.

The proposed new centre is a significant change to the current land use of the site and the hierarchy of centres within the Shire. Whilst there is potential for centres to grow and change in the Shire, the proposal to essentially create a new centre around the Sharks' grounds has a number of significant failings. These relate to the relationship of the site relative to surrounding land uses and its ability to integrate into the future urban structure of Sutherland Shire, as well as issues that arise from the proposed form and intensity of the development proposed, in addition to weakness in the resolution of the design in relation to architectural, environmental and traffic considerations. Specifically the following issues have been identified by Council officers that are shortcomings of the proposal as exhibited:

- the out of centre location lacks public transport and support services
- the proposal has a dense urban form which is not consistent with the surrounding low density environment

- the proposal does not integrate with surrounding development, turning its back on adjacent uses
- this is a poor location for a new centre because it contains a sports field at its central place and there is no potential to grow the centre over time
- the proposal has significant landscaping limitations podium planting will not screen or soften 14 storey buildings, nor can the visual intrusion of buildings be screened by landscaping when viewed from Woolooware Bay or foreshore open space
- the proposal results in excessive height and adverse visual impacts particularly when viewed from Woolooware Bay and from Captain Cook Drive
- the proposal does not create an attractive streetscape two storeys of above ground parking and an essentially blank face to the shopping centre creates a poor streetscape to Captain Cook Drive
- the residential and commercial areas are separated by the stadium producing poor pedestrian connections
- inadequate buffer is provided to the foreshore in this sensitive foreshore location
- the proponent has not established that the development will not adversely affect the environment
- the proponent has not established that the proposal will not create adverse impacts on riparian zone
- insufficient information is provided to determine environmental impacts including site contamination and flooding impacts
- the success of any new public transport should focus on regional services rather than short shuttle service to the railway station, as the short service necessitates an undesirable mode change
- whilst there is road capacity in the immediate location, the proposal will have adverse impacts on traffic in the locality, particularly for nearby intersections already operating at capacity
- the proposal is likely to create game day parking issues
- reduced parking provision rates for both the residential and commercial development is likely to lead to parking overflows on to adjacent streets
- while employment will be created by the new centre, after construction, most employment will provide low skilled jobs whereas the Shire needs skilled employment to assist in employment self containment, and
- while the proposal will increase housing choice in the Shire, the proposal will not provide affordable housing nor necessarily provide housing for the aged.

It is important that the benefits associated with a new centre outweigh the negative impacts of development. Clearly there are a number of issues that the proposal does not satisfy. The proposal has a dense urban form which is resulting in adverse environmental impacts. Importantly, the proponent has not demonstrated that the proposal will not have an adverse environmental impact. This is a critical issue because the site adjoins the aquatic reserve of Woolooware Bay.

Council should note that many of the issues identified above could be addressed through sensitive redesign. Most of these issues were raised with the proponent early in the design process as part of the Director General's Requirements. The applicants have tweaked the design in response to feedback, but they have not comprehensively altered the proposal or reduced its intensity. This highlights the fundamental weakness of the concept as submitted.

Too much development is being proposed and as a result the externalities of the development cannot be properly mitigated on site. For example:

- if the shopping centre was set further back from Woolooware Bay so that a 40 metre vegetated buffer could be provided, with ancillary development set behind this buffer, the environmental concerns could be better addressed; or
- if the shopping centre was set further back from Captain Cook Drive so that a landscaped frontage could be achieved or the front elevation was articulated with active uses rather than parking, a better streetscape could be achieved; or
- if the residential component was reduced in its scale and intensity, the visual impacts of the development would be lessened, better amenity between units would be achieved, the podium car park would reduce in scale allowing deep soil landscaping and better streetscape outcomes.

However, the applicant has not pursued any of these alternatives. Solving these issues will reduce the yield of the development. The proponent has chosen to disregard Council's early input.

The proposal will help the financial viability of the club. The club, Toyota Stadium, proposed medical centre, upper storey restaurant, and two major tenancies (1148sq.m. & 1432sq m) will remain on the club lot. The commercial centre and residential development can secure financing or be sold as they are on separate lots. However, the primary justification for the proposal is the demand for additional retail outlets/ supermarkets in the Shire. While the supermarket is likely to be financially successful, the proposed commercial development may negatively impact existing centres. The proponent has not demonstrated that such development is suitable and appropriate in the locality. The financial needs of the club should not solely justify the new centre.

The proposal is currently being exhibited for two months. Submissions close on the ³ December. Numerous submissions both in support and against the proposal have been received by the Department of Planning and Infrastructure. The Department expects in the order of 1000 submissions to be received by closing. Many support the club and the facilities it provides. Many support the commercial development and jobs it will provide. Many also support the provision of additional housing – particularly more affordable housing. However, there are also many submissions that are concerned that the proposal is an overdevelopment, a 'ghetto', and too high (16 storeys including parking). Some say the development is too far from the station. Many are concerned about increased traffic issues, and creating parking havoc at Woolooware Station and on game days. Many submissions are concerned that the proposal will cause environmental damage. Some claim that the proposal is 'money-driven', the proposal to 'save the Sharks' is a smokescreen, and it does not provide the type of housing people want.

Given that public submissions close on the 5th December, a supplementary report will be provided regarding public submissions. However, in the interim it is recommended that Council forward to the Minister and Department of Planning and Infrastructure a preliminary submission detailing the concerns raised in the report below, followed by a further submission once it has fully considered the issues raised in public submissions.

REPORT IN FULL

Background

In May 2011 Council considered a report (EAP159-11) on the proposed development of the Cronulla Sutherland Leagues Club. On February 21, 2011 the State Government declared the project by Bluestone Capital Ventures No 1 as a Major Project, subject to the provisions of Part 3A of the Environmental Planning and Assessment Act. The proposal is for a concept plan and stage 1 of a staged mixed use residential, retail, entertainment and sporting development which includes the redevelopment of the existing facilities of the Cronulla Sharks Leagues Club.

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On 25 March 2011 the Department of Planning formally issued the Director General's Requirements (DGRs) for the preparation of an Environmental Assessment by the proponents for both the concept plan and stage 1 of the mixed use development (Appendix 1).

The Environmental Assessment Report for the Concept Plan Application was finalised by the proponent in September 2011. The Environmental Assessment and associated supporting material are on exhibition by the Department of Planning and Infrastructure from 5 October 2011 to 5 December 2011.

The Proposal

Cronulla Sutherland Leagues Club has partnered with Bluestone Capital Ventures No. 1 as part of a joint venture to prepare the Concept Plan application. The proposed mixed use redevelopment of the Cronulla Sutherland Leagues Club site includes a new neighbourhood centre with retail, medical and leisure and residential development and incorporates upgrades to the sports facilities, including the Toyota Stadium and the Cronulla Sutherland Leagues Club building.

The Concept Plan prepared for the site is seeking approval of uses, development yields and building envelopes to develop the site in three stages, being:

- Stage 1 New neighbourhood centre with retail, medical and leisure uses on the eastern car park site and redevelopment of the Leagues Club facilities;
- Stage 2 Residential Masterplanned Estate on the western car park and training fields; and
- Stage 3 Extension and improvements to Toyota Stadium including grandstand extensions.

The proponent submits that the proposed Floor Space Ratio (FSR) over the <u>whole site</u> is approximately 0.93:1 comprising the following uses (GFA): Residential – 67,260m2; Commercial and amenities – 740m2; Club uses – 3,900m2; Retail uses – 13,900m2; Leisure uses – 3,350m2; Medical – 1,500m2; and Grandstand – 3,000m2.

(Plans and supporting information can be found at http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=4485.)

The Cronulla Sutherland Leagues Club site is legally described as Lot 11 DP 526492 and Lot 20 DP 529644 and is known as 461 Captain Cook Drive, Woolooware. It should be noted that the proposal includes three lots owned by Sutherland Shire Council (being Lot 21 DP 529644 and Lot 1 DP 711486 along the foreshore and Lot 1 DP 501920, located at the intersection of Woolooware Road and Captain Cook Drive).

Exhibited by the Department of Planning, the Concept Plan includes detailed architectural plans including: Residential Masterplan Architectural Drawings, Retail and Club Concept Architectural Drawings, Landscape Concept Plan, and Roadworks and Stormwater Concept Plan. Detailed planning reports in support of the proposal include Site Contamination Review, Traffic Management and Accessibility Plan, Game Day Satellite Parking Plan, Stormwater, Flooding and Servicing Report, Ecological Assessment, Social Impact Assessment, Visual Impact Assessment Report, Economic Impact Assessment.

Relevant EPIs and Policies

The land is currently subject to the provisions of Sutherland Shire Local Environmental Plan 2000 and Sutherland Shire Local Environmental Plan 2006. The land contains a mixture of Private Open Space, Public Open Space, and Public Open Space (Bushland) zonings.

However, pursuant to the provisions of the now repealed Part 3A (of the Environmental Planning and Assessment Act 1979), the Minister may consider applications for State Significant Development where the DGR's were issued prior to 8 April 2011. The Minister is the consent authority and approval may be granted for development beyond Council's planning legislation.

It is noted that the club site was excluded from SSLEP2006 following a detailed planning amendment (LEP) undertaken in 2005-06. This amendment allows a range of additional land uses within the 6(b) Private Recreation zone, including Conference/Convention Centre, Seniors Housing, Hotel/Motel, residential flats and ancillary shops and also introduced a series of planning controls to govern future redevelopment (see PLN152-06) and EHC032-06). The current SSLEP2000 controls applying to the club site include a maximum floor space ratio of 1:1, landscaped area of minimum 65%, a 15 metre height limit, and a foreshore environmental buffer of minimum 40m (the LEP requires that any cycleway or pedestrian path must be located outside the 40m setback). Of note is an additional clause, Clause 65A, which applies a significant restriction on the development of the site as it prohibits subdivision, except for the creation of public open space in the environmental buffer.

