JRPP No:	2009NTH010
DA No:	DA09/0661
PROPOSED DEVELOPMENT:	174 lot subdivision including 170 residential lots and associated subdivision works including roads, infrastructure, western cycleway and landscaping works at Lot 2 DP 1042119; Lot 224 DP 1075237 and Lot 8 DP1014470, Unnamed Road Reserve, Casuarina Way and Tweed Coast Road, Casuarina
APPLICANT:	Kings Beach (No.2) Pty Ltd
REPORT BY:	Rowena Michel, Tweed Shire Council

Assessment Report and Recommendation

SUMMARY OF REPORT:

Council is in receipt of a development application for a 174 lot subdivision at Lot 2 DP 1042119; Lot 8 DP1014470, Lot 224 DP 1075237 situated at Casuarina Way, Casuarina.

The subdivision proposal is the final stage of the Casuarina development on the Tweed Coast and is commonly known as the North-west Precinct.

The site is subject to a previous SEPP 71 Master Plan approval. The current proposed subdivision is generally in accordance with the approved SEPP 71 Master Plan design, with the inclusion of an additional portion of land in the south-western portion.

The proposal includes a total of 159 residential lots, 9 nominated duplex lots, 2 lots for medium tourist accommodation density (135 units), 3 lots for public open space and 1 lot for a pump station.

The main issues identified during assessment of the proposal related to concerns with:

- proposed off-site works associated with the proposal (including road construction and drainage),
- design detail associated with footpaths, and cycleways and road cross-sections,
- traffic calming and traffic generation rates;
- design details relating to provision of water and sewer;
- shape and size of proposed pocket park;
- management of access to the adjoining natural reserve;
- remediation of contaminated land and treatment of acid sulfate soils;;
- impacts on flora and fauna; and
- further details in relation to impacts from construction noise.

The applicant has provided additional detail which addresses these concerns and the proposal is recommended for approval subject to conditions.

RECOMMENDATION:

That Development Application DA09/0661 for a 174 lot subdivision including 170 residential lots and associated subdivision works including roads, infrastructure, western cycleway and landscaping works at Lot 2 DP 1042119; Lot 224 DP 1075237, Lot 8 DP1014470, Unnamed Road Reserve Casuarina Way and Tweed Coast Road Casuarina be approved subject to the attached conditions.

REPORT:

Zoning:2(e) Residential Tourist
2(e) Residential Tourist
7(I) Environmental Protection (Habitat)
7(a) Environmental Protection (Wetlands and Littoral Rainforests)Cost:\$11,653,400

BACKGROUND:

Land and Environment Consent for Kings Beach

In December 1998, the NSW Land and Environment court granted consent to 'Stage 1 Kings Beach Approval'. This consent was for a development plan and a 14 lot master plan development for the purpose of residential, tourist and commercial development.

The Consent allowed for some stormwater and road works but generally did not permit any works to be undertaken on the site until further development consent were obtained for each precinct.

The subject subdivision application is the final precinct of Casuarina Beach known as the North-west Precinct.

The Court consent required deferral of development of the North-west Precinct and the Town Centre Precinct for a period of 4 years (until 31 May 2003). This was to enable the revegetation of habitat for the Blossom Bat, a threatened species found within the site.

SEPP 71 Master Plan Approval

A development application for subdivision in the North-west Precinct was lodged in December 2002 with a concurrent application for a SEPP 71. This was subsequently withdrawn.

In April 2003, a SEPP 71 Master Plan application relating to the Casuarina North West Precinct was submitted to the Department. It was adopted by the Minister on 14 December 2004 (refer below). A revised master Plan was submitted to the Department and also adopted in February 2005.



ce: Cardno MBK FIG DA03 Nov 2002: Based on Approved Dec 2004 Masterplan

Casuarina North West: DA for Subdivision

Figure 8 2004 Casuarina North West Masterplan

Current Development Application DA06/1313 for Work in the Adjoining Lot

Council is currently assessing a separate application (DA06/1313) for a stormwater drainage channel in adjoining Lot 8 DP1014470. This is to prevent ponding of stormwater within a Banksia compensatory replanting zone for the Blossum Bat. This application has not yet been determined as it included additional cycleway and Asset Protection Zones (APZ) opposed by Council. The applicant was requested to amend the application. Since lodgement of this application, it has become necessary to amend the location of the channel as the original excavation would have impacted on a midden site.

In response to the Council's concerns, the applicant has now included the proposed drainage works in Development Application DA06/1313 into the application subject of this report (DA09/0661) and Development Application DA06/1313 will be withdrawn pending a determination on this proposal.

PROPOSAL

Council is in receipt of a development application for subdivision of land and associated works. The subdivision is comprised of the following allotments:

- 159 residential lots with a minimum area of 578m²
- 9 duplex lots with a minimum area of 1000m²
- 2 medium density lots for tourist accommodation (providing for 135 units)
- 3 public open space lots of varying size
- 1 lot for provision of a pump station.

The proposal also includes the following works:

- Clearing of vegetation and stockpiling of mulch
- Carrying out of earthworks to reshape the site for drainage and urban development purposes
- Construction and installation of engineering infrastructure, including provision of roads, drainage, water quality controls, water supply, sewerage, power and telecommunications and
- Landscaping of the public domain.

The original version of the application indicated three significant components of offsite civil works being earthworks to alleviate stormwater ponding and an infiltration basin to retain and dispose of subdivision run off in adjoining Lot 8 DP1014470. The third component of offsite works was the construction of road and stormwater drainage within the unformed road reserve along the northern boundary of the site.

The proposal was amended in response to Council's request for further information to include works proposed beyond the boundary of the site, namely, the excavation of a channel, the construction of an infiltration basin (in adjoining Lot 8 DP1014470) and the construction of road works and associated stormwater drainage works in the existing Crown Road reserve located along the northern and western boundaries of the site.

SITE DESCRIPTION

The subject site is part of the master planned development known as Casuarina Beach. The site is described as Lot 224 DP1075237 and Lot 2 DP1042119. The proposal was

amended to include the adjoining allotment Lot 8 DP1014470 as requested by Council. Lot 8 is comprised of an environmental reserve adjacent to Cudgera Creek.

The current topography of the site is a result of previous sand mining. The topography on the site generally slopes towards the west.

Previous investigations in the adjoining northern precinct (to the west of the site) have revealed presence of radioactive sand. This was the subject of detailed assessment and remediation prior to release of the allotments in that area.

Lot 8 is currently an environmental reserve and contains significant habitat areas. It is predominately zoned 7 (I) Environmental Protection. The remainder of the site is characterised by coastland scrubland dominated by Coastal Banksia, Coast Tea Tree and Coastal Oak. Other introduced species also occur on the site.

The major threatened species of concern for Casuarina Beach as a whole is the Common Blossom Bat. The applicant was required to undertake compensatory habitat planting for the Blossom Bat on Lot 8 DP1014470.

The subject site is surrounded by the following road network;

Casuarina Way - is an 11m wide urban collector road, located along the eastern boundary of the site. It is noted that the width of Casuarina Way narrows to a 7m pavement width immediately north of the site. Two roundabouts are located on Casuarina Way, one is located to the south and the other is approximately half way along the subdivision site. Another roundabout located in the north east corner of the subject site is currently under construction by the developer of the adjoining residential development Seaside City.

Dianella Drive - is a 9m wide urban local access street, located along the southern boundary. Dianella Drive connects from Tweed Coast Road to the southern roundabout with Casuarina Way. The road is currently formed as a rural road with no kerb and gutter.

Council requested the applicant show Dianella Drive terminating in a cul-de-sac with a radius of 12.5m, as approved recently in the Casuarina Town Centre development by the Department of Planning.

Tweed Coast Road – is an arterial road and is located at the south western corner of the site. Tweed Coast connects with Dianella Drive.

All road pavements are in reasonable condition.

DEVELOPMENT/ELEVATION PLANS:

































CONSIDERATIONS UNDER SECTION 79C OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979:

(a) (i) The provisions of any environmental planning instrument

Tweed Local Environmental Plan 2000

Clause 4 - Aims of the Plan

The aim of the Tweed Local Environmental Plan (TLEP) is to "manage growth so that the unique natural and developed character of the Tweed Shire is retained, and its economic vitality, ecological integrity and cultural fabric is enhanced".

The proposed subdivision forms part of Court approved staged master plan and approved SEPP 71 master plans which have undergone extensive assessment and provide a framework for future development of the area.

As described below, the proposal is consistent with the land uses approved in the Court approved master plan and SEPP 71 master plan, as well as the intent of the subject zoning. Given the extensive planning that assessment that has previously occurred for the site, potential impacts on the environment and residential amenity have been adequately considered and the proposal is not considered to compromise the aims of the TLEP.

Clause 5 - Ecologically Sustainable Development

The proposal is not considered to contravene the principles of ecological sustainable development, which were considered as part of previous master planning. Previous approvals have required compensatory habitat planting for the Blossom Bat, as well as other measures to ensure protection of the environment.

The constraints of the site have been considered in greater detail below, and conditions of approval recommended limiting potential impacts on the environment, particularly in relation to erosion and sediment control and remediation of contaminated land.

Clause 8 - Zone objectives

Clause 8 1(c) requires that the Consent authority considers any cumulative impacts the development may have on the community, locality or catchment. It is not considered that the proposal will result in significant cumulative impacts given the various management plans and conditions imposed which are designed to mitigate potential impacts.

The subject site is partly zoned 2 (e) Residential Tourist, 7 (l) Environmental Protection (Habitat) and 7 (a) Environmental Protection (Wetlands and Littoral Rainforest). Each zone is addressed below.

2 (e) Residential Tourist

The majority of the works and subdivision is proposed in the 2 (e) zone.

The works are permissible (Item 2 - allowed only with consent) in the subject zone.

The primary objective of the zone is to provide and encourage "family orientated tourist accommodation and related facilities and services in association with residential development including a variety of forms of low and medium density housing and associated tourist facilities...". The secondary objective is to permit other development associated with a residential / tourist environment and not likely to affect the residential amenity or place demands on services beyond the level reasonably required for residential use.

The proposed subdivision is consistent with this objective as it provides for low to medium residential development and does not demand greater level of services beyond that reasonably expected for residential use.

7 (a) Environmental Protection (Wetlands and Littoral Rainforests)

A small portion of the south-western corner of the site is zoned 7 (a) Environmental Protection (Wetlands and Littoral Rainforests). This area contains part of proposed lots 165 – 169 as well as part of lot 173 which is proposed as conservation dedication.

The primary objective of the 7 (a) zone is to "*identify*, protect and conserve significant wetlands and littoral rainforests" and "to prohibit development which could destroy or damage a wetland or littoral rainforest ecosystem". The secondary objective is to "protect the scenic values of wetlands and littoral rainforests" and "to allow other development that is compatible with the primary function of the zone".

An inner asset protection zone is required in part of proposed lot 173 adjacent to the western boundary adjoining proposed lot 165. This is defined as 'bushfire hazard reduction' and is permissible with consent in the 7 (a) zone. Whilst this will result in some clearing, it will ultimately assist in protecting the adjoining reserve from bushfire and is deemed acceptable.

A siltation pond is proposed at the rear of proposed lot 165 which is zoned 7 (a). This work is defined as 'urban stormwater quality management facilites' and is an item 3 matter requiring assessment against clause 8 (2). The proposed siltation pond is required to manage water quality and impacts on Cudgen Creek. It is considered acceptable in this regard (refer further discussion below).

The proposed subdivision of lot 173 will facilitate dedication of land for conservation within the 7 (a) zone.

The proposed residential lots partly zoned 7 (a) are lots 165 to 169 situated in the south-west corner of the site. These lots range in size from 578m² to 658m². Subdivision of land within the 7 (a) zone will result in lots less than the minimum size requirement for 7 (a), being 40 hectares. A SEPP 1 objection was not provided for lots 165-169 nor was concurrence sought. Subdivision of lots 165-169 is not supported.

7 (I) Environmental Protection (Habitat)

Land adjacent to the proposed western road (running north - south) is zoned 7 (I) Environmental Protection (Habitat). Various works are proposed in the 7 (I) zone including minor sections of road (within the road reserve), stormwater treatment works and dedication for open space (including fire protection) and cycleways. An asset protection zone is also proposed within the 7 (I) zone. These works are defined as roads, urban stormwater water quality management facilities and works for drainage and landfill. These works are identified as Item 3 – allowed only with consent and must satisfy clause 8(2) (addressed below). Bushfire hazard reduction is an Item 2 matter – allowed only with consent.

The primary objective of the 7 (I) zone is "to protect areas or features which have been identified as being of particular habitat significance, to preserve the diversity of habitats for flora and fauna, to protect and enhance land that acts as a wildlife corridor". The secondary objective is to "protect areas of scenic value and to allow for other development that is compatible with the primary function of the zone".

The proposed stormwater works are considered to be in accordance with the objective of the zone as they are required to prevent ponding in Blossom Bat compensatory habitat area in Lot 8 DP1014470 and treat water run-off from the proposed residential subdivision.

The proposed road works in the 7(I) zone are minor portions located in the road reserve. The applicant has provided justification against clause 8 (2) as addressed below.

The works proposed are considered minor and allow for management of the urban land adjoining the 7(I) land so that impact from the urban land is minimised and the land is managed particularly for bushfire protection and stormwater management.

Clause 8(2) - Consent Considerations

As above, various works including roads, urban stormwater water quality management facilities and works for drainage and landfill are proposed within the 7(I) Environmental Protection (Habitat) zone and must comply with the provisions of clause 8 (2). Similarly urban stormwater quality management facilities are proposed in the 7 (a) Environmental Protection (Wetlands and Littoral Rainforests) zone and also need to comply with clause 8 (2).

Clause 8 (2) requires that the applicant demonstrates the following:

- (a) the development is necessary for any one of the following reasons:
 - (i) it needs to be in the locality in which it is proposed to be carried out due to the nature, function or service catchment of the development,
 - (ii) it meets an identified urgent community need,
 - (iii) it comprises a major employment generator, and
- (b) there is no other appropriate site on which the development is permitted with consent development (other than as advertised development) in reasonable proximity, and
- (c) the development will be generally consistent with the scale and character of existing and future lawful development in the immediate area, and
- (d) the development would be consistent with the aims of this plan and at least one of the objectives of the zone within which it is proposed to be located.

The applicant has addressed the above matters and provide justification as follows:

Drainage channel and infiltration basin - these components are required to be in those specific locations on the site in the 7 (I) zone so as to adequately manage stormwater runoff from the adjoining residential development.

Road – the road is proposed to be within an existing road reserve which limits it to a specific location to the west of the site.

It is also argued that the item 3 development proposed in the 7(I) zone needs to be in the locality because of its direct functional relationship to the development on adjoining land zoned for residential purposes. The applicant considers that the work meets an identified urgent community need in that it facilitates the development of the approved Master Plan for the site. Further, that the works are consistent with the scale and character of other works in the zone and the LEP.

The applicant's arguments are accepted. The proposed works are necessary to limit the overall impact of the development on the adjoining wetland and habitat area in the nature reserve (Lot 8 DP1014470).

