

<b>JRPP No:</b>	2010NTH035
<b>DA No:</b>	DA10/0800
<b>PROPOSED DEVELOPMENT:</b>	Development Application for Cobaki Estate subdivision of precinct 1 and 2 comprised of 475 residential lots (including 1 residual lot) and lots for drainage, open space and urban infrastructure (JRPP) at Lot 1 DP 562222; Lot 2 DP 566529; Lot 1 DP 570077; Lot 1 DP 823679; Lots 46, 54, 55, 199, 200, 201, 202, 205, 206, 209, 228, 305 DP 755740, No. 73 Sandy Lane; Lot 1 DP 570076 Piggabeen Road, Cobaki Lakes
<b>APPLICANT:</b>	Leda Manorstead Pty Ltd
<b>REPORT BY:</b>	Tweed Shire Council

## Assessment Report and Recommendation

**FILE NO: DA10/0800**

### REPORT TITLE:

Development Application DA10/0800 for a Cobaki Estate subdivision of precinct 1 and 2 comprised of 475 residential lots (including 1 residual lot) and lots for drainage, open space and urban infrastructure (JRPP) at Lot 1 DP 562222; Lot 2 DP 566529; Lot 1 DP 570077; Lot 1 DP 823679; Lots 46, 54, 55, 199, 200, 201, 202, 205, 206, 209, 228, 305 DP 755740, No. 73 Sandy Lane; Lot 1 DP 570076 Piggabeen Road, Cobaki Lakes

### SUMMARY OF REPORT:

The development application is required to be assessed under Part 4 of the NSW Environmental Planning and Assessment Act in accordance with the Minister's Concept Approval for the Cobaki site. As the subdivision is for more than 250, lots the Joint Regional Planning Panel is the determining authority in accordance with the State Environmental Planning Policy (Major Development) 2005.

The proposal is for a 508 lot subdivision comprised of 475 residential lots, 3 park open space lots, 2 environmental open space lots, 12 drainage and stormwater lots, 2 infrastructure lots, 13 fire trail lots and 1 development lot.

The application is the first residential subdivision following on from the Concept Approval issued by the Minister for Planning on 6 December 2010.

Access to the site will be via Boyd Street which leads in from Tugun in Queensland and Cobaki Parkway. Boyd Street from the Motorway overpass and Cobaki Parkway have been approved under previous consents and certificates.

Precinct 1 and 2 has a site area of 32.5 hectares. Precincts 1 and 2 will be developed in 14 stages. Whilst dwellings are not proposed to be constructed as part of this application the Development Code requires lots be nominated at subdivision stage for their future

use. 506 dwellings will be constructed as a result of the subdivision. The proposed dwelling mix is as follows:

- 267 Traditional Dwellings
- 138 Zero Lot Dwellings
- 28 Plex Lots (59 Dwellings)
- 42 Terrace Dwellings
- 1 Development Lot

Urban infrastructure to service the lots is proposed to be constructed as part of the subdivision works. Perimeter asset protection zones for bushfire mitigation, environmental open space and local parks are included in the proposal. Earthworks are proposed with 175,000m<sup>3</sup> cut to fill. No fill is proposed to be imported or exported from the site.

The form of development proposed is far superior to the existing approvals over the site and subject to compliance with the extensive recommended conditions the development is recommended for approval.

This report t the JRPP has been broken up into 4 main sections:

- A - Site Context and Previous Approvals
- B - Key Issues
- C - Heads of Consideration and Main Assessment
- D - Options for Determination and Conclusion

## REPORT:

**Applicant:** Leda Manorstead Pty Ltd  
**Owner:** Leda Manorstead Pty Ltd  
**Location:** Lot 1 DP 562222; Lot 2 DP 566529; Lot 1 DP 570077; Lot 1 DP 823679; Lots 46, 54, 55, 199, 200, 201, 202, 205, 206, 209, 228, 305 DP 755740, No. 73 Sandy Lane; Lot 1 DP 570076 Piggabeen Road, Cobaki Lakes  
**Zoning:** Part 2(c) Urban Expansion; Part 6(b) Recreation and Part 7(d) Environment Protection (Scenic Escarpment) Part 7(l) Environmental Protection (Habitat)

## SECTION A - SITE CONTEXT AND PREVIOUS APPROVALS

### SITE AND SURROUNDS

The site is known as Cobaki Estate and is comprised of 17 allotments. It has a total area of 593.5ha. Precincts 1 and 2 are 66.91 hectares in area.

The site is situated approximately 6km west of Tweed Heads. It is within close proximity to the Queensland border and the Gold Coast International Airport, situated a short distance to the north-east.

Existing on-site vegetation includes dry sclerophyll forest, rainforest, woodland, heathland, mangrove forest, grassland and rushland/sedgeland and saltmarsh.

Topography on the site varies significantly including relatively steep slopes and ridges to the north and west and low lying flood planes in the centre of the site. The topography of the site could best be described as a 'basin'.

Residential development is located to the north of the site (adjacent to Precinct 1 and 2) in Queensland, but physically separated from the site by topography and a linear corridor of existing bushland.

Land to the west and southwest of the site is predominately rural in character and includes adjoining bushland as well as Cobaki Creek. The area east of the site is characterised by remnant bushland and Cobaki Broadwater.

### BACKGROUND:

#### Far North Coast Regional Strategy 2006-31

The Far North Coast Regional Strategy (FNCRS) prepared by the Department of Planning identifies that the Tweed Local Government Area's contribution to the dwelling target of an additional 51,000 dwellings for the region by 2031 is 19,100 dwellings. The Cobaki site is mapped in the Strategy's *Town and Village Growth Boundary Map* as *Existing Urban Footprint*. The Concept approval issued by the Minister for Planning for Cobaki approved 5,500 dwellings for the site. The Cobaki site is a key land release area for fulfilling the dwelling targets set out in the FNCRS.

### **Existing Development Consents**

Several development consents have been issued over the subject site between 1993 and 2002 for bulk earthworks and residential subdivision.

A summary of existing consents is outlined in the table below. The majority of the bulk earthwork consents have commenced and works have been undertaken.

<b>Consents</b>		
<b>Reference</b>	<b>Description</b>	<b>Date of Consent</b>
D92/315	Boyd Street Extensions	5 January 1993
D94/438	Bulk Earthworks	27 January 1995
S94/194	730 Lot Urban Subdivision Parcels 1 to 5 and 13 Englobo Parcels (The Entrance, The Sand Ridge)	19 September 1995
D96/271	Bridge over Cobaki Creek	8 April 1997
S97/54	430 lot residential subdivision – parcel 7 to 10 (The Knoll, Piggabeen)	21 October 1997
K99/1124	560 Lot Urban Subdivision (The Foothills, The Plateau, Valley East, Valley West, East Ridge)	21 July 2000
1162/2001DA	8 Management Lots and Bulk Earthworks (town centre)	8 October 2002

A number of Construction Certificates (CCs) have also been issued for bulk earthworks and other civil engineering works including construction of Cobaki Parkway. Assessment of CCs continue.

Figure 1 below identifies extent of approved works.

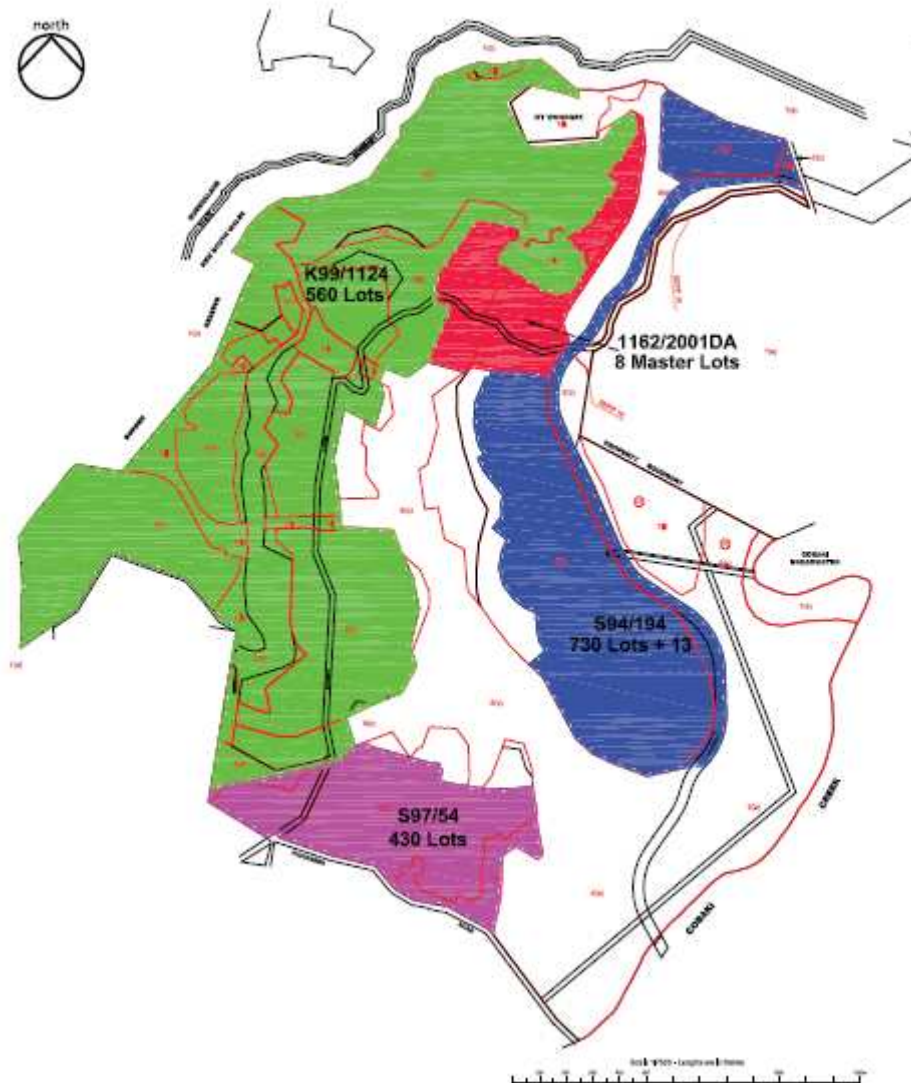


Figure 6 – Existing Subdivision and Development Consents

## Concept Plan Approval

- Residential development for approximately 5,500 dwellings
- Town Centre and neighbourhood centre for future retail and commercial uses
- Community facilities and school sites
- Open space
- Wildlife corridors
- Protection and rehabilitation of environmentally sensitive land
- Road corridors and utility services infrastructure
- Water management areas
- Roads and pedestrian and bicycle network

The Minister stipulated that approval to carry out the project, other than the central open space and Precinct 5, be subject to Part 4 or 5 of the Act, as relevant.

Schedule 2 of the Concept Approval contains modifications to the concept plan and requirements for future applications.

### **Exempt and Complying Order**

An Order was issued by the Minister for Planning on 6 December 2010 declaring that the development within the Cobaki Estate site that satisfies the requirements for exempt or complying development specified in Part A – Exempt and Complying Development in Cobaki Estate Development Code, 15 November 2010, is exempt or complying development, as appropriate.

### **Development Code**

The Director-General's Environmental Assessment Report for the Concept Approval provides the following explanation of the Development Code. The Development Code was approved by the Director General of the Department of Planning on 15 November 2010.

A site-specific Exempt and Complying Development Code ('the code') contains a series of controls and objectives to guide future development of the site consistent with the concept approval. Exempt or complying development is of minimal environmental impact and meets specified, pre-determined standards for development classes or types. The code comprises two parts: Part A comprises the exempt or complying development provisions; Part B comprises controls for development requiring a development application (DA).

The proponent requested that the Minister declare (by Order under s75P2(d) *EP&A Act*) development identified as exempt or complying development under Part A of the code as exempt and complying development for the purposes of the Act. A site-specific code instead of the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008* (the *Codes SEPP*) was requested because:

- many of the lots nominated as low density (greater than 450m<sup>2</sup>) are bushfire or flood prone and the *Codes SEPP* would not apply (cl 1.1.9 *Codes SEPP*);
- most proposed development includes dwellings on lots less than 450m<sup>2</sup>, and the *Codes SEPP* currently applies only to lots greater than 450m<sup>2</sup>; and
- development of the site will occur consistent with design criteria not contemplated by the *Codes SEPP*, so the appropriate mechanism is separate referral to a developer-established, design review panel as proposed in the code.

A similar code is proposed for the proponent's Kings Forest site (subject to a separate Part 3A concept approval 06\_0318), and provided a basis for the Cobaki code. The Department convened a proponent workshop for the Kings Forest code to ensure it was consistent with the *Codes SEPP* (for example, the conditions for a complying development certificate (CDC) are primarily those of the *Codes SEPP*). Particular attention was given to controls for lots less than 450sqm to ensure a similar approach to complying



development for any future, State-wide housing code. The same principles have been applied in consideration of the Development Code.

Both codes were publicly exhibited (Kings Forest, 7 Dec 09 – 1 Feb 10; and Cobaki 13 Jan – 26 Feb 10). The project was discussed extensively with Council and the Department in preparing both codes. All matters resolved in the Kings Forest Code were adopted in the Cobaki Estate Code.

### **Part A**

The code establishes minor development ancillary to dwelling houses and commercial development (in the town and centres) as exempt development. The exempt development controls are consistent with the *Codes SEPP* and the site's environmental values.

Part A identifies a range of dwelling types (detached, terrace, zero-lot, SOHO (limited commercial use), plex, mews dwellings, granny flats), and certain other development as complying development. Development identified on a plan of development for and complying with the controls for a specific development type (for example, zero-lot dwelling) can be built as complying development. Proposals that satisfy the complying development provisions require a CDC (from Council or an accredited professional) and a design review panel (DRP) or architect's pre-approval certificate (certifying assessment of complying development issues of merit detailed in the design guidelines – see Part B below).

### **Part B**

Part B will function like a site-specific DCP. It provides controls for development for which a DA is required: dwellings that do not meet Part A's complying development standards and more complex proposals (for example town houses, semi-detached houses, apartments, town/neighbourhood centre development). DAs will be submitted to the DRP for a statement of compliance with relevant code provisions, prior to lodgement with council.

The residential development controls address a range of amenity and urban design issues, incorporating council's requirements where relevant, for example, flood control lots. The subdivision controls comprise a hierarchy of linked master plans as follows:

#### **1. Precinct plan –**

- lot sizes, street patterns, connections between parks, public spaces, main streets, services, infrastructure and natural environment, and estimated development yield.
- first subdivision DA lodged by initial developer must include a precinct plan.

#### **2. Subdivision design –**

- details of lot sizes, street design, open space and linkages to maximise the number of lots which can be built as complying development ('nominated lots').

#### **3. Nominated lot provisions –**

- pre-determined lot standards for nominated dwelling types.

#### **4. Plan of development (PoD) –**

- must comply with neighbourhood and subdivision design provisions, and nominated lots provisions.
- detailed design, location of nominated lots, asset protection zones, bushfire level of construction.
- flood planning floor levels, easements and covenants.
- maximum number of dwellings per lot, transport infrastructure and networks, landscaping.
- first subdivision DA lodged by initial developer must include a PoD.

#### **5. Design guidelines –**

- form part of PoD for every subdivision and must be submitted with subdivision DA, in addition to Part B controls.
- implemented and administered by initial developer at subdivision stage by Section 88B instrument.
- must be consistent with code.
- cover range of built form, design and ESD matters.
- will be used by the Design Review Panel in assessing DAs and Complying Development.