The Cronulla Sutherland Leagues Club has, on numerous occasions protested the onerous limitations to development, set by the Minister as part of the planning amendment. It is understood that the limitations were imposed by the Minister to ensure that any development, and any subsequent financial gain, benefited the club itself.

Previous Consents

In August 2009, Council granted development consent (EAP014-10⁽¹⁾) for a Mixed Commercial Residential Staged Development Masterplan on the Cronulla Sharks Leagues Club site. That development application related to the land occupied by the existing eastern car park and club premises. The deferred commencement consent issued was for the construction of a seniors living development containing 138 Units, a 150 room hotel, supermarket, retail shops, basement car parking for 628 vehicles, extension of the existing club premises, ancillary landscaping, cycle way and foreshore buffer area. The application related to Lot 11 DP 526492 (No. 461) Captain Cook Drive, Woolooware only. The approved development comprised a 5 storey seniors living development with a gross floor area of 14,355m2, a 5 storey hotel with a gross floor area of 6,140m2, a 2,617m2 supermarket and retail shops and a 750 m2 extension to the existing club premises.

This development consent (DA09/0243) is still valid. However, the land owner now considers that the development is not commercially viable or bankable in terms of securing value for the site.

Generally, the scale of the development currently proposed is being generated by the desire of the owner to produce sufficient funds to retire accumulated debts and provide a source for funding future operations. Some of this revenue may be directed towards the associated Cronulla Sharks NRL team.

The history of the acquisition and ownership of the land was previously considered by Council (FIN176-11).

Proposed New Centre

The proposal is essentially for a new centre. This represents a significant change to the current land use of the site and the hierarchy of centres within the Shire.

The DOPI Draft Centres Policy 2009 addresses the potential for out of centre and edge of centre development. It states that out-of-centre stand-alone sites will generally not be supported unless it has been demonstrated that there are no suitable within-centre or edge -of-centre sites and there is a demonstrated net community benefit. The positive benefits of clustering retail and commercial development in centres can only be achieved where centres are able to grow.

The DOPI Draft Centres Policy states that the location of potential new centres and the location, size and shape of the area to be zoned should be assessed against economic, social and environmental objectives using the suitability criteria. Accordingly, new centres should be assessed against the following suitability criteria:

- access to public transport, or the infrastructure capacity to support future public transport
- good pedestrian access
- good road access for employees, customers and suppliers and, where necessary, capacity to provide new road infrastructure
- close proximity to local labour markets with the skills required by business
- urban design opportunities that create the potential to integrate with surrounding land uses
- potential to increase the amenity of the local area
- capacity to contribute to environmental outcomes
- environmental constraints, such as flooding
- impact on the supply of the existing land use such as residential land (including impacts on housing supply and affordability) or industrial lands.

The appropriateness of the subject site as a new centre needs to be tested against these criteria. The relative isolation of the site, the fact that it is surrounded by Woolooware Bay, Sports fields and prime industrial land uses highlights the fact that the proposed land use is a poor fit for the locality. The land has environmental constraints which reduce its development potential, the site cannot be integrated with surrounding uses so that the centre can consolidate and grow over time, and access to rail is poor.

The criteria listed above are further discussed in sections of the report below. In addition, the proponent has provided a Net Community Benefit Test Report (prepared by JBA Planning) to address some of the wider issues associated with new centre development. These are also discussed below.

Strategic Context

The proposed new centre is not located within an existing strategic centre or corridor nominated within the Metropolitan Strategy or other regional/subregional strategy. The Department of Planning and Infrastructure - Draft South Subregion Subregional Strategy does not identify this area as a potential centre or part of an economic corridor. The proposal is located in proximity to the Taren Point Employment precinct – an area identified by the Strategy as Category 1 employment land to be retained for industrial purposes. It is noted that the proposal will not result in the loss of employment land. However, the proposed centre is more than 800m from Woolooware railway station and as such does not meet the criteria in the Subregional Strategy for increased residential density. However, the proponent claims this is a new centre.

The area has not been identified by Council's Strategic Plan – 'Our Shire Our Future' for a potential centre. In support of the proposal the proponent submits that there is 'a clear demand for additional retail development and in particular supermarket floor space to remedy a critical undersupply within the locality and Sutherland Shire'.

The proponent submits that is the proposal does not proceed it is likely that the Cronulla Sutherland Leagues Club would financially collapse and this in turn would result in a loss of the community services which it provides. The proponent also submits that not proceeding would also result in the loss of an opportunity to provide needed retail and residential development within Sutherland Shire.

Economic Impact

The proposed retail centre will accommodate new club facilities, including restaurants, a medical centre, a major and mini-major retailers as well as smaller speciality shops around a main retail arcade, and associated car parking. Supermarkets comprise 45% of the retail medical and business floor space (not including the club and grandstand).

The commercial component of the centre (including the club) comprises approximately 24,000sq.m floor space (not including the grandstand). This size commercial centre equates approximately to the size of Southgate Shopping Centre (20,000 sq.m. Hirst 2001) and the nearer to Cronulla Centre (24,000 sq.m. Hirst 2001), albeit the commercial uses are configured differently. The centre will have more commercial floor space (including the club) than proposed by the Kirrawee Brick Pit development (14,000 sq.m.).

Under the South Subregion Draft Subregional Strategy, Southgate centre is categorised as a small village – 'a small strip of shops and adjacent residential area within 5 to 10 minute walk. Contain between 800 and 2,700 dwellings'. A local centre will be expected to have low traffic impacts and could serve a largely walkable catchment and have retail that serves daily and weekly convenience shopping needs (DOPI Draft Centres Policy 2009).

The main trade area of the proposed centre extends approximately 1 km to the south and west and includes the suburb of Kurnell, as well as parts of Cronulla and Woolooware (primary trade) and extends west by Gannons Road and incorporates the suburbs of Cronulla, Woolooware and Burraneer (secondary trade) (Pitney Bowes Business Insight Report). However, given the role and function of the club, the trade area may extend further. This proposed centre is more like a stand alone shopping centre like Roselands, as identified in the South Subregion Draft Subregional Strategy, than a local centre that is integrated with a surrounding urban area.

Whilst population projections for the Shire are low, the disposable income of the resident population in this part of the Shire is higher than Sydney average. In addition the centre will be supported by an additional 700 dwellings. Council is well aware of the demand for supermarkets and discount liquor stores in the Shire (Kirrawee, Cronulla, and Caringbah). The supporting retail analysis by Pitney Bowes Business Insight contends that the centre, in particular the supermarket anchor, will be financially viable. The centre will, however, have an economic impact on surrounding centres including Cronulla (7.8% loss of trade) and Caringbah (12.8% loss) and Taren Point (9.5%) and to a lesser extent Miranda and Sylvania (Pitney Bowes Business Insight report). The potential for adverse impacts on nearby centres is limited by the proposed centre's greater distance from Caringbah and Miranda centres - with both centres already having substantial supermarket development. However, this loss of trade will make further investment in existing centres harder to attract. This is particularly important for Caringbah Centre which is in need of revitalisation.

Suitability of the Locations for a New Centre

The difficulty with the proposed centre is that it is not centrally located. It is not located along the railway line which is the traditional higher density development spine in the Shire. The proposed centre will not be the geographic centre of a resident population. Within a 400m radius of the proposed new centre there will only be 700 dwellings and these form part of the new development. The potential to accommodate additional housing to support the centre and help it grow over time is constrained by its position fronting Woolooware Bay. The potential future growth of the centre is also constrained by the sites being adjacent to Woolooware Golf Course, Woolooware High School, Cronulla Golf Course, Solander Playing Fields and the category 1 industrial land to the west currently occupied by Toyota. Only a small number of low density dwellings in Woolooware north may fall into the geographic radius set for centres. Therefore the capacity for the centre to grow over time is severely constrained. This is a very poor long term planning outcome.

Captain Cook Drive is a classified regional Arterial Road and has recently been upgraded. However, public transport to the proposed centre is almost non-existent. The centre is situated approximately 1.4km from Woolooware station, 2.5 km to Cronulla, 2.4 km to Caringbah and nearly 5km to Miranda. Whilst the distance from Woolooware station could enable walking, residents will be less likely to walk as the station is more than 800m away and is not within the visual catchment of the development. A bus trip to a nearby train station will require a

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modal change, adding to travelling times and inconvenience, reducing the attractiveness of public transport. The proponents claim that the development will act as a catalyst for more bus services but this can not be substantiated. This location for the centre is a major failing of the development concept. Transport and traffic issues are further discussed below.

Housing Demand

The residential precinct located to the west of Toyota Stadium will accommodate approximately 700 residential dwellings ranging in size from 50sqm (1 bed) to 95 sqm (3 bed) as well as commercial amenities (740sq.m.). The proponent is not offering to create affordable housing or dedicated housing for older people.

It is noted that the proposal will increase housing choice in the Shire. Council has been considering a housing strategy as part of its next comprehensive Local Environmental Plan. DSILEP. Council is satisfied that the housing targets specified in the Draft South Subregion Subregional Strategy (10,100 new dwellings Dec 2007) can accommodated within the defined radii of existing centres, as required by the Draft South Subregion Subregional Strategy. The subject site is not needed to meet sub-regional housing targets.

Built Form and Urban Design

The concept plan proposes significant development including a new commercial centre and approximately 700 residential dwellings. Of particular concern is the height, bulk and scale of the proposed development within the context of the locality. The residential dwellings are located in eight towers up to 14 storeys high. The residential towers, west of Toyota Stadium, are located above two storeys of above ground car parking (partially hidden by mounding). The highest point of the residential development will be approximately 56 metres above water level (a building height of 52 m – equivalent to 16 storeys).

The redevelopment of the club and retail/commercial precinct, east of Toyota Stadium will largely be limited to the height of the existing club (maximum height RL23.5m), also with two levels of above ground parking.