In terms of the urban stormwater quality management facility proposed in the 7 (a) zone, it is considered that this facility is required in this location given the drainage regime of the site. It will assist in protecting Cudgen Creek from water quality impacts of future residential development and is considered to meet clause 8 (2) requirements.

Clause 15 - Essential Services

Clause 15 requires that development does not occur without a water supply, facilities for treatment of sewer and adequate drainage.

The development proposal includes provision for sewer, water and drainage. Council's Engineers have assessed the proposed infrastructure and it is deemed adequate subject to conditions.

Clause 16 - Height of Building

No buildings are proposed and this clause is not relevant.

Clause 17 - Social Impact Assessment

Clause 17 requires that Council considers a socio economic impact statement (in certain circumstances). The socio-economic impact must identify the likely future impacts of the development on the affected community and analysis the impacts in terms of magnitude, significance, duration, effect on current and future conditions and community services. The socio economic impact assessment must also determine if impacts will cause a loss of amenity within the locality due to reduction in community services and facilities, as well as assess possible measure for the management or mitigation of likely impacts.

A socio-economic impact assessment is required (by Council's DCP) as more than 50 residential lots are proposed.

A socio-economic impact assessment was included in the Statement of Environmental Effects and concludes that the project:

- is compatible and consistent with the remainder of Casuarinas Beach;
- will provide for opportunities for local employment;
- create a high quality public realm and built form;
- create a strong community.

Further assessment of the socio-economic impact statement is provided below.

<u>Clause 20 – Subdivision in Zones 1 (a), 1 (b), 7 (a), 7 (d) and 7 (l)</u>

The purpose of clause 20 is to prevent fragmentation and to protect ecological or scenic values of the land. The clause requires that the minimum lot size in the 7 (a) and 7 (l) zone is 40 hectares. Notwithstanding, clause 20 (3) provides that consent may be granted to subdivision of the land to less than 40 hectares provided that that the allotment will be used for a purpose other than for a purpose (other than for an agricultural or residential purpose) for which consent could be granted.

The proposal includes creation of lot 173 for stormwater treatment and open space. As above, these works facilitate the protection of the Environmental Protection zone through provision of stormwater treatment to prevent ponding in Blossom Bat habitat and provision of a 40 metre buffer from Cudgen Creek.

The proposal will also result in the creation of new road reserves on the northern boundary, minor narrow sections of which will be in the 7(I) zone. Subsequent dedication of road reserve incorporating 7 (I) land will be acceptable as it will be used for road and not residential purposes, satisfying clause 20 (3).

A SEPP 1 Object is required for lots 169 – 165 as the rear portion of these lots are partially zoned 7 (a) Environmental Protection. As a SEPP 1 objection was not provided, nor was concurrence from the Department of Planning, the creation of these lots is not supported.

Clause 22 – Development Near Designated Road

The intent of Clause 22 is to protect and improve the capacity, efficiency and safety of designated as well as to prevent development on designated roads that would detract from the scenic attractiveness of the area of Tweed and to prevent or reduce the potential impact of traffic noise on development adjacent to designated roads.

Casuarina Way and part of Road 1 are identified as Council Designated Roads on Council's mapping system and this clause is applicable to the site.

The designated road mapping indicated a connection from Casuarina Way to Tweed Coast Road via proposed road 1.

The NSW Department of Planning approved a town centre development to the south of existing Dianella Drive under Part 3A of the Act as a Major Project. The approved plans allow Diannella Road to terminate in a cul-de-sac with an emergency vehicle exit, gate and barrier to the Tweed Coast Road provide. The main connection from Casuarina Way to Tweed Coast Road will be through a new "main street" approved as part of the Major Project approval. This will replace the indicative designated road indicated on proposed road 1 to Tweed Coast Road.

In terms of the impact of the proposal on Casuarina Way, the proposed lots are not directly fronting Casuarina Way, however Council's Traffic Engineer has assessed the proposed access points and is satisfied that traffic movement on the designated road is not impeded.

The proposed subdivision is sensitive to traffic noise however there are no lots proposed adjacent to that part of Casuarina Way. Residential lots have previously been approved abutting Casuarina Way as part of existing stage 6B.

The proposal does not detract from the scenic values of the locality as it is of a similar character to surrounding subdivision adjoining the designated roads.

An amended Traffic Report has been prepared to address traffic issues and Council's Traffic engineer has provided an assessment as discussed further below.

<u>Clause 25 – Development in Zone 7 (a) Environmental Protection (Wetlands</u> and Littoral Rainforests) and on adjacent land

The purpose of clause 25 is to ensure that wetlands and littoral rainforests are preserved and protected.

As identified above, works proposed in the 7 (a) zone include siltation pond and an asset protection zone. These works are considered necessary to ensure the protection from bushfire and on-going management of water quality to ensure the management of the adjoining nature reserve (Lot 8 DP1014470).

It is recommended that the proposed creation of lots 165 - 169 is not supported given the lots are less than the minimum lot size requirements of the 7 (a) zone and no SEPP 1 objection has been provided.

The proposal includes dedication of part of lot 173 to enable a 40 metre buffer from Cudgen Creek. This will assist in achieving the intent of the clause.

Council officers raised concern with the impact of the future residential uses on the adjoining reserve, part of which is zoned 7(a). There is concern with pressures from recreational use of the adjoining nature reserve as well as edge affects. The applicant accepts that impacts may occur in this regard and a condition is proposed to ensure that an appropriate management plan is proposed and impacts are mitigated.

Clause 28- Development in Zone 7 (I) Environmental Protection (Habitat) and on adjacent land

The purpose of this clause is to protect wildlife habitat from the adverse impacts of development. As discussed above, some minimal works are proposed in the 7 (I) zone including stormwater treatment works and minor sections of road (as addressed above). It is considered that a plan of management should be provided indicating how adverse effects from this development will be mitigated. Conditions are recommended in this regard.

Clause 34 - Flooding

The objective of this clause is to minimise future potential flood damage by ensuring that only appropriate compatible development occurs on flood liable land and to minimise the effect of flooding on the community.

The subject site is indicating as being flood affected on Council's mapping.

The design flood level has recently been updated to RL2.6m AHD and habitable floor areas are required to be at RL3.1m AHD. Council's Engineer has provided the following comments in this regard.

"The applicant has nominated RL 2.9m AHD as the design (100 year ARI) flood level for the site. It is not apparent where this figure has come from, but apparently the applicant has been liaising with Council's flood modelling consultants, BMT WBM.

Regardless, this level is consistent with previous flood studies for Cudgen Creek, and compares favourably to RL 2.5m AHD in the draft Coastal Creeks Flood Study.

0.5m freeboard will be provided to habitable floor levels, which exceeds the 0.3m specified in coastal areas in DCP-A3, but is consistent with controls imposed on the Tweed Valley and the recommendations of the Floodplain Development Manual. Minimal earthworks are required to provide all allotments above design flood level.

The application has not addressed potential climate change impacts on flooding. The draft Coastal Creeks Flood Study looks at medium and high level impacts for sea level rise and increased rainfall intensity, which increase the peak Q100 flood level by up to 0.3m (RL 2.8m AHD). As such, the proposed subdivision is acceptable with respect to flooding."

Since these comments were provided, the Draft Coastal Creeks Flood Study has been adopted and incorporated into Section A3 of DCP – Development of Flood Liable Land.

Clause 35 - Acid Sulfate Soils

The subject site is indicated as class 2 and class 4 acid sulfate potential on Council's mapping. This clause requires that an acid sulfate soil (ASS) management plan is provided for any works proposed below the ground surface (for class 2) or for works below 2 metres below the natural ground level (class 4).

Previously prepared reports have been submitted relating to ASS, including the following: Acid Sulfate Soil And Geotechnical Report, prepared by Coffey dated December 2002 and Acid Sulfate Soil Management Plan prepared by Cardno Pty Ltd dated November 2002.

The ASS and Geotechnical report identifies that potential acid sulphate soil (PASS) is located in the low lying western portion of the subject site and recommends a liming rate of 3kg/cubic meter across the entire site.

This is inconsistent to the ASS Management Plan which indicates that liming rates of 6kg/cubic meter would be required in some low lying areas where trenching is required. The management also relies of visual identification of ASS to be undertaken by the individual contractor with further assessment and management options to be determined as works are undertaken. This approach is not considered adequate and an amended ASS Management Plan was requested.

The applicant has requested that this be conditioned prior to commencement of any site earthworks, as this work can only be undertaken when vegetation has been cleared from the site.

This is considered consistent with the Tweed LEP 2000 Clause 35 (4a) where the applicant agrees that ASS are present. Appropriate conditions to be applied.

Clause 39 – Remediation of Contaminated Land

This clause seeks to ensure that contaminated land is adequately remediated prior to development occurring.

The site has been partially cleared and is highly disturbed due to extensive sand mining activities. The following reports have been submitted relating to Radiation.

- A Preliminary Site Radiation Investigation Report prepared by Cardno MBK dated November 2002;
- Radiation Remediation Action Plan prepared by Cardno dated August 2008.

It is noted that the conclusion of the two reports are inconsistent.

With respect to the level of investigation which has been undertaken on the site, only a surface radiation survey has been completed to date, with all results being below the background level of 0.2uGy/hr. Significant site disturbance is required to construct the proposed development, which has the potential to uncover undetected materials at depth (having regard for the 300mm depth detection limitation on surface monitoring devices).

Various limitations in the report were identified and further information was requested in this regard.

A revised Radiation Investigation and Remediation Action Plan (RAP) was prepared by Cardno dated 21 March 20010 (revision 21 May 2010). The RAP proposes sub-surface investigations pre-construction works to 4m at 50m centres and to groundwater or 8m (the lesser) at 200m centres of the future finished ground surface level. It is considered that adequate sub-surface investigation will be undertaken.

The RAP has also been revised to clarify that clean validated fill material will have a maximum radiation level 0. 2μ Gy/hr for residential areas, 0.35 μ Gy/hr for parks and roads and be placed and monitored at 0.5m lifts.

Further, inconsistencies in reports have been clarified. The RAP has also been revised to ensure that any radioactive material detected on the site is tested to determine if it is hazardous.

The revised RAP addressed concerns with potential impacts on groundwater. It includes the following statement *"Monazite sand particles are of equivalent size to other sand particles and while in situ are not expected to mobilise within the soil structure if intercepted by groundwater".* Hence it is considered that previous sand mining activities would have no impact on the groundwater in relation to radiation. Appropriate conditions are recommended in this regard.

The revised RAP addresses concerns in relation to potential exempt development (cycleways footpaths etc) and includes further monitoring of areas located outside of the subject boundary where associated works are proposed. Issues in relation to contamination and remediation have been adequately addressed.

Clause 39A – Bushfire Protection

The subject site is bushfire prone. The subdivision triggers referral to the Rural Fire Service (RFS) and general terms of approval have been issued by the RFS. General terms of approval include provision of an inner asset protection zone in part of lot 173 (adjoining proposed lot 165) on the western boundary. This land is zoned partly 7 (a) Environment Protection and partly 2 (e) Residential Tourist. As above, the asset protection zone is required to protect the future residents of the development and the adjoining nature reserve from major fire events.

<u>Clause 45 – Development in the vicinity of heritage items, heritage</u> <u>conservation areas, archaeological sites or potential archaeological sites</u>

Clause 45 seeks to ensure that consideration is given to the effect of the proposed development on the heritage significance of a heritage item, heritage conservation area, archaeological site or potential archaeological site and on its setting, when determining an application for consent to carry out development on land in its vicinity.

The Statement of Environmental Effects includes a Aboriginal and European Cultural Heritage Assessment prepared by Mary Dallas Consulting Archaeologist. The Assessment found that that no Aboriginal or European items were identified within the subdivision area and the majority of the site has been impacted by sand mining in the past which is likely to have destroyed any evidence of Aboriginal occupation.

Notwithstanding, evidence of Aboriginal shell midden has been within the vicinity of Cudgen Creek in Lot 8.

It is recommended that the midden site be fenced off prior to and during the course of the perimeter road construction works and that Tweed Byron Aboriginal Land Council supervise the erection of the temporary fence and its removal after the completion of the road works.

It is considered that the recommendations of the Aboriginal and European Cultural Heritage Assessment be incorporated as conditions to ensure compliance with clause 45.

State Environmental Planning Policies

SEPP (North Coast Regional Environmental Plan) 1988

Clause 32B: Coastal Lands

(1) This clause applies to land within the region to which the NSW Coastal Policy 1997 applies.

- (2) In determining an application for consent to carry out development on such land, the council must take into account:
 - (a) the NSW Coastal Policy 1997,
 - (b) the Coastline Management Manual, and
 - (c) the North Coast: Design Guidelines.
- (3) The council must not consent to the carrying out of development which would impede public access to the foreshore.
- (4) The council must not consent to the carrying out of development:
 - (a) on urban land at Tweed Heads, Kingscliff, Byron Bay, Ballina, Coffs Harbour or Port Macquarie, if carrying out the development would result in beaches or adjacent open space being overshadowed before 3pm midwinter (standard time) or 6.30pm midsummer (daylight saving time), or
 - (b) elsewhere in the region, if carrying out the development would result in beaches or waterfront open space being overshadowed before 3pm midwinter (standard time) or 7pm midsummer (daylight saving time).

The application is considered to comply with Clause 32b. Public access through the adjoining nature reserve to Cudgen Creek will be managed in accordance with an approved management plan to ensure ecological values are protected.

The proposal will not result in any overshadowing of foreshore areas and provides a suitable buffer to the Cudgen Creek to limit impacts upon the adjoining habitat.

Clause 36: Heritage items, generally

- (1) A person shall not, in respect of a building, work, relic, tree or place that is a heritage item:
 - (a) demolish or alter the building or work,
 - (b) damage or move the relic, or excavate for the purpose of exposing the relic,
 - (c) damage or despoil the land on which the building, work or relic is situated or the land which comprises the place,
 - (d) erect a building on, or subdivide, land on which the building, work or relic is situated or on the land which comprises the place, or
 - (e) damage any tree on land on which the building, work or relic is situated or on the land which comprises the place,
 - *i.* except with the consent of the council.
- (2) The council shall not grant a consent required by subclause (1) unless it has made an assessment of:
 - (a) the heritage significance of the item,
 - (b) the extent to which the carrying out of the development in accordance with the consent would affect the heritage significance of the item and its site,
 - (c) whether the setting of the item and, in particular, whether any stylistic, horticultural or archaeological features of the setting, should be retained,

- (d) whether the item constitutes a danger to the users or occupiers of that item or to the public, and
- (e) measures to be taken to conserve heritage items, including any conservation plan prepared by the applicant.

As identified above, the applicant has undertaken an Aboriginal & European Cultural Heritage Assessment Report which includes various recommendations to ensure measures are undertaken to protect any relics.

The report found that the subject site has low European cultural heritage significance and low historical archaeological potential and sensitivity and no Aboriginal archaeological potential. Two undisturbed middens and two disturbed artefact scattered were identified along the banks of Cudgen Creek, to the west of Casuarina. A suitable temporary fence is recommended to be erected around the perimeter of the midden site giving at least a 20 metre buffer zone beyond the currently defined surface extent of the site prior to the construction of the road.

The proposal is considered consistent with this clause subject to compliance with this recommendation.