## **Project Application Approval**

The Deputy Director –General Development Assessment and Systems Performance issued a Project Approval on 28 February 2011 at the Cobaki site for the following-

- Subdivision of the entire Cobaki Estate site into seven (7) lots (including one residue lot for future urban development – Lot 807);
- Staged bulk earthworks to create the central open space, riparian corridor, structured open space, and future stormwater treatment area;
- Road forming works and culverts crossing the central open space;
- Road forming works across saltmarsh areas, including culverts and trunk sewer and water services (Lot 804);
- Revegetation and rehabilitation of environmental protection areas for coastal saltmarsh (Lots 805 and 806); and
- Establishment of freshwater wetland and fauna corridors (Lot 803).

## **Zoning Order**

On 1 March 2011 the Minister for Planning made an Order to amend the Tweed Local Environmental Plan relating to the Cobaki Estate site. The Order amends zoning on portions of the site and amends the minimum lot size for the site from 450m<sup>2</sup> to 120m<sup>2</sup>.

## SECTION B - KEY ISSUES

### Road network –cross border issues.

The Director General's Environmental Assessment Report for the concept approval summarised the historical deeds of agreement regarding the road network as follows:

There are three Deeds of Agreement (DOA) in place which relate to access to Cobaki Estate. These are between the proponent and the following government agencies:

- Gold Coast City Council, dated 8 July 1993;
- Tweed Shire Council, dated 6 August 1993; and,
- Queensland Department of Transport and Main Roads (QDTMR) (formerly the Queensland Department of Main Roads) dated 3 February 1997.

The DOAs remain current. The Cobaki Parkway connects with Boyd Street, in Queensland, which connects with the Gold Coast Highway. The Gold Coast Highway is under the jurisdiction of QDTMR requiring this intersection to be upgraded consistent with requirements outlined by QDTMR in their planning and design guidelines.

#### Gold Coast City Council Deed

A summary of the key provisions of this deed are as follows:

- Entitles the proponent to construct and use a temporary access road from the then constructed limit of Boyd Street to QLD/NSW border;
- Requires the proponent to construct, at the commencement of Cobaki Estate:
  - the intersection between Boyd Street and Gold Coast Highway in accordance with an agreement with QDTMR; and
  - Boyd Street extension in two lanes, from and including a roundabout at the constructed limit of Boyd Street to the QLD/NSW border.
- Requires LEDA to construct a four lane upgrade of Boyd Street in QLD when the eastbound traffic volume on Boyd Street at the state border is exceeding 800 vehicles per hour.

#### Tweed Shire Council Deed

A summary of the key provisions of this deed are as follows:

- Requires the proponent to construct a two lane road in NSW from the QLD/NSW border to the Cobaki Estate boundary, in accordance with Development Approval 92/315;
- Requires LEDA to contribute \$1.57m (adjusted for cost increase) to Tweed Shire Council, when called upon to do so, towards the cost of the Boyd Street overpass at its intersection with the Tugun Bypass (Note: this requirement has been met and the overpass constructed);
- Requires Tweed Shire Council to include certain costs in the relevant Section 94 Contribution Plan; and,
- Makes provisions for the purchase by Tweed Shire Council from LEDA of the 20 metre wide Cobaki Parkway road reserve.

#### QLD Department of Transport and Main Roads Deed

A summary of the key provisions of this deed are as follows:

- Requires LEDA to construct a signalised intersection between Boyd Street and Gold Coast Highway, in three stages:
  - an Initial Layout, prior to the purchase of any residential lot at Cobaki Lakes constructing a dwelling in that lot;
  - an Interim Layout before Leda proceeds to develop, market and sell more than 1,000 residential lots at Cobaki Lakes;
  - an Ultimate Layout:
    - before Leda proceeds to develop, market and sell more than 2,900 residential lots at Cobaki Lakes, or;
    - when two way, peak hour traffic volume on the Gold Coast Highway exceeds 4,300, or;
    - if traffic operational problems occur at the intersection.
- Permits the continuous use of the constructed intersection provided the proponent restricts the development, marketing and sale of residential lots at Cobaki Lakes to 3,500 until an interchange is constructed at the intersection of Boyd Street and the Tugun Bypass (Note: Tweed Shire Council's Section 94 Road Contribution Plan makes provision for the future construction of the interchange).

LEDA are up to date with their obligations under each of the deeds. LEDA have provided the following update regarding the status of the roadworks in Queensland:

## **GOLD COAST/MAIN ROADS WORKS**

### **1. Inland Drive / Boyd Street Intersection**

*GCCC have issued an Operational Works Approval for the construction of the intersection and extension of Cobaki Parkway to the existing Overpass Bridge – refer letter @ 23 April 2010*

*GCCC have endorsed the road name change from Boyd Street to Cobaki Parkway (section of road between the bridge & the proposed new roundabout) @ 8 October 2009 – copy attached*

### **2. Boyd Street / Gold Coast Highway Intersection**

*This intersection straddles two jurisdictions GCCC and Qld Main Roads.*

*Extensive workshops have been held since Oct 2009 for the intersection arrangement.*

*Detailed Design details have been lodged with GCCC/MRD November 2010*

*GCCC/MRD issued RFI on design in early 2011-04-21*

*Updated Details and RFI response to GCCC/MRD @ April 2011 – refer Yeats response letter*

Further fulfilment of the Deeds will be carried out when traffic counts or lot numbers exceed the thresholds in the Deeds.

## **Environmental Protection Land**

The site includes 187 hectares of environmental protection land. Whilst not part of this application 90 hectares of salt marsh will be dedicated to Council following rehabilitation. It is proposed that the balance of the environmental protection land will be retained by the current owner. This application includes 13.5048 hectares of environmental open space to be rehabilitated, managed and maintained in perpetuity by the owner. The balance of the environmental protection land will be rehabilitated and managed on a staged basis as the precincts are developed. Conditions have been recommended to address these further actions.

## **Bushfire Asset Protection Zones Maintenance**

The proposal for precincts 1 and 2 includes dedicating 6.2903 hectares of bushfire asset protection zone land to Council. Council will only accept this land if it is constructed in accordance with the document *Planning for Bushfire Protection*. In this regard the slope of the land is critical as maintenance is dependant upon the ability of machinery being able to operate on slopes with a gradient no greater than 1 in 3. Conditions have been recommended to ensure the Asset Protection Zones (APZ's) do not become an ongoing operational burden for Council.

## **Gold Coast Airport Limited (GCAL)**

GCAL has provided a submission advising that the airspace above the Cobaki site is used as a training area for light aircraft and helicopters. Whilst this area is not within the Australian Noise Exposure Forecast contours, the aircraft would make noise audible to future residents and would be a source of nuisance. It is intended that Council will place advice on Section 149 certificates indicating that airport operations are undertaken in the locality and aircraft noise will be audible provided the GCAL supply Council with a map indicating the affected areas relative to the Cobaki Estate.

## **Water (tanks, stormwater, Cobaki Broadwater)**

### Rainwater Tanks

Appendix C of the Development Code contains rainwater harvesting requirements and whilst Part B development calls up Appendix C of the Code Part A development (complying development) omitted a reference to Appendix C, this has been rectified by including the Appendix C requirements for rainwater harvesting in the Plan of Development controls.

The requirements for rainwater tanks are as follows-

### **Rainwater Harvesting for Demand Management, Tank and Connected Roof Minimums**

<b>Development Type/Size</b>	<b>Connected Roof Area</b>	<b>Minimum Tank Size</b>
Detached Dwelling $\geq 450\text{m}^2$	160m <sup>2</sup> minimum	5000L
Zero - lot Dwelling 250m <sup>2</sup> lots (min)	Min 85% of roof up to 160m <sup>2</sup>	3000L
Terrace Dwelling 175m <sup>2</sup> lots (min)	Min 85% of roof up to 160m <sup>2</sup>	2000L (3000L is space permits)
Plex (each dwelling) 2-5 on 450m <sup>2</sup> lot (min)	Min 85% of roof up to 160m <sup>2</sup>	2000L Site Min 5000L Can be common
Mews (each dwelling) 3-6 on 500m <sup>2</sup> lot (min) (lot can be Torrens Title subdivided further)	Min 85% of roof up to 160m <sup>2</sup>	2000L No common tank without a body corporate or single owner
SOHO Dwelling 250m <sup>2</sup> lots (min)	Min 85% of roof up to 160m <sup>2</sup>	3000L
Multiple Unit Developments, Commercial, Industrial	80-90% of roof area	Common tank sized proportionate to building size

### Waste Water Reuse

Reuse in particular has been investigated by Council in detail in Council's Stage 1 Demand Management Strategy which went on public exhibition in 2008. The Stage 1 report looked at the possibility of introducing recycled water in a 'three-pipe system' to supplement 'future major greenfield development sites' at Cobaki, Bilambil heights, Area E (Terranora), Kings Forest and West Kingscliff. A three-pipe system would include a pipe for drinking water, one for sewage and the third to transport recycled water from wastewater treatment plants. The study concluded that although this system would save the equivalent amount of water as the 'rainwater tank' option, both the upfront and ongoing costs of providing a three-pipe network and establishing membrane treatment was significantly higher. These overall combined costs to the community, home owners and Council were approximately twice that of the rainwater tank option from a long-term financial perspective - in excess of \$30 million over a period of 20 years.

A further two major options considered included the combination of rainwater tanks and recycled water, and an indirect potable re-use option (which would involve returning recycled water to the Clarrie Hall Dam to be collected and re-treated as part of normal drinking water). Indirect potable reuse was also considered under the Water Supply Augmentation Options report. All of these options were ruled out based on low scores in Triple Bottom Line analyses and due to prohibitive costs. (The total cost involved with implementing the indirect potable re-use option was found to be in excess of \$184 million). Returning effluent to Bray Park Weir would reduce the cost of the piping component.

From an environmental perspective, both recycled water options reduced effluent flows to the waterways but only by about 10 per cent and a considerable amount of energy would be required to treat and transport the water. The membrane treatment processes and pumping systems consume enormous amounts of energy which in turn produce significant greenhouse emissions.

### Stormwater

Stormwater conveyance and treatment will be constructed in accordance with Council's requirements. Best practice stormwater management will be undertaken in accordance with recommended conditions of consent.

### **Management Plans**

Condition C4 of the Concept Approval requires stage specific updates and detailing of the management plans where relevant. The Regeneration and Revegetation Plan, Freshwater Wetland Rehabilitation Plan and Buffer Management Plan have been identified to be further detailed for Precincts 1 and 2.

It is Council's preference that the management plans are not finalised at the development application stage and that the opportunity is taken to condition the requirements of the management plans so that Council has greater input and control over the plans and their content. The construction certificates will not be issued until the management plans meet Council's requirements.

### **Development Code**

The five requirements of the Development Code for subdivision applications have been fulfilled. The application includes the following-

- Precinct Plan
- Subdivision Design
- Nominated Lot Provisions
- Plan of Development
- Design Guidelines

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# SECTION C - HEADS OF CONSIDERATION AND MAIN ASSESSMENT

## 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**

The subject land is part zoned 2(c) Urban Expansion, part 6(b) Recreation, part 7(d) Environmental Protection (Scenic/Escarpment) and part 7(l) Environmental Protection (Habitat)

The subdivision and associated works are permissible in the zones with consent. The minimum allotment size for subdivision in the 2(c) zone is 120m<sup>2</sup> as per the 1 March 2011 Ministerial Order.

#### **The objectives of the 2(c) zone are-**

##### **Primary objectives**

- to identify land for urban expansion (which will comprise mainly residential development focused on multi-use neighbourhood centres) and to ensure its optimum utilisation consistent with environmental constraints and the need to minimise residential landtake.

##### **Secondary objectives**

- to allow associated non-residential development which meets the recreation, shopping, commercial, employment and social needs of future residents.
- to ensure that sensitive environmental areas within and outside the zone are protected from any adverse impacts of development.
- to enable planning flexibility to achieve the other objectives of the zone by means of detailed guidelines in a development control plan.

#### **The objectives of the 6(b) zone are-**

##### **Primary objective**

- to designate land, whether in public or private ownership, which is or may be used primarily for recreational purposes.

##### **Secondary objective**

- to allow for other development that is compatible with the primary function of the zone.

### **The objectives of the 7(d) zone are-**

#### **Primary objectives**

- to protect and enhance those areas of particular scenic value to the area of Tweed, minimise soil erosion from escarpment areas, prevent development in geologically hazardous areas, and maintain the visual amenity of prominent ridgelines and areas.

#### **Secondary objective**

- to allow other development that is compatible with the primary function of the zone.

### **The objectives of the 7(l) zone are-**

#### **Primary objectives**

- 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.

#### **Secondary objectives**

- to protect areas of scenic value.
- to allow for other development that is compatible with the primary function of the zone.

#### **Comment**

The uses proposed in each of the zones are consistent with the objectives of each of the zones.

### **Clause 4 - Aims of the Plan**

- (a) to give effect to the desired outcomes, strategic principles, policies and actions of the *Tweed Shire 2000+ Strategic Plan* which was adopted, after extensive community consultation, by the Council on 17 December 1996, the vision of which is:

“The management of 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”, and

- (b) to provide a legal basis for the making of a development control plan that contains more detailed local planning policies and other provisions that provide guidance for future development and land management, such as provisions recommending the following:

- (i) that some or all development should be restricted to certain land within a zone,
  - (ii) that specific development requirements should apply to certain land in a zone or to a certain type of development,
  - (iii) that certain types or forms of development or activities should be encouraged by the provision of appropriate incentives, and
- (c) to give effect to and provide reference to the following strategies and policies adopted by the Council:

*Tweed Heads 2000+ Strategy*  
*Pottsville Village Strategy*, and

- (d) to encourage sustainable economic development of the area of Tweed compatible with the area's environmental and residential amenity qualities.

### **Comment**

The proposed subdivisions fulfil the aims of the plan. The Cobaki site has been identified for a new community for twenty years. Development of Cobaki is consistent with State Government and Council strategic planning.

### **Clause 5 - Ecologically Sustainable Development**

An objective of this plan is to promote development that is consistent with the four principles of ecologically sustainable development. These are:

- (a) the precautionary principle—namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the precautionary principle, public and private decisions should be guided by:
  - (i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and
  - (ii) an assessment of the risk-weighted consequences of various options, and
- (b) inter-generational equity—namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations, and
- (c) conservation of biological diversity and ecological integrity—namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration, and

- (d) improved valuation, pricing and incentive mechanisms—namely, that environmental factors should be included in the valuation of assets and services, such as:
  - (i) polluter pays—that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement, and
  - (ii) the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste, and
  - (iii) environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.

### **Comment**

The proposal is not inconsistent with the four principles above. The subdivision represents a balance between population growth management and environmental protection.

### **Clause 8 - Zone objectives**

- (1) The consent authority may grant consent to development (other than development specified in Item 3 of the Table to clause 11) only if:
  - (a) it is satisfied that the development is consistent with the primary objective of the zone within which it is located, and
  - (b) it has considered those other aims and objectives of this plan that are relevant to the development, and
  - (c) it is satisfied that the development would not have an unacceptable cumulative impact on the community, locality or catchment that will be affected by its being carried out or on the area of Tweed as a whole.

### **Comment**

The relevant parts of the development is consistent with the primary objective of the relevant zones. The aims and objectives of the plan have been considered. Whilst there is likely to be cumulative impacts they will not be at an unacceptable level. The impacts on the environment will be managed through management plans, compensatory habitat, and restoration. Positive cumulative impacts include improvement so the arterial road network, housing choice, community infrastructure and land degradation abatement.

### Clause 15 - Essential Services

Water, sewer and stormwater drainage will be constructed as part of the subdivision works. This provision is satisfied.