The highest residential tower will be higher than any other building in the Shire. Whilst the overall density of the entire concept is less than 1:1, this included the essentially vacant playing field. This open space does not offset the bulk and scale of the development to the same extent as would occur if this area was landscaping surrounding the development. The density of the residential site is approximately 2.3:1. Whilst the residential site provides a 40-60 m landscape buffer to the mangroves, much of the site will be comprised of hard surfaces. Over 70% of the residential site will be covered with podium or driveway/car parking. A mound located centrally above the residential access road will provide, at most 1.8m soil depth in that location only. Landscape planting opportunities to soften the development and provide privacy between buildings will be limited by podium soil depth. The development will create a dense urban environment.

The residential site and commercial precinct are fragmented by the centrally located Toyota Stadium. Pedestrian linkages between the 700 dwellings and club and retail development rely on the foreshore buffer and Captain Cook Drive footpath. It is unfortunate that due to the constraints of the site the development could not be better integrated.

Visual Impacts

A Visual Values and Guidelines for Botany Bay Report, undertaken by URS on behalf of the Department of Planning and Infrastructure in May 2004, identified the visual elements of Botany Bay as an important and worthy of protection. In particular, the study identified the natural landscape character of the southern portion of the bay, in contrast to the more urban

character of the Aministrie was a placed on retaining 1 of this area. The study found that the existing stadium and club have a negative visual value

due to their isolated location, the scale and location of the existing buildings and the large car park area limiting opportunities for effective landscaping.

Consequently, the visual management guidelines developed as part of the study recommended a 20m wide landscape buffer to be provided along Captain Cook Drive with a foreshore visual protection area extending 30m beyond the mangroves/mean high water mark. The guidelines recommend the foreshore strip be planted to screen buildings behind. The visual management guidelines also recommend a 15 metre height limit for buildings. The study considered the adverse impacts of additional lighting, recommending that light spillage on to public areas and the foreshore be minimised. The study found that new buildings larger than existing would represent a poor development outcome.

It is evident that the proposal does not achieve the objectives of the Visual Values and Guidelines for Botany Bay. In support of the proposal the proponent has submitted a Visual Impact Photomontage Report using a 3D model. Whilst it is evident that it will be difficult to discern views of the proposal from distant places, such as Taren Point Bridge, there will be significant adverse visual impacts in closer proximity, including views from the water and Captain Cook Drive. The proposed development is significantly higher than surrounding low density residential development and no buffer to Captain Cook Drive is provided, as recommended in the Visual Values and Guidelines study.

The commercial development proposes a three storey building (plus parapet) at essentially a nil setback to Captain Cook Drive. This elevation is over 120metres long and comprises two floors of car parking topped by the main retail floor. There will be a desire by residents to walk along Captain Cook Drive to the Fitness First Gym, however the development downplays this pedestrian link. The footpath narrows towards Woolooware Road North. Only half of the strip will have an awning. This building elevation is likely to accommodate some natural and mechanical ventilation for the carpark. Opportunities to soften the elevation and create a pleasant pedestrian environment are limited. Clearly this elevation will need to be addressed to create some architectural merit.

The main commercial service vehicular access is off Woolooware Road North. Again this elevation is a three storey building (plus parapet), at essentially a nil setback, with two floors of car parking topped by the rear of the main retail floor. The development turns its back on the adjacent Gym and service station.

The elevation to Woolooware Bay will be somewhat softened by the 30m (extending to 60m in front of one residential tower) vegetative buffer. Landscaping within the 30m buffer in front of the commercial centre is possible but is somewhat limited by the transmission easement. Aside from the lower two levels of car parking, approximately one third of the upper northern elevation of the commercial development is a blank wall to Woolooware Bay, being the back of the major retailer. The proposal will adversely affect views from

Woolooware Bay and the surrounding low density environment.

Regrading of the 'family hill' on the northern side of Toyota Stadium will result in gabion walls and planted terraces within the transmission easement fronting Woolooware Bay. Opportunities for screen planting are limited. Similarly, the larger vegetative buffer (40 - 60m wide) in front of the residential site is also limited by the transmission easement.

Architectural Merit

Council's Urban Design Adviser has considered the proposal and made the following comments:

The scale of the proposed residential element cannot be said to respond to the immediate context of the site or the wider context of Sutherland shire. Solar access to the proposed residential development does not meet the typical SEPP 65 requirements expected of other new residential flat building within Sutherland Shire. Instead the proposal is dependent upon the lesser standard applied to dense urban environments.

Further development of the street level public domain and how all built form relates to these spaces is essential if a cohesive centre is to be created.

Residential Development

In the site analysis there is little urban design justification for the proposed 14 story building forms. All justification centres on the financial viability of the proposal and the necessity of this approach to maintain the club. There is no urban design merit in the creation of an isolated dense urban area containing high rise buildings directly adjacent to the foreshore.

A boulevard has been created running through the centre of the residential development in a north south direction. The built form at ground floor level addressing this boulevard consists largely of car parking facilities. It is a concern that the presentation of the main street created within the residential component of this development will be dominated by car parking.

The eastern edge of the residential development faces back towards the riparian area and then the stadium, the space created between the stadium and residential precinct provides a pedestrian link to the foreshore. This edge of residential development will be dominated by two stories of car parking. The residential element will be quite divorced from this space casual survey surveillance would be poor.

The solar access strategy is currently dependent upon the proposal being classified as a dense urban area. Under this classification the level of solar access required is 2 hours in mid winter between the hours of 9am and 3pm for a minimum of 70% of the units. If the proposal is to be assessed as a typical residential flat development (not dense and urban) SEPP 65 requires a minimum of 3 hours solar access for a minimum of 70% of units in mid winter.

Building	2 hours % of SEPP 65 compliant units	3 hours % of SEPP 65 compliant units 52		
А	77			
В	72	47		
С	73	49		
D	83	57		
Е	77	35		
F	78	55		
G	83	62		
Н	85	77		

The table below shows the percent of units that will achieve the minimum solar access requirements of SEPP 65 for both a typical and dense urban scenario:

The proposal falls short of the minimum solar access requirements for residential flat buildings if assessed as a typical residential flat development. An average of approximately 54% of the total number of units within the development provide the minimum requirement of 3 hours of solar access in mid winter (70% required).

It is not considered reasonable to assess the proposal as a dense urban environment. This concession is typically for inner city localities where development is being in-filled into a dense urban environment. The concession reflects the fact that this land is constrained and the placement of existing buildings will make access to solar access impossible in some instance, particularly the lower levels of buildings. However, this is not a dense urban area – it is a vacant site. Opportunities to orientate buildings are unconstrained. A high standard of amenity for future residents is therefore not an unreasonable expectation.

Retail / Club

This section of Captain Cook Drive could potentially be a very interesting street, but more must be done to connect the different components of the street. The site could offer ground floor retail on the western edge, stadium in the centre and retail / leisure facilities to the east. The current leisure / retail proposal proposes a nil set back and a blank wall to both Captain Cook Drive and Woolooware Road, this approach is not conducive to creating a cohesive centre. If the different components of the new centre are to be connected successfully it is suggested that the base of the retail is set back further from the site boundary and the ground floor activated.

Further development of the public domain across the entire southern edge of the site is necessary if a cohesive centre is to be created.

Public Domain, Landscaping and Open Space

The need to accommodate car parking on two podium levels will limit landscape opportunities. It is unlikely that the proposal meets current SSLEP2000 requirements for 65% landscaped area. Most of the commercial/club development is at a nil setback to Captain Cook Drive. The residential development has an 8m setback with commercial tenancies to Captain Cook Drive. An extended awning means there is limited opportunities for substantial tree planting. The development will largely present a hard edge to the public domain. Again, given the fragmented nature of the site, separated by Toyota Stadium, it is unfortunate that the development could not create a better streetscape or landscape context.

The proposal is located along a sensitive foreshore environment. The Visual Values and Guidelines for Botany Bay Report, undertaken by URS in 2004 for the Department of Planning, prioritised retaining the natural visual character of this area. The current development controls (SSLEP2000) were founded on the URS findings. The current controls were also informed by studies undertaken to protect the mangroves and foreshore environment, which identified the need for a 40m landscape buffer (discussed further below). The current controls do not permit hard landscape features such as paths or cycleways within the buffer.

However, the current proposal includes many structures within the buffer. The main pedestrian link between the residential site and the commercial development is through the environmental foreshore buffer. In fact the proposal reduces the foreshore landscaped buffer to 30m and includes within the "buffer" the 'Foreshore Park', a lower foreshore path, a pool, BBQ, an upper path as well as other hard surfaces. All these ancillary elements are located within the 40m buffer set by SSLEP2006.

It is noted that the podium and residential towers have a greater setback of 40-60m due to easement constraints. However, this setback also accommodates additional landscape structures.

The commercial/club development setback is reduced further, being only 30m. Given the easement limitations, opportunities to screen the development will be limited within the proposed reduced buffer. The environmental impacts of a reduced buffer are further discussed below.

The development does present an opportunity to link to the existing recreational cycleway along Woolooware Bay. However, the linkages are at the expense of the environmental performance of the buffer. The successful completion of the Woolooware Bay cycleway is a an important outcome, but it needs to be in addition to the environmental performance of the foreshore zone. This can be achieved with a greater setback and less intensive development.

Flora and Fauna

The proposal will have impacts on flora and fauna in the locality, including threatened species, populations and endangered ecological communities. The proponent has submitted detailed studies in support of the application. The Director Generals Requirements (DGRs) specifically required the proponent to ensure that the development not adversely affect the Towra Point Nature Reserve, protected under RAMSAR legislation.