Clause 43: Residential development

- (1) The council shall not grant consent to development for residential purposes unless:
 - (a) it is satisfied that the density of the dwellings have been maximised without adversely affecting the environmental features of the land,
 - (b) it is satisfied that the proposed road widths are not excessive for the function of the road,
 - (c) it is satisfied that, where development involves the long term residential use of caravan parks, the normal criteria for the location of dwellings such as access to services and physical suitability of land have been met,
 - (d) it is satisfied that the road network has been designed so as to encourage the use of public transport and minimise the use of private motor vehicles, and
 - (e) it is satisfied that site erosion will be minimised in accordance with sedimentation and erosion management plans.

The proposal is considered to be an acceptable outcome with regard to this clause. It is consistent with the previously approved SEPP 71 Master Plan. Density has been maximised whilst ensuring measures are in place to protect the adjoining reserve.

The proposal complies with Council's road standards, or has been conditioned to ensure compliance.

Clause 81: Development adjacent to the ocean or a waterway

- (1) The council shall not consent to a development application for development on land within 100 metres of the ocean or any substantial waterway unless it is satisfied that:
 - (a) there is a sufficient foreshore open space which is accessible and open to the public within the vicinity of the proposed development,
 - (b) buildings to be erected as part of the development will not detract from the amenity of the waterway, and
 - (c) the development is consistent with the principles of any foreshore management plan applying to the area.
- (2) Nothing in subclause (1) affects privately owned rural land where the development is for the purpose of agriculture.

As identified above, the western boundary of the residential subdivision is approximately 40 metres from Cudgen Creek, contained within a dedicated nature reserve. It is considered that public access through the nature reserve to the adjoining creek should be controlled, given the ecological values and zoning of this land. The development does not impede access to the ocean to the east, which is approximately 400 metres of the site.

SEPP No. 1 - Development Standards

The applicant requires a SEPP 1 objection in relation to proposed lots 169 to 165 as they are partly zoned 7(a) Environment Protection. These lots have areas ranging from 658m² to 578m². The minimum lot size of land zoned 7 (a) is 40 hectares. The applicant did not lodge a SEPP 1 objection. These lots can not be approved without a SEPP 1 objection and concurrence from the Department of Planning.

SEPP No. 44 - Koala Habitat Protection

The SEE included a Flora and Fauna report which advised that the existing vegetation on the site does not comprise potential Koala habitat.

SEPP No. 55 - Remediation of Land

As identified above, the applicant was requested to provide an amended RAP to address potential contamination issues arising from radiation associated with previous sand mining activities.

The applicant has suitably modified the RAP report to address Council's concerns and suitable conditions will ensure that the proposal is consistent with SEPP No. 55.

<u>SEPP No 71 – Coastal Protection</u>

Clause 18(2) requires a master plan if subdivision of land is proposed within the sensitive coastal zone. The site is partly identified as being sensitive coastal land and the applicant has provided correspondence from the Department of Planning (dated 19 November 2009) identifying that the master plan requirement can be waived. A Master Plan for the site is already approved under SEPP 71. The proposal is consistent with the Master Plan. Notwithstanding, the applicant has provided information addressing the matters in clause 8 of SEPP 71 and considers the proposal to be consistent with the aims of this policy.

The proposed subdivision will not have any impact on the coastal foreshore or scenic qualities of the NSW coast. It is consistent with the form of housing that exists in Casuarina.

Compensatory planting has been previously provided in relation to potential impact on threatened species. Cultural matters have been assessed and cumulative impacts were taken into consideration in the original Court approved concept plan for Casuarina Beach.

SEPP (Major Projects) 2005

This policy requires that subdivision in the coastal zone of more than 100 lots be assessed and determined by the Minister. However, the applicant has provided correspondence from the Minister declaring that the development is of local planning significance only and can be dealt with under Part 4 of the act (correspondence dated 12 February 2009).

Notwithstanding, the value of the works exceeds \$10 million dollars, requiring determination by the Joint Regional Planning Panel.

(a) (ii) The Provisions of any Draft Environmental Planning Instruments

Council's Draft Local Environmental Plan 2010 was placed on public exhibition during the course of the assessment. The subject site has been identified as R1 – General Residential and E2 – Environmental Conservation. Whilst some road works and infrastructure are proposed in the E2 zone, the majority of the proposed development is located within land in the R1 zone. The proposed development is permissible in these zones and is not inconsistent with the Draft LEP.

(a) (iii) Development Control Plan (DCP)

A2-Site Access and Parking Code

Road design and street networks are discussed in subsection A5 – Subdivision Manual below.

The proposal being for subdivision does not generate any car parking requirements at this stage.

A3-Development of Flood Liable Land

As identified above, the proposal is considered to be consistent with Council's flood policy.

A5-Subdivision Manual

The proposed subdivision has been assessed against section A5 and is generally compliant. Relevant sections of A5 are addressed in more detail below.

A5.4.3 Physical Constraints

The Subdivision Manual (A5) requires that master planning of the site is undertaken to identify physical constraints, including environmental constraints on the development site or adjacent land. The intent is that urban form responds to the natural landform and drainage system, topographical features and environmental constraints. The proposal is consistent with the approved SEPP 71 Master Plan.

A5.4.5 Environmental Constraints

A5 also requires that site constraints are identified including contaminated land, landslip, bushfire threatened species, ecological communities, coastal lands, significant vegetation, landscape character, acid sulfate soils, heritage or cultural items.

These matters have been addressed in this report and it is considered that applicable constraints can be effectively managed or the design has responded limit impacts.

A5.4.7 Storm water Runoff, Drainage, Waterways and Flooding

Council's engineer reviewed the application and made initial comments in relation to the stormwater infrastructure proposed on adjoining Lot 8. It was identified that a separate application (DA06/1313) was lodged with Council to excavate a channel through a stand ridge that would otherwise result in ponding of stormwater within a Banksia replanting zone (compensatory bat food trees), which was imposed in the original court approval for the Casuarina development. While the proposed drainage component of that application is generally satisfactory, it was considered necessary that the application be amended to ensure drainage excavation did not impact upon the midden site.

It was considered that the most effective way to resolve this issue is to amend the subject development application to include the earthworks on Lot 8 and withdraw DA06/1313. The inclusion of Lot 8 in the development land requires owner's consent from Council which has subsequently been provided.

Council's Engineer identified that the proposed "stormwater management system relies on the natural infiltration properties of the sandy soil to dispose of stormwater runoff from frequent events (up to 3 month ARI intensity), to minimise impacts on Cudgen Creek. This system has worked effectively for the rest of Casuarina and other coastal developments. Two infiltration basins are proposed along the western boundary of the site (including portions within the unnamed crown road reserve). A third basin is located within Council's Lot 8 (as discussed above).

Sizing of the basins is based on two performance criteria, being infiltration of the Q3 month event, and provision of detention storage to limit post
development stormwater flows to pre-development levels up to the Q100 storm. For the three basins, the detention volume dominates, by an order of magnitude, and has therefore been adopted. It is noted that sizing of these stormwater facilities makes numerous assumptions regarding the infiltration properties of the soil, which need to be properly justified in the detailed design stage, and must be consistent with QUDM and AR&R.

Piped street drainage shall be sized for the Q5 event, discharging directly to the infiltration basins. The outlet to the basins must be designed to avoid scour of the basins, and sediment export should the basins overtop.

GPTs will be installed on outlets from road drainage systems to the basins, to remove gross pollutants, sediments and oils. Again, this system is similar to that employed successfully elsewhere throughout the Casuarina estate. Proprietary devices must meet Development Design Specification D7 requirements.

Major storms and surcharge flows from the basins will discharge towards Cudgen Creek via Council's Lot 8. In accordance with prior negotiations relating to previous versions of the north west precinct development, Council accepts this westerly flow as a lawful point of discharge, provided the discharge does not adversely impact on Banksia replanting areas. As discussed above, this requires earthworks to prevent ponding in one such area."

The application has been amended to include works in Lot 8.

Council's Engineer noted that the construction of Road 6, in the Crown Road reserve at the northern end of the site relies to a large extent on approved road construction by the neighbouring Seaside development (ref CC08/0473). As the release of lots 15, 16, 17, 18, and 19 relies on the completion of Road 6 through to Casuarina Way, conditions should be applied that the road and all associated services are completed either by the developer or other parties prior to the release of these lots.

Stormwater and drainage design is considered acceptable.

A5.4.8 Urban Structure

The Subdivision Manual seeks to ensure neighbourhood design is walkable, connected and includes an interconnected street network. It is also considered that a network of well distributed parks should be provided, as well as neighbourhood centres that act as a community focus and surrounded by higher density.

The urban structure has been largely dictated by the approved SEPP 71 Master Plan. Notwithstanding, it includes medium density development adjacent to central large park, with an interconnected street system. The urban structure is considered suitable.

A5.4.10 Movement Network

This section of the Subdivision Manual seeks to ensure adequate street network and intersection design.

Council's Engineer has provided the following comments in this regard.

"The existing roundabout at the intersection of Casuarina Way and Canthium Way will provide the main central access to the subdivision. An existing road stub is located on the roundabout to form proposed Road No. 1 into the development site.

Conditions are imposed to existing roads to ensure street standard is acceptable. A condition of consent has been included for the construction of upright barrier kerb and gutter on both sides of Dianella Drive. An emergency vehicle exit, gate and barrier are also located at the end of the cul-de-sac on Dianella Drive.

Road Number	Description	pavement width	verge width	road reserve width	footpath / cycleway	Vertical alignment
Road No.1	entry road into development	11m	4.5m	20m	2 x 1.2m footpath	1 to 3%
Road No.2	access road 420m in length	7.5m	3.75m	15m	1.2m footpath	0.7 to 6%
Road No.3	access road 180m in length	7.5m	3.75m	15m	1.2m footpath	1 to 3%
Road No.4	access road 360m in length	7.5m	3.75m	15m	1.2m footpath	0.6 to 5%
Road No.5	connects into Dianella Dr	7.5m • ch0 -120 • ch320- end	3.75m for a 7.5m pavement	15m	1.2m footpath ch 0-120	0 to 5%
		8m • ch120 - 309 • one way crossfall	3m for a 8m pavement		2.5 cycleway ch 120- end	
Road No.6	partially located over an existing crown road	7.5m • ch580- 740 • ch860- 1000	3.75m for 7.5m pavement	20m	1.2m footpath • ch580- 740 • ch860- 1000	0-4.5%
		8m • ch220- 580 • ch1000- 1142	3-3.5m for 8m pavement		2.5m cycleway • ch220- 580 • ch1000- 1142	
		11m • ch740- 860	4.5m for a 11m pavement		2 x 1.2m footpath ch 740-860	

The proposed road layout comprises of roads identified in the table below.

A traffic report prepared by Cardno Eppell Olsen, dated October 2009 states "all streets within the North West Precinct should be classed as local streets JRPP (Northern Region) Business Paper – 22 July 2010 – 2009NTH010 Page 38 with the exception of the short section of roadway between the roundabout on Casuarina Way and the internal street adjacent to the park"

Road No. 6 would typically be required to be designed as bus route due to the function it performs. Existing Casuarina Way currently functions as a bus route and the proposed subdivision development is located within 400m of Casuarina Way. Council's subdivision manual requires a bus route to be provided within 400m of all proposed allotments. Therefore Road No. 6 is considered adequate to be designed as a local access road.

Offsite Works

Council requested (further information correspondence dated 19 November 2009 that the applicant include proposed Road No. 6 (located along the northern boundary of the proposed development) within the development application. Seven lots within this application have direct frontage to proposed Road No. 6 and 2 lots have a corner frontage to the proposed road.

It is noted that the drawings in the resubmitted application have not been amended to include proposed Road No. 6, and the off site works for adjoining Lot 8 associated with (DA06/1313). These works are the construction of an infiltration basin for stormwater, earthworks to alleviate flooding and proposed banksia replanting on adjoining Lot 8. The applicant's response to Council's further information request agreed that the works should be included in the development application and it is noted Figure No. 28 prepared by Cardno has been modified to reflect these requirements.

A condition of consent has been included to ensure that proposed Road No. 6 and the associated cycleway are constructed and the proposed off site works for Lot 8 are also included.

As road 6 is currently a Crown road reserve, a condition of consent is also recommended requiring the transfer of the Crown road to Council ownership prior to commencement of any works.

Proposed Intersections

Intersection No. 1

The intersection of existing Casuarina Way and proposed Road No. 6 located in the north eastern corner of the site will be a roundabout. The roundabout is currently being constructed by the Seaside City residential development.

Intersection No. 2

The intersection of existing Dianella Drive and proposed Road No. 5 located in the south west corner of the site is a standard T intersection. Dianella Drive will terminate in a cul-de-sac and the intersection is located near the end of the cul-de-sac.

Horizontal alignment

The traffic report provides detail on the road geometry, which is identified as an area of non compliance. The following is an extract from the traffic report; "Curve radii on certain streets are below the required 30m radius for a design speed of 40km/h. This is not considered a problem as the location of these curves is such that the actual vehicle speed will be less than the design speed of 40km/h due to the very straight lengths which do not allow vehicles to achieve high speeds within the development. This is considered beneficial to the overall road network and amenity in the area."

Speed restrictions within the subdivision will be nominated at 50km/h, as per the existing subdivision on local access streets. Although due to the geometry of the proposed road layout, the speed environment will be lower around 40km/h.

A number of previous approvals for Casuarina have resulted in tighter road geometry than required in Council's development and design specifications. i.e. a 50km/h design speed requires a 50m radius. 40km/h requires a 30m horizontal curve radii.

Council's Traffic Engineer recommended a condition of consent requiring a 0.5m carriageway widening is provided on corners between a radius of 20m and 30m and a 1m carriageway widening is required on corners with a radius less than 20m.

Vertical Alignment

The vertical alignment of all proposed roads within the subdivision are relatively flat and designed in accordance with Council's standards.

Pedestrians / Footpaths

The application shows footpath details for the subdivision on Plan No. DA5 – conceptual pedestrian movements prepared by Cardno dated October 2009. Amended plans dated February 2010 show either a cycleway or footpath on all roads, as per Council's development design specifications.

A number of pedestrian links are provided through the development (the links also act as an overland flow paths) from the internal road network through to Casuarina Way.

Cycleways

A 2.5m wide concrete cycleway is proposed along the entire western boundary. The proposed cycleway will connect to an existing cycleway south of the development near Dianella Drive and north into Seaside City.

Bus routes / Shelters

Casuarina Way has been designed as a bus route. All proposed lots within the subdivision are located within 400m of the two existing bus shelters situated on Casuarina Way opposite stage 6B (which has been completed).

A5.4.11 Open Space Network

The applicant has indicated that all park requirements for Casuarina Beach (in accordance with the Court Consent – Kings Beach Plan) have been

dedicated as part of Stage 1. This included dedication of foreshore areas and environmental reserves.

Notwithstanding, it is proposed to dedicate lot 172 as a local park. This is centrally located within the subdivision and has an area of approximately 6667m. It is also proposed to dedicate proposed lot 174 as a park. Lot 174 has an area of approximately 1097m².

Council officers raised concerns with the size of Lot 174 being less than the minimum size requirement for this location (2000m²).