### Clause 16 - Height of Building

The proposal does not include buildings. A three storey height limit applies to the site. This provision is satisfied.

### Clause 17 - Social Impact Assessment

The objective of the clause is to ensure that proper consideration of development that may have a significant social or economic impact. The Concept Approval granted consent to 5,500 dwellings which equates to approximately 10-12,000 people. The concept approval includes a town centre, neighbourhood centre, community facilities and schools sites, open space and infrastructure. As the population of the Cobaki Estate grows the facilities and infrastructure will develop accordingly. Residents will have access to facilities and services to meet their social and economic requirements.

The proposal is part of a wider development of a greenfield site. Any likely adverse social and economic impacts will be mitigated by the provision of facilities to support the residential community.

### Clause 20 Subdivision zones 7(d) and 7(l)

The minimum allotment size in both the 7(d) and (l) zones is 40 hectares. The proposed lot size for the lots in each of these zones is less than 40 hectares however clause 20(3) permits consent to be granted for lots less than 40 hectares where the allotment is to be used for a purpose, other than for an agricultural or residential purpose for which consent could be granted. The land 7(d) and 7(l) is to be used for environmental facilities which is a permissible use.

### Clauses 26 and 28

Clauses 26 and 28 relate undertaking work within zones 7(d) and 7(l) the clauses are satisfied by not having structures in the either of the zones and the accompanying management plans.

### Clause 33 Obstacles to aircraft.

The proposal does not include any structures 110 metres in height above ground level. This clause is satisfied.

### Clause 34 Flooding

#### **(1) Objectives**

- to minimise future potential flood damage by ensuring that only appropriate compatible development occurs on flood liable land.
- to minimise the adverse effect of flooding on the community.

- (2) Where, in the consent authority's opinion, land is likely to be subject to flooding, then it must not grant consent to development on that land unless it has considered:
- (a) the extent and nature of the flooding hazard affecting the land, and
  - (b) whether or not the development would increase the risk or severity of flooding of other land in the vicinity, and
  - (c) whether the risk or severity of flooding affecting the development could be reasonably mitigated, and
  - (d) the impact of the development on emergency services, and
  - (e) the provisions of Section A3 - Development of Flood Liable Land of *Tweed Development Control Plan*.

### **Comment**

Council's Shire Wide Flood Modelling advises that the site is flood prone, with a Design Flood Level of RL 2.9m AHD, however a Flood Assessment (undertaken by Gilbert and Sutherland in July 2010 modelling the localised flood event), calculated that the Q100 flood level within the site increases upstream along the central drainage corridor. As such, a uniform Design Flood Level of RL 2.9m AHD is not applicable to the site.

As per the Central Open Space Project Application, Council requested that this Applicant provides a Design Flood Level Map incorporating the Regional Q100 event and the Local Catchment Q100 event (as modelled to be higher in the northern parts of the site) to show the Design Flood Level across the Cobaki site at 100mm contours.

This plan has been prepared and was submitted with the latest submission. This plan is to be updated at the completion of finished earthworks for each Precinct and will be used as a common reference in all future development proposals within Cobaki to determining levels for future Precinct applications that border the Central Open Space drainage corridor. Refer Appendix G – Design Flood Level Map.

The minimum residential floor level for dwellings within Precincts 1 & 2 will hence be set at 500mm above the determined flood level as defined by the 0.1m contour Design Flood Level Map, current at the time.

Section A3.2.6 of the DCP contains the Emergency Response Provisions in relation to flood hazard within the Shire. Under these controls new residential subdivisions on an area exceeding 5 hectares are to have high level road evacuation route(s) to land located above the PMF accessible to all lots via (as a minimum) pedestrian access at or above the design flood level not exceeding 100m in length.



The proposed development provide the required high level road evacuation routes from each residential lot within the Precinct area to land located above the PMF level located to the north of Sandy Road

The Cobaki Estate concept plan application addressed flood impacts of the filling of flood prone land, and demonstrated that there would be minimal impacts on local flood behaviour. The concept plan, approved by Minister for planning authorises filling of this land for residential purposes. Significant earthworks have already taken place in this area under prior construction approvals. The works proposed in the subject applications will not have significant impacts over and above these previous approvals.

Flood studies have been undertaken for internal catchments, and will be managed by an internal open drainage system.

#### Clause 35 - Acid Sulfate Soils

The relevant objectives of clause 25 are as follows:

- to manage disturbance of acid sulfate soils to minimise impacts on water quality, ecosystems, infrastructure and agricultural and urban activities.
- to require special consideration and development consent for work including some agricultural and infrastructure-related works, that would disturb soils or ground water levels in areas identified as having acid sulfate soils.

#### **Comment**

Part C – Requirements for Future Applications relevant to the Concept Approval dated 6 December 2010 Section C4 and Section C5 require (C4) that all future applications include where relevant, stage specific management plan updates to the Preliminary Acid Sulfate Soils Management Plan providing where relevant, details on timelines for implementation of recommended works, maintenance periods, funding arrangements, measureable performance and completion criteria. Each plan is to consider all other existing plans for the site to ensure that conflicts and negative impacts do not arise. (C5) to ensure the protection of groundwater quality and water quality in Cobaki Creek and Broadwater, a detailed Acid Sulfate Soil Assessment and Acid Sulfate Soil Management Plan if required which addresses groundwater and Acid Sulfate Soil must be provided prior to the issue of the construction certificate for the central open space and prior to the issue of future precinct earthworks construction certificates. Section C5 goes on to specify the assessment, scope, content and detail of any Acid Sulfate Soil Assessment Report.

Section 8.2 of the Statement of Commitments under Schedule 3 of the Concept Approval dated 6 December 2010 requires that ASS are to be appropriately managed and that detailed ASS investigations and ASS Management Plans will be prepared for the detailed design and construction

of areas of potential ASS. Such investigations and plans are required prior to the approval of Construction Certificate Applications.

According to the SEE an Acid Sulfate Soils Assessment was undertaken by Gilbert and Sutherland as part of the Concept Plan Application. According to previous comments dated 9 January 2009 and 22 December 2009 in relation to the Concept Plan the Acid Sulfate Soils Assessment and Management Plan was not provided for review. Therefore examination of the Cobaki Lakes Constraints Map Ref: Plan No: 6400-170A dated 12/10/2009 and Council's Enlighten Planning Maps of the extent of Acid Sulfate Soils have been used to gain an indication of the extent of Acid Sulfate Soils in relation to the Precinct 1 and 2 application.

The Cobaki Lakes Constraints Map does not indicate any potential ASS distribution extending into the Precinct 1 and 2 areas and Council's ASS Planning Map indicates that the majority of the Precinct 1 and 2 areas is Class 5 with possible intrusions of Class 3 and Class 2 ASS in the Eastern sections.

Therefore the applicant will need to consider the extent of ASS distribution affecting Precincts 1 and 2 and if necessary based upon any likely disturbance of ASS material carry out a detailed ASS assessment and where required based upon this assessment prepare an ASS Management Plan for consideration and approval prior to the issue of any earthworks construction certificate. A suitable condition of consent has been recommended to address this issue.

## **Clause 39 Remediation of contaminated land**

### **(1) Objective**

- to ensure that contaminated land is adequately remediated prior to development occurring.

(2) *State Environmental Planning Policy No 55—Remediation of Land* applies to land to which this plan applies despite any other provision of this plan.

Part C – Requirements for Future Applications relevant to the Concept Approval dated 6 December 2010 Section C17 requires that a Stage 2 Contamination Assessment is to be prepared for Precincts 10 and 17.

Section 8.3 of the Statement of Commitments under Schedule 3 of the Concept Approval dated 6 December 2010 requires that contaminated sites are to be appropriately managed and that detailed contamination assessments of potentially contaminated land will be undertaken and where required Remediation Action Plans implemented. It also requires that Site Audit Statements will be obtained where necessary to verify the remediation of any contaminated land in accordance with relevant NSW guidelines.

The Cobaki Lakes Constraints Map reference Plan No: 6400-170A dated 12/10/2009 indicate potential areas of contamination located in Precincts 10 and 17 and also indicates the location of the decommissioned cattle dip.

When the locations of the potential areas of contamination and the location of the cattle dip are compared to the Master Plan (submitted as Annexure 2 to the Statement of Environmental Effects) it is evident that the cattle dip site and the potential areas of contamination located in Precinct 17 are in relatively close proximity to future residential allotments in Precinct 1 and 2.

The applicant was requested to provide further consideration to the other areas of potential contamination (identified within the Stage 1 Preliminary Contamination Assessment by Gilbert and Sutherland dated May 2008) and advise of what appropriate measures will be provided to prevent occupants of Precincts 1 and 2 from coming into contact with such areas should Precincts 1 and 2 be approved prior to detailed investigation and remediation (if required) of these other areas.

In response to this request a site meeting was carried out on Friday 21 April 2011 with the applicant's representative. This meeting involved a site inspection of the location of the other areas of potential contamination as identified in the Stage 1 Preliminary Contamination Assessment carried out by Gilbert and Sutherland dated May 2008 relative to the location of both precincts 1, 2 and 6.

In response to this meeting, additional information has been provided by the applicant's representative by e-mail dated 4 May 2011. This information advises that the Gilbert and Sutherland Assessment identified three (3) areas of potential contamination, Turners cattle dip, a temporary site compound located on Precinct 17 and an existing dwelling /shed/spray race located on Precinct 10.

Of these areas, the cattle tick dip site is the subject of a remediation action plan and NSW EPA Accredited Site Auditor Certification and Audit Statement. A suitable condition of consent has been recommended to address this issue.

In respect to the temporary site compound, the applicant's representative advises that the compound has been relocated to a "permanent" location in the elevated area of Precinct 10. This area has been fenced off to the public. Significant earthworks have been undertaken in the vicinity of the temporary compound, which poses an insignificant risk to Precinct 1 & 2.

In respect to the existing dwelling/shed and spray race, the applicant's representative advises that this area is not operational. There is a secured access gate located off Piggabeen Road adjacent to this site. The site is located well clear of Precinct 1, 2 & 6 – in excess of 2 kilometres. On this basis this site poses an insignificant risk to Precinct 1 & 2 and 6.

At the time of the site meeting the applicant's representative advised that other areas of the Cobaki development site outside of Precincts 1, 2 and 6 represented construction areas and that accordingly the developer would have to ensure that any future occupants of Precincts 1, 2 and 6 were excluded from these areas.

Given the above advice it is considered that a condition can be imposed on the application requiring that the applicant take appropriate measures acceptable to Council to restrict future residents of precincts 1, 2 and 6 from having access to these other areas of potential contamination until such times as the recommended Stage 2 detailed contamination investigation of these areas is carried out. The cattle dip site will be subject to a separate condition.

## **Clause 39A Bushfire protection**

### **(1) Objective**

- to minimise bushfire risk to built assets and people and to reduce bushfire threat to ecological assets and environmental assets.
- (2) In determining whether to grant consent to development in areas that, in the opinion of the consent authority, are likely to be affected by bushfire, the consent authority must take into account:
- (a) whether the development is likely to have a significant adverse effect on the implementation of any strategies for bushfire control and fuel management adopted by the Bushfire Control Office established by the Council for the area, and
  - (b) whether a significant threat to the lives of residents, visitors or emergency services personnel may be created or increased as a result of the development (including any threat created or increased by the access arrangements to and from the development), and
  - (c) whether the increased demand for emergency services during bushfire events that is created by the development would lead to a significant decrease in the ability of the emergency services to effectively control major bushfires, and
  - (d) the adequacy of measures proposed to avoid or mitigate the threat from bushfires including:
    - (i) the siting of the development, and
    - (ii) the design of structures and the materials used, and
    - (iii) the importance of fuel-free and fuel-reduced areas, and
    - (iv) landscaping and fire control aids such as roads, reserves, access arrangements and on-site water supplies, and
    - (e) the environmental and visual impacts of the clearing of vegetation for bushfire hazard reduction.
- (3) In taking into account the matters required by subclause (2), the consent authority must have regard to the provisions of the document entitled *Planning for Bushfire Protection*, prepared by Planning & Environment Services, NSW Rural Fire Service in co-operation with the then Department of Urban and Transport Planning, and dated December 2001, and must be satisfied that those provisions are, as much as is possible, complied with.

## **Comment**

The subject land is bushfire prone. A perimeter asset protection zone (APZ) is proposed as part of the development. The APZ is proposed to be 20 metres wide with a 5 metre wide fire trail within for access for emergency vehicles. The APZ will be dedicated to Council and maintained by Council. The Plan of Development nominates lots that are bushfire prone and future development will require specialist assessment for bushfire mitigation.

The provisions of the Tweed LEP regarding bushfire have been satisfied.

It should also be noted that section 75P(2)(b) of Part 3A of the NSW Environmental Planning and Assessment Act turns off the integrated provisions as such the NSW Rural Fire Service have not provided terms and conditions. The applicants are still required to obtain the bush fire safety authority from the NSW RFS prior to commencement.

### **Clause 44 Development of land within likely or known archaeological sites**

The residential areas of Precincts 1 and 2 don't contain any known archaeological sites however they are immediately adjacent to Cultural Heritage Protection Areas (CHPA). CHPA's contain a representative sample of the type and distribution of artefacts within the Back Ridge. The CHPA's are zoned Environmental Protection. The Cobaki Lakes Cultural Heritage Management Plan contains management requirements for activities within the CHPA's.

Clause 44 of the Tweed LEP has been satisfied.

### **Clause 52 Zone Map overlay provisions**

The Cobaki site prior to the amended zoning plan approved by the Minister contained zone overlay provisions however this is redundant now due to the amended LEP approved by the Minister discussed in a previous section of this report.

### **State Environmental Planning Policies**

#### **SEPP (North Coast Regional Environmental Plan) 1988**

##### **Clause 15: Rivers, streams and wetlands**

Potential exists for the adjacent Cobaki Broadwater to be adversely affected by runoff, erosion and sedimentation particularly during the construction phase of the subdivision. This risk is able to be managed through a Construction Environmental Management Plan (CEMP) which is required by the Concept Approval. Issues regarding public foreshores areas are not relevant and the Department of Primary Industries has made a submission regarding fish habitat. See Section over regarding submissions.

#### Clause 29A: Natural areas and water catchment

Clearing is not proposed in environmental protection zones.

#### 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).

#### **Comment**

The Coastal Policy contains actions to control impacts of development in the coastal zone. The relative impacts of the proposal are able to be mitigated construction techniques and management practices.

The site is not subject to coastal hazards such as beach erosion as such this is not relevant.

The proposal includes highly detailed site planning within the context of the principles of neighbourhood planning involving connectivity, permeability and legibility of subdivision design. The proposal is not inconsistent with the North Coast Design Guidelines.

#### Clause 43: Residential development

Density, road widths, public transport capability and sediment and erosion management are all acceptable.

#### Clause 66: Adequacy of community and welfare services

The site is located in close proximity to the Regional Centre of Tweed Heads which as adequate services for the development. Future development includes a commercial area which is likely to include additional services for the residents.

#### Clause 82: Sporting fields or specialised recreation facilities

Structured open space is to provided as part of the Cobaki Estate.

#### SEPP No. 14 - Coastal Wetlands

SEPP 14 Wetlands exist adjacent to the Cobaki site. The provisions of the SEPP are not triggered by the proposed subdivision as there is no clearing, draining, filling or levee construction in the SEPP 14 wetland.

#### SEPP No. 44 - Koala Habitat Protection

The percentage of koala food trees on the site does not exceed 15% of the total number of trees as such the provisions of the SEPP are not applicable.