In summary, there has been inadequate investigation of the biodiversity of the site surrounds, in particular migratory birds. The lack of detail in the proposal has also meant that the impact of the development is not able to be fully and adequately assessed. The consultant's report supporting the Environmental Assessment notes several areas where detailed assessment has not been possible. This lack of detail of biodiversity that may be impacted by the proposal, accompanied with the lack of detail of potential impacts is of great concern. The proposal to address these deficiencies at detailed design stage or via management plans using untested means provides no comfort. Perhaps of greater concern is the proposed reduction in width of

the riparian zone and lack of suitable landscaping within the zone, along with the inclusion of significant structures and facilities. This reduction in width has not been sufficiently justified and significantly reduces the potential to mitigate impacts within a suitably vegetated and managed riparian zone. This lack of detailed assessment, the failure to provide a 40m buffer and the failure to include robust mitigating and management measures represents a significant non-compliance with the DGRs.

It is recommended that the proposal not be supported in its current form due to the significance of potential impacts associated with the development and the limited opportunities to effectively manage these impacts due to the reduction of the width of the riparian zone from 40m to 30m.

Were the development to be modified such that it provided a 40m riparian zone appropriately vegetated and structured in accordance with the provisions of NSW Office Guidelines for Controlled Activities (2008) and the provisions of SSLEP 2000 Clause 8, then greater opportunity would exist to manage and appropriately mitigate any impacts that arise from the development. This combined with the recommendation of the ecological consultant in terms of detailed design and management plans, may address many of the concerns identified.

Council's Manager Environmental Science has provided the following specific comments:

Threatened Species and Migratory Birds

The DGRs required that "a detailed survey (using a variety of survey methods by a suitably qualified person) of the migratory bird habitat, and determine whether and how they are using the site and adjoining areas, and assess any potential impacts or threat to the population."

Such a detailed survey and assessment has not been carried out. The consultants note that this has not been possible due to time constraints. DECCW provided advice that in the absence of such studies, recent studies (within 5 years) could be used. The consultants then relied on a number of previous studies, only one of which related to this site and was undertaken within the last 5 years. This study itself did not involve detailed site surveys undertaken at the most appropriate times of the year. In addition to relying on previous older studies of the general area, the consultants did undertake some site surveys, however these were undertaken during June when migratory birds are not present in the area (most have migrated to northern hemisphere) and therefore the survey is of little or no value in regards to migratory birds. There is therefore no certainty in the assessment as to the numbers and species that may be potentially impacted by the proposal. Therefore the applicant has not complied with the DGRs requirements for migratory birds. This is of particular concern as one of the most significant potential impacts from the proposed development is impacts into the mangrove and estuarine habitats adjacent to the site, and subsequent impacts on migratory birds and threatened species using this habitat.

This concern is further increased by the lack of specific data for assessment of impacts and the subsequent inability to properly assess these impacts. For example the consultants note the following impacts could not be properly assessed:

• Alteration of low regimes to mangrove habitat. Ecological note "Additional information is needed to determine the impacts of changes to flow regimes".

- Noise impacts to Towra Aquatic Reserve. While Ecological have assessed that "there will be no noise impacts on Towra Nature Reserve or Taren Point Shorebird Reserve" these reserves are 450m and 2,250m away respectively. Of more concern are the impacts to the Towra Point Aquatic Reserve (ie Woolooware Bay) which is immediately adjacent the site. Predicted noise impacts for the construction works are anticipated to extend 60m into the mangrove habitat resulting in "temporary displacement of fauna from this area". If construction occurs over a summer season this may have significant impacts. If operational noise impacts extend into the mangroves post construction, this may also have a significant and longer term impact.
- Light spill. Ecological note "There are no details available for the concept plan about the design of lighting for the proposed buildings and landscaped areas", however the report notes a wide range of impacts that may occur.

The consultants have noted these impacts and suggest that management plans and careful design may be needed to mitigate these impacts. Such measures have often proven ineffective or impossible to implement post approval.

Environment Protection and Biodiversity Conservation Act 1999

Australia's main national environment law is the Environment Protection and Biodiversity Conservation Act 1999 or EPBC Act. This legislation is designed to protect and manage matters that are nationally significant, including wetlands of international importance (Ramsar wetlands), migratory species, and nationally threatened species and ecological communities. The proponent has referred their project proposal to the Federal Environment Minister to see whether the development needs to undergo a federal assessment process because the development abuts the Towra Point Aquatic Reserve and the Ramsar wetlands are located across Woolooware Bay.

The project has been referred to the Commonwealth Department of Sustainability, Environment, Water Population and Communities, who on 17 May 2011 confirmed that the proposal is not a controlled action, and does not require further assessment or approval under the EPBC Act before it can proceed (refer to letter at Appendix S)

Mitigation and Management Options

The EA does not contain any "detailed actions that will be used to prevent, control, abate or minimise identified impacts to the Towra Point Aquatic Reserve". Much of the assessment has focussed on impacts to the more distant Towra Point Nature Reserve or Taren Point Shorebird Reserve. Where mitigating measures have been proposed, they are lacking in any specific detail, and there has been no assessment of effectiveness and reliability.

There has been much reliance on attempts to mitigate impacts through management plans and detailed design in the absence of adequate assessment. Past experience has shown that reliance on these measures post approval does not deliver acceptable outcomes. Design changes are often not possible or are uneconomic, and management measures do not deliver the desired outcomes. This was demonstrated during the construction of the Desalination Plant at Kurnell. Council expressed concern over potential impacts to threatened Grey-headed Flying Fox adjacent to the plant, in particular impacts from noise and light (similar to this proposal). These concerns were not adequately addressed during the approval process and the development was approved with these impacts to be managed via a management plan. Despite the development and implementation of a management plan, the

Grey-headed Flying Fox were impacted by the works. The Grey-headed Flying Fox population abandoned the site and are yet to return to the site in numbers.

The current inadequate level of assessment coupled with the lack of detail in the proposed mitigation measures along with the recent history of failure of such an approach, pose serious concerns for Council.

Council had considered many of these potential impacts previously in the development of the LEP for the site. This LEP provided for a 40m riparian buffer between the mangroves of the Towra Point Aquatic Reserve and the development. This buffer was to be fully vegetated, and structures such as the bicycle path were to be located outside this buffer. The provision of the buffer was seen as an acceptable way to mitigate many of the impacts from development (eg noise and light spill). The 40m width also provided a greater opportunity to implement a range of mitigating measures within this buffer. The reduction of this buffer to 30m and the inclusion of many structures within the riparian zone, compromises the ability of the buffer to adequately deal with the impacts of the proposal. The loss of a buffer of this size and the move away from it functioning as an ecological riparian zone to more active recreational zone, raises significant concerns.

The loss of the vegetated 40m wide riparian zone coupled with the lack of detail of proposed mitigating measures to overcome the inadequate assessment of potential impacts of the development, means that there can be little certainty that impacts of the proposal can be successfully managed.

Impacts to Biodiversity

The DGRs require a detailed assessment of impacts to biodiversity, habitats and native vegetation. As noted above this detailed assessment has not been undertaken. The study is lacking in detail of biodiversity beyond the immediate confines of the site. Also the impacts of the proposal on biodiversity have not been able to be accurately assessed due to a lack of detailed information associated with the proposal.

The consultant's report adequately addresses the issue of the biodiversity of the immediate site and impacts of development on the confines of the site. The site is currently degraded and has little habitat of value. The proposed landscaping will result in an improved biodiversity outcome for the site as noted by Ecological. Council's concern remains the impacts to biodiversity beyond the site.

Protection and Enhancement of Riparian Lands

While the proposal represents an improvement over the existing situation, it represents a significant reduction in the anticipated benefits that were to be delivered by the restored riparian zone. This is particularly the case in the reduced 30m riparian buffer adjacent to the proposed commercial development. The reduction in width to 30m coupled with the inclusion of the cycle track within the 30m and the restrictions imposed by the electricity easement severely reduce the opportunity to deliver meaningful planting within this area. Opportunities to provide significant screening planting to mitigate impacts of noise, light spill and radiated heat from large concrete walls have been reduced, such that there is little meaningful planting of any height proposed or possible within this area. Areas such as that adjacent to the loading dock, have proposed mound planting, but only have sufficient width to plant Casuarina glauca and lower shrubs. Such planting will only achieve a height of

maximum 8m, compared to the building height of approx 21m. There currently exist on site a number of trees (Eucalyptus robusta) that reach a height of 15-20m. Due to the reduced width of the riparian zone and other site constraints there is no opportunity to achieve any planting that would reach a similar height and provide appropriate screening and mitigation of impacts. Other areas within the riparian zone adjacent to the proposed commercial development do not have any proposed planting of trees, such as adjacent to the proposed food court. This again limits any ecological role that this riparian zone may play and provides no opportunity to mitigate impacts arising from the development.

The proposed riparian zone adjacent to the residential development has greater opportunity to provide a range of ecosystem benefits due to its increased width, however again many of these opportunities are lost due to the extent of 'development' within the riparian zone. The proposed landscaping in this area contains a large area dedicated to active recreation structures such as walkways, cycleways, playgrounds, barbecues and picnic facilities. Low plating is proposed for much of this area along with turf to provide informal play areas. While some saltmarsh planting is proposed, there will be little modification of the ground surface to provide the necessary change in elevation required to provide a suitable habitat for saltmarsh. There is also little significant tree planting within this riparian zone, with much of it proposed within the electricity easement. No planting of any significant height or structure is possible within this easement. This again limits the potential of this riparian zone to deliver any significant ecological benefits.

The proposed limited landscaping of the riparian buffers in each area provides increased opportunity for direct public access into sensitive habitats compared to a more densely planted and fully structured riparian zone. Issues such as litter are also increased under the minimal planting regimes. It is envisaged that the more active and open nature of the proposed riparian zones in these areas will deliver limited ecological benefits, do little to mitigate and screen impacts from the proposed developments and will result in ongoing maintenance problems and impacts to the sensitive environments of the Towra Point Aquatic Reserve.

