



2.00 RESPONSE TO DEPARTMENT OF PLANNING KEY ISSUES

Any and all plans and drawings referred to throughout this Report are included in the attached Exhibit Books, for ease of reference.

Exhibit Book 1 refers to the Concept Plan Application.

Exhibit Book 2 refers to the Project Application for Stage 1 Works.

Attachment 2 – Landscape Concept Plan (EDAW) is fully contained within Exhibit Books 1 and 2.

This Section of the Report addresses the key issues provided by the Department, by letter dated 14 November 2008. For convenience, the following responses are provided in the order in which matters are raised in the Notification of Key Issues referred to above. Each Key Issue is cited and is followed by a response.

2.01 CONCEPT PLAN

2.01.1 Urban Design

2.01.1.1 Main Street Traffic Flow

- a. Main Street combines perpendicular to kerb parking with a single traffic lane in each direction. It is considered that this may create conflicts between through traffic and vehicles entering and leaving parking spaces, especially at peak periods. Road widths should account for the type of parking proposed and comply with relevant RTA and Austroads guidelines. The Department notes that additional traffic lanes may be required to provide for efficient traffic movement.*

Response

Parking along Main Street has been converted to 45 degree parking along the northern side and parallel parking along the southern side, with one travel lane on either side of a central median. The design provides sufficient road space for manoeuvring and complies with Austroads dimensional standards. This revised design reduces the extent of conflict between moving traffic and cars parking/unparking. (See Cardno Eppell Olsen **Drawings Nos. 8491-901(F), 8491-904(D) and 8491-905(D)**).



- b. Demonstrate that the Main Street design provides for loading for the retail space proposed.*

Response

Loading for the potential future retail tenancies on the southern side of Main Street is to occur in the parallel kerbside parking allocation by conversion of such spaces (to loading zones) as required. (See Cardno Eppell Olsen **Drawings Nos. 8491-901(F), 8491-904(D) and 8491-905(D)**).

2.01.1.2 Esplanade

- c. The esplanade should be visible from the eastern end of Main Street. Currently, the entry of the esplanade is obscured by both vegetation and the road alignment.*

Response

The amended design allows for the Esplanade to be viewed from the eastern end of Main Street, although it is not considered necessary for the functioning of the road network. (See Cardno Eppell Olsen **Drawings Nos. 8491-901(F), 8491-903(F) and 8491-904(D)**).

- d. The design of the esplanade is based on a “narrower access street” under Tweed Shire Council’s typology. The current designation does not appear to provide for the expected traffic volumes. Further, the chicane configuration of the eastern part of esplanade road way, implemented as part of traffic calming in combination with reverse angle parking and parallel parking could further impede traffic flow at these narrow points.*

Response

The amended design has removed the narrowed street design and chicane as previously proposed, although a low speed environment is still anticipated for the Esplanade. The design as now proposed will satisfactorily accommodate the anticipated traffic volumes in conjunction with increased kerbside parking provision. (See Cardno Eppell Olsen **Drawings Nos. 8491-901(F), 8491-902(F) and 8491-903(F)**).

- e. The esplanade road provides a very small number of parking spaces. Further justification needs to be provided demonstrating how the proposed parking arrangements provide easy access to the foreshore and beach for the expected future demand. As discussed at our meeting on 5 November 2008, parking should be provided along the full length of the esplanade.*



Response

The amended design has provided public kerbside car parking along the eastern alignment of the Esplanade. This provides a total of 42 car spaces (including 3 disabled spaces) along the Esplanade with direct access (no road crossings) to the foreshore. (See Cardno Eppell Olsen **Drawings Nos. 8491-901(F), 8491-902(F) and 8491-903(F)**).

- f. It is unclear as to whether the esplanade will be accessible for buses. Given that the nearest bus stop is proposed to be more than 200m away, justification is required as to how the current design will allow for public transport patrons to conveniently access the esplanade.*

Response

The amended road design will accommodate bus travel. In addition, kerbside indented bays are provided for use as coach set down/pick up areas adjacent to the foreshore and Icon building. (See Cardno Eppell Olsen **Drawing No 8491-908(C)**). It is noted that regular scheduled bus services (i.e. public transport) will use Casuarina Way.

Private coach use of the Esplanade will be on an “as required” basis. It is not possible to anticipate the frequency or extent of such use. The roadway has been designed to accommodate such use.

- g. The road cross sections and treatment schemes do not show footpaths or pedestrian crossings on the esplanade road. As high volumes of pedestrian traffic are expected in this area, these need to be specified.*

Response

Given that the construction of footpaths and cycleways is part of the project application, details of the footpaths and cycleways are indicated on amended engineering cross-section drawings (see Cardno **Drawings Nos. DA 34(D), DA 35(F), DA 43 and DA44**).

- h. There is the potential for the geometry of the esplanade road to create conflicts between vehicles and pedestrians. Specifically, vehicles on the esplanade would drive in front of the icon building (in a west to east direction) before turning to a north to south direction where a pedestrian crossing is proposed. Drivers would have little advanced visibility of the pedestrian crossing.*



Response

A car park has been designed on the south side of the Icon building and the roadway (from Main Street to the Esplanade) running on the north side of the Icon building.

While it is not possible to avoid traffic driving in front of the Icon building, the proposed design of the roadway will be a low-speed precinct with feature paving and pedestrian crossing opportunities will be facilitated throughout, in addition to specific locations near the roundabout, so satisfying safety considerations within this localised pedestrian/vehicle interface. (See Cardno Eppell Olsen **Drawing No. 8491-903(F)**).

2.01.1.3 Road Layout and Connectivity

- i. There is a lack of north-south road connections within the development. There is a distance of over 250m along Main Street without a through connection. Connectivity could be improved by extending the proposed north-south culs-de-sac to road no. 5. The additional north-south connection would also provide possible locations for service access and underground parking.*

Response

The road design as now proposed provides sufficient connectivity throughout the Town Centre for traffic movements. There is no need for north-south roadway connections spaced any closer than the 200–300m as currently proposed. More importantly, building and land use designs allow for north-south (and east-west) pedestrian connectivity so that pedestrian travel is encouraged (and/or made quicker and easier than vehicular travel). The proposed road, lot and building layout seeks to achieve the latter.

Overall, the layout will encourage pedestrian and cycle movement, consistent with the stated objectives of the 2(e) Residential Tourist zone and consistent with environmentally sustainable development principles generally.



2.01.1.4 Building Envelopes and Setbacks

- j. The setbacks between the building envelopes (refer Land Use Plan) do not appear to comply with State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development (SEPP 65). As future buildings will be required to comply with SEPP 65 (at a minimum), the concept plan must demonstrate that compliance of the indicative building envelopes is possible.*

Response

It is acknowledged that SEPP 65 refers to a Residential Flat Design Code which specifies, inter alia, minimum distances between buildings up to three (3)-storeys where habitable rooms face each other, or where habitable rooms face non-habitable rooms, or where non-habitable rooms face each other.

The indicative building placements, as presented, are generally compliant. (See **Appendix 1 - ML Design letter dated 10 February 2009 Casuarina Town Centre Indicative Master Plan** and the **attached ML Design Plan (MP-01-04(Q))**).

- k. Buildings facing the foreshore should have a consistent building line.*

Response

The indicative configurations for buildings on Lots 14, 15 and 16 have been amended to demonstrate a consistency of alignment.

In addition, it is intended that buildings to be placed on Lot 18 will be respectful of building alignments to be established for Lots 14, 15 and 16. It is to be noted, notwithstanding, that Lot 18 is physically separated from Lots 14-16, and unlike these lots, fronts open space directly, and is also required to blend the Town Centre frontage with existing residential development to the north. Additionally, it is reasonable to anticipate, as a matter of appropriate tourist hotel design, that recreation facilities, including swimming pools and the like, would be preferably located on the beach side of buildings.