#### SEPP No. 55 - Remediation of Land

The site contains a cattle tick dip site which will be remediated. Conditions are proposed to satisfy the provisions of the SEPP.

#### SEPP No 71 – Coastal Protection

The matters for consideration are the following:

- (a) the aims of this Policy set out in clause 2,
- (b) existing public access to and along the coastal foreshore for pedestrians or persons with a disability should be retained and, where possible, public access to and along the coastal foreshore for pedestrians or persons with a disability should be improved,
- (c) opportunities to provide new public access to and along the coastal foreshore for pedestrians or persons with a disability,
- (d) the suitability of development given its type, location and design and its relationship with the surrounding area,
- (e) any detrimental impact that development may have on the amenity of the coastal foreshore, including any significant overshadowing of the coastal foreshore and any significant loss of views from a public place to the coastal foreshore,
- (f) the scenic qualities of the New South Wales coast, and means to protect and improve these qualities,



- (g) measures to conserve animals (within the meaning of the Threatened Species Conservation Act 1995) and plants (within the meaning of that Act), and their habitats,
- (h) measures to conserve fish (within the meaning of Part 7A of the Fisheries Management Act 1994) and marine vegetation (within the meaning of that Part), and their habitats
- (i) existing wildlife corridors and the impact of development on these corridors,
- (j) the likely impact of coastal processes and coastal hazards on development and any likely impacts of development on coastal processes and coastal hazards,
- (k) measures to reduce the potential for conflict between land-based and water-based coastal activities,
- (l) measures to protect the cultural places, values, customs, beliefs and traditional knowledge of Aboriginals,
- (m) likely impacts of development on the water quality of coastal waterbodies,
- (n) the conservation and preservation of items of heritage, archaeological or historic significance,
- (o) only in cases in which a council prepares a draft local environmental plan that applies to land to which this Policy applies, the means to encourage compact towns and cities,
- (p) only in cases in which a development application in relation to proposed development is determined:
  - (i) the cumulative impacts of the proposed development on the environment, and
  - (ii) measures to ensure that water and energy usage by the proposed development is efficient.

### **Comment**

The relevant issues have been considered and are discussed throughout this report. The matters for consideration under clause 8 have been addressed and are satisfied. A masterplan waiver was provided by the Department of Planning on 11 February 2011.

### **SEPP (Major Projects) 2005**

The proposal exceeds the 250 lot threshold in the SEPP, accordingly the Joint Regional Planning Panel is the consent authority.

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

None applicable.

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

Tweed Development Control Plan

The Cobaki Estate Development Code is to be read in conjunction with the following parts of the Tweed DCP:

A2-Site Access and Parking Code

Not applicable at this stage

A3-Development of Flood Liable Land

See flood assessment section

A4-Advertising Signs Code

Not applicable

A5-Subdivision Manual

See subdivision assessment section

A11-Public Notification of Development Proposals

Exhibition undertaken in accordance with the DCP.

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

Clause 92(a) Government Coastal Policy

The proposal is not inconsistent with the provisions of the Coastal Policy. The estuarine actions in the Policy are more relevant than the coastal processes actions given the location of the site. The proposal includes water quality management, salt marsh rehabilitation and erosion and sedimentation control.

Clause 92(b) Applications for demolition

Not applicable

Clause 93 Fire Safety Considerations

Not applicable

Clause 94 Buildings to be upgraded

Not applicable

**(a) (v) any coastal zone management plan (within the meaning of the Coastal Protection Act 1979),**

The relevant management plan is the *Coastal Zone Management Plan for Cobaki Broadwater and Terranora Broadwater*.

The objectives of the Plan are:

- To improve water quality and ecosystem health by revegetation/regeneration of riparian vegetation, prioritising the mid – transition zones of all creeks and their ephemeral drainage lines.
- To improve rural stormwater discharge quality and ecosystem health by facilitating and supporting best practice land management and functional On-site Sewage System Facilities (OSSF).
- To improve urban stormwater discharge quality by implementing a Stormwater Quality Improvement Device (SQID) retrofitting strategy in existing priority areas, and ensuring future development does not contribute further to the existing pollutant loads.
- To restore riparian habitat to enhance connectivity of wildlife corridors.
- To protect and enhance shorebird habitat and provide additional high tide roosting sites.
- To increase and enhance public access to foreshores and low-impact recreation activities.
- To protect viable commercial fishery industries by preserving and improving fish habitat, including marine vegetation such as seagrass and saltmarsh and improving fish passage.
- To stabilise degraded creek bed and banks, to restore their natural values, improve downstream instream health, and reduce the infilling of the broadwaters.
- To increase community awareness and protection of areas important to Aboriginal cultural heritage.

**Comment**

The proposal is not inconsistent with the objectives of the Plan. Stormwater will be managed and treated prior to discharge into receiving waters. The saltmarsh area is required to be rehabilitated as part of the Project Approval.

Water Sensitive Urban Design will be implemented with requirements for landscaped areas, on site infiltration and rain water tanks.

Aboriginal Cultural Heritage sites have been identified as part of the Concept Approval for the Cobaki Estate. The sites are not part of the current precincts under consideration. The sites will be protected.

Stormwater, Erosion and Sedimentation Management Plans have been prepared for the development and are subject to recommended conditions.

**(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**

Agreed offsets forming part of the concept plan approval have been reduced

Precincts 1 and 2 include areas at the headwaters of the central drainage channel that were nominated as offsets for loss of 3.8ha (and the only remaining portion on the Cobaki Lakes estate) of Swamp Sclerophyll Forest EEC, all of which will be removed with the Precinct 6 proposal.

The concept plan approved the removal of this community subject to the revegetation of a number of discrete parcels, totalling 15.73ha. The areas proposed for offsets were detailed in the *Revised Site Regeneration and Revegetation Plan* prepared by James Warren and Associates dated October 2010, specifically Figure 5 *Endangered Ecological Community Offset Areas*. This plan formed part of the Concept Approval at Condition A3 *Project in accordance with documents*. The total offset area is shown as Area 13 on Figure 4 *Rehabilitation and Management Precincts* of this document (excerpt below).

The current DA reduces the width and area of Management Area 13 substantially by the imposition of passive parks and drainage reserves for stormwater treatment and conveyance for the majority of the area and does not provide a management plan or commitment to undertake any such compensatory works prior to the loss of the relevant habitat. This is contrary to the terms of the concept plan and the Statement of Commitments. Because of the effect of Condition A4(2) of the Concept Plan, this conflict within the current DA which will conflict with the concept plan will have no effect as the concept plan will prevail. A condition has been recommended for compensatory offsets to be implemented for the Swamp Sclerophyll Forest EEC.



**Figure 1:** Areas adjacent Precinct 1 and 2 where revegetation (blue), retention and restoration was agreed and conditioned as offset for loss of habitat and EECs within MP06\_0316. Since the proponent committed (within the Concept Plan approval) to commencement of rehabilitation works prior to registration of any plan of residential subdivision for adjacent land, site specific management plans and restoration works have been conditioned for Areas shown as 1, 2, 3, 13 and 4.



**Figure 2:** EEC offset areas surrounding Precinct 1 and 2: Blue = Swamp Sclerophyll, red Lowland rainforest, Green = Freshwater wetlands.





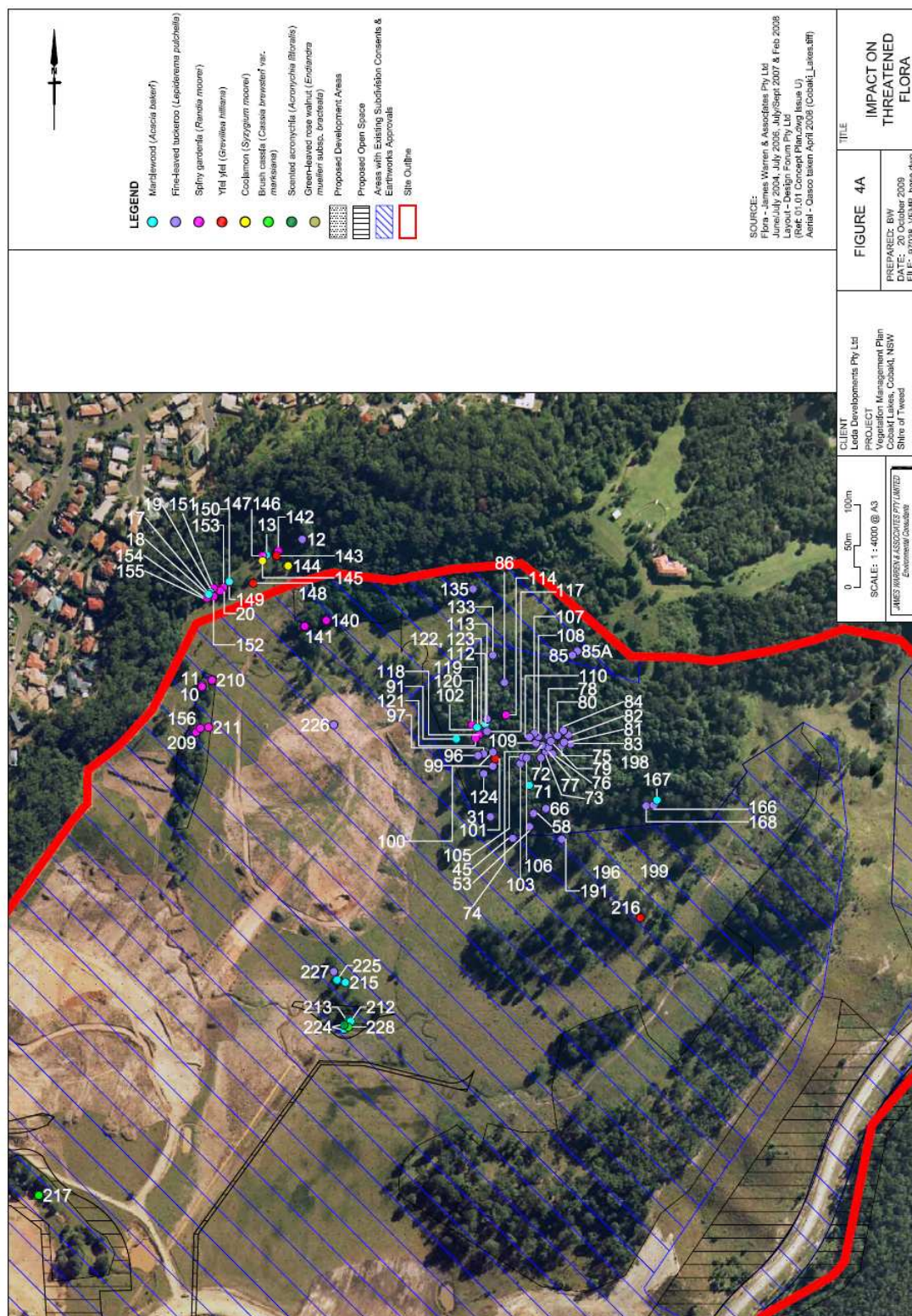
**Figure 4: Proposed vegetation management areas for Precinct 1**

The net result for Precinct 1 provides for two small, disjunct linear parcels that will be subject to significant edge effects and difficult to restore, manage and maintain. The covenant area within the public park does not meet the commitment to restore the surrounding area with rainforest species and does not provide adequate protection for significant threatened rainforest flora, in particular the one stem of *Acronychia littoralis*.

It is also apparent that additional threatened species in the vicinity of the covenant area have been lost during the Concept Plan process, as evidenced by subsequent versions of the SRRP (Figures 6 and 7 below). This does not give certainty to the commitment for retention and restoration.

Since the proponent committed (within the Concept Plan approval) to commencement of rehabilitation works prior to registration of any plan of residential subdivision for adjacent land, site specific management plans and restoration works have been conditioned for Areas shown as 1, 2, 3, 13 and 4. Such areas were already primarily to be protected and restored in accordance with previous Tweed Shire Council consents for which earthworks and clearing has been undertaken. This aspect has been conditioned.









**Figure 6:** Threatened flora records as illustrated in the final Site Revegetation and Restoration Plan dated October 2010 documentation for MP06\_0316. Note the central clump containing 4 stems.

## Ecological Management Plans

The Concept Approval requires stage-specific updates to the *Revised Site Regeneration and Revegetation Plan*, *Freshwater Wetland Rehabilitation Plan*, *Fauna Management Plan* and *Principal Buffer Management Plan* (amongst others). Only templates have been provided to date which do not contain sufficient detail to be able to rely on proposed outcomes being achieved. It is not clear what components of various management plans will be undertaken under this application and the Project Application. Clarification was requested, with the response that wherever overlaps occur, the first plan will be adopted and continued in the subsequent approval. Although the meaning of this statement is not clear, this aspect has been conditioned such that plans must be provided prior to release of the Construction Certificate for the current DA.

## Central drainage corridor

The current DA claims part of the central drainage corridor as offset for loss of Freshwater Wetlands EEC when it was understood that Council will need to maintain this corridor for stormwater purposes and thus long term management for ecological offset is not possible. Council has previously advised that dual management purposes are conflicting and objection is raised to freshwater wetland offset in the central drainage corridor. A condition requiring a planning agreement to be reached prior to the loss of freshwater wetland is contained within the central open space Project Approval.

## EEC Swamp Sclerophyll forest offset

The current DA reduces the width and area of two of the proposed parcels, proposes subdivision to remove most of one lot to become passive parkland, proposes a very small covenant area where restoration to lowland rainforest on floodplain was proposed and places the covenant in a public park with only a 5m buffer around individual rare and threatened rainforest flora species. No detailed management plan or commitment to undertake any such compensatory works is proposed prior to the loss of the further habitat. This is contrary to the terms of the concept plan and the Statement of Commitments. Because of the effect of Condition A4(2) of the Concept Plan, this conflict within the current DA which will conflict with the concept plan will have no effect as the concept plan will prevail.

Because the loss of all remaining Swamp Sclerophyll Forest is proposed to enable the Precinct 6 development, all offset areas for Swamp Sclerophyll Forest EEC as agreed and committed in the concept plan approval is required to be planned and restoration work undertaken prior to the relevant vegetation removal. This has been considered and conditioned within the precinct 6 application. As some of the offset area is proposed adjacent to Precincts 1 and 2, this aspect has been conditioned.

## Koalas

The site is not prime koala habitat not is it suitable has a recovery area for koalas and koala habitat.

Rehabilitation Area 2 of the Revised Site Regeneration and Restoration Plan (Warren 2010) contain Forest Red Gum and Tallowwood, both Primary Koala Food Trees. This area requires restoration and connectivity should be maintained with other potential habitat areas. No further clearing should be allowed in this area zoned for environmental protection and protected as a wildlife corridor in previous Tweed Shire Council consents. APZ's should be entirely outside environmental protection zoned land. This aspect has been conditioned.

#### Small environmental parcels difficult to maintain

A total of 13.65ha within 4 separate allotments are proposed as environmental open space. These are comprised of

<b>Lot Number.</b>	<b>Size</b>
105	5228m <sup>2</sup>
Covenant area	1444m <sup>2</sup>
107	1.712ha
213	11.27ha (Mt Woodgee, zoned environmental protection, minimal restoration proposed)
<b>Total Environmental</b>	<b>13.65ha</b>
Total fire trails/public footway	6.2903ha
Total Drainage reserve	4.13ha
Total casual open space	2.02ha

Whilst the large lots will be more easily maintained, the two smaller areas will require ongoing work and technical expertise to ensure threatened species are retained. This particularly the case for the covenant area and it is considered that its location within a public park is likely to lead to a loss of threatened species in the longer term.