Provision of a 40m wide Core Riparian Zone

The EA does not provide for a core 40m wide riparian zone, rather it proposes a 30m wide riparian zone within which there are a range of structures and facilities and a limited range of planting and therefore does not comply with the DGRs.

The proponent has attempted to justify this reduction in riparian zone width in terms of an inconsistent planning approach to setbacks along Woolooware Bay. While setbacks do vary along the Bay and are in the majority of instances are less than the 40m required for this development, this is mainly the result of historical approvals, rather than an inconsistent approach. Many of the developments referred to in the EA are approvals and subdivisions over ten years old. These approvals pre-date legislation and policies such as the Georges River REP, which required the consideration of the provision of a 40m vegetated to buffer to the Georges River and its tributaries, and the State Wetlands Policy, which includes provisions for the protection of wetlands such as those in Woolooware Bay. For example, the recent industrial development at Northumberland Drive referred to in the EA is the result of a 1997 industrial subdivision approval which established the industrial lots within 20m of Woolooware Bay. None of these developments has resulted from recent industrial subdivision approvals and none have been associated with rezoning or major change of land use. Thus the Sharks development provides an opportunity to comply with more recent

Other justification for the reduction in riparian zone width in the supporting documentation include contaminated land management and improved stormwater management. The contaminant status of the site is noted as an impediment to providing an intertidal zone suggested within the originally proposed 40m buffer. Council has undertaken works to provide an intertidal saltmarsh area adjacent to the Toyota site to the west of the Sharks site. The nature of the fill and contamination at both sites is similar. Despite this Council was able to undertake the works without any significant impacts and contamination issues. Also, the failure to provide one component of a riparian zone should not be seen as reason to reduce the overall width of the zone. A core riparian zone as required under this DGR has many components, and opportunities exist to expand other components of such a zone.

Stormwater management and maintenance of hydrology is just one of the roles that a riparian zone can fulfil. Other functions such as provision of habitat, terrestrial linkages, screening of developments, acting as a noise barrier and physical barrier to public entry into sensitive aquatic environments, screening for light spill, etc are other roles fulfilled by riparian zones. Any potential reduction of the role of the riparian zone in mitigating stormwater and hydrological impacts does not translate to a decreased need to for the riparian zone to provide these other roles. The lack of detailed assessment of impacts such as noise and light spill, highlight the need to maintain a fully vegetated core riparian zone of maximum width in order to appropriately manage these impacts. Therefore a reduction in width from 40m to 30m cannot be justified on the basis of improved stormwater management alone.

Loss of Sporting Field

The proposed residential development is located on the Cronulla Caringbah Junior Rugby League Football Club grounds. It is proposed to relocate the club to shared grounds at Cronulla High School.

Participation in organised sport in the Shire continues to grow. Whilst the Australand/Breen development at Greenhills will result in additional playing fields, the removal of playing fields is not desirable. The pressure on existing sporting fields will be exacerbated by an increase in population in the St George region as expected and mandated by the DOPI South Subregion Draft Subregional Strategy. Council has a current undersupply of sports fields and many fields suffer from excessive use.

Council's Manager Active Communities has provided the following comments:

Council was seeking to develop a community use agreement for Cronulla High School similar to that currently in use at Woolooware High School. The proponent has proposed a similar option of their own and hence Council has not taken further action at this stage. If Cronulla Caringbah were to remain on their existing site and Council developed a use agreement with Cronulla High School there would have been a net increase in available sporting facilities for the community. If Sharks reallocate existing teams, under their development proposal, to Cronulla High School they solve a local issue but we do not gain a net increase in available sporting fields in Sutherland Shire.

Transport and Accessibility

A major priority of the State government is integrating transport and land use. The NSW State Plan released in March 2010 aims to promote use of public transport and job growth in centres. It is acknowledged that the NSW Department of Transport (DoT) has indicated that the Concept Plan will create "sufficient demand as both a trip origin (residential) and trip destination (retail neighbourhood) to warrant creation of a new public bus service linking the site to nearby centres and public transport nodes" (p58). However, the DoT has not given any guarantees in relation to the provision of additional bus services due to funding constraints (Appendix M of EA).

High density housing as proposed would be better located at existing major transport nodes, such as railway stations, providing direct access to the city and other employment regions within the Sydney Metropolitan Region.

Further comments have been provided by Council's Environmental Scientist:

The impact from the Cronulla Sharks development on traffic and accessibility will be dependent upon how strongly it can reduce car dependence and car mode share. Although the principles for "Good Transit Orientated Development" adopted by the applicant (pg 25 Traffic Report) are encouraged and supported, it is considered that the public and active transport measures proposed are unlikely to achieve the reduction in car travel demand sought to justify the reduced car parking provisions for the development.

The development is situated approximately 1.4km from Woolooware station, 2.5km from Cronulla, and 2.4km from Caringbah and nearly 5km from Miranda. 2009 travel data from the NSW Bureau of Transport Statistics shows the following distribution of trips by transport mode by distance travelled in the Shire. This is summarised below:

Transport Mode	Up to 2km	Over 2km to 5km		
Car	36%	83%		
Bus	0.5%	7%		
Train	1.0%	2%		
Walk*	61%	6%		
Cycling	0.5%	0.9%		

For trips less than 2km, walking has the highest use. Beyond 2km car use becomes the dominant mode. Bus trips increase significantly above 2km and trains only slightly. This data combined with recent research by Daniels and Mulley (2011) which indicates that in Sydney 75% of walk trips to public transport are less than 824m, has implications for trips and mode choice from the development.

Residents at the development choosing to travel by train to work are unlikely to walk to the closest station at Woolooware due to the distance being greater than 800m. Similarly employees or visitors travelling to the site by train will incur the same constraint. Bus use to Woolooware Station is also likely to be low if the current mode share (0.5%) for bus trips less than 2km in the Shire is any guide. Alternatively rail commuters could travel by bus to either Cronulla or Caringbah stations, or cycle to Woolooware Station. However, factors such as bus frequency, cost, travel time and mode transfer are likely to limit the use of bus services as will the lack of a cycleway to Woolooware station from the development.

For bus commuters the proposed bus route provides a limited, indirect and fragmented link (requiring transfer at Miranda or Caringbah) to employment and major regional centres. Therefore, for commuters and non commuters alike, trips by car are more likely to be undertaken. Unresolved, the implications are potentially greater demand for on street car parking in and around Woolooware, Cronulla and Caringbah stations, where parking capacity is already very limited.

Table 1 (NSW Bureau of Transport Statistics 2011) shows mode of transport by trip purpose in the Sutherland Shire in 2009. The most popular mode of transport is the car, then walking, train, bus and cycling.

Purpose	All Modes	Car	Bus	Train	Walk	Cycle
Work	8%	73%	2%	21%	3%	>1%
Shopping	11%	67%	3%	4%	24%	1%
Recreation	4%	50%	2%	4%	42%	2%
Social	6%	89%	>1%	1%	10%	>1%
Entertainment	6%	54%	2%	11%	34%	>1%
Medical	1%	81%	>1%	3%	16%	>1%
Education	4%	59%	14%	9%	12%	2%

This table demonstrates that without strong incentives, car trips are likely to dominate rather than be reduced by the development. It is of concern that the opportunities to reduce the number of trips by car by providing on site access to shopping, recreational, entertainment and medical services will also contribute to reducing the demand for many of the key trips made by public and active transport from the site, potentially making bus trips less viable.

Applying measures that reduce car trips for the journey to work, shopping and education will have the greatest benefit in helping to reduce traffic congestion. In general it is considered that:

- due to the constraints of distance and directness to rail services, higher order retail / services and employment, capture of key bus trips from on site retail/ commercial development - the proposed reduction in residential car parking provisions is overly ambitious. Strong demand for additional car ownership will persist with potential on site parking and area impacts.
- 2) Shopping, medical and recreation / entertainment uses proposed will provide some "self containment" and help to reduce vehicle trips but will not be of a scale that is likely to capture the majority of private vehicle travel demands,
- 3) the potential for residents to substitute car trips by using more public and active transport is limited by a lack of infrastructure (cycleways, footpaths and of end trip facilities), services (bus services), fragmented connectivity and network integration.
- 4) the application of travel access plans and public transport information as indicated in the development proposal are supported, but are not likely to significantly modify travel behaviour unless incentives linked to travel mode targets are included. Applying mode share targets as a condition of consent, to ensure stronger use of public and active transport, is difficult to enforce and highly resource dependent.

Measures that could assist in reducing car use at the development may include:

- Cycleway to Woolooware Station and secure cycle parking facilities (via Woolooware Rd and Denman Ave)
- The development of a Cronulla to Sutherland Cycleway link
- Direct access to high frequency Metro Bus links
- Car share scheme (e.g Go get) in lieu of reduced residential car parking
- stronger design emphasis on direct, safe walking and cycling links to and from the site

(supported by very low pedestrian signal dwell times at key intersections).

Game Day transport options using satellite areas and buses will help to minimise car trips to the stadium. However, this should only be supported where it can be demonstrated that existing retail /commercial parking is not compromised by supporters attending a game at the cost to local business. Strategies need to be put in to stop potential for overspill into residential areas and for alternative contingencies to be in place if these parking opportunities cannot be provided.

Traffic and Carparking

There is capacity to accommodate the proposed development on Captain Cook Drive. Traffic management facilities will enable the development to function. However, there will be adverse flow on traffic impacts to intersections in the locality, which are already operating at or beyond recommended capacities. In addition, there is some concern that the reduced rates of carparking will result in adverse impacts on parking and residential amenity in the locality.