- l. The shadow diagrams indicate that future buildings will result in overshadowing of the public 7(f) zone. This overshadowing is not supported (as per Clause 32B of the North Coast REP) and may require an increase in building setbacks.*



Response

The indicative setbacks from the Zone 7(f) line for buildings on Lots 14, 15 and 16 have been modified so that shadows will not be cast onto 7(f) zoned land in public ownership.

ML Design Plan No. MP-01-13(C) “Sun Study – Winter Solstice – June 21 – 3pm” refers. The time indicated is when shadows will be at a maximum in this area.

It is to be noted that building setbacks have been increased to 6.0m.

2.01.2 Proposed Land Uses

- a. *The significant departures from the LEC approved master plan are required to be justified in further detail. The earlier Concept Master Plan for the site (Mc Kerrell Lynch Drawing SK09B-09-99) which has been submitted in support of various development applications for the Casuarina Beach site, has resulted in the community expecting the current proposal to include the same elements, such as a community sports centre, service station and surf lifesaving club. Further justification for differences from this earlier master plan is required.*

Response

The Land and Environment Court, in the matter *Lenen Pty Ltd v Tweed Shire Council*, Proceedings No. 10686 of 1997 and 30386 of 1998 (see Attachment 1 to the Environmental Assessment), granted certain consents. Plan references comprise:

- Kings Beach Subdivision Plan;
- Kings Beach Development Plan;

These plans are contained in Exhibit Book 1 attached to the Environmental Assessment previously lodged (August 2008).

It is to be noted that the reference to “*the earlier Concept Master Plan for the site (McKerrell Lynch Drawing SK09B 27-09-99)*” has no lawful status and accordingly, no reliance is to be placed upon it or its contents.



- b. The EA mentions an International Hotel/Tourist Facility and Entertainment Venue (Hotel/Tavern) but their location(s) are not identified. Likely locations for these facilities should be indicated and an assessment of potential impacts provided.*

Response

It is proposed that a hotel be developed on land described as proposed Lot 18, with reference to the submitted Land Use Plan (see **ML Design – MP-19(N)**).

A notional representation of such a facility is indicated on the submitted Concept Plan (see **ML Design Plan No. MP-31(J)**).

The potential impacts of any such proposal are not able to be addressed at this time as no specific plans have been developed to date.

Other hotel/motel style accommodation opportunities may arise for further consideration with reference to the mixed use lots proposed in the submitted Land Use Plan (Lots 3-4, 7-11 and 14-16), however, as stated above, no specific plans have been developed to date. Of these lots, Lots 14, 15 and 16 are the more likely lots to be further assessed for consideration for development for such purposes.

With reference to Lot 18, the stated intended use of which is ‘hotel’, the submitted Land Use Plan (see **ML Design Plan No. MP-19(N)**) has been amended accordingly.

It is to be noted that such proposed development is directly consistent with the primary stated objective of the accorded 2(e) – Residential Tourist Zone, with reference to the Tweed Local Environmental Plan.

- c. As the site is zoned 2(e) Residential Tourist, the provision of both residential and tourist development is required to meet the zone objectives. Please provide a brief justification of the ratio of tourist to residential development proposed.*

Response

With reference to the Built Form Compliance Table (see Environmental Assessment referred to above, at page 64), a number of lots have been allocated for



Medium Density Residential development, generally in three (3)-storey configuration and with plot ratios to a limit of 1.2.

It is anticipated that there will be an ordered balance of residential and tourist development consistent with the stated Primary and Secondary Objectives (see Environmental Assessment referred to above at Attachment 11, page 23), of the 2(e) Residential Tourist Zone, to be reflected in subsequent detailed planning assessments.

Overall, the residential development is envisaged to include single dwellings, medium density and mixed use housing choice to meet the needs of a range of households for tourist, family holiday, weekend visits as well as for retiree and permanent residents and the visiting community.

d. It is unclear what type of retailing activities are envisaged as part of the 2000m² of retail in the icon building and super lots 5, 6, 12 and 13.

Response

The Environmental Assessment makes reference to a Main Street comprising a supermarket-led shopping anchor at the Tweed Coast Road entry to Casuarina Town Centre, connecting to beach retailing experience at the foreshore (proposed Commercial Lot 17).

(To remove any doubt, with reference to the use of Lot 17, the intended use of this Lot is 'Mixed Use' and **ML Design Plan No MP-19(N)** has been amended accordingly.

The proposed intervening treatments of Main Street, are to be mixed use in form and content (proposed Mixed Use Lots 5, 6, 12 and 13), the ground floor tenancies of which are to provide for active street frontage. Such activities will include, but will not be limited to, retailing, commercial, restaurant and other associated uses.

Overall, retailing and commercial tenancies will be consistent with coastal tourism centre uses, e.g. cafes, restaurants, ice cream parlours, takeaway food outlets, surf shops and the like.



The transition to a casual, relaxed and comfortable beach-retailing environment within the setting of a boulevard connecting to (and from) a “chore” shopping facility, is integral to the philosophy of pleasantness of place promoted by the Concept Plan. Were the potential for such an experience to be removed from the Plan, the essence of a cohesive and inviting Town Centre would be at risk.

The above-described activities are confirmed not to exceed 2000m² floor space.

e. It is unclear what land uses are included in the ‘mixed-use lots’.

Response

Likely ground floor tenancies may include retailing, commercial, restaurant and other associated uses as described above.

First floor level occupancies may include a mix of commercial, personal services and other associated uses, together with residential use.

Upper floor levels are anticipated to be wholly residential.

f. Does the development propose the provision of affordable housing? It may be appropriate to include a commitment relating to the future provision of affordable housing on the site.

Response

The development does not propose a provision of affordable housing at this time.

It is noted that such provision was not raised as an issue to be addressed in the Director General’s Requirements.

Such provision, however, may be given consideration at a future time, should circumstances permit.

Notwithstanding, the proposed development provides for housing choice which will include a range of product that is and will be affordable.

g. Has there been any consideration of the provision of housing for seniors or people with disability?



Response

Any and all development will be compliant with equitable access requirements. No specific planning for housing for seniors at this time has been undertaken, nor has any such application been made. It is noted that the provision of housing for persons with disabilities was not raised as an issue to be addressed in the Director General's Requirements.

Notwithstanding, the location of low profile residential buildings on level ground within a well-equipped walkway/cycleway environment - all within the immediate vicinity of a "chore" shopping centre – is conducive to the creation of an attractive setting for the housing of seniors or any persons with disabilities.

- h. Clarification is required as to what is proposed as part of the surf club for this location. It appears that only limited surf club facilities will be available as part of this proposal in the icon building (office, toilets and equipment storage). Will there be a first aid room or provision for training/meeting rooms/entertainment area, parking for rescue vehicles, surf equipment and inflatable's boats? How will the interaction of the club functions be managed within the icon building?*

Response

The designated surf life saving club facility for this section of the Tweed Coast is located at Salt, approximately one (1) kilometre to the north of the Casuarina Town Centre. The limited office, first aid room and storage facilities to be provided within proposed Lot 17 (the "icon building") will be an adjunct to the Salt facility and will be managed by that Club in accordance with prevailing surf life saving protocols.

It is noted that this is common practice along the coast and the Surf Life Saving Clubs' Association have indicated agreement with such an arrangement.

2.01.3 Supermarket

- a. It is unclear how the size of the proposed supermarket-anchored centre is justified in light of Council's Tweed Coast Strategy which identifies the provision of a local centre at Casuarina. The Strategy describes a local centre as providing for 'the day to day commercial and service needs of the local area only'. However, the Socio-Economic Impact Assessment (Attachment 8) includes Cabarita/Bogangar and Kings Forest in the proposed centre's primary trade area and areas further afield for the*



secondary trade area. It is noted that the Tweed Coast Strategy envisions a local centre at Kings Forest, which would mean that this trade should not be considered in the numbers for the primary trade area.