The applicant has responded by stating that all formal requirements for park and open space within the entire Casuarina site were addressed by dedications as part of Stage 1. The applicant argues that no additional park areas are required and the pocket park will serve a community purpose and is therefore desirable, however if Council is unwilling to accept the dedication of the park area, the proponent will reverted Lot 174 to a residential allotment.

Council's Parks and Recreational Officer has identified that the proposed park at Lot 174 is a concern due to the cost associated with maintenance and limited recreation benefit. This public land may either be increased to its compliant size or deleted from the proposal. If the park is deleted, it is considered that an alternative agreed land use and trade off should be provided and agreed to by Council. Relevant conditions are imposed in this regard.

Conditions are recommended to ensure that the central park is suitably embellished, and maintained for an appropriate term and to an acceptable standard.

Table A5-9.4 - Land in Zone 2 9e) Residential Tourist

The proposal complies with the minimum lot size for dwelling houses of $450m^2$. Lot sizes are in the order of $600 - 1000m^2$.

The proposed medium density lots are 6608m² and 3868m² which is sufficient size to provide an acceptable design.

All lots comply with the required minimum frontage width of 9 metres except for proposed lot 122 and lot 30 which are battleaxe shape. This is considered acceptable given they have areas of 854m² and 810m² respectively and sufficient space on-site for on-site visitor car parking.

The majority of lots have a long axis which runs north south or east west providing solar access.

A6-Biting Midge and Mosquito Control

Council's Entomologist has reviewed the application and does not consider that the proposal will create new mosquito breeding areas.

A13-Socio-Economic Impact Assessment

The Statement of Environmental Effects includes a Social Impact Assessment (SIA) prepared by Victor Ferros dated October 2009. The SIA identifies a number of beneficial impacts associated with the proposal including increase in housing stock, increase in social profile and demographics. It concludes that the project will result in a positive impact and various benefits generating from the proposal including compatible development consistent with the Casuarina Beach development as a whole, opportunities for local employment, high quality public realm and built form, enhanced community character and creation of a strong community.

It is considered that the proposal does not result in any impacts on existing residential amenity, other than impacts during construction which can be managed through limits on hours of construction and other conditions. The proposal is generally consistent with the planned outcome for development in Casuarina Beach and has access to existing services and infrastructure including roads, sewer and water.

It is not considered that the proposal will result in any unreasonable social and economic impact.

B5-Casuarina Beach

Section B5 of the DCP provides broader planning guidelines and controls for the roll-out of subdivision across Casuarina Beach. Many of the provisions within Section B5 have been implemented in previous subdivision stages and through the Master Plan. The proposal is consistent with the 1998 Court Consent and the Master Plan and does not contravene provisions within B5.

B9-Tweed Coast Strategy

Section B9 provides a broad overview of major strategic planning issues relevant to the Tweed Coast generally.

The proposal is generally consistent with B9 and does not contravene the intended urban structure, centres hierarchy or design principles relating to the Tweed Coast.

Section B9 includes specific provisions relating to riparian buffers in TSC.7.9. It states that riparian buffers should be 50 metres wide, however where the buffer adjoins an environmental protection zone, the buffer need only have a minimum width of 20 metres (from the edge of the environmental protection zone).

Control TSC.7.10 states that the riparian buffer zone should incorporate two components, being a 20 metre core buffer (adjoining the mean high water mark) and a 30 metre outer buffer, adjacent to any section of the core buffer that adjoins Cudgen Creek. It is not required where the core buffer adjoins an environmental protection zone. The outer buffer does not need to be dedicated to Council.

The development provides a minimum of 40 metres from Cudgen Creek, with most of development over 50 metres from the creek. The core buffer has a width of 40 metres and is currently owned by Council and zoned Environmental protection. The applicant has argued that this amount of core buffer justifies the reduction of the outer buffer by 10 metres.

This is considered acceptable in this instance, having regards to the comments below (ecological impacts).

(a) (iv) Any Matters Prescribed by the Regulations

Clause 92(a) Government Coastal Policy

As identified above, the proposal is not considered to be inconsistent with the Coastal Policy. It will not result in overshadowing or impacts on the coastal foreshore.

Clause 92(b) Applications for demolition

No demolition is proposed.

Clause 93 Fire Safety Considerations

No buildings are proposed.

Clause 94 Buildings to be upgraded

No buildings are proposed.

(b) The likely impacts of the development and the environmental impacts on both the natural and built environments and social and economic impacts in the locality

Context and Setting

The proposal is considered compatible with the existing density and character of surrounding Casuarina Beach development and coastal communities.

Access, Transport and Traffic

Proposed access roads have been assessed above in relation to Council's Development control Plan A5- Subdivision Manual.

In terms of traffic, a traffic assessment prepared by Cardno, dated October 2009 provides a traffic analysis of the proposed subdivision. The traffic report concludes that the proposal will not inadequately affect the surrounding road network.

Various comments were made in relation to this report relating to traffic calming, pedestrian traffic and public transport, credits for Tweed Road Contribution Plan, design of kerb and speed limits.

Council's Traffic Engineer has reviewed the applicants response to the issues raised above and provides the following comments:

"The traffic report states that Tweed Road Contribution Plan (TRCP) credits should apply to the development for the prior construction of the relocated Tweed Coast Road through the site. Credits do not apply for this construction as Tweed Coast Road was reconstructed on a differing alignment to suit the previous overall subdivision layout (Kings Beach) and was never part of the TRCP. TRCP contributions will be required as per the current TRCP and there are no TRCP credits that apply to the proposed development.

The traffic report also states that the TRCP applies only to external traffic and has estimated this traffic. This methodology is not in accordance with the TRCP which incorporates discrete traffic generation rates for differing land uses. For the purposes of contributions, the traffic generation rates as stated in the TRCP must be applied to the entire development without amendment.

Plans show flush kerbing on the 'parkland side' of proposed Roads 5 and 6. This flush kerb should be vertical kerb.

0.5m carriageway widenings are required on corners between 20m and 30m radius and 1.0m widenings on corners less than 20m.

Conditions are recommended to ensure these matters are consistent with Council policy.

Ecological Impacts

The Statement of Environmental Effects (SEE) included a flora and fauna report prepared by Cumberland Ecology. It identified that a number of flora and fauna impact reports have been undertaken for previous stages of Casuarina Beach and for the approved Master Plan. The stage 1 approval required protection of major ecological attributes within the Casuarina Beach site and also required compensatory plantings to offset the impacts arising from the development of the various stages including the north-west precinct.

The SEE also identified that the site has been partially cleared and subject to extensive sand mining. The dominant vegetation in north-west precinct is coastal scrubland dominated by Coastal Banksia, Coast Tea Tree, Wattles and Coastal Oak. Introduced shrubs including Lantant, Bitou Bush are abundant in some places.

The initial findings in the SEE identify that no endangered ecological communities occur on Lot 224 and Lot 2 (which comprise the area proposed to be subdivided). Two endangered ecological communities occur within the vicinity of this land, including Littoral Rainforest on the conserved and rehabilitated coastal strip and Coastal Swamp Sclerophyll Forest, which

occurs in the land conserved along Cudgen Creek (Lot 8 – now part of the proposed site). However neither of these plant communities occur within the land proposed for subdivision and will not be impacted by the development.

The major threatened species of concern for Casuarina Beach is the Common Blossom Bat.

Due to the disturbed nature of the vegetation on the site, Cumberland Ecology concludes that it is unlikely that the site provides substantial habitat for threatened species other than foraging habitat for the Common Blossom Bat and conclude that there are unlikely to be significant detrimental impacts upon threatened flora and fauna.

Upon assessment of these findings, Council's Ecologist requested additional information on the following matters:

- Review of the population status of the common Blossom Bat and habitat;
- Quantification of the extent Banksia and Pink Bloodwood vegetation communities proposed to be removed and any additional compensation.
- Justification for the difference in mapping relating the presence of EEC Subtropical Coastal Floodplain Forest
- A plan of management in the form of an operational environmental management plan
- Justification for the proposed 40 metre setback from Cudgen Creek.

The applicant raised concerns with the above information requested given the extensive history associated with the site and requirements on the Court Consent which included monetary compensation as well as compensatory habitat planting. Council Officers met with the applicant to discuss these issues (3 March 2010) and it was agreed that a number of the abovementioned information request items could be removed or modified, including the requirement for a review of the population status of the common Blossom Bat. The information request was amended as follows:

"Consideration and discussion of any potential Endangered Ecological Communities listed under the Threatened Species Conservation Act 1995 that may be present on the subject site or adjacent land and methods to avoid impact on any EECs. A determination that no EECs are present on the site must be justified using the relevant Scientific Committee determinations and the relevant DECC Identification Guidelines for Endangered Ecological Communities (DECC 2007)

The Cumberland Ecology report provided with the application requires the following amendments and additions –

- Table recommends that 7-part tests be prepared for Elyonurus citreus, Syzygium hodgkinsoniae, Greater Sand Plover, and others. These have not been provided and should be provided.
- the report has identified the habitat of Eastern Long-eared Bat and Little Bentwing Bat.as being present on the site without providing an assessment of significance – this should be provided.
- Local records exist nearby to the site for the following species: Archidendron hendersonii, Acronychia littoralis, Cryptocarya foetida, and Geodorum

densiflorum, and Long-nosed Potoroo yet no survey for these species has been undertaken nor has their presence been assumed and 7-part tests undertaken – this should be provided.

The requirement for an Operational management plan should be removed if agreement to fence and prevent access to the joining reserve is reached, otherwise it should be amended to read as follows:

Consideration and discussion of impacts to the adjoining riparian zone arising from construction and occupation of the development, and methods to avoid impacts to conservation values."

Applicant's Response – Presence of EEC

The applicant provided a response from Cumberland Ecologist dated 10 June 2010. This response identified that the site contains three endangered ecological communities (EEC), namely, Littoral Rainforest, coastal Swamp Sclerophyll Forest and Swamp Oak Floodplain Forest. There is also minor intrusion of another EEC, the Subtropical Coastal Floodplain Forest in the margin of the south-western boundary of the site. The proposal does entail clearing of such vegetation.

An Assessment of Significance was provided which concludes that whilst there will be loss of regenerating habitat, it is well represented in the study area and will be protected and enhanced in the long term. Provision of compensatory habitat planting and enhancement will aid the long term survival of the community.

The Cumberland response report identifies that the subdivision is part of an approved Master Plan and has established two conservation areas (including adjoining Lot 8), providing for the conservation of EEC and habitat of threatened species such as the Common Blossom Bat. The conservation areas have already been managed and rehabilitated to improve vegetation and fauna habitat condition.

Conservation works and amelioration measures implemented for the Master Plan and the Court Consent include the following:

- Conservation of significant stands of vegetation in lot 500 and lot 8
- Dune management plan including \$5,000 000 in dune restoration and management by Aspect North within Lot 500;
- Planting of over 70,000 *Banksia integrifolia* and other flowering plants in Lot 8 and Lot 500 to provide habitat for the Common Blossom Bat;
- A monetary payment of \$20,000 to TSC for revegetation works within Cudgen Nature Reserve;
- Removal of the Bitou Bush infestations within Lot 500; and
- Management of the proposed North West land to prevent dumping, fires etc.

It is concluded that the impacts of the subdivision on flora and fauna will not be negative when considered in the overall context of the Master Plan, Court Consent and compensation measures undertaken to date. No species impact statement is considered necessary.

Applicant's Response – Setback to Cudgen Creek

The Ecological response argues that the minimum buffer distance of 40 metres from Cudgen Creek is justifiable given the average setback of the subdivision will exceed this distance (two thirds of the length of the western edge of the subdivision provides a setback greater than 200 metres) and because it will comply with the Guidelines for Riparian Corridors under the Water Management Act 2000.

Council Officer's Assessment

Council's ecologist has assessed the response and does not support the clearing of vegetation within Crown Road Reserve and within a 50 metre buffer distance to Cudgen Creek, without the provision of appropriate compensatory measures being included in the application. Council's ecologist has not accepted the assumption that the Blossom Bat restoration (undertaken as part of the Court Consent and Master Plan) is sufficient.

Council's ecologist has provided the following recommendation:

- 1) If the Joint Regional Planning Panel were to ask for more information, additional information that will be required includes:
 - A list of plant species recorded in each vegetation community as per Figure B3 of the Cumberland Ecology additional information;
 - Demonstrate that the restoration for the Eastern Blossom Bat is adequate to also offset for the loss of potential Swamp Oak Floodplain Forest, Swamp Sclerophyll Forest on Coastal Floodplains, Subtropical Coastal Floodplain Forest and Littoral Rainforest, and potential Freshwater Wetlands on Coastal Floodplains, or provide additional measures that demonstrate adequate compensation for the losses of EECs, 7(I) (habitat) zone and the reduction in places of the 50 m buffer to Cudgen Creek;
 - Provision of detailed and rigorous consideration to the potential Freshwater Wetlands on Coastal Floodplains, Swamp Oak Floodplain Forest, Swamp Sclerophyll Forest on Coastal Floodplains, Subtropical Coastal Floodplain Forest and Littoral Rainforest.
 - Provision of revised s5A assessment of significance for potential Freshwater Wetlands on Coastal Floodplains, Swamp Oak Floodplain Forest, Swamp Sclerophyll Forest on Coastal Floodplains, Subtropical Coastal Floodplain Forest and Littoral

Rainforest, with demonstrated consideration to the threatened species assessment guidelines and the precautionary principle;

- Confirmation of whether the changes to the AS 3959-1999 (in force 1 May 2010) does or does not require increased Asset Protection Zones and whether the 21 metre APZ referred to in the report is complied with on the ground. Amended plans are to be provided (if required), and ensure appropriate consideration in the Landscaping Plan and Operational Environmental Management Plan to be submitted.
- Further and rigorous detailed consideration to the ecologically sustainable development provisions of the EPA Act, the North Coast REP and the NSW Coastal Policy as related to native plants and animals; and
- These above considerations are to include direct and indirect impacts (resulting from proposed cut and fill, acid sulphate soil management, bushfire risk mitigation, landscaping, stormwater quality controls, habitat restoration-compensation) on and off site, and to the development of appropriate mitigation and compensatory measures.
- 2) If the Joint Regional Planning Panel were to approve the application, conditions that must appear on any consent includes:

Deferred commencement

- The following deferred commencement conditions must be approved by the Council's General Manager or delegate, and must be provided within 12 months of the granting of development consent;
- The applicant must demonstrate that the trees being retained on the site and on adjacent land can be protected in accordance with AS 4970-2009 Protection of trees on development sites;
- Provision of revised plans that delete the infrastructure aspects of the development from the 7(I) (Habitat) zone
- The applicant must provide a Landscaping Plan that identifies all the areas of proposed plantings, and a planting schedule (the species proposed to be planted, the densities, the species size and associated requirements, compliance with Planning for Bushfire Protection Guidelines, and whether or not they are characteristic of, or locally recorded in Swamp Oak Floodplain Forest, Swamp Sclerophyll Forest on Coastal Floodplains, Subtropical Coastal Floodplain Forest and Littoral Rainforest), the associated collection, propagation, maintenance requirements, timing and staging, specific and measurable performance criteria, and monitoring, evaluation, corrective

action, and reporting requirements. As compensation for the Glossy-black Cockatoo and Red-tailed Black Cockatoo, Allocasuarina littoralis is to be included in the Landscaping Plan and would need to be planted at sufficient densities to allow for appropriate levels of male:female ratios of mature plants to be achieved;

- The applicant must provide a Operational Environmental Management Plan that addresses the direct and indirect, perceived and actual impacts of all aspects of the proposed development to the endangered ecological communities, threatened species and their habitats, including:
- weed control and management;
- avoidance, mitigation and compensatory measures proposed in relation to all aspects of the proposal, timing and staging. The applicant must demonstrate adequate compensatory measures at a ratio of 2:1 for the loss of the endangered ecological communities, address compensatory habitat measures for the threatened fauna;
- vegetation and fuel management guidelines that provide for the establishment and on-going management of the APZ in accordance with the RFS Planning for Bushfire Protection Guidelines 2006 and Standards for Asset Protection Zones;
- specific and measurable performance criteria; and
- monitoring, evaluation, corrective action, and reporting requirements.