Whilst Council has agreed to accept and maintain the drainage reserve allotments and parks, no such commitment is possible for the environmental areas because there is no similar Council budget allocation. The proponent has offered to retain these environmental areas in their ownership, thereby reducing the maintenance burden on Council's Natural Resource Management Unit. Monitoring and reporting is required to ensure restoration outcomes are met and the offset areas are maintained in perpetuity. This aspect has been conditioned.

1. Commitment to commencement of works prior to subdivision

a. Saltmarsh rehabilitation commitment

The proponent has committed (in the Statement of Commitments forming part of the Concept Plan approval) to commence the rehabilitation works associated with the Revised Saltmarsh Rehabilitation Plan prior to registration of any plan of subdivision. Because the proposal involves subdivision, a condition has been imposed to this effect.

b. Scribbly Gum management plan

The proponent has committed (in the Statement of Commitments forming part of the Concept Plan approval) to commence the management works prior to registration of any plan of residential subdivision. A relevant condition has been imposed.

c. Freshwater Wetlands

The proponent has committed (in the Statement of Commitments forming part of the Concept Plan approval) to commence the rehabilitation works prior to registration of any plan of residential subdivision. A relevant condition has been imposed.

d. Buffers to environmentally sensitive lands

Previous development consents have required a 20m buffer to wetland and environmental protection lands in this area. Cobaki Parkway is of sufficient width that such a provision would be met, although not in the form originally intended

2. Fauna monitoring report

The Concept Approval requires a Flora and Fauna Monitoring Report to collate and synthesize all monitoring and reporting requirements. Because threatened species habitat will be impacted, this report should be available during assessment to illustrate the adequacy of the proposed works and monitoring regime. This aspect has been conditioned prior to issue of the construction certificate.

3. CEMP and environmental officer

The concept plan and project application approvals recognised the complexity in environmental management required provision of a Construction Environmental Management Plan and employment of a suitably qualified Environmental Officer. This condition is re-iterated below.

4. Dogs and cats

The concept plan prohibits the keeping of cats within the Cobaki lakes site through the imposition of Condition C14. It is considered that a

minimum additional condition be imposed such that dogs must be contained to fenced yards and prohibited from the central drainage reserve. Given the density of development proposed, it is recommended that dogs be further constrained to only those yards large enough to cater for them. A suitable condition has been imposed.

## Ecology legislation Assessment Table

Legislation	Section(s)	Comment
<i>Environmental Protection and Biodiversity Conservation Act</i>	Schedules	<p>The proponent referred the proposal to the Commonwealth on 17 October 2009, primarily for consideration of potential impacts upon the Long-nosed Potoroo but also in consideration of additional federally threatened species as well as migratory species and adjacent Commonwealth land.</p> <p>The Commonwealth Department of Sustainability, Environment, Water, Population and Communities decided on the 11 February 2010 that the proposal is a 'controlled action' under the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act). The project is classified as a controlled activity due to potential impacts on a number of threatened flora and fauna species. On 1 December 2010 the Commonwealth advised the proponent to arrange public exhibition of the relevant documents and that assessment would commence after that period had closed. Exhibition has now closed but no advice has yet been received from the Federal Minister with regard to the proposal.</p> <p>The Commonwealth assessment is a separate process to that being undertaken in this report and will be reported to the Federal Minister administering the EPBC Act. In this regard two threatened plant species are located within public parkland with little buffer protection offered, a previously protected Osprey nest has been reported as no longer in place and a new nest site nominated.</p>
<i>Environmental Planning and Assessment Act (Section 5A) and Threatened Species Conservation Act 1995</i>	<p>Section 5A (significant effect on threatened species, populations or ecological communities, or their habitats);</p> <p>Section (94) &amp; Schedules 1, 1A, 2 and 3</p>	<p>Consideration of threatened species, populations and ecological communities and key threatening processes has been previously undertaken within the concept plan process, with the outcome from the Department of Planning that it was considered that a significant effect was not likely to arise from the proposal with the imposition of conditions, and in particular, with the use of compensation mechanisms to offset losses of threatened species and their habitat, as well as Endangered Ecological Communities (EEC's).</p> <p>Notwithstanding comment above with regard to both the potential for a significant impact when assessed under Part 4 of the EP&amp;A Act and the requirement to satisfy Council that offsets</p>

Legislation	Section(s)	Comment
		have been reserved and will be rehabilitated in accordance with previously issued consents, the intention to provide offsets has not been transferred into any plan which may be conditioned and thereby provide assurance that offsets for loss of Swamp Sclerophyll EEC, freshwater wetland, Wallum Froglet habitat and other threatened species habitat will be provided prior to removal of such habitat. This aspect has been conditioned such that plans must be provided prior to issue of a construction certificate and works commenced prior to issue of any subdivision certificate.
<i>Native Vegetation Act 2003</i>		The Act applies to environmental protection land and land zoned for open space where dual consent is required for the clearing of native vegetation. Vegetation on Mount Woodgee and other rainforest areas is of an age that is regarded as either remnant vegetation or protected regrowth, thus should not be cleared without (dual) consent within areas outside of residential zones. The Department of Industry and Investment have had input into the Concept Plan process and it is assumed that the need for dual consent may have been waived.
<i>Water Management Act 2000</i>	Clause 91; 91(E)	<p>The applicant has correctly stated that because the project (or part thereof) has been approved under Part 3A (concept plan) and subsequently assessed under Part 4, "the project or that stage of the project is not integrated development for the purposes of Part 4." This means that the application is not required to be forwarded to the relevant government departments for their assessment and General Terms of Approval.</p> <p>However, this does not set aside the provisions of the Water Management Act nor obviate the need for separate permit prior to undertaking work.</p> <p>A Controlled Activity Approval will be required if the proposal intercepts groundwater (such as when dewatering is required) or involves earthworks within 40m of a named watercourse. A generic condition has been applied.</p> <p>The concept plan required as a condition that an assessment of impacts on groundwater be undertaken and a groundwater management and monitoring plan be submitted with all future applications where groundwater will be intercepted, following an appropriate period of baseline monitoring and in consultation with Council and the Office of Water. The application at C10 refers only to a section which states that</p>

Legislation	Section(s)	Comment
		the application is not integrated development.
<i>Fisheries Management Act 1994</i>	Section 198-202 referring to dredging and reclamation or removal of marine vegetation	No dredging and reclamation permit is likely to be required under Part 7 of the Fisheries Management Act as no direct impacts upon watercourses appear to arise from the proposal. Strict erosion and sediment control measures to be used to control runoff and ensure water quality within adjacent sensitive receptors have been conditioned by others.
<i>SEPP 14</i>		Mapped SEPP 14 wetlands surround the Cobaki Broadwater. The current proposal does not appear to impact upon the SEPP nor propose any development within 100m of the SEPP.
<i>SEPP 26</i>		The land does not contain mapped Littoral Rainforest; therefore this SEPP is not applicable to the development. Nonetheless, the threatened species <i>Acronychia littoralis</i> , typical of littoral rainforest has been recorded on the site and requires protection in accordance with the SRRP.
<i>SEPP 44</i>		The Precinct 1 and 2 development proposes fire trails around Management Area 2 which contains Koala food trees. The revised proposal for fire trails may impact upon this environmental protection area. Koala food trees should be avoided if so and this has been conditioned.
<i>SEPP 71</i>		The site is within the coastal zone and considerations are required under Clause 8. It is considered that potential exists for a cumulative impact on the environment unless the offset considerations required under previous DA's are satisfactorily considered and thoroughly addressed.

## Visual

The ultimate development will result in a significantly different visual appearance of the site compared to the previous use as grazing land. Earthworks have and will continue to transform the site however this transformation is within acceptable limits (no more than 10% of the site exceeding 5m of cut or fill) and are works normally associated with urban subdivision. The steep land in the Mt Woodgee area has been protected via an environmental protection zoning with protection of the ridgelines consistent with the objectives of the zone.

## Community facilities/services

Other than open space supporting facilities for the residential community will not be available immediately within the Cobaki Estate. However as the estate grows the Town Centre will develop and services will establish. This is



considered acceptable for a large Greenfield development. Initial residents will have to travel to established centres for facilities and services.

### **Housing Choice**

The plan of development and Code provides for a wide variety of housing choice with differing lot sizes and dwellings sizes. This is a highly desirable outcome with a high level of variability of household size and occupancy rates in the Tweed.

In addition the Concept Approval required a housing affordability study to be submitted with the application. The study has made recommendations regarding rental accommodation. The recommended conditions include adoption of the Cobaki Estate Affordable Housing Study prepared by Hill PDA Study recommendations.

### **Population Growth/Dwelling Targets**

The development assists the Tweed with fulfilling the dwelling targets stipulated by the State Government in the Far North Coast Regional Strategy. The dwelling target for the Tweed is 19,100 additional dwellings by 2031. Precinct 1 and 2 will result in 506 additional dwellings which represents 2.65 % of the target.

It is considered that planning objectives are satisfied when the strategic targets can be met with housing provided in a planned and structured format that includes provision of open space, urban services (over time) and environmental protection.

### **Aircraft noise**

The site is not within the Australian Noise Exposure Forecasts contours however given the close proximity to the airport the owners of the airport have advised that the airspace above the site is used for light aircraft training. Council does not control the airspace and airports are a Federally controlled facility. The solutions to this issue are limited however it is intended that section 149 Certificates will be notated with advice regarding use of the airspace by the Gold Coast Airport Limited. The extent of the future properties affected is not known at this stage and GCAL has been requested to provide maps indicating the airspace used relative to the Cobaki Estate.

### **Engineering Assessment**

This proposed subdivision utilises works to be completed pursuant to the existing development consents as follows.

- S94/194 – The construction of the 2 (western) lanes of the Cobaki Parkway from the present Boyd Street formation to Proposed Precincts 1 & 2 Entry Road.
- S92/315 – Construction of Boyd Street Extension.
- DA96/271 – Services across Cobaki Creek.



- MP 08\_0200 – Bulk Earthworks of Central Open Space and Drainage Corridor, construction of trunk services. Approved February 2011.
- “Roads to be opened” actions and “roads to be closed” actions for Sandy Lane in Precincts 1 & 2 are intended to be completed under DA1262/2001 and K99/1124. (As referenced on Michel Plan No. 6400-220).

It has been identified that several of the existing consents will need to be modified pursuant to Section 80A(1) of the EP&A Act 1979 (as amended). Darryl Anderson Consulting Pty Ltd provided Council a letter (dated 31 March 2011) indicating which consents and conditions needed to be modified.

Precincts 1 & 2 incorporates a range of lot sizes between 150m<sup>2</sup> to approximately 1000m<sup>2</sup> to facilitate a range of housing product. Based on the following densities:

- 2.6 persons per Traditional Dwelling Lot
- 2.3 persons per Terrace and Zero Dwelling Lot
- 1.95 persons per Multi Dwelling Housing Unit

Precincts 1 & 2 are expected to provide a population of up to 1508 persons.

The Bulk Earthworks (BEWs) of the Central Drainage Corridor will be undertaken under associated Construction Certificate/s under MP 08\_0200. The actual fit out” and landscaping of the Central Open Drainage Corridor as required to manage stormwater discharge from Precinct 1 & 2, as well as the embellishment of Open Space areas within the Central Open Space and Drainage Corridor associated with Precinct 1 & 2, will be undertaken under this DA and associated Construction Certificates.

An amended Master Plan, showing the relationship of the proposed subdivision to the balance of the Cobaki Estate has been submitted under Annexure 1 of the RFI response.

Council will ensure that essential services are provided to each stage, such that each stage can “stand alone” and will not be reliant on future stages.

The dedication of Open Space Areas and Environmental Protection Zones is intended to occur at the completion of the various associated stages of the development.

### **Plan of Development**

Section 5.6 of the Cobaki Estate Development Code (The Code) requires a *Plan of Development* to be submitted with all applications for subdivision. An amended Plan of Development (POD) plus 5 Detail POD Sheets have been submitted with the RFI Response (2 sheets for Precinct 1 and 3 sheets for Precinct 2).

It was noted that the Precinct 2 POD Detail 2 Plan (Plan No. MPS 2144 DA-106) of the original submission did not nominate the location of the zero Lot

Wall for proposed allotments 325-335. This has been addressed in the latest submission (now Lots 697-707).

### **Existing Title Restrictions**

Councils Geographical Information System does not identify any restrictions on the title of the land associated with Precinct 1 & 2.

### **Required Title Restrictions**

On lots where zero lot lines are permitted, the zero lot alignment must be shown on the approved *Plan of Development*, as well as the zero lot line location be shown on the Section 88B instrument.

The Code specifies that:

- Where possible, all services must be located in footpaths in accordance with Figure 5.9.1 (of the Code).
- It is noted that the original submission showed sewer reticulation within easements within the frontage (or rear) of private property, as per Council's standard practice. The latest submission has shifted the sewer reticulation from within the frontage of allotments to within the road reserve. Although this is consistent with The Code, this is not Council's preference. Further negotiation will occur at construction certificate stage.
- Where services are located within a residential lot, an easement is to be provided over that infrastructure that has at least one connection to a public road or reserve.
- Again, this has been provided in the civil engineering plans submitted.

### **Geotechnical / Earthworks / Landforming**

The Statement of Commitments requires that the *Broadscale Geotechnical Investigation - Cobaki Lakes (Cardno Bowler, February 2010)* will be implemented to support earthworks, civil construction and building work. This Report enforces that earthworks will be undertaken under Level 1 Geotechnical supervision. The latest Engineering Services Report by Yeats (March 2011), reinforces this.

Condition C7 of the Concept Plan Approval requires that "*a detailed geotechnical assessment prepared by a suitably qualified person must be submitted with each future development application for subdivision.*"

The Applicant has simply referenced the Broadscale Cardno Report and has submitted a complimentary Preliminary Slope Stability Assessment (again prepared by Cardno Bowler, 25 November 2010) with the original submission and has provided a second complimentary letter Cardno Bowler (dated 16 March 2011) in response to Council's RFI submission.

The above submission does not comply with the requirements of C7, however as the site is considered Low Risk, Council now consider that such

documentation can be accepted at CC stage. As such, appropriate consent conditions will be imposed.

#### Retaining Walls

It is proposed that the use of retaining walls be minimised during bulk earthworks construction by providing temporary 1 in 1 batters. Retaining walls will be provided under separate civil Construction Certificates.

It is noted that the latest Engineering Services Report (March 2011) continues to reference that 2.4m high retaining walls (consisting of 2 x 1.2m high structures) will be required due to the gradient of the existing slope of the land. This however is contradicted by the latest earthworks plans which have amended the land forming within the steep parts of Precincts 1 & 2 to limit retaining walls to 1.2m in height (except for a referenced 3.0m retaining wall fronting the Open Space between Precinct 1 & 2 – Refer Drawing YC0229-2M5-EW08 B).

It has been confirmed that a 3.0m retaining wall fronting the open space area is proposed, as shown, with all other retaining walls within residential Precincts 1 & 2 at a maximum height of 1.2m.

Council will assess the proposal of such a wall as CC stage. A combination of tiered 1.2m retaining walls and batters may be achievable. Either way, Council will enforce that the provisions of Council's Design Specification D6 are adhered to.

It is also noted that the latest submission (Drawings YC0229-2M5-EW01 B and -EW06 B) proposes Bulk Earthworks over the proposed School Site and partially over the proposed Shopping Centre site of Precinct 5. The original submission only showed earthworks for the required sections of Sandy Road and Loop Road required to service Precinct 1 & 2. Whilst works over Precincts outside of Precinct 1 & 2 are not endorsed, no issues are raised with what is shown as the earthworks shown over Precinct 5 are consistent with the BEWs recently approved under 48/2001CCSU.02, being an amended Construction Certificate for BEWs for the Town Centre.