Response

Attached please find the Report - **Casuarina Beach Town Centre Retail Sustainability and EIA Assessment** prepared by Brian Haratsis (MacroPlan Australia) (see **Attachment 1**). This Report, dated December 2008, was commissioned as a peer review of the previously submitted Socio Economic Impact Assessment prepared by Conics Pty Ltd.

Amongst other things, this Report has concluded that

- the proposed Casuarina supermarket and specialty retailing development should proceed in the location proposed;
- the proposal is consistent with Council's Planning Strategies, namely, it contributes to a distribution of villages along the Tweed Coast.
- there is a market gap for a full-line supermarket immediately (2008/2009);
- the trading impacts upon supermarket-based centres are not significant, with the exception of expected impacts upon Kingscliff Woolworths, however, the impacts at Kingscliff could be expected to be dissipated within the short term (2011/2016) as the Casuarina catchment becomes self-sustaining, given the strong population growth in the Casuarina and Kingscliff catchments;
- other benefits include reduced vehicle trips, competitive pricing for the benefit of consumers, stimulation of the local economy and the creation of direct and indirect jobs.

Having regard to the above, the further following responses are made:

- (i) it is clear that the proposed supermarket-anchored centre is justified in light of Council's Tweed Coast Strategy which identifies the provision of a local centre at Casuarina;
- (ii) the intended role of the proposed centre at Casuarina will encourage sustainable travel behaviour while at the same time supporting sustainability at other centres; namely:



- Pottsville would be allowed to perform a village centre function - as strategically designated – by 2016 when it is likely to achieve critical mass;
- Kings Forest would be allowed to perform a local centre role – as strategically designated – based on the timing and size of its own localised catchments;
- Cabarita/Bogangar would be allowed to perform a village centre function – as strategically designated – based on its own catchment, noting that Cabarita/Bogangar has limited further urban development potential;
- Further, Tweed Shire Council has advised acceptance of the indicative findings of the MacroPlan Retail Sustainability report (see **Attachment 1**). It is noted that MacroPlan has recently undertaken and continues to undertake Council's retail assessment studies.

b. Further justification for the location of the supermarket is required. The location of the supermarket-anchored centre is justified partly on the ease of access from Tweed Coast Road and partly based on its ability to separate the supermarket traffic from the rest of the site. However, the entry to the supermarket is quite some distance from Tweed Coast Road and requires the traffic to enter Casuarina Way so it is considered that these arguments are not justified. While it is acknowledged that a proportion of traffic going to the supermarket will come along Casuarina Way, the dependence of trade from Cabarita/Bogangar and Kings Forest in the primary trade area suggests that much traffic will also come from Tweed Coast Road.

Response

The trade area for the proposed centre has considered the needs of the local residential community with growth in retail floor space as well as expected, suitably located, future retail growth. The retail development potential in Casuarina is based on the requirements of this local community and non-resident visitors. It is acknowledged that, in the short term, the proposed centre will “borrow” trade from Pottsville, however, as the market matures and residential growth takes place, the medium term catchment for the proposed centre will become self-sustaining.



The basis upon which Main Street – that street connecting the Tweed Coast Road to the beach – is planned, requires, not only the activation of several hundreds of metres of street frontage attributable to the proposed shopping centre, but also its separation from balance retailing representation at or near the beach providing for a differentiated, though complimentary, “beach” shopping experience. The desired objective is the activation and the heightening of interest along the entire length of Main Street, consistent with well held principles of urban design.

The expected directional distribution supporting the proposed centre in the short to medium term is projected to be balanced and without undue strain placed upon the Tweed Coast Road, amongst others.

The following further commentary by the Project Urban Designer (Malcolm Middleton Architects) is made in support of the proposed development in the context of general and specific urban design assessments:

- **“Supermarket Size and Location**

The location of the Supermarket is an important structural component of the urban design strategy for the Casuarina Town Centre. The selection of the site for the Supermarket has a direct relationship with the size of the facility. It is noted that Council, through their retail advisor Macroplan and the Town Centre proponents are in agreement on the need for and size of the proposed Supermarket as a 2500m² facility.

Given that the 2500m² size and attendant parking and servicing requirements form an essential ingredient of this overall input into the Town Centre location, this influence in turn becomes a basic decision making influence for the selection of a location of the Supermarket.

From the layout proposed by the proponents, some concerns were noted by the Department of Planning professional staff in relation to the parking layout and internal site road circulation system. This issue has been reviewed in the context of these observations and a revised circulation system adopted that removes the concerns expressed.

The original conceptual village centre Masterplan diagrams, prepared in 1999, make no specific site specific reference to the location of a Supermarket. However, the Masterplan concept, through its road and urban patterns, implies a small scale supermarket facility embedded into the village structure shown at the time to the east of what is now Casuarina Way. No parking provisions are illustrated apart from on street parking.

With the passage of time and the nature of the build out of the of the project with its proximity to the adjoining facilities at Salt and the recent additional approval of the Seaside project on the adjoining site, the location of the Supermarket must logically be measured once again against the contemporary site specific attributes of the location.



The decision to create a revised and enhanced street layout making a direct connection to the beach from the Tweed Coast Road has been a significant improvement in urban form from the original Concept Masterplan. The original plan was not able to anticipate the placemaking opportunities of regional significance for the Casuarina community that now exist.

After a detailed review of the merits of the overall revised urban design approach, it was concluded that the larger size facility would be unlikely to be a complementary Town Centre land use if it is located either in the middle of the revised site format, or at a beach side location.

The reasons for this are numerous but primarily relate to the incompatibility of the land use and associated parking and servicing needs in context with the residential uses and the high quality residential amenity proposed for the beach side precinct to the east of Casuarina Way.

The significant urban design arguments in support of the proposal are:

- 1. The site provides a significant point of arrival and urban entry to the Town Centre and establishes the urban identity of the location. This is an important differentiation to the residential expression already existing at other parts of the site interface with Casuarina Way.*
- 2. The site is located in between the two major roads carrying the majority of the traffic from both within the site curtilage and from the surrounding residential areas that will be serviced by the Town Centre.*
- 3. The site offers an opportunity to maintain the existing roadside landscape setting by maintaining the linear Tweed Coast landscape whilst introducing an urban place of significance for the area.*
- 4. The Supermarket location and high end architectural concept will complement the Town Centre land use and will enable a controlled visual transfer onto the boulevard from the Tweed Coast Road.*
- 5. The site is an anchor for the new boulevard form leading to the major attraction of the beach entry point and associated parkland and support retail for tourism purposes.*
- 6. The site engages directly with the major traffic flows that will provide access to it. It is the most logical location to separate the differing hierarchies of local and regional traffic with the busier traffic kept to the edge of the site with direct road access to both the Tweed Coast Road and Casuarina Way.*
- 7. Servicing movements are kept out of the main residential areas and public places with a tourism focus.*
- 8. Acoustic concerns are minimised.*
- 9. The high quality integrated landscape and architectural expression are positioned to enable the north facing street edge to provide activation to the boulevard from its point of entry and arrival at the Town Centre.*
- 10. The external appearance of the built form provides for visual interest around the building from all elevations. The design approach is conceived in a manner that responds appropriately to the wider urban setting and the differing functions present at the external faces of the building.*
- 11. The linear transition to the beach will enhance the Town Centre pedestrian movements which will in turn provide activation to the two main street frontages. These pedestrian movements will assist the facilitation of the long term pedestrian pattern proposed for the length of the boulevard with minimum interruption by through traffic or supermarket access movements.*
- 12. The design of the Town Centre and boulevard closely follows the well-tested and successful approach of successful urban settings through the provision of an activity anchor at each end with urban contribution and a linking street with activated frontage potential along its length.*



- **Conclusion**

The Supermarket position and function is a critical factor for the successful creation of a place of substance and functionality at the Casuarina Town Centre.