Council's Manager Traffic and Transport has provided the following detailed comments on the impacts on traffic in the locality and car parking:

Parking Provision - Residential

The proposed parking provision for the residential component is deficient by some 291 spaces with regard to Council's required DCP rates. The primary deficiencies relate to parking for the 406 two bedroom units and visitor parking. Council's DCP requires 1.5 spaces per two bedroom unit whereas the applicant proposes 1 space per 2 bedroom unit (203 space deficiency)

Council's DCP requires 1 visitor space for every 4 units whereas the applicant proposes 1 space for every 8 units (88 space deficiency)

The TMAP justifies the reduced rates with respect to a strategic planning context aimed at reducing motor vehicle ownership/usage. Rates contained in the RTA Guide to Traffic Generating Developments are also lower than those in Council's DCP but are predicated on accessibility to good public transport. The reduced off street parking strategy and lack of available on street parking in close proximity to the residential component may reduce vehicle ownership, but is more likely to create management issues such as the use by residents of visitor parking and parking within the retail/club area. Rigorous management strategies would need to be implemented and advertised at the time of purchase which may conflict with parking objectives within the retail/club component. In addition, it is considered that a more convenient bus service than that currently proposed would be required for the strategy to be effective.

It would also be necessary for Council to introduce and regularly enforce overnight parking restrictions within its existing off street parking facilities at Solander and Captain Cook Playing Fields. However, this would not address potential parking intrusion into these areas from residents' visitors. In this regard, the proposed reduced visitor parking rate should not be accepted as it is unlikely that visitors will arrive by public transport.

An effective reduced residential parking strategy would reduce traffic generated by the residential component development. However, the main traffic generation is associated with the retail component which is unlikely to be reduced.

The proposed commercial parking provision with the residential component is satisfactory.

The provision of an activity area within the open space along the northern frontage has been promoted as being open for community use. It is noted however, that no parking provision is provided.

Parking Provision

Parking rates for the retail component are generally in accordance with rates accepted by Council for similar size developments. They accord with the rates contained in the RTA Guide to Traffic Generating Developments. However, there is some concern with the adequacy of the proposed parking provision for the following elements of the Retail/Club component:

Medical Centre - The size of the medical centre is significant at 1500m2 GFA. For a stand alone centre the RTA recommended parking rate is 1 space per 25m2 GFA which would equate to 60 spaces. However, the recommended rate where the Medical Centre forms part of a shopping centre is substantially reduced to 1 space per 111m2 GFA which equates to only 13 spaces as currently proposed by the applicant. Given the size of the Medical Centre, it is questionable whether the proposed allocation would even be sufficient for staff parking let alone patients. The current allocation is considered inadequate.

Club - Proposed parking allocation for club patron parking has been reduced pro rata based on previous parking demand surveys for the existing club and proposed reduction in GFA. However, it is not clear as to when the parking surveys were undertaken and from where within the club the demand was generated. It is possible (and certainly desirable by the applicant) that the reduced floor area would not result in a reduced parking demand. In addition, the club has promoted the idea of recreating the club as a destination point for restaurant dining and other club related activities. As such the applicant should further justify the adequacy of the proposed parking provision for the club premises.

Leisure - 3,350m2 GFA is dedicated as leisure space. It is understood that this space is intended as being ancillary to the shopping centre for the purposes of activities/child minding etc for club patrons and shoppers and as such will not directly generate traffic and parking. Clarification should be sought from the applicant in this regard. If the future uses were to become destination activities in their own right, additional parking generation would result.

Traffic Generation

Residential - The generation rate adopted for the residential component is questionable as it is predicated on accessibility to good public transportation.

Retail - The generation rates for the retail component are generally in accordance with rates accepted by Council for similar size developments. They generally accord with the rates contained in the RTA Guide to Traffic Generating Developments with the following exception:

The report states that the Saturday peak generations can be calculated as being 105% of the Friday rates as per the RTA Guide to Traffic Generating Developments. This is incorrect as the 105% rate applies to daily traffic volumes not peak hour volumes. Saturday peak generations should instead be calculated at 134% of the Friday PM peak. The applicant should be required to revise traffic modelling accordingly. In addition, modelling should be provided for the AM peak period, in particular the impact on the intersection of Captain Cook Drive and Taren Point Road. Sensitivity testing should be undertaken for both the peak generation periods including potential growth in the Kurnell peninsula. Game day sensitivity should also be considered.

Club - Assumed traffic generation for the club area has been reduced pro rata based on recent traffic demand surveys for the existing club and proposed reduction in GFA. It is possible (and certainly desirable by the applicant) that the reduced floor area would not result in a reduced traffic generation. The club has promoted the idea of recreating the club as a destination point for restaurant dining and other club related activities. As such the applicant should further justify the assumed pro rata reduction.

Access and Egress

Proposed Traffic Signals - Under the current proposal three (3) sets of traffic signals are proposed in Captain Cook Drive. Two (2) are proposed for entry/exit to the club/retail component, including replacement of the roundabout at Woolooware Road. Another is proposed for the residential component which includes removal of the existing mid block pedestrian signals adjacent the entry to Solander Fields. A set of mid block pedestrian signals is also proposed in Gannons Road south of Captain Cook Drive.

Retail/Club - The RTA has indicated a preference for a single set of signals from a future asset liability perspective, with a left in left out only treatment in lieu of signals at the western entry to the retail/club component. However, it is apparent that a second set of signals proposed for the retail/club component is necessary under the current proposal in order to provide sufficient capacity for traffic generated by the development to exit the site. Modelling contained in the TMAP indicates that the linking and coordination of the signal cycles for two (2) sets of signals will still provide satisfactory traffic flow along Captain Cook Drive. As such, should the retail/club component precede in its current form, and subject to sensitivity testing, Council favours two (2) sets of signals for the following reasons:

- Provides sufficient capacity for traffic to enter and exit the sight.
- A left in left out treatment will encourage traffic to use Woolooware Road to exit the area.
- A second set of signals will improve game day pedestrian safety.

Alternatively, reducing the scale of the retail/club component would require only a single set of signals.

Sensitivity testing should be undertaken for both the peak generation periods in addition to potential growth in the Kurnell area. Game day sensitivity should also be considered.

Subject to sensitivity testing, the proposed removal of the roundabout and signalising the intersection of Woolooware Road and Captain Cook Drive is supported as it will provide improved pedestrian connectivity and safety between the proposed retail/club component and school and residential precincts to the south. Removal of the roundabout will however reduce accessibility to Captain Cook Playing fields to those arriving from the West on Captain Cook Drive. A Bus only U-turn facility is proposed at the signals via a right turn bay and slip lane in Woolooware Road to support the proposed Game Day Parking Plan. The proposed right turn access to the Captain Cook playing fields should be reviewed and consideration given to the provision of roundabout at the intersection of Woolooware Road and Restormel Street. The existing signal design also shows 2 through lanes and an indented parking bay in the southern departure in Woolooware Road. It is noted that only a single through lane is required.

Residential - Subject to sensitivity testing, the proposed signalised entry to the residential component should operate at a satisfactory level of service as currently proposed. However, prohibition of the right turn movement into the sight should be reconsidered, especially on the basis that the intersection of Gannons Road and Captain Cook Drive should, in Councils opinion, be signalised. Consideration should also be given to linking these signals with the 2 sets of signals proposed for the retail/club component. These signals will allow pedestrians to cross Captain Cook Drive under signal control in lieu of the removal of the existing mid block pedestrian signals. Some concern has been raised that shifting the pedestrian movements further east no longer satisfies the existing pedestrian desire line between the Solander and Captain Cook Playing Fields and parking areas. The proposal will result in significant inconvenience with increased distances of 100 - 200m for these pedestrians. This could result in risk taking. A preferable outcome in terms of pedestrian management would be to relocate the entry to the residential component closer to the western site boundary.

Traffic Impacts

Kingsway/Gannons Road

The additional traffic generated from the proposed development will result in a drop in the level of service at this intersection from D to E in the Friday PM peak and E to F in the Saturday Peak. This will have a flow on affect to the signalised intersection of Denman Avenue/Gannons Road. Consideration should be given to linking these sets of signals pending a SCATES analysis by the applicant. Capacity at this location is also currently restricted by the single lane southbound railway underpass.

Captain Cook Drive/Taren Point Road

This intersection is already operating at capacity with level of service F in the AM, PM and Saturday peak periods. The additional traffic generated from the proposed development will result in increased delays, frequency and length of queuing, in particular on the west and eastbound approaches.

Intersection of Gannons Road and Captain Cook Drive

The TMAP examines the merit for the provision of Traffic Signals at this intersection. Given that the existing roundabout is already failing with respect to service levels in the PM peak period, it would seem unreasonable for the applicant to be lumbered with the full cost of constructing traffic signals at the intersection. However, the fact remains that the additional traffic generated from the development will add considerably to existing delays at the intersection, in particular the eastern approach. The TMAP modelling indicates that existing delays on the southern approach will rise from 460 seconds to 804 seconds. The actual length of delay is questionable based on existing sight observations, however, a 75 % increase in delay can be assumed empirically. The solution to this problem is to signalise the intersection. Signalising the intersection would also provide an improved outcome for pedestrians during normal and game day conditions. In this regard the proposed midblock pedestrian signals in Gannons Road are located 60m south of the pedestrian desire line to avoid queuing into the roundabout.

The suggested solution to remove the bypass movement through RTA improvements that would increase the capacity of the Taren Point Road/Kingsway route is undesirable, unlikely to be successful and is not supported.

Subject to the results of revised modelling for the Saturday peak period and sensitivity testing as outlined earlier in the report, it would seem likely that the proposed traffic signals on Captain Cook Drive to enable access and egress to both the residential and retail/club components will operate at satisfactory levels of service without significant delays for traffic on Captain Cook Drive. However, the proposed development will result in a significant impact on existing key intersections on the surrounding arterial road network that are already operating at poor levels of service, in particular the intersections of: Kingsway/Gannons Road

Captain Cook Drive/Taren Point Road Gannons Road and Captain Cook Drive

Site constraints limit the ability to improve these intersections without significant expense. Given that these intersections are already operating at or near capacity, the argument as to who is responsible for undertaking improvements is debatable. However, it is a fact that the scale of the proposed development will have a significant impact on these intersections to the detriment of traffic flows. All intersections form part of the State Road network and fall under the Responsibility of Roads and Maritime Services.