Additionally, it is noted that Council's Specifications require that where retaining walls or batters are utilised to create a level difference between adjacent allotments or an allotment and a road and the retaining wall is located in the lower allotment, the top of batter or top of retaining wall shall be located a minimum 0.5m horizontally from the boundary. This will be checked at CC stage of assessment.

The original DA submission advised that less than 10% of the proposed earthworks exceeds 5m in depth, as per TSC DCP requirements. This is maintained with the latest submission.

The Cardno Bowler Preliminary Slope Stability Assessment Report submitted with the DA, advises that:

- No Slips, creep, seepage, etc have been encountered with Precinct 1 & 2, during Cardno's 10 year involvement on site.

- That a more detailed geotechnical assessment will be carried out by Cardno Bowler across Precinct 1 & 2 at a later date (i.e. prior to construction certificate approval).
- As stated above, this detailed geotechnical assessment should be submitted with the DA Application (as per C7 of the Concept Plan), however Council will is condition the consent to have this information issued prior to the issue of the construction certificate.

Earthworks already undertaken over Precinct 1 & 2 were approved under old development consents. Those consents pre-date and do not relate to the recently approved Concept Plan Approval. As such, Leda advise that it is not Leda's intention to complete the subdivision layout and register lots pursuant to the old development consent and that the proposed development has been designed to comply with the various management plans, ecological assessments and rehabilitation areas approved under the Concept Plan.

Additionally, it is noted that the Cultural Heritage Report advises that:

- Precincts 1 & 2 are immediately adjacent to Cultural Heritage Protection Areas (CHMP Section 12 & Figure 7). Contractors should be advised that ground disturbance cannot be undertaken in Cultural Heritage Protection Areas without prior survey or monitoring activities. Refer to the Activity Response Hierarchy in Section 12.3 of the CHMP for further details.
- Precinct 6 is located approximately 300 m to 800 m north of Cultural Heritage Parks 8, 9 and 10 (CHMP Section 13 and Figure 6). These areas have been nominated for protection. The boundaries of the Parks should be fenced prior to construction in Precinct 6 commencing. .

### **Lot Layout**

It is noted that the latest submission has adjusted the nominated lot type in several locations, being:

- Lots 470-471 – have changed from “Traditional” to “Zero Lots”.
- Lots 610-614 – have changed from “Traditional” to “Zero Lots”.
- Lots 896-902 – have changed from “Zero Lots” to “Traditional”.
- Lots 916-920 & Lots 924-927 – have changed from “Traditional” to “Plexs”.

The proposed changes has not effected the provision of essential services to these Lots.

Each Terrace Lot correctly has been confirmed with a frontage to a street and a secondary frontage to a laneway.

### **Development Layout**

Section 5.5 (4) of The Code states that - Lots for townhouse dwellings, villa dwellings, apartment, tourist accommodation or seniors housing must be nominated as development lots on the Plan of Development.

- The SEE states that only one Development Lot is proposed in Precinct 2 (Lot 214).
- Section 5.5 (5) of The Code also states that – Development Lots must be provided with roads, drainage (including downstream drainage to a lawful point of discharge), service connections and easements sufficient to cater for the future development of the *Development Lot* and the surrounding land.
- The Civil Engineering Plans submitted under Annexure 8 (of the original DA submission) and now under Annexure 4 (of the RFI response), show that essential infrastructure will be provided for the Development Lot. This will be scrutinised in more detail at the CC stage of assessment.

## **Open Space**

### Casual Open Space.

Precinct 1 & 2 generate the need for 17,040m<sup>2</sup> (1.704 ha) of usable Casual Open Space and that a total of 21,631m<sup>2</sup> (2.16 ha) is proposed.

The latest submission advises that Local Park 2 (located within Precinct 1) is intended to be dedicated as a Neighbourhood Park and will be embellished as such.

### Sports Fields (Usable Structured Open Space)

The SEE states that based on estimated densities, Precinct 1 & 2 generate the need for 25,636m<sup>2</sup> (2.5636 ha) of usable Structured Open Space (Sports Fields), with Precinct 6 requiring 21,500m<sup>2</sup> (2.15ha). No SOS is proposed within Precinct 1 & 2, however a total of 61,600m<sup>2</sup> (6.16ha) is proposed within Precinct 6. This leaves a surplus of 14,464m<sup>2</sup> (1.4464 ha) to cater for the demand generated by future Precincts.

## **2.0 Traffic**

A summary of the 3 Deeds applicable to the access of the Cobaki Estate (shown below) has been extracted from the Director Generals – Environmental Assessment Report – November 2010.

### **1.2.2 Deeds of Agreement**

There are three Deeds of Agreement (DOA) in place which relate to access to Cobaki Estate. These are between the proponent and the following government agencies:

- Gold Coast City Council, dated 8 July 1993;
- Tweed Shire Council, dated 6 August 1993; and,
- Queensland Department of Transport and Main Roads (QDTMR) (formerly the Queensland Department of Main Roads) dated 3 February 1997.

The DOAs remain current. The Cobaki Parkway connects with Boyd Street, in Queensland, which connects with the Gold Coast Highway. The Gold Coast Highway is under the jurisdiction of QDTMR requiring this intersection to be upgraded consistent with requirements outlined by QDTMR in their planning and design guidelines.

#### Gold Coast City Council Deed

A summary of the key provisions of this deed are as follows:

- Entitles the proponent to construct and use a temporary access road from the then constructed limit of Boyd Street to QLD/NSW border;
- Requires the proponent to construct, at the commencement of Cobaki Estate:
  - the intersection between Boyd Street and Gold Coast Highway in accordance with an agreement with QDTMR; and
  - Boyd Street extension in two lanes, from and including a roundabout at the constructed limit of Boyd Street to the QLD/NSW border.
- Requires LEDA to construct a four lane upgrade of Boyd Street in QLD when the eastbound traffic volume on Boyd Street at the state border is exceeding 800 vehicles per hour.

#### Tweed Shire Council Deed

A summary of the key provisions of this deed are as follows:

- Requires the proponent to construct a two lane road in NSW from the QLD/NSW border to the Cobaki Estate boundary, in accordance with Development Approval 92/315;
- Requires LEDA to contribute \$1.57m (adjusted for cost increase) to Tweed Shire Council, when called upon to do so, towards the cost of the Boyd Street overpass at its intersection with the Tugun Bypass (Note: this requirement has been met and the overpass constructed);
- Requires Tweed Shire Council to include certain costs in the relevant Section 94 Contribution Plan; and,
- Makes provisions for the purchase by Tweed Shire Council from LEDA of the 20 metre wide Cobaki Parkway road reserve.

#### QLD Department of Transport and Main Roads Deed

A summary of the key provisions of this deed are as follows:

- Requires LEDA to construct a signalised intersection between Boyd Street and Gold Coast Highway, in three stages:
  - an Initial Layout, prior to the purchase of any residential lot at Cobaki Lakes constructing a dwelling in that lot;
  - an Interim Layout before Leda proceeds to develop, market and sell more than 1,000 residential lots at Cobaki Lakes;
  - an Ultimate Layout:
    - before Leda proceeds to develop, market and sell more than 2,900 residential lots at Cobaki Lakes, or;
    - when two way, peak hour traffic volume on the Gold Coast Highway exceeds 4,300, or;
    - if traffic operational problems occur at the intersection.
- Permits the continuous use of the constructed intersection provided the proponent restricts the development, marketing and sale of residential lots at Cobaki Lakes to 3,500 until an interchange is constructed at the intersection of Boyd Street and the Tugun Bypass (Note: Tweed Shire Council's Section 94 Road Contribution Plan makes provision for the future construction of the interchange).

The CRG Traffic Impact Assessment (TIA) Report submitted with the original Precinct 1 & 2 DA submission explains in detail the 1997 Deed of Agreement between Leda and the Queensland DMR (now Department of Transport and Main Roads (DTMR)) and the 1993 Deed of Agreement between Leda and the GCCC, which requires the upgrade of Boyd Street and it's intersection with the Gold Coast Hwy, but does not detail the 1993 Deed of agreement between the Proponent (Leda) and TSC.

It is noted that the Statement of Commitments (SOC 3.2.7) of the Concept Plan approval mentions replacing the 1993 Deed between Tweed Shire Council and Calsonic Management Services Pty Ltd with a new Deed. This has also not been discussed in the original Traffic Report or the latest "Master Plan Traffic Planning Assessment" (MPTPA) prepared by CRG in response to Council's RFI submission.

The TIA Report states that based on a peak directional split of 80/20, Precinct 1 & 2 will only generate a maximum traffic volume of 249vph (eastbound) in Boyd Street. Note 80/20 means that 80% of trips will travel to and from the north via Boyd Street, with the remaining 20% heading south via Piggabeen Road once that connection is in. These estimated values are well below the 800vph trigger to upgrade Boyd Street to 4 lanes. Note, Precinct 6 is



referenced as generating a maximum traffic volume of 290vph (eastbound). This equates to a combined loading of (249 + 290) 539vph which again does not trigger the upgrade of Boyd Street.

Whilst traffic modelling is informative it will be actual traffic counts that will determine the actual traffic movements that in turn will determine when the trigger for road upgrades via the Deeds are reached.

In response to Council's RFI submission, Leda engaged CRG to prepare a "Master Plan Traffic Planning Assessment" (MPTPA). This addendum report, references that the 1993 Deed of agreement will be triggered prior to the occupation of 1430 dwellings (again based on a 80/20 split). Whilst such a split should only be considered if the actual crossing over Cobaki Creek exists, or else it is 100% vehicles heading north. The trigger of 800 vehicles per hour is not reached with the proposal.

In regards to Leda's 1997 Deed of Agreement to upgrade the intersection of the Gold Coast Highway & Boyd Street once 1,000 residential lots are developed, it is noted that Precinct 1 & 2 comprises of 476 allotments (being 497 dwellings). This falls below this trigger point on a Precinct based assessment, however when it is taken into consideration with Precinct 6 (which comprising of 441 allotments, being 549 dwellings), the combined development of Precincts 1, 2 & 6 generate (476 + 441 =) 917 allotments.

Additional items worth noting from CRG's TIA Report:

- Provides a layout plan of the Boyd Street / Gold Coast Highway intersection. This plan has not yet been approved by the DTMR.
- Advises that Queensland DTMR in conjunction with the GCCC, TSC and the NSW RTA is currently preparing a "Cross Border" study which is intended to provide a more accurate assessment of future traffic demands and road network capacity requirements in the vicinity of the State border.
- Has adopted revised / reduced rates to those normally adopted for residential development, on the basis of the closeness of Precinct 1 & 2 to the planned town centre (Precinct 5), the school site and other community facilities, as well as the intended presence of a bus.
- It is also noted that the addendum MPTPA assumes that, upon completion of the development, 50% of residential trips generated will exit the estate and the balance would be generated by the proposed non-residential uses (shopping centre, community facilities, recreational facilities, schools etc).
- Estimates under Figure 4.1 that Precinct 1 & 2 will generate a total of 3313vpd, placing 994vpd along the proposed "Plateau Road" and 2319vpd along the proposed "Loop Road", (based on revised rates). Council requested that traffic numbers under the ultimate development of the site are also provided.
- The MPTPA provided estimated, ultimate daily traffic volumes on all collector and distributor roads (as requested), however in regards to Precinct 1 & 2, the updated figures provided indicate that the proposed

road profile for “The Plateau” is inadequate. Refer Section 10.1 – Roads. Condition to be imposed.

- Advises that roundabouts are proposed to control junctions between Trunk Collector Roads and Collector Streets. “T” intersections will be limited to access streets only.
- The Report proposes 2 x “Deflected Tee Junction” intersections and 3 x “Slow Points” within Precinct 1 & 2.
- As requested by Council, the location of these 2 x “Deflected Tee Junction” intersections and 3 x “Slow Points” has been shown on the Plan of Development, however the “Slow Points” are proposed as “speed bumps”, which are not preferred by Council. Condition to be imposed.
- Suggests that the proposed priority controlled intersection at Cobaki Parkway / Sandy Road will operate satisfactorily until such time as Cobaki Road is extended to Piggabeen Road to the south.
- As requested by Council, the Applicant has provided details of the potential staging of intersection treatments at the Cobaki Parkway / Sandy Road junction, taking into account RTA warrants for traffic signals within the MPTPA. The MPTPA advises that based on Section 2.3 of the RTA’s publication ‘Traffic Signal Design – Section 2 Warrants’, a signalised intersection may be considered if the following warrant is met.
- Traffic demand:

For each of four one-hour periods of an average day:

- the major road flow exceeds 600 vehicles / hour in each direction; and
- the minor road flow exceeds 200 vehicles / hour in one direction

As such, the MPTPA estimates that signals will be warranted at the Cobaki Parkway / Sandy Road intersection upon the completion of Stage 3 of development, however as the actual sequence of development may change, the need for signalisation or other upgrade works should be assessed during each Development Application.

- Note, Council’s Traffic Engineer has advised (via his memo dated 30/03/2011) that the “Although the justifications provided are reasonable, the proposed traffic signals at the Sandy Lane / Cobaki Parkway and the Sandy Lane / new internal road just west of the Cobaki Parkway intersections must be approved by the Roads and Traffic Authority of NSW, who are the ultimate determining authority. Should these approvals not be obtained, roundabout intersection treatments must be considered.”

Note, confusingly, CRG has referenced the development of Precinct 1 & 2 to be Stage 1, the development of Precinct 6 to be Stage 2, the development of Precinct 7 & 8 to be Stage 3, the development of Precinct 3, 4 & 5 to be Stage 4, etc. Refer CRG Figure 5.7.

The MPTPA also references that a signalised intersection is proposed at the first intersection on Sandy Road west of Cobaki Parkway. Although traffic numbers on Sandy Road are estimated to not reach 600 vehicles /



hour in each direction (even with full development of the Cobaki Estate), traffic signals are proposed at this intersection to enhance pedestrian safety once the adjoining commercial precinct and school, which are proposed as part of Stage 4, are developed.

- As per above, this will be subject to RTA approval.

CRG also submitted a "Road Traffic Noise Assessment" for Precinct 1 & 2 with the original application. The Report advises that:

- road traffic noise levels from Cobaki Parkway are predicted to impact the proposed lots within Precincts 1 & 2 at levels below the adopted road traffic noise criterion, hence acoustic treatments are not required.
- road traffic noise impacts from the proposed internal roads should be considered acceptable. Same for noise impacts from Boyd Street on Precincts 1 & 2 – acceptable.

## **Roads**

### **Road Network / Horizontal / Vertical Alignment, Cross Section**

The majority of internal access streets within Precinct 1 & 2 are proposed as a 14.5m road reserve, with a 7.5m pavement, except where described below. This corresponds to Council's standard profile for Access Streets servicing up to 3000vpd.

These internal roads consist of barrier kerb and gutter except for the laneways which have an inverted crown and mountable kerb.

#### Access Lane to proposed Terrace Lots

The latest submission (Drawings YC0229-2M5-TS01 B) proposes a 5.5m pavement within a 8.0m and 6.5m road reserve to service the 2 terrace sections of the development. Council will enforce that a minimum 6.0m pavement (as per Council standards) is provided. Council will ensure that this is consistent with Precinct 6.

#### Loop Road

The proposed 19.0m road reserve, 11.0m pavement Loop Road, equates to Council's standard profile for Low Volume Neighbourhood Connector road, servicing between 3000 - 5000vpd. Leda have addressed Council's RFI concern, clarifying that the Loop Road will service an ultimate catchment of approximately 475 equivalent detached dwellings and will therefore generate in the order of 2,500 vehicles per day (Refer Figure 4,4 and 4,5 of the Cobaki "Master Plan Traffic Planning Assessment", Annexure 4 of Leda's latest submission). This does not exceed the road profiles capacity of 5000vpd.