The new Town Centre proposes an urban beachside setting that has a viable urban and commercial core and a series of localised placemaking initiatives.

This approach and site location will establish a long term functionality for the site allowing it to grow and enhance the wider community into which it is placed.

The siting of the Supermarket is a core value of this long term potential."

- c. *It is unclear as to whether approval for the future expansion of the supermarket is being sought as part of the concept plan application. If approval is sought, the retail assessment within the Socio-Economic Impact Assessment (Attachment 8) should reflect this.*

Response

To remove any doubt, the Concept Plan (see **ML Design Plan No. MP-31(J)**) allocates within a plan of subdivision a lot for retailing purposes. The accompanying Project Application for Stage 1 Works seeks approval for the construction of the proposed shopping centre comprising a 2500m² supermarket, specialty shops (850m²) and restaurants (310m²), totalling 3660m² of retailing and associated floor space on the ground level. (Amenities totalling 75m² are also included at ground level). In addition, office space (400m²) is proposed on the first floor level. In total, the proposed centre will have a total floor space of 4135m².

Any expanded retailing and floor space beyond these specifications would be the subject of a further, or further applications (if any), consistent with sustained population growth potentials.

2.01.4 Drainage Swale

- a. *As previously advised, a number of concerns remain unresolved regarding the treatment of the drainage easement (as shown on Figure 01A – Survey Plan – Exhibition Book 1) (“the swale”) in the current proposal. In particular:*
- (i) Council has advised it is unwilling to extinguish or modify the drainage swale easement; and*
 - (ii) a diverse range of stakeholders have identified the current benefits of the swale (open space and cycleway) and that the proposal is a*



significant departure from the earlier concept master plan for the site (McKerrell Lynch Plan).

A redesign of the swale is required, in consultation with the Council ensure that the engineering functions of the swale can be maintained (or adequately replicated); and the community benefit of the current open space and cycleway is maintained.

Response

The drainage system has been redesigned, and preliminary agreement has been reached with Tweed Shire Council's Engineering Department regarding its technical adequacy. The new solution proposes three (3) x 900mm diameter concrete pipes. A new alignment has been adopted which will allow a walkway/cycleway to be constructed over the top of the pipe drainage and the connection from the coastal cycleway through to the playing fields to be maintained.

To ensure delivery of this proposal, the Applicant offers to dedicate to Council land within the current swale to a width of 15m, and in addition, to grant to Council an easement of 10m width over the balance length of the drainage system, so effecting the connection of the entire length of the drainage system. The dedication area and proposed easement areas are illustrated on **Cardno Drawing No. DA40(J)**.

The offer of dedication of land within the swale seeks to ensure, in addition, a lawful carriageway for pedestrian and cyclist movement.

The revised proposal complies with Council requirements in terms of drainage performance and extends and enhances the form, functions, and safety of the walkway/cycleway system which will connect the coastal cycleway to the playing fields, as well as providing additional dedicated open space.

This proposal overall will result in the addition of a further 3180m² of land to be dedicated for public open space purposes which is intended to be used for passive recreation purposes and for the use by residents of a walkway/cycleway. This area will be grassed and will include the walkway/cycleway in accordance with the submitted EDAW Plans including Landscape Concept Plan, Stage 1 Landscape Works, Vehicular Street Hierarchy/Public Access to Foreshore, Pedestrian Links,



Cycle Circulation and Section (Access Dedication – 15m Width) (see **Attachment 2 – Landscape Concept Report Casuarina Town Centre (EDAW)**).

(Overall, this Application proposes 11515m² of privately-owned lands to be dedicated for public open space purposes. This contribution is in addition to the contributions already made since the inception of the Casuarina project, in fulfilment of all such requirements.)

Currently, the swale is unusable as open space, given the gradient of its banks, and is therefore only able to be used for drainage purposes.

Additionally, the Applicant offers to setback any building a minimum of 5 metres from the southern boundary of the area to be dedicated and to landscape and manage that area in accordance with an approved landscape plan. Accordingly, the applicant will maintain the 5m area adjoining the southern boundary to a high standard and in such a way that proper privacy and boundary treatments are assured. The Applicant is concerned that if this 5m area is not properly maintained by Council through lack of funds or for any other reason, then privacy will not be guaranteed and the edge treatment, particularly in the north east corner, may end up sub-standard.

Overall, the 20m separation distance between the building line and the northern boundary line, as now proposed, greatly exceeds SEPP 65 requirements or other similar setbacks approved by Council throughout Casuarina.

2.01.5 Noise

- a. Consideration should be given to the potential amenity impacts (particularly noise) arising from the location of entertainment venue(s) and retail uses adjacent to residential development.*

Response

It is not anticipated that any entertainment venue(s) will be so located as to cause potential adverse amenity impacts.

It is noted that there is no current application lodged for such entertainment facilities.



Retail uses adjacent to residential uses, particularly in areas designated for mixed use development, would be designed to ensure minimisation of adverse impacts, if any.

2.01.6 Mosquitoes

- a. Further consideration is required of the likely impacts and mitigation measures to control mosquitoes for the development given its proximity to mosquito breeding grounds identified in Council's DCP A6 – Mosquito and Biting Midge Control.*

Response

With reference to DCP A6, and particularly to Figure 14 – Biting Insect Control Tweed (Cudgen), the subject site does not appear to within 1 kilometre of extensive biting insect breeding areas, which areas are, as a general rule, areas where Biting Midge and Mosquito problems would regularly be a nuisance to human habitation.

Notwithstanding, the Applicant would agree to the imposition of reasonable and relevant conditions, to the extent necessary, consistent with Council control measures designated within the DCP provisions.

It is noted that consideration of such measures did not arise in the Director General's Requirements nor were they raised in any agency or public submissions.

2.01.7 Ecology

- a. The EA (page 4) references a fauna corridor as part of a layer of critical connections. The EA needs to demonstrate where the fauna corridor is to be located and what measures will be in place to ensure its ongoing ecological function.*

Response

The reference to fauna corridor was incorrect.

The connections referred to (enabling direct access from the Tweed Coast Road to the Town Centre and the foreshore) are intended to provide unobstructed beach access and public parking, and establish connection points limited to car, cycle and pedestrian activity.



2.02 PROJECT APPLICATION FOR STAGE 1 WORKS

2.02.1 Supermarket

- a. No detailed traffic flow safety analysis has been undertaken for the supermarket.*

Response

The proposed traffic arrangements for the shopping centre have been considered as part of the original detailed traffic assessment. It is noted that the supermarket car park design has been revised. (see **Cardno Eppell Olsen Drawing No. 8491-702(E)**).

- b. The current orientation of the supermarket does not allow the safe and efficient entry and exit of delivery trucks.*

Response

The proposed traffic arrangements, including truck movements, have been amended.

Safe and efficient entry/exit for the supermarket loading dock by delivery vehicles is readily achieved by vehicles entering the site from the Casuarina Way driveway, circulating through the car park, reversing into the loading area then exiting the site via a left hand turn into the Boulevard. Such on-site manoeuvring is safe, efficient and appropriate for this type and size of centre.

- c. The current design will result in conflict between pedestrians and delivery vehicles. In particular, there is a potential conflict between the customer parking to the west of the supermarket and the loading bay. It must be demonstrated (using truck turning paths) that there is sufficient space for large trucks to use the loading bay without interfering with customer traffic.*

Response

The proposed loading area at the rear of the shopping centre (i.e. on the Tweed Coast Road frontage) has been re-designed to avoid areas of significant pedestrian activity and general customer traffic. Pedestrian activity is focused upon the Casuarina Way and Boulevard frontages. General customer traffic will use the Casuarina Way driveway. Parking spaces originally located adjacent to the loading bay have been removed. Sufficient turning areas on-site, in particular at the supermarket loading bay, have been confirmed by the use of AutoTURN



vehicle swept path software. (See **Cardno Eppell Olsen Drawings Nos 8491-704(B), 8491-702(E), 8491-703-1(C) and 8491-703-2(C)**).