Woolooware Precinct

There is some concern that the retail component of the development will result in increased through traffic within the local road system to the south east of the site, in particular, Woolooware Road, Sturt Road and Denman Avenue. It is likely that Local Area Traffic Management will be required, at the expense of the applicant, to address this issue should the proposal proceed.

Servicing Arrangements

Whilst detailed designs would be required with any future project DA's, additional information should be provided at the current concept stage as per Director General Requirements.

Game Day Parking

Sharks are keen to develop improved public transport and also provide a shuttle service with satellite parking to try and reduce the traffic and parking impact on the surrounding area on game days. They also need to address the loss of existing on site game day parking resulting from their development proposal.

Council's Manager Active Communities and Council's Manager Traffic and Transport have provided the following comments on sport parking and game day arrangements:

Maximising patronage of a shuttle service is problematic. The shuttle route and satellite parking needs to be of a reliable and constant nature. Patrons are then familiar with the service and more likely to use it. Where the route and/or parking location constantly varies depending on date/day/time of game or other conflicting activities then patrons are likely to become confused and less likely to use the service. Whilst there would be sufficient parking outside of conflicting times, the lack of constancy would seem counter productive to the establishment and sustainability of the service.

The proposed development will have a direct impact on sporting field parking at Captain Cook and Solander playing fields for game day and training parking at community sporting fixtures. This is both because the community currently use the western Sharks car park for overflow parking and that residents and their visitors of any potential new development may decide to park in the parking areas for the fields. This may sound like a contradiction but the point is current sports field parking for Solander and Captain Cook fields is at capacity during game days that occur on weekends and mid week.

Parking arrangements for actual Sharks games is proposed to be for only 12 days per year. However, it should be taken into account that there are numerous other games played on Toyota Park eg football finals. Indeed this is something that Sharks may need to expand if they are to make the site more viable in the future. Additional events at Toyota Park, above the Sharks home games, are easily catered for on the western car park. If that is no longer available in the future these events will have a direct impact on parking at both Captain Cook and Council's Solander fields. The proponent submits that this will only have an effect at 12 home games per year, although this appears to be an inaccurate figure.

Alternative parking locations that are available for all home games with minimal conflicting demands should be considered.

Sporting fields have a direct impact on local residents at all community sporting fields. Night games, training, parking, noise, game day traffic, etc. Council receives numerous complaints and resistance to community based sporting clubs running activities. This site has no residential impact currently and consideration needs to be given to this in the future if the development goes ahead. Once people occupy residential space in the proposed development, will they have an expectation that sporting activities on Solander fields are to be scaled back to minimise their impact on the residents?

Flooding, Drainage & Stormwater

Given the sensitive foreshore location it is imperative that the development address groundwater, drainage and flooding issues associated with the proposed development including piped stormwater drainage and overland flows. Whilst the proposal incorporates Water Sensitive Urban Design principles, it is considered that the proposal has not adequately addressed flooding and the impacts of sea level rise. In particular the proponent has not addressed the potential flooding impacts of a new roundabout /intersection at Woolooware Road and Captain Cook Drive.

Council's Stormwater Manager has provided the following specific comments:

Council's information indicates that the subject site is affected by both localised flooding from the Woolooware Bay catchment and major flooding from the lower Georges River. The development proposal relies on flood investigations carried out by Kozarovski & Partners for previous DAs. These earlier studies should be reassessed in light of the Lower Georges River Flood Risk Management Study & Plan. A flood study should be undertaken as part of this application as flooding needs to be considered at the earliest stages of the design process to ensure that any adverse effects are identified and easily rectified.

The Sea Level Rise Risk Assessment for Sutherland Shire commissioned by Council indicates that the subject property will be affected by sea level rise brought on by Climate Change. A sea level rise allowance of 0.41 metres is proposed for the development based on recommendations by Kozarovski & Partners for previous DAs. This is not consistent with the current NSW State Government benchmarks of 400mm by 2050 and 900mm by 2100. It is considered that the 2100 benchmark should be adopted as being most appropriate for the proposed development considering its probable lifespan. Modelling of the impacts of increases in sea level rise should be undertaken as part of this application so that the impacts can be considered at the earliest stages of the design process to ensure that any adverse effects are identified and easily rectified.

It is proposed to discharge stormwater to Council drainage infrastructure, which consists of a constructed channel crossing the subject site. The development is therefore subject to On-Site Detention (OSD). The proponent contends that OSD is not warranted due to the location of the subject site at the bottom of the catchment. This assertion must be supported by a detailed hydrologic model of the catchment comparing pre and post developed conditions. It may well be that OSD is not beneficial in this instance, but this must be clearly demonstrated.

The stormwater management concept is based on the philosophy of Water Sensitive Urban Design (WSUD). Council fully supports the implementation of WSUD principles in major development. However, insufficient detail is provided to ascertain whether design objectives and performance criteria can actually be met. Further investigation is required and to be successful WSUD must be fully integrated into the overall design of the development. This requires the applicant to commission an interdisciplinary team of highly experienced professionals that includes, but is not limited to: planners, architects, environmental scientists and engineers.

The proponent proposes to utilise the existing constructed stormwater channel crossing the subject site. The drain is tidal and has been colonised by mangroves, which exacerbate flooding upstream. No further drainage connections to the channel or structures (eg. pedestrian crossings) which could potentially decrease the channel area should be permitted until such time as its conveyance has been restored. This may involve removing mangroves or augmenting the channel by some other means. Removal of mangroves from constructed stormwater channels for flood mitigation has been approved by the NSW State Government authorities in the past where compensation is provided.

The proponent proposes to construct a trash rack in the existing stormwater channel at Captain Cook Drive. This device would presumably become a public asset. A trash rack may or may not be appropriate in this location. Council has constructed a number of these devices in recent years. The applicant should investigate and select a suitable gross pollutant trap capable of operating in tidal conditions. A detailed design should be carried out and submitted to Council for approval. All stormwater infrastructure that will become a pubic asset is subject to Council approval.

The proponent proposes to construct the piped stormwater system over the landfill area to reduce infiltration. Details of the amount of fill required to provide sufficient grades for the stormwater system should be considered and detailed at concept stage.

Previous development consents for 461 Captain Cook Drive, Woolooware require the applicant to implement a range of flood mitigation works (refer to 06/1007 & 06/1008). This work has NOT been satisfactorily completed. In a site meeting with Council staff, the proponent's engineering consultant also confirmed that the flood mitigation measures had not been constructed in accordance with his recommendations. Council retains the bond monies and is pursuing the applicant for non-compliance with the consents. It is considered that no new development proposals should be approved in 461 Captain Cook Drive, Woolooware until all past development approvals have been fully complied with.

Exposure to Electro Magnetic Fields

The proposed development site encompasses 132kV Ausgrid overhead power lines that run east west in an easement along the northern boundary of the development site. The proposed development immediately abuts the Ausgrid easement. In addition, the landscape plan indicates that the area directly under the easement will be used as a recreation facility (Foreshore Park). The residential tower blocks are proposed to be built within 15 metres of the power line easement. Given the potential Botany Bay water views from these dwellings it is likely that these dwellings will contain large balcony areas to take advantage of the water views.

Epidemiological health studies and laboratory studies have been unable to rule out a positive correlation between long term exposure to EMF and negative health effects. Indeed there have been some studies that indicate a weak, but none the less measurable correlation between long term exposure to EMF and an increase in childhood Leukaemia rates. Given the uncertainty of the risks posed by long term EMF exposure the best practice response is to apply a precautionary approach and take steps to avoid or at least minimise unnecessary exposure to EMF.

The close proximity of the residential tower blocks D and H to the power line easement results in unnecessary EMF exposure to any future residents. While the science of the relationship between EMF and health impacts is uncertain it is prudent to apply the precautionary approach and minimise exposure where possible. The most viable solution is to remove the residential tower blocks D and H and use the land as additional landscaped recreation area.

Council's Manager Environmental Science has provided the following specific comments: The concept plan application and the supporting consultant report prepared by Magshield Products indicate that the potential electric field exposures and magnetic field exposures are within the relevant national and international exposure guidelines. Whilst the estimated exposures for magnetic fields should generally be within the relevant guidelines, there remains concerns with regards to the unnecessary long term exposure of residents to a known but not quantified health risk.

However, it is considered that the electric field calculations contained in the consultant report do not accurately reflect likely exposure. It is recommended that the proponent undertake electric field exposure modelling at the closest, unshielded exposure point and at a point that includes a person standing or sitting on an unshielded balcony at the same elevation as the power line.

Noise may also be an issue for residential dwellings along the northern side. High voltage power lines often emit an audible hum during periods of high humidity and or high load. While the overall sound levels are likely to be low, they will be well within the threshold of hearing particularly in the evening. The constant hum may discourage or prevent residents from leaving windows open during the evening, negating any energy efficient cross ventilation design features the apartment may have and contributing to lower overall indoor air quality. The noise is also a constant reminder of the presence of the power lines which may create stress in residents who are concerned with the potential (real or otherwise) health effects of the power lines.

The location of the dwellings D and H will also result in future residents being subject to significant visual impacts arising from the power lines. The power lines will dominate views from any balconies or windows facing north. Like noise, the visual presence of the power lines at eye level will be a constant reminder of their presence and may create stress in residents who are concerned with the potential (real or otherwise) health effects of the powerlines.

A greater setback to the easement (removal of buildings H and D) could provide greater separation to the power lines, opportunities for additional landscaped area and potentially reduce the visual and noise issues. Burying the cable will address the noise, visual and electric field exposure but is unlikely to have a significant impact on electromagnetic field exposure. There are also likely to be some significant technical barriers to burying the cable, including cost and the fact that the soils are likely to contain a mixture of PASS and contaminated fill and should not be disturbed it at all possible. It is also unclear if Ausgrid would be supportive of such a proposal.