Prior to the issue of a Construction Certificate

- The applicant is to demonstrate that the trees being retained on the site and on adjacent land have been protected in accordance with AS 4970-2009 Protection of trees on development sites.
- Landscaping works are to be undertaken in accordance with the approved Landscaping Plan.
- The applicant is to demonstrate that the landscaping works have been and will be undertaken in accordance with the approved Landscaping Plan.
- All works are to be undertaken in accordance with the approved Operational Environmental Management Plan.
- The applicant is to demonstrate that the works have been and will be undertaken in accordance with the approved Operational Environmental Management Plan.

Prior to Construction

All works are to be undertaken in accordance with AS 4970-2009 Protection of trees on development sites.

- The applicant is to demonstrate that the trees being retained on the site and on adjacent land to have been protected in accordance with AS 4970-2009 Protection of trees on development sites.
- Landscaping works are to be undertaken in accordance with the approved Landscaping Plan.
- All works are to be undertaken in accordance with the approved Operational Environmental Management Plan.

During Construction

- All works are to be undertaken in accordance with AS 4970-2009 Protection of trees on development sites.
- Landscaping works are to be undertaken in accordance with the approved Landscaping Plan.
- All works are to be undertaken in accordance with the approved Operational Environmental Management Plan.

Prior to the Issue of an Occupation-subdivision Certificate

- The applicant is to demonstrate that the trees being retained on the site and on adjacent land have been protected in accordance with AS 4970-2009 Protection of trees on development sites.
- The applicant is to demonstrate that the landscaping works have been undertaken in accordance with the approved Landscaping Plan.
- The applicant is to demonstrate that the works have been undertaken in accordance with the approved Operational Environmental Management Plan.

During Occupation

The landscaped, and any compensatory habitat, areas are to be maintained in accordance with the Planning for Bushfire Protection Guidelines and the Standards for Asset Protection Zones and the guidelines in the approved Biodiversity Conservation Management Plan.

The ecologist's recommendation has not been adopted in this instance as it is based on the assumption that compensatory habitat planting has not occurred. This is not considered to be the case in light of the evidence provided by the applicant during the course of the application.

Notwithstanding, various conditions proposed above are included in the recommendation, including the requirement for an operational environmental management plan. It is also recommended that public access to Cudgen Creek is not provided from the site.

Landscaping

The SEE included a landscape plan which was assessed by Council's ecologist. The following comments were made in this regard:

"The proposed Landscaping Concept Plan identifies a schedule and palette of plants for each of the proposed landscaping areas. Some of the species on the schedule and palette are not appropriate for the site. The identified plantings for the streetscape includes Lophostemon confertus which grows to 40 m high and a stem diameter of 2m, and has bark which makes it a likely flammability risk and is not likely to be consistent with the Planning for Bushfire Protection Guidelines. The proposed plants for the screen plantings and shade trees for the pocket park are not identified. The open space central park identifies the trees Ficus macrophylla and Melaleuca quinquenervia but does not identify the plants for the planting area.

Species on the schedule that are appropriate includes Acmena hemilampra (now known as Syzygium hemilamprum), Cupaniopsis anacardioides, Callistemon citrinus (local stock not 'endeavour'), Ficus macrophylla, Dianella caerulea, Lomandra longifolia, Pandanus, Westringia fruticosus, Banksia integrifolia, Banksia robur, Agathis robusta, Juncus usitatus, and Isolepis nodosa (now known as Ficinia nodosa). Other species such as Allocasuarina littoralis, Harpullia pendula, and Melaleuca quinqueneriva should be considered for their consistency with the Planning for Bushfire Protection Guidelines.

Species on the schedule which are not appropriate includes Grevillea Honey Gem (potential to hybridise with local species), Callistemon citrinus Endeavour (potential to hybridise with local species), Lophostemon confertus (size and bark not appropriate), Lomandra longifolia tanika (potential to hybridise with local species), Liriope muscari evergreen giant (weed potential), Gazania rigens alba (known environmental weed), Dianella brevipedunculata (from SE Qld potentially local populations unknown, potential to hybridise with local species), and Banksia integrifolia prostrate (potential to hybridise with local species which is the focus of the habitat restoration plantings under the Master Plan).

Palette of plants shows two species not on the schedule, Myoporum parvifolium and Casuarina equisetifolia, of which neither is appropriate for planting at the site. The Myoporum parvifolium is from the South Far Western Plains, grows on clay soils and has the potential to hybridise with other local Myoporum species. Casuarina equisetifolia although recorded from the locality was never common and overplanting following sandmining has resulted in an abundance of this species, which may also hybridise with the other local Casuarinaceae species"

A condition is recommended requiring a revised landscape plan.

Water Quality

A Water Quality Monitoring Program was prepared by Cardno dated 8 August 2008. The report proposes monthly monitoring of Cudgen Creek pre, during and post construction. Considering the large scale of the development and

potential environmental impacts it is considered that during construction monitoring be amended to weekly. This is also consistent with other similar development within the Tweed Shire Council.

A revised Water Quality Monitoring program was submitted by Cardno dated 12 February 2010 and includes weekly surface water monitoring. Appropriate conditions are recommended in this regard.

Construction Noise

The construction phase of the proposal has the potential to impact upon existing residential dwellings located along the eastern site boundary.

A Construction Noise Management Plan has been prepared by Cardno dated 20 May 2010. Further discussion with Cardno have been undertaken in relation to the assessment method to calculate existing background noise and predicted noise impacts. These issues have been adequately resolved and it is considered that the management plan has been prepared in general accordance with the NSW Interim Construction Noise Guideline. It is anticipated that noise impacts from construction activities will be experienced by surrounding land uses. The management plan proposes appropriate construction hours and practical measures to ensure noise impacts are minimised and are considered adequate.

Groundwater

Section 2.3 of the SEE indicates that groundwater is not anticipated to be intercepted during excavation works. Condition to apply to ensure no dewatering activities are undertaken without prior approval from Council's General Manager or delegate.

<u>Dust</u>

A dust management plan is considered necessary and conditions are imposed to ensure such is approved prior to commencement of works.

(c) Suitability of the site for the development

Surrounding Landuses/Development

The subject site is compatible with surrounding residential development to the north, south and east. Conditions are recommended to ensure that the edge effects upon the adjoining reserve are limited.

Flora and Fauna

The site is currently vegetated and assessment of impacts is discussed above. The ecological features of the site have been taken into account when the SEPP 71 Master Plan and Court Consent were issued, requiring compensatory habitat.

Topography

The site will require bulk earthworks in the form of cut and fill to create a reasonably level site which drains towards Cudgen Creek. Details of cut and fill depths is shown on Plan No. DA11 cut / fill depth prepared by Cardno and dated October 2009. The plan details cut up to 5m for a small section of the site adjoining existing stage 6B along the eastern boundary. The application also states that no imported fill will be required as it is intended to obtain all fill material from on site earthworks.

Council's development design specifications for mass landform change include;

The proportion of a subdivision site (plan area) that contains cut or fill areas with finished surface levels that depart from natural surface levels by more than 5m shall not exceed 10%. Variations up to 15% of site area may be considered if such variations have a demonstrated environmental benefit (eg. avoidance of importing borrowed fill off site).

The cut and fill plan shows relatively small areas of cut and fill up to 5m, these areas are deemed to be less than the 10% requirement for cut and fill. The earthworks are compliant with Council's policies.

Site Orientation

The configuration of the site allows for the majority of long axis of proposed lots to be provided on a north / south or east /west orientation to allow for increased solar access.

Contaminated Land

The site is constrained by contaminants from previous sand mining activities. This has been suitably addressed through Remediation Action Plans discussed above.

(d) Any submissions made in accordance with the Act or Regulations

The application was notified and advertised from Wednesday 4 November 2009 to Wednesday 18 November 2009.

During this time, seven submissions were received objecting to the proposal. Issues raised in the submissions are outlined in the table below, including an officer response to the issues.

Issue of Concern	Response
There is concern that the central park does not	Conditions are recommended to ensure
include toilet amenities, washing facilities,	appropriate play equipment and amenities
swings, seating and bins.	are provided.
A cycleway on the western boundary needs to	A cycleway is proposed in this location and
be installed to provide a link with the adjoining	will be required to be constructed as part of
town centre to the south and Seaside City to	an approval.
the north.	
Access to Cudgen Creek should be provided	It is not considered that access to Cudgen

including a safe viewing platform.	Creek is appropriate from the western part
	of the site, with regard to the environmental
	values of the land and the 'Cudgen Creek Recreation and Public Access Plan'.
A fence should be constructed along the western boundary to prevent the general public from entry.	Conditions of approval require an environmental operation plan which considers recreation and access plan for Lot 8, taking into consideration the Cudgen Creek Recreation and Public Access Plan. Access will need to be managed to ensure impacts on the nature reserve are limited,
	including provision of fencing.
A construction access road should be provided off Dianella Drive to prevent construction vehicles from using Casuarina Way to limit impacts associated with dust, safety and noise.	The applicant has provided a construction Noise management Plan (20 May 2010) which includes measures to reduce environmental nuisance during construction activities. It includes a complaint response action, noise monitoring and corrective action. Additional conditions are recommended in relation to management of dust.
Roadways should be 8 metres and not 7.5 metres	Council's Traffic Engineer is satisfied with the road design.
Concern with extension of development into the site and impacts on wildlife.	The proposal is part of an approved SEPP 71 Master Plan and has been identified for residential development for some time. Various habitat planting and restoration work has been undertaken to compensate for loss of habitat in the site.

(e) Public interest

Land and Property Management Authority

The Land and Property Management Authority (LPMA) made a submission to the proposal including the following points:

 The proposed development includes sections of unnamed and unformed Crown road (along the western and northern boundary of the subdivision). Land owners consent was not provided by LPMA. In respect of the northern Crown public road, the proponent was advised to contact Tweed Shire Council to request submission of an application to the LP'MA to transfer ownership to Council.

In response to this concern, a request for transfer to ownership has been undertaken and conditions are required to ensure that the land is transferred and Council's owners consent provided prior to issue of a construction certificate.

• In relation to the infiltration pond proposed between Tweed Coast Road and the south-western boundary, LPMA suggests that this road should be closed and purchased by the proponent and dedicated to Council as an addition to the adjacent Council public reserve. Council's engineer is satisfied with the proposed stormwater treatment subject to conditions.

• There is concern that the Crown public road adjoining the western boundary of Lot 224 will include an infiltration pond of 1980m² in association with a road and shared cycleway.

Council's engineer is satisfied with the proposed stormwater treatment subject to conditions.

• LPMA supports the establishment of a minimum 50 metre vegetated buffer to the SEPP 14 land.

Comments are noted however given the majority of the buffer is zoned Environmental Protection and two thirds of the site is located at least 200 metres from Cudgen Creek, the proposed buffer width is considered suitable.

• Stormwater treatment measures should meet TSC objectives.

Conditions are recommended requiring stormwater treatment meets Council's policies.

Rural Fire Service

The Rural Fire Service has provided general terms of approval, which are incorporated into the conditions.

OPTIONS:

- 1. Approve the application subject to conditions.
- 2. Refuse the application.

LEGAL/RESOURCE/FINANCIAL IMPLICATIONS:

The applicant may appeal the decision in the NSW Land and Environment Court.

POLICY IMPLICATIONS:

Nil.

CONCLUSION:

Council is in receipt of a subdivision application for the final stage of Casuarina Beach. The proposed subdivision is consistent with the approved SEPP 71 Master Plan and the intent of the 2 (e) zone.

The proposal is recommended for approval, subject to conditions to limit and manage potential impacts arising from the development.

UNDER SEPARATE COVER/FURTHER INFORMATION:

Nil.

CONDITIONS OF CONSENT

GENERAL

1. The development shall be completed in accordance with the Statement of Environmental Effects prepared by BBC Consulting Planners dated 15 October 2009, "Response to Information Request" prepared by Cardno dated 25 March 2010 and plans prepared by Cardno, listed in the table below, except where varied by the conditions of this consent.

Plan title	Figure Number	Date /
	0	Revision
Concept Master Plan	DA 3	Feb 2010 E
Lot Layout and Number	DA 4	Feb 2010 E
Conceptual Pedestrian Movements	DA 5	Feb 2010 F
Existing Land Description, Zoning and	DA6	Feb 2010 D
Features		
Residue of Existing Lot 224 Real Property	DA7	Feb 2010 E
Lot Details Sheet 1 of 2		
Residue of Existing Lot 224 Real Property	DA 8	Feb 2010 D
Lot Details sheet 2 of 2		
Natural Surface Plan	DA 9	Feb 2010 F
Finished Surface Contours	DA 10	Feb 2010 G
Cut / Fill Depths Layout Plan	DA 11	Feb 2010 E
Erosion and Sedimentation Control Plan	DA 12	Feb 2010 E
Roadworks – Road Hierarchy	DA 13	Feb 2010 E
Roadworks Layout plan Sheet 1 of 2	DA 14	Feb 2010 E
Roadworks – Layout Plan	DA 15	Feb 2010 D
Sheet 2 of 2		
Roadworks Longitudinal Sections Road 1	DA 16	Oct 2009 D
and 2		
Roadworks Longitudinal Sections Roads 3	DA 17	Oct 2009 D
and 4		
Roadworks Longitudinal Sections Road 5	DA 18	Oct 2009 C
Roadworks Longitudinal Sections Road 6	DA 19	Feb 2010 E
Sheet 1 of 2		
Roadworks Longitudinal Sections Road 6	DA 20	Feb 2010 D
Sheet 2 of 2		
Stormwater Drainage Layout – Stormwater	DA 21	Feb 2010 E
Drainage Strategy		
Stormwater Drainage Infiltration Details	DA 22	Feb 2010 F
Water Reticulation Layout Plan	DA 23	Feb 2010 E
Sewer Reticulation Layout Plan Sheet 1 of 2	DA 24	Feb 2010 E
Sewer Reticulation Layout Plan Sheet 2 of 2	DA 25	Feb 2010 E
Asset Protection Zone	DA 26	Feb 2010 E
Public Roads and Dedications	DA 27	Feb 2010 C
Lot 8 Flood Mitigation	DA 28	Feb 2010 A
Typical Road Cross Sections Sheet 1 of 2	DA 29	Feb 2010 A
Typical Road Cross Sections – Sheet 2 of 2	DA 30	Feb 2010 A

2. The use of crushing plant machinery, mechanical screening or mechanical blending of materials is subject to separate development application.