To reiterate, the revised layout has the service vehicle traffic removed from the vehicular traffic for the majority of the car park and circulation roadways. In addition, car parking adjacent to the loading dock area has been removed and this area has been made one-way for service vehicles only. This is considered to be an appropriate and acceptable design,

- d. The design of the supermarket development results in customers having to travel a circuitous route to access the centre. If the supermarket is to be located as proposed, consideration needs to be given to the provision of access at a location closer to the Tweed Coast Road, but which ensures the continued safe operation of the road.*

Response

The proposed shopping centre access and egress (all turns) is via Casuarina Way. Service vehicles only will be permitted to egress (left turn only) into the Boulevard (see amended plan referred above). Such provision is considered appropriate for the centre and is consistent with good traffic engineering design through the Town Centre traffic network (i.e. main access points where traffic conflicts are high have been separated from major intersection locations such as Boulevard/Tweed Coast Road and Boulevard/Casuarina Way/Main Street). Although this may represent a slightly more circuitous access route for some customers, this design ensures safe and efficient use of the proposed road network.

- e. The location of disabled spaces nearest to the north western entry to the carpark is a hazard to users of these parking spots and potentially impedes the flow of traffic to the area. These spaces should be relocated.*

Response

The attached revised car park layout. (See **Cardno Eppell Olsen Drawing No 8491-603(A)**) proposed for the supermarket has addressed this issue by removing any conflict between entry/exit traffic and disabled parking bay users. (It is noted that 176 car spaces are now proposed to be provided within the shopping centre site).

- f. Further, some disabled spaces should be located along the southern side of the Boulevard to the north of the supermarket to allow easy access to the supermarket and retail located here.*



Response

Two (2) disabled car spaces are now proposed on the southern side of the Boulevard near the north east and north west corners of the supermarket. (See **Cardno Eppell Olsen Drawings Nos. 8491-901(F) and 8491-907(D)**). Additional disabled spaces may be added along the Boulevard if considered necessary and may be addressed by the imposition of appropriate conditions.

- g. The lack of easy access for supermarket users off Tweed Coast Road and the provision of parking spaces on the north of the Boulevard is likely to encourage pedestrians to cross the 4 lanes of traffic to access the centre. Are barriers or other measures proposed in this area to mitigate this risk?*

Response

There is a large supply of car parking on the shopping centre site in easy and close proximity to the supermarket and other uses, sufficient to ensure that customers will not be likely to seek to park on the northern side of the Boulevard. It is considered unlikely that such customers would choose to park in the latter location as the central median of the Boulevard is to be densely landscaped, with pedestrian crossings to be at selected locations only. Barriers are not considered necessary and would inhibit the easy flow of pedestrians throughout the Town Centre precinct.

- h. Details regarding the proposed pedestrian crossing treatments for the internal supermarket car park are required.*

Response

The pedestrian crossings (i.e. zebra crossings) within the shopping centre car park are indicated on the architectural plans (see **Donovan Hill Drawing Nos. DA05(I) and DA08(H)**). (See also **Cardno Eppell Olsen Drawing No. 8491-702(E)**)

- i. The southern elevation of the supermarket is largely a blank facade and should be modified to incorporate additional openings or uses that enable it to be connected to the rest of the centre.*

Response

The southern elevation is designed of profiled pre-cast panels which is considered to be far superior to typical supermarket buildings and should be considered in the context of the entire composition. The panel profile contributes significantly to



building identity and is recognisable in all panels as they dis-engage to form the major opening to the pedestrian route from the car park and as they return along the eastern elevation. This project-specific profile is modified further to allow for the glazed openings to the office space. The southern elevation will be understood as a small component within this larger composition and as such, is a genuine response to the pragmatic requirements of building design.

- j. It appears that the awning for the supermarket facade extends over the public footpath (refer plan DA08). If this is the case a lease of airspace will be required.*

Response

The awning has been reduced in extent to be contained within the property boundary (see amended **Donovan Hill Drawing No. DA08(H)**).

- k. The pylon sign(s) to be located on Tweed Coast Road are discordant elements of the design and should be eliminated. Additional signage could be better integrated onto the raised section of the roof facing the corner of the Tweed Coast Road and the Main Entry Road.*

Response

The pylon sign proposed to be located on the Tweed Coast Road has been deleted.

- l. Please provide details regarding the operation of the shopping centre with respect to hours of operation and servicing requirements.*

Response

It is intended that the operating hours of the shopping centre will be 8.00am to 9.00pm, Monday- Friday and 8.00am to 6.00pm, Saturday-Sunday.

Servicing of the centre is intended to be limited to the period 6.00am-10.00pm.

2.02.2 Landscaping and Open Space

- a. Further consideration needs to be given to the provision of amenities in the public domain (including the civic park, icon building and surrounds and foreshore area). It is unclear from the plans whether facilities such as public seating, toilets, BBQs, sheltered areas, children's playing grounds, drinking fountains, surf showers, bike racks or interpretive signage are to be provided. There needs to be adequate provision of appropriately located facilities throughout the development. The landscaping plans need to be*



amended to reflect the type and location of these facilities in the open space areas.

Response

See **Attachment 2 - Landscape Concept Report, Casuarina Town Centre (EDAW)**. This Report contains a series of reviewed landscape architecture plans, including Pedestrian Links, Foreshore Reserve Management Area, Civic Park, Public Car Park Section. The detailing of items of public infrastructure and street furniture is included in the Landscape Concept Report (see **Attachment 2**).

- b. There is some confusion as to the areas proposed to be dedicated as public open space under the current project application. The Statement of Commitments (SoCs) for this project (EA – pg 43) states that “the Proponent will dedicate 5,767m² of privately held 7(f) lands as public open space to encourage a larger, more legible public realm which promotes permeability within the 7(f) zone. A total 9,801m² (including the above dedication) of public open space will be created, and will encompass the realignment and upgrading of the existing foreshore cycleway”. Please clarify what portion of this is already public open space under the management of Tweed Shire Council.*

Response

The existing foreshore cycleway, which is to be realigned and upgraded, is already contained within public open space under the management of Tweed Shire Council.

These lands, zoned 7(f), which contain the existing foreshore cycleway, comprise an area of 18,944m² (see revised **ML Design Plan MP-30(Q)**).

This revised Open Space Plan (see **above**) has re-assessed the privately held 7(f) zoned land to be dedicated to be 4164m². A further 7351m² of 2(e) zoned privately owned land is also proposed to be dedicated (including 3180m² comprising the swale), totalling 11515m², or 4.4% of the subject site area.

It is noted that the works referable to the realignment of the walkway/cycleway and minor drainage works and landscaping in the 7(f) zone are subject to Council approval which has been sought. Should such works not be approved, it will not adversely affect the proposed development as the existing walkway/cycleway, within its landscaped setting, will suffice.



- c. *The EA (pg 11) states that “the Concept Plan makes provision for a further 0.9801 hectares, or 4.5% of the Concept Plan area, to be added to the public (open space) domain despite all such dedications and contributions, statutorily requires having been met”. Does this area include the pocket park at the eastern end of road number 6, the drainage swales infiltration areas and the civic park? What proportion of the area proposed to be dedicated as public open space is available for recreational use? For example, the stormwater assessment (Attachment 2 pg 22) states that significant areas are to be devoted to drainage swales. Are these included in the open space calculations?*

Response

The additional open space to be created results primarily from the establishment of a major new road at the eastern end of Road No. 1 and, additionally the dedication of part of 7(f) zone, which is currently in private ownership. Also to be included is an additional small open space area to be dedicated at the eastern end of Road No. 6.