Council's Traffic Engineer has not questioned the referenced traffic numbers as per CGR's submission.

The proposed Loop Road profile is also consistent with the approved Concept Plan. Note, No On Street parking is proposed on this road.

### The Plateau

CRG's "Master Plan Traffic Planning Assessment" (MPTPA) estimates that the ultimate traffic loading on "The Plateau" will be 5800vpd (refer Figure 4.4 and 4.5). As such the proposed road profile of 19.0m road reserve, 11.0m pavement is inadequate as this accommodates up to 5000vpd. The next highest order TSC road profile provides a 20.9m road reserve, 13.4m pavement and accommodates up to 7000vpd. Condition to be imposed.

### Access to proposed Lots 612-614 & 702-704

Although MPS's latest "Access Network Plan" references the proposed access road servicing Lots 612-614 & 702-704 as a Private road, the accompanying wording advises that this road is intended to be a Public Road. Council's position is a Public road is more appropriate (i.e. for Council and RFS access as well as for providing reticulation services), provided:

- a sealed turnaround facility is provided at the end of each of these roads to allow a B99 standard vehicle to turn around,
- that this access road is constructed of a material (i.e. concrete) to TSC approval such that it gives the appearance to the general public that it is not a public road, and
- that a nominated and registered garbage collection area is provided at the entrance to these public roads.
- This shall be conditioned accordingly.

It is noted that these "Bin Collection area" have been nominated on the detailed "Plan of Development" sheets.

The associated road reserves for these access roads have been increased from 10.0m to 12.5m (providing a 6.0m pavement).

### Proposed Road No.1 and the southern portion of Road No.7

Council's request that proposed Road No.1 and the southern portion of Road No.7 be widened to provide a minimum 9.0m pavement width (17.0m road reserve) to cater as a bus route, such that the development provides a complying number of residents within the 400m walking distance criteria of Council's DCP-A5 Subdivision Manual has been accommodated in the proposal.

### **Road Frontage**

TSC DCP A5 requires 50% road frontage to parks. Whilst the Concept Approval provided variation to this Council's Open Space Officer is satisfied with the proposal given the location and layout of the parks.

## **Cul-de-sacs**

It is noted that the SEE states that the cul-de-sac at the eastern side of Precinct 2 is approximately 130m long, servicing 12 dwellings. Council assessment indicates it is more like 175m with 15 lots. Notwithstanding, it does not comply with Council's DCP which limits cul-de-sacs to a maximum length of 100m. It is acknowledged that the site's topography limits the ability for strict compliance, however the applicant was requested to justify non-compliance having regard to implications on emergency service vehicles and connectivity.

The Applicant responded by stating that due to the sites topography, shape and dimensions, there was "no other practical urban layout suitable to avoid a cul-de-sac arrangement in that part of the site. The subject cul-de-sac services only 12 lots and only 2.5% of all lots will front a cul-de-sac compared the DCP control which allows 15% of all lots to front a cul-de-sac. The subject road provides a cul-de-sac head at the end with a turning radius to allow emergency service vehicles to suitably access that part of the site. Emergency service access is also provided in two directions at the end of the cul-de-sac via the fire trail network. The fire trail network also provides a public 'hike and bike trail' for recreational use."

The justification is considered reasonable in this instance.

## **Intersections**

As mentioned above, roundabouts are generally proposed to control junctions between Trunk Collector Roads and Collector Streets, rather than intersections, with "T" intersections limited to access streets only.

## **Bus routes / Shelters**

The original proposal had approximately 50 lots outside of Council's 400m walking distance DCP criteria. As such, Council requested that proposed Road No.1 and the southern portion of Road No.7 be widened to provide a minimum 9m pavement width, which is the minimum requirement to cater as a bus route, such that the development provides a complying number of residents within the 400m walking distance criteria of Council's DCP-A5 Subdivision Manual. As referenced above, the latest submission has made this adjustment to the design.

Leda's latest submission advises that Leda's Traffic Engineers have sent a copy of the proposed public bus provisions as depicted by Figure 7.1 of the submitted Master Plan Traffic Planning Assessment report to Transit Group Australia Pty Ltd, where discussions with Mr. Alan Cavanaugh of Transit Group Australia indicate that they are satisfied with the proposed bus route and bus stop provisions. It is also stated that Mr. Cavanaugh has discussed this issue with Council staff.

Mr Cavanaugh advised that there were no issues in regards to the proposed route and location of bus stops, however the major issue will be in regards to

buses crossing the NSW / QLD border. This will ultimately be determined by the Ministry of Transport NSW.

## **Access**

Access to Precincts 1 & 2 is proposed off the Cobaki Parkway / Sandy Road northern intersection. This intersection is covered under a separate application to TSC. From this intersection it is proposed to construct Sandy Road through Precinct 5 and west towards the Central Open Space and Plateau Road intersection at various stages of Precinct 1 & 2's development.

No vehicular access is proposed from the lots backing onto Sandy Road. N/A for Precinct 1 & 2.

As per the requirements of The Code (5.5(k)), the driveway locations for Zero-lot, Terrace, Soho, Shop Top, Plex and Mews Dwelling lots are provided on the POD.

As mentioned above, proposed Lots 612-614 & 702-704 are to be serviced via Public roads.

Lots 908, 909 (and possibly 907) will be serviced via a battleaxe arrangement.

The locations of street trees have been amended to fit with the nominated driveway locations. Locations of gully pits etc. will be assessed at CC stage.

Council requested that the development controls on the POD be amended to ensure that the location of driveways on zero-lot lines provide the required clear sight triangles at the street frontage. The following note has been added to the POD.

3.3 Clear vehicle and pedestrian sight distances shall not be compromised at any time by any obstruction (refer AS 2890.1-2004 Off street car parking). A 2m (along front boundary) x 2.5m (along driveway) sight triangle is to be maintained either side of the driveway for pedestrian safety.

## **Pedestrians / Footpaths / Cycleway**

The SEE advised that footpaths will be provided along all internal roads, with the exception of access laneways, in accordance with Council's requirements. The latest Landscape Plans (Annexure 5) have provided (at Council's request) a "Cobaki Overall Connectivity Network Plan" showing how the paths associated with Precinct's 1 & 2 (and 6) interact with the overall Cobaki Estate.

## **Parking / Manoeuvring**

The SEE advises that the PoD (Detail Plans) shows the required on street car parking for Terrace and Plex lots, with on street car parking for each Traditional and Zero lot not shown, as the intention for these lots is that the required 1 on street car parking space will be provided adjacent the lot frontage.

Council's RFI submission, Point 6, requested that all on-street car parking required for Plex dwellings must be provided as additional to normal parallel kerb-side parking (e.g. angle parking).

In response to Council' RFI, Leda responded by amending the POD, showing the areas designated as available on-street parking areas for Plex, Terrace or Mews dwellings.

As discussed with Council Officers in the workshops (post lodgement), Leda amended the on-street car parking plan to not identify on street spaces that are located adjacent to open space areas.

Council's Infrastructure engineer as advised that while on-street parking arrangements are still considered contrary to Council's DCP-A2, the amended parking details appear compliant with Development Code and are therefore satisfactory.

## **Stormwater Drainage**

The consulting engineers for the applicants submitted a Site Based Stormwater Management Plan (SB SWMP) for Precinct 1 & 2, with the original application. This strategy incorporates rainwater tanks, a large constructed open drainage channel and bio-filtration devices to treat pollutant laden stormwater before it is discharged from the subject site.

The original SB SWMP was prepared entirely on the water quality objectives (WQOs) of the Water By Design "Design Objectives for Water Management". These design objectives and adopted targets for stormwater quality management are as follows:

<b>Pollutant Types</b>	<b>Site Water Quality Objective</b>
Total Suspended Solids (TSS)	80% Reduction
Total Phosphorous (TP)	60% Reduction
Total Nitrogen (TN)	45% Reduction
Gross Pollutants > 5mm	90% Reduction

Council advised that although TSC is currently in the process of reviewing it's stormwater quality approach (Design Specification D7 – Stormwater Quality) to be in line with Water By Design, Council still require the application to consider Council's existing water quality objectives (i.e. Design Specification D7 – Stormwater Quality). As such, an amended SB SWMP was required to be submitted, based on Council requirements for Suspended Solids, Phosphorus and Nitrogen. Where TSC requirements cannot be met, Leda were advised that Council would consider accepting the Water By Design criteria, if justified.

An amended SB SWMP has been submitted with Leda's latest RFI response, however it has not assessed the proposed development against TSC current water quality objectives. However Council's standards are currently being

updated to include best current practice which will be reflected in the construction certificate and approval.

In regards to the Water By Design criteria, Table 3.8 of the original SB SWMP and the amended SB SWMP does however show that the water quality load based reduction objectives of 80% for Total Suspended Solids, 60% for Total Phosphorous, 45% for Total Nitrogen and 90% for Gross Pollutants are achieved for stormwater discharging into the Central Open Space.

The following rainwater size tanks are required / proposed:

Development/Lot Type	Council Requirements		Adopted Parameters	
	Connected Roof Area	Min. Rainwater Tank Size	Connected Roof Area	Min. Rainwater Tank Size
Detached Dwelling	160m <sup>2</sup> min.	5,000L	160m <sup>2</sup>	5,000L
Zero-lot Dwelling	Min 85% of roof up to 160m <sup>2</sup>	3,000L	160m <sup>2</sup>	3,000L
Terrace Dwelling	Min 85% of roof up to 160m <sup>2</sup>	2,000L (3,000L if space permits)	160m <sup>2</sup>	2,000L
Plexes (Each Dwelling)	Min 85% of roof up to 160m <sup>2</sup>	2,000L/dwelling Site min. 5,000L (can be common)	160m <sup>2</sup>	2,000L
Mews (Each Dwelling)	Min 85% of roof up to 160m <sup>2</sup>	2,000L/dwelling No common tank without a Body Corp or single owner	160m <sup>2</sup>	2,000L

Although rain or rooftops are not laden with sediment, MUSIC operates by considering that rainwater tanks remove a volume of water from the system, hence runoff is reduced, which in turn reduces sediment loads.

Bio-retention basins are proposed for each precinct to treat the pollutant laden stormwater from the development parcels. These basins are proposed to be constructed adjacent to the Central Open Space & Drainage Corridor to ensure water quality objectives are met before entering the major drainage channel. The invert of the filter media within the bio-retention basins will be kept above the existing groundwater level to ensure the stormwater runoff is treated before entering the groundwater sources.

The bio-retention basins will accept flow from the Precinct's underground piped drainage system, retain this runoff within an extended detention depth of 0.3m and percolate this water through the filter media (sandy loam topsoil). Filtered stormwater is then proposed to be recovered at the base of the filter media via a drainage layer containing perforated pipes. The surface of the bio-retention device is proposed to be densely planted out with locally occurring native ground cover species and shrubs, in consultation with a landscape architect and the approved landscaping plans for the site.

Council will assess at CC stage whether the Water By Design guidelines allow flows greater than the Q3 month event to discharge into the bio-filtration basins.

GPT's, in the form of rock lined basins / fore-bays immediately downstream of all outlet headwalls are also proposed to be installed to assist in capturing and retaining the coarse pollutants that enter the piped drainage systems. This is another standard treatment adopted by the Water By Design guidelines.

Overflow from the rainwater tanks and the road network stormwater pipe systems for Catchments D and E is proposed to be discharged to a vegetated swale located in the Open Space between Precincts 1 & 2, which discharges runoff into a bio-retention basin for treatment. Discharge from this basin is maintained within the Open Space corridor, before being discharged under the Loop Road and into the Central Open Space & Drainage Corridor. Council have liaised with Yeats to confirm that the cross drainage under the Loop Road will need to be sized to cater for the minimum Q50 storm event.

Catchments C and F also utilise bio-retention basins within this Open Space Corridor. Council's Open Space Officer is not opposed the location of these basins, in regards to water bodies close to parks.

The Central Open Space & Drainage Corridor will provide a final polishing function to the stormwater quality treatment train prior to entering the low flow drainage channels south of Sandy Road, however (as requested by Council) this has been excluded from the MUSIC model. Council consider the Central Drainage Corridor provides a conveyance function only.

Although this drainage corridor will provide a bio-retention function, as stated above, this has not been included within the modelling.

### **Lawful point of discharge**

Stormwater from each lot is to be conveyed via a suitable piped network system and treated in bio-filtration basins and swales within the subdivision site. Each bio-retention basin will provide outlet drains for the treated stormwater to pass along the central drainage corridor and ultimately discharging to the Cobaki Broadwater.

As the drainage area is to be dedicated progressively as the development occurs along the alignment of the drain, an easement for drainage is proposed along the alignment of the existing agricultural drain to provide an unimpeded conveyance and legal point of discharge across the land. The easement will be extinguished as necessary following construction and dedication of the ultimate drain.

### **External catchments**

The application identifies that Precincts 1 & 2 are subject to external catchments to the north of the site. These flows are proposed to be captured in a bypass swale drain in the Open Space area that bi-sects Precincts 1 & 2. The flow within this bypass swale drain (sized to convey the Q100) will then be conveyed (via a culvert sized to convey at least the Q50) under the Loop Road and discharged into the Central Open Drainage Corridor.

It is proposed that all stormwater generated within Precincts 1 & 2 will be fully managed within or adjacent to Precincts 1 & 2 to alleviate any impacts on downstream drainage systems. This will be assessed in more detail in the Construction Certificate phase of assessment.

### **Downstream drainage network**

N/A – This is a Greenfield site.

### **Stormwater Quality Management**

#### **Construction Phase (Erosion & Sediment Control)**

It is noted that as this development creates more than 50 lots, under Council's current DCP A5, the development is deemed a Large Subdivision and as such should be providing constructed wetlands. Council's staff are currently amending Council's specifications as Council are steering away from such methods and are adopting techniques recommended by "Water By Design". This includes the utilisation of intended bio filtration basins as temporary sedimentation ponds during the construction phase of the development.

In order to ensure the integrity and durability of the treatment devices in the early stages of the development, it is proposed to turf the bio-filtration basins temporarily to cater for the house construction phases of the project. Once the house construction phase reaches 90% complete for the contributing treatment device catchment, the temporary turf will be removed and the bio-filtration basins will be completed by the developer, with the nominated vegetation and surface works. This has become standard practice based on Water By Design recommendations.

It is noted that the Ecological Report (Annexure 4) submitted with the DA states that:

- "A detailed Precinct 1 & 2 Regeneration & Revegetation Plan will be prepared at the Construction Certificate stage and will include measures to revegetate stormwater treatment areas after construction is complete."
- "Some stormwater treatment areas occur within designated Freshwater Wetland Rehabilitation Areas. These areas will be seeded with grass during the construction phase and then revegetated in accordance the Precinct 1 & 2 Freshwater Wetland Rehabilitation Plan after construction is complete. This detailed rehabilitation plan will be prepared at the Construction Certificate stage."

Yeats' latest submission (Drawing YC0229-2M5-ES07 B) has proposed temporary Sediment Ponds sized to comply with the IEAust (QLD) Erosion and Sediment Control Guidelines. Council will enforce that the proposed sediment control measures comply with TSC / NSW requirements and are consistent with any approved erosion and sediment control plan for the Central Precinct.