[GEN0045]

3. The subdivision is to be carried out in accordance with Tweed Shire Council Development Control Plan Part A5 - Subdivision Manual and Councils Development Design and Construction Specifications.

[GEN0125]

4. Approval is given subject to the location of, protection of, and/or any necessary approved modifications to any existing public utilities situated within or adjacent to the subject property.

[GEN0135]

5. A Sewer manhole is present on this site. This manhole is not to be covered with soil or other material.

Should adjustments be required to the sewer manhole, then application shall be made to Council's Community and Natural Resources Division for approval of such works.

[GEN0155]

6. A Subdivision Works Accredited Certifier (SWAC) shall be appointed to assume the responsibility for certifying the compliance of the completed public infrastructure (refer to Development Construction Specification C101.01 for variations).

The SWAC shall be accredited by the Building Professionals Board Accreditation Scheme, in the following categories,

- B1: Accredited Certifier Subdivision certificate
- C3: Accredited Certifier Stormwater Management and facilities design compliance
- C4: Accredited Certifier Stormwater management facilities construction compliance
- C5: Subdivision works and building works (location of works as constructed) compliance
- C6: Accredited Certifier Subdivision road and drainage construction compliance

The SWAC shall provide documentary evidence to Council demonstrating current accreditation with the Building Professionals Board prior to approval and issue of any Construction Certificate.

[GEN0275]

7. Water quality monitoring shall be undertaken pre-construction, during construction and post-construction in accordance with the Water Quality Monitoring Program prepared by Cardno dated 12 February 2010 to the satisfaction of Council's General manger or delegate.

[GENNS01]

- 8. The subdivision and creation of proposed lots 165, 166, 167, 168 and 169 is not approved.
- 9. Proposed lot 174 is not approved as public open space and in this regard the use of lot 174 is to be subject of further discussion and final agreement between the General Manager or his delegate.

10. The developer must undertake maintenance operations on all public open space, including parks, for a minimum of 12 months after the Subdivision is registered with the Land Titles Office. This includes establishment time, all soft as well as hard landscaping, including mowing and weed control. Provision and costs assocated with water consumption for irrigation or electricity during this period must also be met by the developer.

[GENNS02]

- 11. No entry statement structures are to be located on public land.
- 12. The clearing of vegetation in Lot 8 DP1014470 is not permitted unless in accordance with works indicated in the approved plans.

[GENNS03]

PRIOR TO ISSUE OF CONSTRUCTION CERTIFICATE

13. Proposed Lots 172 shall be suitably embellished at no cost to Council including grassing, landscaping, seating, playground equipment and shade cover in accordance with detailed plans to accompany the Construction Certificate application. Embellishment shall include public toilet facilities, in accordance with a design approved by the General Manager or his delegate. Where play equipment is installed a minimum area of 10m around the equipment is to be turfed and the remaining area seeded.

Where a developer pays Council to acquire and install play equipment, Council will NOT install the equipment until a minimum of 20% of the lots in that stage of the development are occupied. The embellishment shall be completed prior to the issue of a Subdivision Certificate.

[PCC0235]

14. Prior to the issue of a Construction Certificate, a cash bond or bank guarantee (unlimited in time) shall be lodged with Council for an amount based on 1% of the value of the works as set out in Council's fees and charges at the time of payment.

The bond may be called up at any time and the funds used to rectify any noncompliance with the conditions of this consent which are not being addressed to the satisfaction of the General Manager or his delegate.

The bond will be refunded, if not expended, when the final Subdivision/Occupation Certificate is issued.

[PCC0275]

15. In accordance with Section 109F(i) of the Environmental Planning and Assessment Act 1979 (as amended), a construction certificate for SUBDIVISION WORKS OR BUILDING WORKS shall NOT be issued until any long service levy payable under Section 34 of the Building and Construction Industry Long Service Payments Act, 1986 (or where such levy is payable by instalments, the first instalment of the levy) has been paid. Council is authorised to accept payment. Where payment has been made elsewhere, proof of payment is to be provided.

[PCC0285]

16. A traffic control plan in accordance with AS1742 and RTA publication "Traffic Control at Work Sites" Version 2 shall be prepared by an RTA **accredited**

person and shall be submitted to the Principal Certifying Authority prior to issue of the Construction Certificate. Safe public access shall be provided at all times.

[PCC0865]

17. The proponent shall submit plans and specifications with an application for construction certificate for the following civil works and any associated subsurface overland flow and piped stormwater drainage structures designed in accordance with Councils Development Design and Construction specifications. These works include the following;

URBAN ROAD

- (a) Construction of vertical face kerb and gutter on an approved alignment along with associated sub-surface drainage and overland stormwater drainage systems is to be provided for all roads within the subdivision. All kerb and gutter is to comply with the requirements of Development Design Specification D1.
- (b) Footpaths and cycleways for the development are to be constructed in accordance with Council's Development Design Specifications. The cycleway is to be constructed to a thickness of 150mm with SL 72 reinforcement.
- (c) Upright vertical kerb and gutter is to be provided on both sides of Dianella Drive in accordance with Council's Development Design Specifications.
- (d) A 0.5m carriageway widening is to be provided on corners between a radius of 20m and 30m and a 1.0m carriageway widening is required on corners with a radius less than 20m.

DRAINAGE

(a) Construction of a stormwater drainage system that will convey all waters through the site to a legal point of discharge. The sub-surface and overland drainage systems shall convey the respective flows from minor and major storm events to a legal point of discharge. Clearly defined upstream catchment areas and supporting stormwater calculations shall accompany the engineering design plans.

OTHER WORKS

- (b) The construction certificate application must include the continuation of Road 6 and the associated 2.5m wide reinforced concrete cycleway through to its connection to Casuarina Way. Engineering plans must demonstrate compatibility of the subdivision works with the adjoining Seaside development.
- (b) Construction works to prevent ponding of stormwater in Lot 8 DP 1014470 shall be designed and constructed in accordance with Cardno

Figure No. DA 28 (Rev. A, February 2010) except where otherwise modified by this consent.

[PCC0875]

18. Details from a Structural Engineer are to be submitted to the Principal Certifying Authority for approval for all retaining walls/footings/structures etc taking into consideration the zone of influence on the sewer main or other underground infrastructure and include a certificate of sufficiency of design prior to the determination of a construction certificate.

[PCC0935]

- 19. Prior to the issue of a Construction Certificate for civil works the following detail in accordance with Councils Development Design and Construction Specifications shall be submitted to the Principal Certifying Authority for approval.
 - (a) copies of compliance certificates relied upon
 - (b) four (4) copies of detailed engineering plans and specifications. The detailed plans shall include but are not limited to the following:
 - earthworks
 - roadworks/furnishings
 - stormwater drainage
 - water supply works
 - sewerage works
 - landscaping works
 - sedimentation and erosion management plans
 - location of all service conduits (water, sewer, electricity supply and telecommunication infrastructure)

The Environmental Planning and Assessment Act, 1979 (as amended) makes no provision for works under the Water Management Act 2000 and Section 138 of the Roads Act to be certified by an Accredited Certifier.

[PCC0985]

- 20. Permanent stormwater quality treatment shall be provided in accordance with the following:
 - (a) The Construction Certificate Application shall include a detailed stormwater management plan (SWMP) for the occupational or use stage of the development prepared in accordance with Section D7.07 of Councils *Development Design Specification D7 Stormwater Quality*.
 - (b) Permanent stormwater quality treatment shall comply with section 5.5.3 of the Tweed Urban Stormwater Quality Management Plan and Councils Development Design Specification D7 - Stormwater Quality.
 - (c) The stormwater and site works shall incorporate water sensitive design principles and where practical, integrated water cycle management.
 - (d) Specific Requirements to be detailed within the Construction certificate application include:

(i) Shake down area along the haul route immediately before the intersection with the road reserve.

[PCC1105]

21. Disposal of stormwater by means of infiltration devices shall be carried out in accordance with Section D7.9 of Tweed Shire Councils Development Design and Construction Specification - Stormwater Quality.

[PCC1125]

- 22. A construction certificate application for works that involve any of the following:-
 - connection of a private stormwater drain to a public stormwater drain
 - installation of stormwater quality control devices
 - erosion and sediment control works

will not be approved until prior separate approval to do so has been granted by Council under S68 of the Local Government Act.

- a) Applications for these works must be submitted on Council's standard s68 stormwater drainage application form accompanied by the required attachments and the prescribed fee.
- b) Where Council is requested to issue a construction certificate for civil works associated with a subdivision consent, the abovementioned works can be incorporated as part of the construction certificate application, to enable one single approval to be issued. Separate approval under section 68 of the LG Act will then NOT be required.

[PCC1145]

- 23. Erosion and Sediment Control shall be provided in accordance with the following:
 - (a) The Construction Certificate Application must include a detailed erosion and sediment control plan prepared in accordance with Section D7.07 of *Development Design Specification D7 Stormwater Quality.*
 - (b) Construction phase erosion and sediment control shall be designed, constructed and operated in accordance with *Tweed Shire Council Development Design Specification D7 - Stormwater Quality* and its Annexure A - "Code of Practice for Soil and Water Management on Construction Works".

[PCC1155]

- 24. Where water is to be drawn from Councils reticulated system, the proponent shall: -
 - Make application for the hire of a Tweed Shire Council metered standpipe including Councils nomination of point of extraction.
 - Where a current standpipe approval has been issued application must be made for Councils nomination of a point of extraction specific to the development.
 - Payment of relevant fees in accordance with Councils adopted fees and charges.

[PCC1205]

25. Cut and fill levels for the development are to be in accordance with Cardno Drawing No. 7079/2/1 Figure No. DA10 titled "Finished Surface Contours"

dated February 2010 and Drawing No. 7079/2/1 Figure No. DA11 titled "Cut/Fill depths layout plan dated February 2010.

[PCCNS01]

- 26. Prior to the issue of a Construction Certificate for each stage of the project, a Construction Management Plan shall be submitted to and approved by the Certifying Authority. A copy of the approved plan shall be submitted to Council. The Plan shall address, but not be limited to, the following matters where relevant:
 - a) hours of work;
 - b) contact details of site manager;
 - c) traffic and pedestrian management;
 - d) noise and vibration management;
 - e) construction waste management;
 - f) erosion and sediment control; and,
 - g) flora and fauna management.

[PCCNS02]

27. All existing unformed crown road reserves indicated on Cardno Figure DA 27 (dated February 2010 Revision C) must be transferred to Council ownership and owners consent provided prior to issue of a construction certificate.

[PCCNS03]

- 28. A maintenance plan for the Asset Protection Zones (APZ) on public land is to be prepared and approved by the General Manager or his delegate. The plan should be consistent with Planning for Bushfire requirements and guide Council on the maintenance actions required for the APZ.
- 29. Detailed landscape plans must be submitted for all areas to be dedicated as casual open space, cycleways/pedestrian links, streetscapes and asset protection zones. All landscape plans will require approval from the Manager, Recreation Services, Tweed Shire Council prior to issue of construction certificate. Landscape plans must be consistent with Tweed Shire Councils DCP Section A5 Subdivision Manual (Table A5-8.2.1) and Development Design Specification D14. Tweed Shire Council standard drawings S.D.701, 702, 703, 704, 705 and 706 will apply. The landscape plans must provide slope information and all underground services, and indicate any implications or constraints at or beyond the boundary that will affect ongoing management of the public land.

The Landscaping Plan must identify proposed plantings, and a planting schedule (the species proposed to be planted, the densities, the species size and associated requirements and whether or not they are characteristic of, or locally recorded in Swamp Oak Floodplain Forest, Swamp Sclerophyll Forest on Coastal Floodplains, Subtropical Coastal Floodplain Forest and Littoral Rainforest), the associated collection, propagation, maintenance requirements, timing and staging, specific and measurable performance JRPP (Northern Region) Business Paper – 22 July 2010 – 2009NTH010 Page 63

criteria, and monitoring, evaluation, corrective action, and reporting requirements. As compensation for the Glossy-black Cockatoo and Red-tailed Black Cockatoo, *Allocasuarina littoralis* is to be included in the Landscaping Plan and would need to be planted at sufficient densities to allow for appropriate levels of male:female ratios of mature plants to be achieved.

[PCCNS04]

- 30. The applicant must demonstrate that the trees proposed to be retained on site and on adjoining land can be protected in accordance with AS 4970-2009 Protection of trees on development sites.
- 31. The applicant must submit a plan of management in the form of an Operational Environmental Management Plan and in accordance with Clause 28 of Tweed LEP 2000 detailing consideration of each of the following potential impacts on Lot 8 DP1014470 (and adjacent conservation lands) and the management of these impacts during construction and operation of the development (with consideration of the lands' role as compensation for other parts of the Casuarina development, rather than for recreation). All relevant requirements specified in the plan should be structured in a useable form for construction use and must be approved by the General Manager or his delegate prior to issue of construction certificate:
 - recreation and public access public access through Lot 8 is not considered appropriate and the management plan should include details of proposed fencing and management of unauthorised entry;
 - continued access across the site to Lot 8 DP 1014470 by bush regeneration personnel for ongoing restoration works in accordance with the Blossom Bat Habitat Restoration Plan – Cudgen Nature Reserve and Tweed Shire Council Land adjacent to Casuarina (Bushland Restoration Services 2008) will be required;
 - measures to protect the midden some 80 metres or so from the central development area from resident and development impacts;
 - drainage and hydrological impacts caused by cut and fill on site and removal of vegetation which require consideration in relation to persistence of important vegetation communities and habitat within Lot 8 DP 1014470;
 - loss of vegetation associated with drainage works;
 - provision of post and rail fencing along cycleways;
 - Consideration of the Cudgen Creek Recreation and Public Access Plan (October 2008).

[PCCNS05]

32. All recommendations contained in the 'Aboriginal and European Cultural Heritage Assessment Report', prepared by Mary Dallas Consulting Archaeologists, dated March 2009 shall be implemented prior to commencement of work.

[PCWNS02]

PRIOR TO COMMENCEMENT OF WORK

33. The proponent shall accurately locate and identify any existing sewer main, stormwater line or other underground infrastructure within or adjacent to the site and the Principal Certifying Authority advised of its location and depth

prior to commencing works and ensure there shall be no conflict between the proposed development and existing infrastructure prior to start of any works.

- 34. Prior to the commencement of works, the applicant shall ensure that a Site-Specific Safety Management Plan and Safe Work Methods for the subject site have been prepared and put in place in accordance with either:-
 - (a) Occupation Health and Safety and Rehabilitation Management Systems Guidelines, 3rd Edition, NSW Government, or
 - (b) AS4804 Occupation Health and Safety Management Systems General Guidelines on Principles Systems and Supporting Techniques.
 - (c) WorkCover Regulations 2000
- Prior to work commencing, a "Notice of Commencement of Building or Subdivision Work and Appointment of Principal Certifying Authority" shall be submitted to Council at least 2 days prior to work commencing.