These areas are not proposed to be used for infiltration basins. The infiltration basins will be constructed in the current open space precinct on the eastern boundary of the site when the cycleway is reconstructed. The purpose is to make this area consistent with that of the remainder of the Casuarina coastal frontage and so ensure that there will be no loss of recreational amenity as a consequence of these works.

- d. *It is unclear what works (Attachment 2 pg 22) are proposed for the cycle path reconstruction. Detailed plans (providing enough information to guide engineering drawings at construction certificate) need to be provided that outline the scope of the works.*

Response

Additional drawing details are provided, addressing this issue (see **Cardno Drawings Nos. DA42, DA43 and DA44**)

- e. *Confirmation is required that Council are willing to accept responsibility for the management and ongoing maintenance of the entire open space network and those areas identified as Asset Protection Zones (APZs). It is notes that APZs would not normally be managed by public authorities on behalf of private owners. Appropriate covenants and practical commitment from Council to ensure on-going maintenance of APZs is required.*



Response

Previous agreements with the Rural Fire Service concluded that use of the area dedicated by the Applicant for public open space purposes along the coastal frontage of the entire Casuarina development could be used for Asset Protection Zone purposes. Historically, Council have actively accepted responsibility for the care and management of these open space areas. These areas include the coastal walkway/cycleway and extensively landscaped areas, which are currently maintained by Council.

2.02.3 Earthworks

- a. Plans do not accurately show the finished levels at the edge of all parcels. Plans (DA 22G) do not show the existing contour levels and site boundary levels clearly.*

Response

The plans have been amended to include all relevant information (see **Cardno Drawings Nos. DA22(H), DA24(I) and DA25(H)**).

- b. It is unclear whether the proposed earthworks include changes to the frontal swales. If so, further details need to be provided that outline the extent of the works proposed on Lot 13 DP 1014470 and an assessment of any impacts that re-contouring of the frontal swale will have on the dunal system of Lot 500 DP 727420.*

Response

There are no significant changes to levels in the frontal swale and there will be no alteration to levels at the boundary of Lot 500.

The revised drawings for the cycleway and infiltration basins indicate the extent of earthworks required (see **Cardno Drawings Nos DA22(H), DA24(I) and DA25(H)**).

- c. The site re-contouring requires the importation of approximately 40,000m³ of fill which will be imported from the northern precinct. Has any assessment been undertaken as to whether the northern precinct can supply this amount of fill and if so, what analysis has been undertaken to ensure that the fill is suitable for the purpose e.g. are radiation level acceptable? The construction plan of management and SoCs need to be amended to include stringent screen processes for potential contaminants.*



Response

In accordance with the current planning intent for the site, it is advised that earthworks will be balanced and that there will be no requirement for importation and fill.

- d. The engineering reports and the EA identify the need for further site contamination assessment. The SoCs need to be amended to be more specific with respect to what surveys will be done. Given the extent of bulk earth works proposed and the site's history, this should include a thorough site specific radiation survey.*

Response

A detailed site-specific radiation survey will be undertaken when approval is granted for the clearing of site vegetation. The survey will measure surface gamma radiation levels over the entire site utilizing a 20m grid, and extensive drilling to determine the presence or otherwise of radio-active material at depth. No earthworks will be undertaken until this work is completed as the first stage of investigation. (It is noted that a similar investigation has recently been completed on the Seaside City site approximately 1km to the north of the subject site, in accordance with Council requirements)

- e. Insufficient details have been provided regarding proposed works on the sports fields (Lot 10 DP 1014470) with respect to re-contouring for drainage works. Will these works affect the functioning of the sports fields? Has Council agreed to these works?*

Response

No works are proposed on the playing field areas, with the exception of minor trimming of the existing drainage swale at the southern boundary of the supermarket site. Council agreement is currently being sought in relation to these works. (See Section 2.01.4 above)

In response to the further query “whether any of the required works are outside the site boundary”, these are shown in attached **Cardno Drawings Nos DA42, DA43 and DA44** with reference to infiltration basins, cycleways, etc. Further, **Cardno Drawing No. DA46** clarifies proposed works in Lot 10 (sports fields), including additional earthworks and stormwater drainage.



2.02.4 Water Cycle Management

2.02.4.1 Stormwater

- a. Is there to be any ongoing monitoring program for stormwater runoff from the development or are all interception devices etc to be dedicated to Council? If so, please provide evidence of consultations with Council regarding the stormwater attenuation arrangements for this development.*

Response

All water quality management systems are to be dedicated to Council, in accordance with processes and procedures adopted in all previous stages of Casuarina. Development approvals granted for previous stages include conditions requiring monitoring of water quality on-site and in Cudgen Creek. It is expected that similar conditions will apply with reference to any approval of the subject application.

- b. The section of WSUD in the engineering report of the EA gives a good description of past measures taken to ensure WSUD was implemented in other areas of the Casuarina development however specific details should be provided on the WSUD measures to be implemented for the current site.*

Response

The WSUD systems utilized elsewhere in Casuarina are intended to be provided on the subject site. These include the provision of Gross Pollutant Traps to handle runoff from all car parking areas and the establishment/reconstruction of infiltration basins in open space areas to capture and treat stormwater runoff by filtration.

- c. The development proposes to drain stormwater to the west of the site, in contravention of the stormwater regime (using the front swale) implemented for other Casuarina sites. The justification used for this change to the stormwater regime is the lack of fill material available to contour the site correctly. However, it is noted that the engineering report identifies significant earthworks on the site including the importation of 40,000m³ of fill and cutting of up to 6m. Further justification is required as to why the stormwater regime is proposed to be changed.*

Response

As stated above, no additional fill is to be imported.



The volume of soil material available on site is simply insufficient to drain the site consistently from west to east.

It is noted that the drainage solution adopted for developed sections of Casuarina were initiated by the developer and not by Council who had previously agreed that all runoff was to be directed to the west, to Cudgen Creek. The design solution accepted by Council in the Southern and Northern Casuarina precincts was to the effect that increased residential amenity could be achieved by grading the precincts from west to east. However, all major drainages eventually directed to the west in any event and there is no overflow into Lot 500. It is noted that only the eastern part of the Central Precinct drains to the east, with the remainder of the site draining directly to the west. There is no engineering or environmental benefit to be obtained from draining the development to the east, provided that sufficient areas of stormwater infiltration are provided before final discharge occurring. Specific allowance has been made for this infiltration for all sites which do not drain to the frontal swale.

2.02.4.2 Groundwater

d. The use of groundwater by the development is referenced throughout the documentation however no assessment is provided. Please provide details including volumes and location of bores and clearly indicate whether a water licence will be sought under the Water Act 1912 and whether the Department of Water and Energy (DWE) has been consulted.

Response

The application recognises that there is a groundwater resource available on site, but does not require that use of this resource is necessary to allow the development to proceed. Should groundwater be intended to be used in the future development of the site, appropriate investigations and applications will be made, consistent with the development history of previous stages of Casuarina.

It is noted that Cardno has previously undertaken two (2) groundwater investigations within the Casuarina Development.



The first investigation was undertaken in 2001 which investigated the use of groundwater for flow supplementation into Tweed Shire Council's sewer system.

The investigation was for a bore located in the park at the corner of Casuarina Way and Dianella Drive which was proposed to draw 4l/s.

The second investigation was in Lot 177, in Kamala Crescent, which was in irrigation bore and was proposed to draw 400l/day.

Subsequent investigations have also been undertaken at SALT and at Seaside City to the north of the Casuarina development.

The reports concluded that the flow rates proposed were sustainable however, limitations should be placed on the construction of additional groundwater bores in the immediate vicinity of these production bores unless detailed modelling of their effect on the aquifer has been completed.