Utilities and Infrastructure

The proponent submits that there are adequate services and utilities to service the proposal. At this time the proponent is not proposing to use tertiary treated recycled water from Council's plant.

Section 94 Contributions

Approximately 4,500 sqm of foreshore land, owned by Cronulla Sutherland Leagues Club, is zoned for public open space purposes. Council has a current acquisition liability for this land.

The 2005 Shire Wide Open Space and Recreation Facilities Contribution Plan and the 2003 Community Facilities Contribution Plan apply to the site. The development of 700 residential flats is likely to generate a contribution in the order of \$6.5 million.

The proponent has indicated that they are willing to enter into a Voluntary Planning Agreement (VPA) for works in kind including dedication and on-going management and maintenance of public domain areas. It is not clear what that VPA would encompass. Council should be mindful of any ongoing liabilities associated with the proposed Foreshore Park.

Staging

The proponent is seeking approval for the subdivision of the club and the existing car park into two separate lots to accommodate the development. The club, Toyota Stadium, medical centre, upper storey restaurant, and two major tenancies (1148sqm & 1432sqm) will remain on the club lot. The retail arcades comprising 1 major supermarket, a second major tenancy, 2 mini-major tenancies, and specialty shops, and all car parking will remain on a separate lot. The residential component is already on a separate lot.

Clause 65A of SSLEP2000 prohibits subdivision, except for the creation of public open space in the environmental buffer. The Cronulla Sutherland Leagues Club has, on numerous occasions protested the onerous limitations to development, set by the Minister as part of the planning amendment to SSLEP2000. It is understood that the limitations were imposed by the Minister to ensure that any development, and any subsequent financial gain, benefited the club itself in perpetuity.

Contamination

Given the history of the site and the sensitive foreshore location, the issue of contamination must be addressed to ensure the feasibility of the development and the future health of residents. In summary, it is most likely possible that the land can be developed. However, there is a lack of data available to properly determine that the site is suitable for its proposed use in its current state, or if it can be made suitable following remediation. Therefore further assessment is required in order to make an accurate determination on the status of the site and the remediation works that may be required. The presence of hydrogen sulphide gas within the soils should also be included in the assessment.

Council's Manager Environmental Science has provided the following specific comments:

A Risk Assessment is required to assess potential pathways of methane gas and any other gases detected. The risk assessment should not only consider current pathways, but those that may be created through development. Particular attention should be given to the impact of slab-on-ground construction on the increased accumulation of gases and the potential

pathways and impacts on residents and neighbouring properties and the use of drainage systems as a potential pathway for gases.

Several investigations have been carried out on various sections of the site between 1994 and 2006. Environmental Investigation Services (EIS) have stated that the results from the earlier (pre 2001) investigations cannot be relied upon due to the way the samples were taken, the QA/QC procedures being less stringent than what is required today and primitive groundwater well installation leading to non-representative results. There are significant data gaps in the results and EIS have recognised this and have recommended that further investigation is carried out to close these data gaps.

The site was historically a mangrove swamp which has been filled with domestic and industrial waste. It has most likely also been filled with other unknown fill materials and may contain a number of contaminants such as asbestos and heavy metals. Previous investigations have indicated that levels of methane gas, above guidelines, have been detected emanating from the beneath ground level. This has been determined to be most likely attributed to the decomposition of organic matter in the domestic waste. It could also be a product of rotting vegetation as a result of covering the mangrove swamp.

Hydrogen Sulfide (H2S) gas is another gas that is often generated through the degradation of organic matter when mangrove swamps are filled in, particularly where actual or potential acid sulphate soils are present. Other known areas of reclaimed mangrove swamp for residential purposes have resulted in the drainage system acting as a conduit for the H2S gas. Hydrogen sulphide, often referred to as the "rotten egg gas" is heavier than air and so sits in drainage pits and does not dissipate very easily. Human exposure to H2S gas can have significant health impacts as a result of short term and long term exposure.

Recent research carried out and presented at the recent Cleanup conference in Adelaide indicates where gases are generated below ground level, slab on ground construction restricts the natural biodegradation processes that occur at the ground surface to break down and dissipate gases and as a result increases the concentration of the gases beneath the slab. There is also evidence to suggest that these gases migrate out the side of the slab in greater concentrations to affect neighbouring properties.

Acid Sulfate Soils

It is recommended that soils not be disturbed or disturbance is keep to a minimum. If disturbance of soils is required, extensive investigation in areas that are proposed to disturb soils should be carried out to determine the acid generating potential of the soils. Sampling should be carried out in accordance with the Acid Sulfate Soils Manual and extend to one (1) metre below the maximum depth of excavation or two (2) metres below the land surface, whichever is the greater.

Council's Manager Environmental Science has provided the following specific comments:

A limited investigation by EIS has indicted that all the soils, both fill and natural, are to be considered as potential acid sulphate soils. Without further investigation to determine the acid generating potential of the acid sulphate soils, excavation that is likely to disturb these soils should be avoided.

If excavation for footings, drainage or basement carparking is required, then extensive investigation into the acid generating potential of the soils at depths that exceed the intended depth of excavation should be carried out. An acid sulphate soils management plan is required to be prepared based on the results obtained from the investigation in order to be able to appropriately manage any impacted acid sulphate soils. The ASS Management Plan must be prepared in accordance with the Acid Sulfate Soils Manual (Acid Sulfate Soil Management Advisory Committee) and any other relevant guidelines.

An Acid Sulfate Soils Management Plan must be prepared in accordance with the Acid Sulfate Soils Manual (Acid Sulfate Soil Management Advisory Committee) and any other relevant guidelines prior to approval of development application. The ASSMP shall outline a treatment method for excavated or disturbed soils, a leachate management plan, and a proposal for the disposal or reuse of treated acid sulphate soils and any other requirements as per the Acid Sulfate Soils Manual. It must be demonstrated that the surrounding environment will not be impacted through the disturbance of acid sulphate soils.

Community Services

The number of residential dwellings indicates a large population increase in an area with very few community services. The closest existing services are located in Caringbah CBD, and transport is limited.

Council's Manager Communities Unit has provided the following preliminary comments:

Consideration should be given to the provision of adequate community facilities within the development including support services, library, childcare and aged services. Access to local primary schools is limited. Adequate transport should be provided. The development should meet, at a minimum, the requirements of Australian Standards for Access and the Residential Access Code.

Crime Prevention Through Environmental Design Principles should be implemented across the facility and considered in the detailed design phase. The proposal is not necessarily providing housing options for the aged.

The site and pedestrian routes to the site, have been a recent focus of NSW Police and Council due to ongoing complaints regarding intoxication, drunk-walking, litter and public drinking. Further consideration of mechanisms to ameliorate these incidents should occur as increased licensed premises, or increased visitation of licensed provision, and the potential provision of a large packaged liquor outlet may increase crime risk.

Conclusion

The proposed redevelopment of the Cronulla Sutherland Leagues Club will change the urban form for the locality. What is currently a low density area where open space and recreational uses are set in a foreshore environment will become a dense urban environment. The proposal will have adverse impacts on the visual quality in the locality when viewed from surrounding localities and Woolooware Bay.

While issues such as architectural merit, contamination and drainage may be able to be overcome by additional study and design development, the proponent has not demonstrated that the proposal can be built without an adverse impact on the surrounding environment. The proposal does not create an adequate buffer to the wetlands or establish a landscape context to Captain Cook Drive. Opportunities to soften the development are limited due to the extent of podium parking. Similarly amenity for future residents is compromised by the density of the development proposed. In essence this is an overdevelopment of the site. The site simply cannot accommodate such an intensive form of development without adverse effects.

The proposed new centre is poorly located, lacks public transport and the capacity to grow into the future. The proposal will have adverse traffic impacts felt by the wider community. Reduced rates of car parking will create overflow parking problems and be exacerbated by game day parking and other large events.

Clearly this is a development that divides the community. The desire for the Club to continue and the NRL team to be successful has aroused the support of many in the community. However, many submissions in support fail to recognise the significant environmental impact this development will have on the locality. A centre in this location is a poor planning outcome. The financial viability of the Club is not a planning consideration.

It is recommended that Council forward to the Minister and Department of Planning and Infrastructure a preliminary submission detailing the concerns raised in the report followed by a further submission once it has fully considered the issues raised in public submissions.

Report Recommendation:

1. That a preliminary submission be forwarded to the Minister and Department of Planning and Infrastructure detailing the concerns raised in this report.

2. That a further submission be made once the public exhibition has concluded and Council has had an opportunity to consider the issues raised in public submissions.

Part 3A Application State Significant Development Cronulla Sutherland Leagues Club, 461 Captain Cook Drive, Woolooware

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Cronulla Sharks DGRs March 25.pdf Director General Requirements

Committee Recommendation:

1. That a preliminary submission be forwarded to the Minister and Department of Planning and Infrastructure detailing the concerns raised in this report.

2. That a further submission be made once the public exhibition has concluded and Council has had an opportunity to consider the issues raised in public submissions.

3. That the Sharks Development in its present form not be supported by Council.

4. That detailed modelling of the traffic movements in and out of the development proposal, including usage of parking facilities in both the residential and the retail section be provided to Council.

Council Resolution:

1. That a preliminary submission be forwarded to the Minister and Department of Planning and Infrastructure detailing the concerns raised in this report.

2. That a further submission be made once the public exhibition has concluded and Council has had an opportunity to consider the issues raised in public submissions.

3. That the Sharks Development in its present form not be supported by Council.

4. That detailed modelling of the traffic movements in and out of the development proposal, including usage of parking facilities in both the residential and the retail section be provided to Council.