[PCW0225]

36. All imported fill material shall be from an approved source. Prior to commencement of filling operations details of the source of the fill, nature of material, proposed use of material and confirmation that further blending, crushing or processing is not to be undertaken shall be submitted to the satisfaction of the General Manager or his delegate. Once the approved haul route has been identified, payment of the Heavy

Haulage Contribution calculated in accordance with Section 94 Plan No 4 will be required prior to commencement of works.

[PCW0375]

37. Prior to start of works the PCA is to be provided with a certificate of adequacy of design, signed by a practising Structural Engineer on all proposed retaining walls in excess of 1.2m in height. The certificate must also address any loads or possible loads on the wall from structures adjacent to the wall and be supported by Geotechnical assessment of the founding material.

[PCW0745]

- 38. Civil work in accordance with a development consent must not be commenced until:-
 - (a) a construction certificate for the civil work has been issued in accordance with Councils Development Construction Specification C101 by:
 - (i) the consent authority, or
 - (ii) an accredited certifier, and
 - (b) the person having the benefit of the development consent:
 - (i) has appointed a principal certifying authority,
 - (ii) has appointed a Subdivision Works Accredited Certifier (SWAC) accredited in accordance with Tweed Shire Council DCP Part A5 – Subdivision Manual, Appendix C with accreditation in accordance with the Building Professionals Board Accreditation Scheme. As a minimum the SWAC shall possess accreditation in the following categories:

- C4: Accredited Certifier Stormwater management facilities construction compliance
- C6: Accredited Certifier Subdivision road and drainage construction compliance

The SWAC shall provide documentary evidence to Council demonstrating current accreditation with the Building Professionals Board prior to approval and issue of any Construction Certificate, and

- (iii) has notified the consent authority and the council (if the council is not the consent authority) of the appointment,
- (iv) a sign detailing the project and containing the names and contact numbers of the Developer, Contractor and Subdivision Works Accredited Certifier is erected and maintained in a prominent position at the entry to the site in accordance with Councils Development Design and Construction Specifications. The sign is to remain in place until the Subdivision Certificate is issued, and
- (c) the person having the benefit of the development consent has given at least 2 days' notice to the council of the person's intention to commence the civil work.

[PCW0815]

39. The proponent shall provide to the PCA copies of Public Risk Liability Insurance to a minimum value of \$10 Million for the period of commencement of works until the completion of the defects liability period.

[PCW0835]

40. Prior to commencement of work on the site all erosion and sedimentation control measures are to be installed and operational including the provision of a "shake down" area where required to the satisfaction of the Principal Certifying Authority.

In addition to these measures the core flute sign provided with the stormwater approval under Section 68 of the Local Government Act is to be clearly displayed on the most prominent position of the sediment fence or erosion control device which promotes awareness of the importance of the erosion and sediment controls provided.

This sign is to remain in position for the duration of the project.

[PCW0985]

41. Prior to the commencement of earthworks an Acid Sulfate Soil Management Plan including appropriate soil investigations shall be submitted and approved by the General Manager.

[PCWNS01]

42. Prior to the commencement of earthworks all pre-earthwork surface radiation monitoring results as required by Part 3.1 and 3.2 of the approved Remediation Action Plan shall be provided to Council to the satisfaction of the General Manager.

[PCWNS02]

43. Prior to the commencement of earthworks a Dust Management Plan shall be submitted and approved by the General Manager.

DURING CONSTRUCTION

- 44. All proposed works are to be carried out in accordance with the conditions of development consent, approved construction certificate, approved management plans, drawings and specifications.
- 45. Construction and/or demolition site work including the entering and leaving of vehicles is limited to the following hours, unless otherwise permitted by Council: -

Monday to Saturday from 7.00am to 6.00pm

No work to be carried out on Sundays or Public Holidays

The proponent is responsible to instruct and control subcontractors regarding hours of work.

[DUR0205]

- 46. All reasonable steps shall be taken to muffle and acoustically baffle all plant and equipment. In the event of complaints from the neighbours, which Council deem to be reasonable, the noise from the construction site is not to exceed the following:
 - A. Short Term Period 4 weeks.

 $L_{Aeq, 15 \text{ min}}$ noise level measured over a period of not less than 15 minutes when the construction site is in operation, must not exceed the background level by more than 20dB(A) at the boundary of the nearest likely affected residence.

B. Long term period - the duration.

 $L_{Aeq, 15 min}$ noise level measured over a period of not less than 15 minutes when the construction site is in operation, must not exceed the background level by more than 15dB(A) at the boundary of the nearest affected residence.

[DUR0215]

47. All lots must be graded to prevent the ponding of surface water and be adequately vegetated to prevent erosion from wind and/or water to the satisfaction of the General Manager or his delegate.

[DUR0745]

48. Proposed earthworks shall be carried out in accordance with AS 3798, "Guidelines on Earthworks for Commercial and Residential Developments". The earthworks shall be monitored by a Registered Geotechnical Testing Consultant to a level 1 standard in accordance with AS 3798. A certificate from a registered Geotechnical Engineer certifying that the filling operations comply with AS3798 shall be submitted to the Principal Certifying Authority upon completion.

[DUR0795]

49. The use of vibratory compaction equipment (other than hand held devices) within 100m of any dwelling house, building or structure is strictly prohibited.

[DUR0815]

50. No soil, sand, gravel, clay or other material shall be disposed of off the site without the prior written approval of Tweed Shire Council General Manager or his delegate.

[DUR0985]

51. The surrounding road carriageways are to be kept clean of any material carried onto the roadway by construction vehicles. Any work carried out by JRPP (Northern Region) Business Paper – 22 July 2010 – 2009NTH010 Page 67

Council to remove material from the roadway will be at the Developers expense and any such costs are payable prior to the issue of a Subdivision Certificate/Occupation Certificate.

[DUR0995]

- 52. All work associated with this approval is to be carried out so as not to impact on the neighbourhood, adjacent premises or the environment. All necessary precautions, covering and protection shall be taken to minimise impact from: -
 - Noise, water or air pollution
 - dust during filling operations and also from construction vehicles
 - material removed from the site by wind

[DUR1005]

53. A concrete footpath 1.2 metres wide and a 2.5 metre wide cycleway is to be provided in accordance with Cardno Plan DA 5 dated February 2010. The footpath shall be 100 millimetres thick and constructed on a compacted base. The footpath and cycleways must be in accordance with Councils Development Design and Construction Specifications and Standard Drawing SD013.

Twenty four (24) hours notice is to be given to Council's Engineering & Operations Division before placement of concrete to enable formwork and subgrade to be inspected.

[DUR1735]

54. Where the construction work is on or adjacent to public roads, parks or drainage reserves the development shall provide and maintain all warning signs, lights, barriers and fences in accordance with AS 1742 (Manual of Uniform Traffic Control Devices). The contractor or property owner shall be adequately insured against Public Risk Liability and shall be responsible for any claims arising from these works.

[DUR1795]

- 55. Before the commencement of the relevant stages of road construction, pavement design detail including reports from a Registered NATA Consultant shall be submitted to Council for approval and demonstrating.
 - (a) That the pavement has been designed in accordance with Tweed Shire Councils Development Design Specification, D2.
 - (b) That the pavement materials to be used comply with the specifications tabled in Tweed Shire Councils Construction Specifications, C242-C245, C247, C248 and C255.
 - (c) That site fill areas have been compacted to the specified standard.
 - (d) That supervision of Bulk Earthworks has been to Level 1 and frequency of field density testing has been completed in accordance with Table 8.1 of AS 3798-1996.

[DUR1805]

56. During the relevant stages of road construction, tests shall be undertaken by a Registered NATA Geotechnical firm. A report including copies of test results shall be submitted to the PCA prior to the placement of the wearing surface demonstrating:

- (a) That the pavement layers have been compacted in accordance with Councils Development Design and Construction Specifications.
- (b) That pavement testing has been completed in accordance with Table 8.1 of AS 3798 including the provision of a core profile for the full depth of the pavement.

[DUR1825]

57. Any damage caused to public infrastructure (roads, footpaths, water and sewer mains, power and telephone services etc) during construction of the development shall be repaired in accordance with Councils Development Design and Construction Specifications prior to the issue of a Subdivision Certificate.

[DUR1875]

58. Tweed Shire Council shall be given a minimum 24 hours notice to carry out the following compulsory inspections in accordance with Tweed Shire Council Development Control Plan, Part A5 - Subdivision Manual, Appendix D. Inspection fees are based on the rates contained in Council's current Fees and Charges:-Roadworks

(a) Pre-construction commencement erosion and sedimentation control measures

- (b) Completion of earthworks
- (c) Excavation of subgrade
- (d) Pavement sub-base
- (e) Pavement pre kerb
- (f) Pavement pre seal
- (g) Pathways, footways, bikeways formwork/reinforcement
- (h) Final inspections on maintenance
- (i) Off Maintenance inspection

Water Reticulation, Sewer Reticulation, Drainage

- (a) Excavation
- (b) Bedding
- (c) Laying/jointing
- (d) Manholes/pits
- (e) Backfilling
- (f) Permanent erosion and sedimentation control measures

- (g) Drainage channels
- (h) Final inspection on maintenance
- (i) Off maintenance

Sewer Pump Station

- (a) Excavation
- (b) Formwork/reinforcement
- (c) Hydraulics
- (d) Mechanical/electrical
- (e) Commissioning on maintenance
- (f) Off maintenance

Council's role is limited to the above mandatory inspections and does <u>NOT</u> include supervision of the works, which is the responsibility of the Developers Supervising Consulting Engineer.

The EP&A Act, 1979 (as amended) makes no provision for works under the Water Management Act 2000 to be certified by an "accredited certifier".

[DUR1895]

59. All retaining walls in excess of 1.2 metres in height must be certified by a Qualified Structural Engineer verifying the structural integrity of the retaining wall after construction. Certification from a suitably qualified engineer experienced in structures is to be provided to the PCA prior to the issue of an Subdivision Certificate.

[DUR1955]

60. The developer/contractor is to maintain a copy of the development consent and Construction Certificate approval including plans and specifications on the site at all times.

[DUR2015]

61. The applicant shall obtain the written approval of Council to the proposed road/street names and be shown on the Plan of Subdivision accompanying the application for a Subdivision Certificate.

Application for road naming shall be made on Councils Property Service Form and be accompanied by the prescribed fees as tabled in Councils current Revenue Policy - "Fees and Charges".

The application shall also be supported by sufficient detail to demonstrate compliance with Councils Road Naming Policy.

62. Inter allotment drainage shall be provided to all lots where roof water for dwellings cannot be conveyed to the street gutter by gravitational means.

[DUR2285]

63. All stormwater gully lintels shall have the following notice cast into the top of the lintel: 'DUMP NO RUBBISH, FLOWS INTO CREEK' or similar wording in accordance with Councils Development Design and Construction Specifications.

[DUR2355]

64. Regular inspections shall be carried out by the Supervising Engineer on site to ensure that adequate erosion control measures are in place and in good condition both during and after construction.

Additional inspections are also required by the Supervising Engineer after each storm event to assess the adequacy of the erosion control measures, make good any erosion control devices and clean up any sediment that has left the site or is deposited on public land or in waterways.

This inspection program is to be maintained until the maintenance bond is released or until Council is satisfied that the site is fully rehabilitated.

[DUR2375]

- 65. The site shall not be dewatered, unless written approval to carry out dewatering operations is received from the Tweed Shire Council General Manager or his delegate.
- 66. During construction, a "satisfactory inspection report" is required to be issued by Council for all s68h2 permanent stormwater quality control devices, prior to backfilling. The proponent shall liaise with Councils Engineering and Operations Division to arrange a suitable inspection.

[DUR2445]

67. An accurate plan of the sewage pumping station site shall be submitted to Council 60 days prior to lodgement of the Application for Subdivision Certificate to allow the land to be classified.

The Environmental Planning and Assessment Act, 1979 (as amended) makes no provision for works under the Water Supplies Authorities Act, 1987 to be certified by an Accredited Certifier.

[DUR2635]

68. All topsoil stockpiles are to be sprayed with dust suppression material such as "hydromulch", "dustex" or equivalent. All haul roads shall be regularly watered or treated with dust suppression material or as directed on site.

[DURNS01]

69. All construction activities that generate dust shall cease when average wind speeds exceed 15m/s(54 km/h). The applicant shall be responsible for providing a calibrated wind meter on site to monitor wind speeds. This data must be able to be produced to Council on request.

[DURNS02]

70. All works shall comply with the North West Precinct, Casuarina Beach Radiation Investigation and Remediation Action Plan prepared by Cardno dated 21 March 2010 (Revision 21 May 2010) to the satisfaction of Council's General Manager or delegate. Modifications to the approved Remediation Action Plan are not permissible without the separate written approval from Council's General Manager or Delegate.

[DURNS03]

- 71. All works shall comply with the approved Acid Sulfate Soil Management Plan to the satisfaction of Council's General Manager or delegate.
- 72. All works shall comply with the Construction Noise Management Plan prepared by Cardno dated 20 May 2010 to the satisfaction of Council's General Manager or delegate.
- 73. A community liaison officer and community liaison contact phone number shall be available on a 24-hour basis during construction works. Details of the contact person and telephone number shall be clearly displayed at the site entry. Details of the contact person and telephone number shall be locally advertised a minimum of fourteen (14) days prior to the commencement of works and local, directly affected residents notified by means of an individual letter drop to each household.
- 74. All works shall comply with the approved Dust Management Plan to the satisfaction of Council's General Manager or delegate.
- 75. All works are to be undertaken in accordance with the approved Operational Environmental Management Plan.

[DURNS04]

[DURNS04]

PRIOR TO ISSUE OF SUBDIVISION CERTIFICATE

76. Prior to issue of a subdivision certificate, all works/actions/inspections etc required by other conditions or approved management plans or the like shall be completed in accordance with those conditions or plans.

[PSC0005]

77. A certificate of compliance (CC) under Sections 305, 306 and 307 of the Water Management Act 2000 is to be obtained from Council to verify that the necessary requirements for the supply of water and sewerage to the development have been made with the Tweed Shire Council.

Pursuant to Section 109J of the Environmental Planning and Assessment Act, 1979 a Subdivision Certificate shall NOT be issued by a Certifying Authority unless all Section 64 Contributions have been paid and the Certifying Authority has sighted Council's "Contribution Sheet" and a "Certificate of Compliance" signed by an authorised officer of Council.

Annexed hereto is an information sheet indicating the procedure to follow to obtain a Certificate of Compliance:

Water DSP6:	196 ET @ \$11020 per ET	\$2159920
South Kingscliff Water Levy:	169 ET @ 256 per ET	\$43264
Sewer Kingscliff:	169 ET @ \$5295 per ET	\$894855

These charges to remain fixed for a period of twelve (12) months from the date of this consent and thereafter in accordance with the rates applicable in Council's adopted Fees and Charges current at the time of payment.

A CURRENT COPY OF THE CONTRIBUTION FEE SHEET ATTACHED TO THIS CONSENT <u>MUST</u> BE PROVIDED AT THE TIME OF PAYMENT.

Note: The Environmental Planning and Assessment Act, 1979 (as amended) makes no provision for works under the Water Management Act 2000 to be certified by an Accredited Certifier.