Bore licenses were issued for the two (2) bores.

Groundwater monitoring was also undertaken during the construction period for the Casuarina development. Reports for this monitoring were submitted to Tweed Shire Council.. These reports are now archived.

It is also understood that a groundwater investigation has been undertaken by Gilbert and Associates which investigated the supply of groundwater for the irrigation of the playing fields.

- e. An assessment is required to establish what impact the excavation of material for the basement carpark of the supermarket will have on groundwater. What measures are proposed to control dewatering and what impact the removal of approximately 40,000m³ of fill material will have on ground water e.g. will the excavation intercept ground water? DWE should be consulted in this regard.*



Response

Excavation during construction of the basement car park for the supermarket will be limited to 12,000m³ of material. The minimum level at which this excavation will occur is above the normal groundwater level on this site of about 1.0m AHD which was established by detailed monitoring and investigations for the initial stages of Casuarina. The maximum groundwater level recorded during a normal year was about 1.5m AHD. In comparison, the finished basement level is 4.0m AHD, with the expectation that a further 0.5m of excavation below this level will be required for construction purposes. The excavation will not therefore intercept groundwater, and no dewatering will be required during the construction phase.

(It is further advised that Groundwater investigation reports on Casuarina were completed in 2001-2002 and subsequently).

2.02.5 Traffic and Access

2.02.5.1 Car Parking

- a. *A clearer justification for the proposed car parking needs to be provided. The Deed of Agreement (dated 15/12/98) stipulated that car parking spaces for the foreshore are to be located within 100m of the foreshore area rather than the 200m as currently proposed. The overall car parking scheme needs to be clarified as there is no certainty that car parking spaces proposed will be available for foreshore access and will not be used by residents and their visitors or customers of the retail areas. What measures will be implemented to ensure that this situation does not occur? What management mechanisms will be in place to ensure equitable access to the public underground car parking as referred to in the traffic engineering study?*

Response

It is acknowledged that the referred Deed of Agreement required a nominated provision of car parking spaces within 100 metres from the “Esplanade roads”. These spaces have already been provided.

Notwithstanding, the subject proposal nominates the provision of car parking within 200 metres of the foreshore, taking into consideration



contemporary acceptable walking distances. Further, all other applications and approvals granted by both the Department of Planning and Council in the past in both Casuarina and the neighbouring Seaside City project to the north have been determined on the basis of car parking being located within 200 metres from the western boundary of the area containing the coastal walkway/cycleway.

All such provision is to be within dedicated parking areas or road reserves, in addition to the provision of on-site car parking for individual lots, which in every instance is to be self sufficient and strictly in accordance with local authority requirements, so minimising any inconvenience to the public.

As addressed in previous traffic engineering reporting, public car parking for general beachgoers within Casuarina is to be provided at a rate of 300 spaces per km of beach frontage, in accordance with Policy requirements. As the site frontage is 538m this represents a requirement for 162 car spaces. As stated above, an appropriate distance is considered to be 200m which represents a walk of less than 5 minutes. The proposed road design (see **Cardno Drawing No 8491-909(C)**) provides 172 public car parking spaces within a 200m distance of the foreshore. Of these, 141 spaces (87% of the required spaces) are within a 100m distance of the foreshore (less than 2 minute walk). Such provision exceeds the accepted requirement.

As is common with all other public car parking spaces (throughout Australia) there is no special provisions to prevent such spaces being used by adjacent residents or retail/commercial users. The latter is self regulating via the appropriate on-site provision of car parking spaces for these uses (as stated above).

Public underground car parking is not proposed as part of the current application, and accordingly, there is no need for management mechanisms to enable equitable access.



2.02.5.2 Pedestrian Footpaths and Cycleways

b. The urban design premise for this development as a walkable environment is supported however no details are provided about potential areas of pedestrian, vehicular and cyclist conflict throughout the development. Project level details are required for all roads including the pedestrian crossings.

Response

At this stage, the specific locations and details of all pathways and crossing facilities for pedestrian and cyclists have not been specified. It is important that such details are designed at a later stage so that they are located to suit those areas of greatest demand.

c. Multiple car and pedestrian conflict points exist along the Boulevard. The use of rear service lanes and rear access points to proposed retail and residential lots (5, 6, 12 and 13) should be investigated as a means of reducing these potential conflicts.

Response

It is accepted that there is a need to minimise the number and frequency of vehicular driveways along Main Street (between Casuarina Way and the Esplanade) to reduce conflicts between vehicles and pedestrians and cyclists. This will be addressed in the building and lot layout design for this area using such measures as rear lanes, rear access and/or combined access driveways and may be dealt with by appropriate conditions.

d. All roads should have footpaths on either side. Is there any footpath dining envisaged for the Main Street area? If so, road cross sections will need to reflect this. A 1.2m wide footpath, as specified by drawing DA34B is considered inadequate as it does not allow for unfettered use of the street by a number of different users (e.g. motorised scooters, streetside dining, bus stop area). Footpath widths should be in accordance with Council, RTA and Austroads guidelines.

Response

It is intended that constructed footpaths be provided (of sufficient width) in areas of high pedestrian activity, in particular if and where retail/dining/commercial uses are proposed. (See amended **Cardno**



Drawings Nos. DA34D, DA35F, DA43 and DA44) (The further response to 1g. above refers).

e. Further clarification on the operation of the cycleway network in the Boulevard area is required. Is it envisaged that the bulk of cyclists will share the footpaths with pedestrians or will dedicated cycle lanes be provided in the road corridor.

Response

Given the mixed use nature of the Town Centre precinct, the low speed environment encouraged by the design and the casual/relaxed atmosphere established within Casuarina, it is intended that the majority of cyclists will use the roads. The latter is to be via shared use with vehicular traffic, to avoid the segregation that may lead to higher vehicle speeds and reduced awareness of cyclists. Dedicated cycle lanes are not proposed on key roadways (eg. Boulevard, Main Street, Casuarina Way) as sufficient road widths are proposed to allow shared use.

f. The Department is concerned that the development intends to remove the east-west cycle path from its present location and redirect cyclists into a high traffic flow environment. Further consideration needs to be given as to the management of potential risks to pedestrians, cyclists and motorists.

Response

Reference is made to the response to Drainage Swale (Section 2.01.4) above.

Taking into account the proposed redesign of the drainage system, the opportunity is to be taken to establish, extend and enhance the form, functions, and safety features of the existing cycleway and walkway system linking the existing coastal cycleway (to be reconstructed) to the playing fields, generally within an open space, segregated setting and so minimising potential risks to pedestrians, cyclists and motorists.

To reiterate, the existing east-west cycle path (within the swale corridor) will be retained as part of the design of this corridor,



however modified as indicated above, and as shown on the relevant revised plans.

2.02.5.3 Road Network

- g. Please provide further clarification and justification for the numbers and locations of disabled car spaces throughout the development. It appears that inadequate consideration has been given to the location of these, for example*
- (i) a disabled parking spot is located as the first space heading west on the boulevard which, given its close proximity to the intersection and traffic entering the area at speed, means that there is a high probability of conflict.*
 - (ii) lack of spaces on the Main Street. It is inappropriate that disabled motorists, should be expected to cross a major intersection and travel approximately 180-250m to access shops on Main Street.*

Response

The location of disabled car spaces as currently proposed is indicated on **Cardno Eppell Olsen Drawing No. 8491-901(F)**.

The proposed layout is in accordance with Australian Standards. The design accordingly reflects the policy priority for locating disabled use car spaces near the foreshore for easy access to the beach, and near the Icon building and public park. The shopping centre car park layout provides for disabled use car spaces near the main entrance and removed from passing traffic.

Additional disabled use car spaces can be added if considered necessary. This can be addressed by appropriate conditions. Such conditions may best be implemented when the proposed land uses fronting the roadways are finalised or established.