[PCC0265/PSC0165]

78. Section 94 Contributions

Payment of the following contributions pursuant to Section 94 of the Act and the relevant Section 94 Plan.

Pursuant to Section 109J of the Environmental Planning and Assessment Act, 1979 a Subdivision Certificate shall NOT be issued by a Certifying Authority unless all Section 94 Contributions have been paid and the Certifying Authority has sighted Council's "Contribution Sheet" signed by an authorised officer of Council.

A CURRENT COPY OF THE CONTRIBUTION FEE SHEET ATTACHED TO THIS CONSENT MUST BE PROVIDED AT THE TIME OF PAYMENT.

These charges include indexation provided for in the S94 Plan and will remain fixed for a period of 12 months from the date of this consent and thereafter in accordance with the rates applicable in the current version/edition of the relevant Section 94 Plan current at the time of the payment.

A copy of the Section 94 contribution plans may be inspected at the Civic and Cultural Centres, Tumbulgum Road, Murwillumbah and Brett Street, Tweed Heads.

(a) Tweed Road Contribution Plan: 1098.5 Trips @ \$955 per Trips

\$1049068

(\$868 base rate + \$87 indexation)

S94 Plan No. 4

Sector7_4

Heavy Haulage Component

Payment of a contribution pursuant to Section 94 of the Act and the Heavy Haulage (Extractive materials) provisions of Tweed Road Contribution Plan No. 4 - Version 5.1.1 prior to the issue of a construction certificate or subdivision certificate, whichever occurs first. The contribution shall be based on the following formula:-

 $Con_{TRCP - Heavy} = Prod. X Dist x Unit x (1+Admin.)$

where:

	\$Con _{TRC}	_{P - Heavy} heavy haulage contribution	
	and:		
	Prod.	Projected demand for extractive material site over life of project in tonnes	to be hauled to the
	Dist.	Average haulage distance of product on S	hire roads
		(trip one way)	
	\$Unit	the unit cost attributed to maintaining a Section 6.4 (currently 2.5c per tonne	
	Admin.	Administration component - 5% - see Sect	ion 6.5
(b)		e Library Facilities: ② \$792 per ET	\$133848
	(\$792 bas	se rate + \$0 indexation)	
	S94 Plan	No. 11	
(c)	Bus Shelf 169 ET @	ters: ② \$60 per ET	\$10140
	(\$60 base	e rate + \$0 indexation)	
	S94 Plan	No. 12	
(d)	Eviron Ce 169 ET @	emetery: ② \$120 per ET	\$20280
	(\$101 bas	se rate + \$19 indexation)	
	S94 Plan	No. 13	
(e)		ity Facilities (Tweed Coast - North) ᢧ \$581 per ET	\$98189
	(\$581 bas	se rate + \$0 indexation)	
	S94 Plan	No. 15	
(f)		ns to Council Administration Offices cal Support Facilities	
	169 ET @	⊉ \$1759.9 per ET	\$297423.1
	(\$1759.9	base rate + \$0 indexation)	
	S94 Plan	No. 18	
(g)	Cycleway 169 ET @	/s: ⊉ \$447 per ET	\$75543
	(\$447 bas	se rate + \$0 indexation)	
	S94 Plan	No. 22	
(h)	-	Open Space (Casual) ② \$1031 per ET	\$174239
	(\$1031 ba	ase rate + \$0 indexation)	
	S94 Plan	No. 26	
(i)	-	Open Space (Structured):	Page 74

169 ET @ \$3619 per ET (\$3619 base rate + \$0 indexation) S94 Plan No. 26 \$611611

[PCC0215/PSC0175]

79. Prior to the issue of a Subdivision Certificate a defect liability bond (in cash or unlimited time Bank Guarantee) shall be lodged with Council.

The bond shall be based on 5% of the value of the works (minimum as tabled in Council's fees and charges current at the time of payment) which will be held by Council for a period of 6 months from the date on which the Subdivision Certificate is issued. It is the responsibility of the proponent to apply for refund following the remedying of any defects arising within the 6 month period.

[PSC0215]

80. Prior to the issue of a Subdivision Certificate, a maintenance bond equal to 25% of the contract value of the footpath construction works shall be lodged for a period of 3 years or until 80% of the lots fronting paved footpaths are built on.

Alternatively, the developer may elect to pay a cash contribution to the value of the footpath construction works plus 25% in lieu of construction and Council will construct the footpath when the subdivision is substantially built out. The cost of these works shall be validated by a schedule of rates.

[PSC0225]

81. Prior to the issue of a subdivision certificate, a certificate of compliance shall be submitted to Council by the Developers Subdivision Works Accredited Certifier (SWAC) or equivalent, verifying that the placed fill has been compacted in accordance with the requirements of AS 3798, "Guidelines on Earthworks for Commercial and Residential Developments" and is suitable for residential purposes.

The submission shall include copies of all undertaken test results.

[PSC0395]

82. All landscaping requirements shall be completed to the satisfaction of the General Manager or his delegate PRIOR to the issue of a Subdivision Certificate.

[PSC0485]

83. Any damage to property (including pavement damage) is to be rectified to the satisfaction of the General Manager or his delegate PRIOR to the issue of a Subdivision Certificate. Any work carried out by Council to remove material from the roadway will be at the Developers expense and any such costs are payable prior to the issue of a Subdivision Certificate.

[PSC0725]

84. Prior to the issue of a Subdivision Certificate, Work as Executed Plans shall be submitted in accordance with the provisions of Tweed Shire Council's Development Control Plan Part A5 - Subdivision Manual and Council's Development Design Specification, D13 - Engineering Plans. The plans are to be endorsed by a Registered Surveyor OR a Consulting Engineer Certifying that:

- (a) all drainage lines, sewer lines, services and structures are wholly contained within the relevant easement created by the subdivision;
- (b) the plans accurately reflect the Work as Executed.

Note: Where works are carried out by Council on behalf of the developer it is the responsibility of the <u>DEVELOPER</u> to prepare and submit works-as-executed (WAX) plans.

[PSC0735]

85. Upon completion of all works on the site and prior to the issue of a Subdivision Certificate, a further dilapidation report is to be prepared and certified by a suitably qualified and experienced structural engineer detailing the current general condition including the structural condition of the adjoining buildings / sites, infrastructure and roads. The dilapidation reports shall take into consideration the findings of the original reports and provide to Council the written acceptance of the adjoining / adjacent owners confirming agreement that no damages have occurred / repairs carried out are acceptable.

[PSC0795]

86. A Subdivision Certificate will not be issued by the General Manager until such time as all conditions of this Development Consent have been complied with.

[PSC0825]

- 87. The creation of easements for services, rights of carriageway and restrictions as to user as may be applicable under Section 88B of the Conveyancing Act including (but not limited to) the following:
 - (a) Easements for sewer, water supply and drainage over ALL public services/infrastructure on private property.
 - (b) Identify all allotments to be created as dual occupancies.
 - (c) A restriction to user requiring that all roofwater from dwellings shall be discharged to an approved infiltration pit located on the subject property. The infiltration pit shall be approved by the Principle Certifying Authority.

Pursuant to Section 88BA of the Conveyancing Act (as amended) the Instrument creating the right of carriageway/easement to drain water shall make provision for maintenance of the right of carriageway/easement by the owners from time to time of the land benefited and burdened and are to share costs equally or proportionally on an equitable basis.

Any Section 88B Instrument creating restrictions as to user, rights of carriageway or easements which benefit Council shall contain a provision enabling such restrictions, easements or rights of way to be revoked, varied or modified only with the consent of Council.

Privately owned infrastructure on community land may be subject to the creation of statutory restrictions, easements etc in accordance with the Community Land Development Act, Strata Titles Act, Conveyancing Act, or other applicable legislation.

88. Council's standard "Asset Creation Form" shall be completed (including all quantities and unit rates) and submitted to Council with the application for Subdivision Certificate.

[PSC0855]

89. Prior to registration of the plan of subdivision, a Subdivision Certificate shall be obtained.

The following information must accompany an application:

- (a) original plan of subdivision prepared by a registered surveyor and 7 copies of the original plan together with any applicable 88B Instrument and application fees in accordance with the current Fees and Charges applicable at the time of lodgement.
- (b) all detail as tabled within Tweed Shire Council Development Control Plan, Part A5 - Subdivision Manual, CL 5.7.6 and Councils Application for Subdivision Certificate including the attached notes.

Note: The Environmental Planning and Assessment Act, 1979 (as amended) makes no provision for works under the Water Supplies Authorities Act, 1987 to be certified by an Accredited Certifier.

[PSC0885]

- 90. The following restrictions apply to dog and cat ownership and control on all residential lots:-
 - (a) Owners of dogs within the development shall have their yards fenced so as to securely contain a maximum of one (1) dog per allotment and the ownership of cats within the development shall be restricted to one desexed cat per allotment and such cats shall be restrained within the house or a secure night cage between the hours of 6.00pm and 6.00am.
 - (b) No dog shall be registered without the construction of a dog-proof compound which must be approved by Council and the relevant fee paid by the applicant.
 - (c) No owner can retrieve a dog that has been impounded unless they can demonstrate to Council they have a secure compound.

These ownership and control requirements shall be reinforced by a Restriction as to User under Section 88B of the Conveyancing Act, 1919-1964.

A Section 88B Instrument creating the restriction as to user shall contain a provision enabling the restriction to be revoked, varied or modified only with the consent of Council.

[PSC0905]

91. Prior to the application for a Subdivision Certificate a Compliance Certificate or Certificates shall be obtained from Council OR an accredited certifier for the following:-

(a) Compliance Certificate - Roads

(b) Compliance Certificate - Water Reticulation

(c) Compliance Certificate - Sewerage Reticulation

(d) Compliance Certificate - Sewerage Pump Station

(e) Compliance Certificate - Drainage

Note:

- 1. All compliance certificate applications must be accompanied by documentary evidence from the developers Subdivision Works Accredited Certifier (SWAC) certifying that the specific work for which a certificate is sought has been completed in accordance with the terms of the development consent, the construction certificate, Tweed Shire Council's Development Control Plan Part A5 Subdivisions Manual and Councils Development Design and Construction Specifications.
- 2. The EP&A Act, 1979 (as amended) makes no provision for works under the Water Management Act 2000 to be certified by an "accredited certifier".

[PSC0915]

92. The six (6) months Defects Liability Period commences upon the registration of the Plan of Subdivision.

[PSC0925]

93. Prior to the issue of a Subdivision Certificate and also prior to the end of defects liability period, a CCTV inspection of any stormwater pipes and sewerage system installed and to be dedicated to Council including joints and junctions will be required to demonstrate that the standard of the infrastructure is acceptable to Council.

Any defects identified by the inspection are to be repaired in accordance with Councils Development Design and Construction Specification.

All costs associated with the CCTV inspection and repairs shall be borne by the applicants.

[PSC1065]

94. Prior to issuing a Subdivision Certificate, reticulated water supply and outfall sewerage reticulation shall be provided to all lots within the subdivision in accordance with Tweed Shire Council's Development Control Plan Part A5 - Subdivisions Manual, Councils Development Design and Construction Specifications and the Construction Certificate approval. The Environmental Planning and Assessment Act, 1979 (as amended) makes no provision for works under the Water Management Act, 2000 to be certified

by an Accredited Certifier.

[PSC1115]

95. The site of the sewage pumping station shall be transferred to Council in fee simple, at no cost to Council within 28 days of the date of registration of the plan of subdivision.

[PSC1125]

96. The production of written evidence from the local telecommunications supply authority certifying that the provision and commissioning of underground telephone supply at the front boundary of the allotment has been completed.

[PSC1165]

97. Electricity

- (a) The production of written evidence from the local electricity supply authority certifying that reticulation and energising of underground electricity (residential) has been provided adjacent to the front boundary of each allotment; and
- (b) The reticulation includes the provision of fully installed electric street lights to the relevant Australian standard. Such lights to be capable of being energised following a formal request by Council. Should any electrical supply authority infrastructure (sub-stations, switching stations, cabling etc) be required to be located on Council land (existing or future), then Council is to be included in all negotiations. Appropriate easements are to be created over all such infrastructure, whether on Council lands or private lands.

Compensatory measures may be pursued by the General Manager or his delegate for any significant effect on Public Reserves or Drainage Reserves.

[PSC1185]

98. Proposed Lots 15 to 22 shall not be released until Road 6 and all associated services are constructed continuously along the northern boundary of the subdivision to its connection to Casuarina Way, to Council's satisfaction in accordance with approved construction certificate plans.

[PSCNS01]

99. Prior to issue of a subdivision certificate a validation statement regarding radiation monitoring, from a suitably qualified person, shall be provided to Council to the satisfaction of the General Manager or delegate. Monitoring and investigation shall include both surface and depth monitoring. The validation statement shall confirm compliance with the approved Remediation Action Plan, include details of monitoring undertaken, the nature and depth of materials on site, and the depth monitoring undertaken on the site relative to cut and filling works. The statement shall establish that the site is suitable for the proposed use.

[PSCNS02]

- 100. Prior to the release of a Subdivision Certificate, casual open space is to be embellished in accordance with the approved landscape plans. Installation of playground equipment and soft fall however will not occur until 30% of the relevant stage's allotments are occupied. The developer must contribute the appropriate financial contribution for these items as a bond prior to the release of the Subdivision Certificate for each stage. Council will undertake the installation at the appropriate time.
- 101. Any playgrounds provided must comply with the guidelines established in the 'Playground Audit for Tweed Shire Council' (July 2009). Appendix 3 of this establishes a procedure for assessing risks and mitigation measures. No playground facility may have a Facility Risk Rating that exceeds 13 as defined in Table 3A7 of this document.
- 102. Prior to issue of a Subdivision Certificate, Work as Executed Plans (WAX) must be submitted for all landscaped casual and active open space. These must show all underground services, irrigation systems and the location of concrete paths, structures, other park infrastructure and garden bed outlines.

The plans are to be certified by a registered surveyor or consulting engineer.

Two categories of WAX plans are to be provided:

- a) the original approved plan with any variation to this indicated.
- b) plan showing only the actual as constructed information,

The plans are to be submitted in the following formats:

- a) 2 paper copies of the same scale and format as the approved landscape plan.
- b) A PDF version on CD or an approved medium.
- c) Electronic copy in DWG or DXF format on CD or an approved medium.

[PSCNS03]

GENERAL TERMS OF APPROVAL UNDER SECTION 100B OF THE RURAL FIRES ACT 1997

- At the issue of subdivision certificate and in perpetuity, proposed part Lot 173 adjoining the western boundary of proposed Lot 165, shall be managed as an inner protection area (IPA) as outlined within Appendices 2 & 5 of 'Planning for Bushfire Protection 2006' and the NSW Rural Fire Service's document 'Standards for asset protection zones'.
- 2. Water, electricity and gas are to comply with section 4.1.3 of 'Planning for Bushfire Protection 2006'.
- 3. Public road access shall comply with section 4.1.3(1) of 'Planning for Bushfire Protection 2006'.

General Advice:

This approval is for the subdivision of land only. Any further development application for class 1, 2 and 3 buildings as identified by the 'Building code of Australia' must be subject to separate application under section 79BA of the EP&A Act and address the requirements of 'Planning for Bushfire Protection 2006'.