- (iii) It is unclear whether the proposed road cross sections accommodate the infrastructure required for servicing the proposed lots.*

Response

Details of the infrastructure servicing the individual lots are addressed in the engineering reports previously submitted with the Environmental



Assessment. The incorporation of servicing within the road sections is a matter for imposition of conditions.

(iv) The traffic report states that a number of road cross sections do not meet Council's DCP. Further details should be provided stating which cross sections are inconsistent with Council's DCP, how they depart from Council's controls, and why this is justified.

Response

Details of the road cross sections and where they differ from the Council standard cross sections are outlined in Section 3.5 of the Traffic Report (as prepared by Cardno Eppell Olsen and dated June 2008).

2.02.5.4 Public Transport

b. The project needs to specify the location and design of bus stops proposed within the development and outline any consultation with local transport companies.

Response

Provision has been made for a public bus service.

At this stage, there has been no consultation with local transport companies regarding the location of bus stops. Regular scheduled bus services (i.e. public transport) are to operate along Casuarina Way (as with the balance of Casuarina). The completion of Casuarina Way, as part of the Town Centre development, enables a continuous bus route along Casuarina Way for the entire Casuarina community. The design is such that all land parcels within the Town Centre are no more than 400m from this bus route. The location of bus stops can be addressed (in consultation with bus operators) once land use details are finalised.

In addition, indented bus bays are proposed on the Esplanade and Main Street (near the Icon building) for occasional use by tourist or private coaches.



2.02.6 Owner's Consent

- a. Any proposed work on Lot 13 DP 10144720 and the sports fields (Lot 10 DP 1014470) (including road works within easements) requires land owner's consent from Council prior to determination.*

Response

In relation to Lot 10, it is noted that the western end of the existing east-west drainage swale (see **Figure DA46**), is located in this allotment. Owing to the proposed replacement of the eastern section of the swale with stormwater pipes, and the establishment of a revised cycleway alignment, there will be a requirement to carry out minor connection works within Lot 10. These works will include construction of a concrete headwall and apron to fix the location of the pipe outlet, limited trimming earthworks to match the retained section of the swale with the headwall, and the construction of a small length of cycleway to connect to the existing playing field cycleway in Lot 10.

These works will have no affect on the amenity of Lot 10 or the playing fields therein, and it is submitted that there is no apparent reason why the owner's consent for these works should not be given. Should Council not grant its consent, the engineering drainage requirements for the project could still be achieved by retaining the existing swale over its entire length, however, significant changes would be required (see **Cardno Drawing No. 47A – Proposed Retaining Wall**).

With reference to the proposed work on Lot 13, Tweed Shire Council has been formally requested to grant its consent, however, it is waiting for a copy of this **Preferred Project Report** for its consideration prior to providing consent.

Should Council not grant its consent for the carrying out of works in Lot 13 (the open space area immediately to the east of the site boundary, between the site and the beach), it is advised that all relevant engineering components of the development may still be able to proceed, notwithstanding that the subject proposal is to fill the existing east-west drainage swale and to replace the drainage capacity with buried pipes. This would remove the existing infiltration basins in the swale, consequently requiring the construction of replacement basins in Lot 13.



If permission is not granted for the construction of these basins, it would be necessary to retain the drainage swale. While this would allow maintenance of drainage and water quality performance, it would have significant ramifications for the existing layout. Extensive modification of virtually all development elements currently planned would be required. In particular, Casuarina Way would require major re-alignment and two (2) major road bridges crossing of the swale would be required.

It is the considered engineering opinion that the retention of the swale would produce a significantly sub-optimal outcome, since it would act as a substantial barrier between the areas to the north and south of the swale; however, the required engineering solutions would still be capable of being made to work, albeit with the major modifications adverted above.

It is submitted that this would be a most unfortunate result and would deliver a much poorer urban design result for the residents of Casuarina, the adjoining developments and the general public.

The area of the existing swale, if left as unusable open space, retaining walls of up to 4m high would need to be constructed on either side, with consequent unacceptable visual impacts (see **Cardno (Qld) Pty Ltd, Drawing No. 47A – Proposed Retaining Wall**). It was always intended that the swale (drainage and sewerage) be piped once the full drainage for Casuarina was designed and this is the reason why the swale was not dedicated as open space as part of Stage 1.

Meetings have been held with Tweed Shire Council Officers, with the prospect that, following these and further negotiations, the appropriate Council consent will issue.

It is advised that no further consents are required in relation to the sports fields.

2.02.7 Subdivision

- a. Further justification needs to be provided as to whether the subdivision of the 7(f) zone for the provision of private open space associated with residential development is permissible considering Clause 21A of the Tweed LEP.*



Response

Subdivision of the 7(f) Zone was already approved by the Land and Environment Court in 1998 when the Management Lots comprising Casuarina were created. A number of those lots contained land in two (2) zones, namely the 2(e) and the 7(f) Zones. At that time, the 7(f) lands were in part dedicated for the purposes of public open space. The same is now being undertaken with the subdivision of the 7(f) lands being for the purposes of dedication of some of those lands for public open space. All coastal frontage residential lots in Casuarina Beach have been subdivided into lots of approximately 650m² area and these lots are contained within both the 2(e) and the 7(f) zones and are retained in private ownership.

No building work or structures other than environmental facilities can occur within the 7(f) zone, regardless of whether it is private or public land, without prior approval. Subdivision may be approved if the 7(f) zoned lands are used for environmental protection or landscape uses. All lots in Casuarina which include 7(f) zoned lands are used for residential purposes in the areas zoned 2(e) and environmental landscape purposes and infiltration (water into the aquifer). Given these facts, Clause 21A of the Tweed LEP does not impinge upon the subdivision. The purpose of the subdivision is not for an agricultural or residential purposes rather for the dedication of open space for environmental and landscape works and for infiltration of water in the 7(f) zone.

In this regard it is noted that the Minister has over-riding powers in determining matters of State Significance and should be invited to utilise those powers in the particular circumstances to follow the precedent set by the Land and Environment Court (referred above).

b. Is the car park proposed on the northern section of Lot 6 to be a public car park?

Response

No. This car park is to be retained in private ownership to service the Santai resort, and is accordingly not available as a public car park.



- c. *It is unclear whether the pedestrian links proposed are intended to be publicly accessible as most are not indicated as easements on the 'Dedication and Easement Plan'.*

Response

All pedestrian links are intended for public use and are included with reference to amended **Cardno Drawing No DA40(J)**.

2.02.8 Staging

- a. *Is the project seeking combined construction certificate for all of stage 1 (including the supermarket) or separate construction certificates?*

Response

A combined construction certificate for Stage 1 works is to be sought. (The Stages are depicted in **Cardno Drawing No. DA41(G)**).

- b. *Please clarify whether the Main Street and the Boulevard are to be completed to a finished standard and dedicated to Council as part of stage 1, prior to the construction of buildings along them.*

Response

Yes.

- c. *Staging plans do not include works for the closure of Dianella Drive.*

Response

The reconstruction of Dianella Drive as proposed is to occur as part of the Stage 1 works.

2.02.9 Contributions

- a. *The EA (pg 11) states that "All Public Open Space provision and attendance contributions for the area, the subject of the Concept Plan, have already been made". An assessment of the required contributions in accordance with Council's section 94 plan or as otherwise agreed with the Council is required.*

**Response**

All such contributions are or have been lawfully required and have been paid, excepting for a contribution towards a shortfall in the provision of active open space.

- b. The EA and SoCs reference 'credits', presumably for works occurring as part of the broader Casuarina development. What credits are being sought in respect to s94 contributions as part of the project application? The EA should outline any consultations with Council in this respect.*

Response

The matter of credits with reference to s94 contributions as part of the Project Application has been addressed (see Environmental Assessment – Attachment 7 – Traffic Impact Study Cardno Eppell Olsen).