## Monitoring

The original SWMP submitted with the SEE stated that “as only proven Stormwater Quality Best Management Practices (SQBMPs) are proposed for this development, it is considered that ongoing water quality monitoring is not necessary”. Council did not accept this and required an amended SWMP to reflect the Concept Plan approval, Condition C6(3) which states *“All future applications for each stage of development are to demonstrate, through the provision of monitoring and adaptive management plans and commitments, that any proposed surface water/stormwater pollution reduction devices will be monitored to determine their pollutant removal efficiencies and the need for further treatment of drainage to ensure the preservation of water quality in Cobaki Creek and Cobaki Broadwater.”*

Leda’s updated “Precinct 1 & 2 Site Based Stormwater Management Plan” states that a “monitoring program including reporting will be established to determine the pollutant removal efficiencies of the proposed treatment devices as per section D7.A12 of the TSC Development Design Specification - D7 Stormwater Quality. This will also establish if further treatment of the stormwater drainage system is required to ensure the preservation of water quality in Cobaki Creek and Cobaki Broadwater.”

Additionally it is noted that the submitted Ecological Assessment Report (Annexure 4) advises that:

- water will not be released from detention basins until samples have been analysed and shown to meet the criteria outlined in the ESC Program, and.
- regular (three monthly) water quality testing is to be undertaken within the wetland in the vicinity of any discharge points to ensure that acceptable water quality parameters are maintained.

## Operational Phase

As mentioned above, water sensitive urban design techniques such as bio-retention basins and swale drains are proposed to treat stormwater within the precinct area.

Access to the bio-retention basins and swales is proposed via gates with a maximum 1:6 turfed ramp, 3 m wide. It shall be assessed during the CC assessment as to whether these access ramps need to be sealed.

It was noted that Condition C6(1) of the Concept Plan approval states that “The stormwater management plans are to be submitted to the satisfaction of the Council following consultation with the DECCW and Industry and Investment (Fisheries).”

It is noted that Leda have advised that they have received feedback from Industry and Investment (Fisheries), but not from DECCW. Leda advise that Fisheries main concern is that the invert of stormwater outlets be set at or above natural ground level, and be consistent with current best practice WSUD. Leda advise that their latest Precinct 1 & 2 Stormwater Management

Plan (SMP) submission complies with these comments and will issue the amended SMP to both DECCEW and Industry & Investment (Fisheries) for information."

Council will enforce that stormwater infrastructure is installed in accordance with Council's Design Specification D5 - Stormwater Drainage Design which incorporate current best practice.

As stated above, Council will enforce that complying SWMPs are submitted with each CC submission and will ensure that Condition C6(1) of the Concept Plan is also complied with.

Leda's latest submission also advises that on 23 February 2011, the Department of Industry and Investment made a submission to Tweed Shire Council which stated that the proposal does not trigger approvals under the Fisheries Management Act 1994 and that no other matters of objection were noted.

The I&I letter also requests that the DA (if approved) ensures that the invert level of stormwater outlets be set at or above natural ground level and be consistent with current best practice WSUD.

In regards to ESC, I&I request that the DA ensures that ESC Plans developed and implemented for the site are consistent with the most recent version of Landcom's *Managing Urban Stormwater: Soil and Construction* Manual. This document is referenced in Council's D7 Specification.

This letter also states that "the rehabilitation and protection of saltmarsh communities, as required by the 6 December 2010 Concept Approval for MP06\_0316, is required to commence prior to registration of any plan of subdivision". Condition to be imposed.

## **Stormwater Drainage Management**

### **Pipe Drainage**

Yeats' request to TSC for a reduction of pipe flow requirements from a Q5 to Q2 piped system servicing WSUD features only was not supported by Council. As such, Yeats have maintained Q5 pipes.

### **Onsite detention**

Rainwater tanks are proposed.

Leda advise that the development Controls on the POD have been amended to include requirements to install water tanks as per Appendix C of the Cobaki Development Code.

### **Infiltration**

Bio-filtration measures are proposed for stormwater treatment.

Council RFI submission Point 34, required calculations to be submitted to confirm that the proposed bio-filtration profiles have adequate capacity to contain and treat it's associated catchment.

- Leda latest submission advises that the Bio filtration profiles have been sized using the MUSIC modelling software and in accordance with the Water By Design MUSIC Modelling guidelines
- These will be checked in detail at CC stage of assessment.

### **Overland Flow paths**

Q100 overland flow path arrows for the major drainage systems have been added to the latest Preliminary Services Plans within the Precinct 1 & 2 Engineering Services Report. The Project Engineers (Yeats) have confirmed that these overland flow paths are in accordance with TSC and QUDM guidelines.

Council will enforce that all major drainage systems meet Council and QUDM standards in public areas (roads, open space, pedestrian areas etc), including consideration of surcharge points from the catch drains provided with the northern fire trails. Adequate safety factors (FoS 1.5 applied to rainfall intensities) and freeboards (0.5m to adjoining residential land) are to be applied to major drainage system design;

### **Services/Utilities** **Water Supply**

The water supply strategy is to provide new trunk main connections from the existing water main at Kennedy Drive along Piggabeen Road, across the new Cobaki Creek Bridge and to the Cobaki Site. A 375mm diameter trunk water main is currently under construction along Piggabeen Road from the intersection of Kennedy Drive and Piggabeen Road to the southern end of the site. This will be the potable water supply connection point for the Cobaki Development.

This water supply is currently served by an existing 5.2ML Walmsleys Reservoir with a top water level (TWL) of 69.52m.

The proposal involves the continuation of the 375mm diameter main from the southern connection point at Piggabeen Road, along Cobaki Parkway to the Sandy Lane roundabout (south). Here the trunk main is proposed to be reduced to a 300mm diameter water main and will continue to the northern intersection of Cobaki Parkway and Sandy Road, adjacent to the future Town Centre. The 300mm diameter trunk water main will be the connection point for the Precincts 1 & 2 potable water supply. 250mm diameter mains are proposed to extend from Sandy Road and loop via a 200mm diameter main. Internal 100mm diameter mains are intended to service the allotments.

Note: the trunk water main proposed within Cobaki Parkway has been prepared under a separate application to Tweed Shire Council.

It is also noted that no subdivision under this application can be finalised prior to completion of adequate stages of external trunk infrastructure servicing the site. Yeats advise that future CC applications for trunk water (and sewer) infrastructure including staging requirements are currently being designed and will be submitted to TSC shortly for approval.

### **Effluent disposal**

The sewerage strategy for Cobaki Lakes identifies a need for a new Regional Pump Station which is proposed to be located within the southern part of the site adjacent to the alignment of the Cobaki Parkway. The trunk connection will extend from the site, across Cobaki Creek, along Piggabeen Road where connection will be made to the existing trunk main to the Gollan Drive pump station. The required external works are presently being undertaken in accordance with the separate approvals for those works.

The 250mm diameter sewage rising main is currently under construction along Piggabeen Road from the intersection of Kennedy Drive and Piggabeen Road to the southern end of the site. Once this rising main has reached capacity, a new 375mm diameter sewage rising main is intended to then carry all sewer flows from the Cobaki Development to the Gollan Drive pump station.

Overflow storage will be required at all Pump Station and Lift Station locations within the development site and will be incorporated into the sewerage system in accordance with TSC's Development Design Specification D12 – Sewerage System. At least 8 hours Average Dry Weather Flow (ADWF) total storage will be provided within the system and an alarm in the pumping station to indicate the occurrence of sewage overflow.

Following Council's RFI submission, Yeats have updated Section 6.5 of their Engineering Services Report, and now advise that a Sewer Overflow Investigations Report in accordance with the DECCW (NSW EPA) Licensing Guidelines for Sewage Treatment Systems will be prepared and lodged in conjunction with future TSC Construction Certificate applications of the PS2 sewer pump station and LS1 sewer lift station.

This report will include consideration of time to overflow in peak wet weather, peak dry weather, location of actual discharge in an overflow, public exposure to sewage, sensitive environmental issues and the like in establishing the likelihood and consequences, to arrive at a risk rating. Consultation will also be undertaken with Tweed Shire Council's Water Unit Strategic and Assets Engineer during the preparation of this report.

### **Internal sewerage system**

Lift Station LS1 is proposed to be located adjacent to Lot 707 (note Yeats report still referenced old Lot No. 335). This lift station will then elevate the Precinct 1 & 2 sewage and direct the flow through a gravity system to the Town Centre Pump Station (PS2), near the intersection of Sandy Road and Loop Road.

The new Regional Sewer Pump station is proposed within the Cobaki Development under a separate application, adjacent to the future Cobaki Parkway and Sandy Lane roundabout (southern end). It is proposed to pump sewage flows from the development over Cobaki Creek and into the 250mm diameter rising main that is currently under construction. A bridge structure over Cobaki Creek will be required to carry the sewer and water infrastructure for the Cobaki Development (under separate application).

A common injection rising main starting from the proposed Town Centre Pump Station (PS2) is proposed to be constructed east along Sandy Road and then south along Cobaki Parkway, under a separate application. This rising main will include two (2) injection points; one for the rising main from the proposed Precinct 6 Pump Station (PS3) and the other for the rising main from the future Precinct 7 & 8 Pump Station (PS4). This external common injection rising main within Cobaki Parkway has been prepared under a separate application to Tweed Shire Council.

The proposed Town Centre Pump Station (PS2) will be the connection point for the Precincts 1 & 2 sewerage system.

Council's original concerns being:

- That Lot 839 was not serviced,
- That the proposed sewer reticulation in the vicinity of proposed Lot 946 was located down the same property boundary as the Zero Lot Wall in Lot 946, and,
- That it was preferable that the sewer reticulation with proposed Lot 959 was located around the front of the lot,

have been addressed in the latest submissions.

### **Electricity**

Existing 11kV overhead powerlines currently cross Cobaki Creek at the southern end of the Cobaki Development and terminate within the site. There is also another existing electrical main from Piggabeen Road that provides power to the existing construction site buildings.

It is proposed to provide the electrical and communications infrastructure to the development from the south along Piggabeen Road and then over the future Cobaki Creek bridge.

The Precinct 1 & 2 Electrical Master Concept Plans prepared by MDA Consulting Engineers are adequate for DA assessment and will be assessed in more detail at the CC stage of assessment.

### **Telecommunication**

Currently there is no existing communications to the site, telecommunications will be provided as part of the infrastructure works.

## **Gas Reticulation**

The original application advised that preliminary investigations had been made in relation to the reticulation of gas from the existing infrastructure located in Golden Four Drive, Tugun. The latest submission advises that these investigations have indicated that connection is not feasible.

Gas should be provided as it is available to be tapped locally once there is sufficient demand, it shall be conditioned that should connection to gas be required, an amendment or separate application will be made to provide relevant details and gain approval for those works.

## **Construction Environmental Management Plan**

Condition C4 (2) requires a CEMP to be submitted with all future applications. As such, a CEMP (Statement of Intent) for Precinct 1, 2 & 6 has been submitted with the Application.

The submission states that the purpose of this report / plan is to confirm to Council, Leda's *statement of intent* with respect to the preparation of these CEMP's including:

- Context;
- Structure; and
- Content.

Leda's intention is to develop the CEMP's during the assessment period of the Development Applications for each precinct and to then submitted the CEMP to Council, for approval, prior to the issue of the Construction Certificate.

## **Natural Hazards**

### **Flooding**

Council's Shire Wide Flood Modelling advises that the site is flood prone, with a Design Flood Level of RL 2.9m AHD, however a Flood Assessment (undertaken by Gilbert and Sutherland in July 2010 modelling the localised flood event), calculated that the Q100 flood level within the site increases upstream along the central drainage corridor. As such, a uniform Design Flood Level of RL 2.9m AHD is not applicable to the site.

As per the Central Open Space Project Application, Council requested that this Applicant provides a Design Flood Level Map incorporating the Regional Q100 event and the Local Catchment Q100 event (as modelled to be higher in the northern parts of the site) to show the Design Flood Level across the Cobaki site at 100mm contours.

This plan has been prepared and was submitted with the latest submission. This plan is to be updated at the completion of finished earthworks for each Precinct and will be used as a common reference in all future development proposals within Cobaki to determining levels for future Precinct applications

that border the Central Open Space drainage corridor. Refer Appendix G – Design Flood Level Map.

The minimum residential floor level for dwellings within Precincts 1 & 2 will hence be set at 500mm above the determined flood level as defined by the 0.1m contour Design Flood Level Map, current at the time.

Section A3.2.6 of the DCP contains the Emergency Response Provisions in relation to flood hazard within the Shire. Under these controls new residential subdivisions on an area exceeding 5 hectares are to have high level road evacuation route(s) to land located above the PMF accessible to all lots via (as a minimum) pedestrian access at or above the design flood level not exceeding 100m in length.

The proposed development provide the required high level road evacuation routes from each residential lot within the Precinct area to land located above the PMF level located to the north of Sandy Road.

### Open Space

The latest landscaping Plans (prepared by Planit) show that the individual Precinct Parks for both Precinct 1 & 2 are at levels at least Q100 – 1m to that shown on the 0.1m contour Design Flood Level Map. Generally the Parks are shown at the Q100 level is acceptable.

## **2.1 Acid Sulfate Soils**

An Acid Sulfate Soil assessment was undertaken by Gilbert and Sutherland as part of the Concept Plan Application. In accordance with Condition C5 of the Concept Plan Approval any Acid Sulfate Soil Management Plan (if required) is to be deferred to the Construction Certificate Stage for assessment.

## **2.2 Bushfire Protection**

Portions of the site are mapped as bushfire prone.

Condition C8 of the Concept Plan Approval requires a detailed bushfire assessment and management plan to be submitted with each development application for subdivision. As such, a Bushfire Risk Assessment Plan was submitted under Annexure 10 of the DA .

In regards to engineering aspects of the submitted plans, the proposed longitudinal grades of the fire trail are acceptable, however Council advised in it's RFI submission that the as a result of the excessive cuts proposed to win material for future stages of the development, unacceptable batters in the order of 1:1.5 are proposed. Such batters do not comply with RSF guidelines, which limit batters in APZs to 18 degrees (or 1:3). Council prefer 1:4 such that they can be mowed. Council will need to be convinced that any batter proposed steeper than 1:4 can be maintained.

At a meeting with Leda (pre RFI Submission), Council staff indicated that if the steep batters (greater than 1:4) could be reduced, there may be scope for Council to accept them, provided they are planted accordingly.



Following this consultation with Council, Leda have amended their design and have limited the extent of batters steeper than 1:3, however significant length of steep batters still exists (Refer submitted Cross Sections YC0229-2M5-XS01 to XS34 in Annexure 3 of Leda's Response Submission).

Condition to be imposed regarding maintenance of the APZ batters.

The APZ will fall under Council ownership.

Instead of providing passing bays every 200m as per RFS requirements, the development proposes to provide access points to the fire trail at a spacing less than 200m. Provided these access points are graded and profiled as per RFS guidelines to enable fire trucks to enter and exit the fire trail and pass one another, this is acceptable, subject to RFS acceptance. Access details can be finalised at CC stage of assessment.

The proposed fire trails are also intended for dual use - hike and bike trail.

At CC assessment, the Fire Trails profile will need to be adjusted to provide drainage relief points for the associated catch drains to discharge down the numerous access points along the trail.

In response to Council's RFI submission, Point 40, the consultants Yeats have advised that Q100 flow calculations have been undertaken for the Precinct 1 & 2 fire trail catch drains and that these catch drains have been designed to capture and convey the stormwater runoff through the nominated overland flow paths. This will be assessed in detail at the CC Stage.

Yeats have also advised that (at Council's request) they will move a Fire Trail such it is now between Lots 625/626, such that is better aligns with Road 14 for overland flow purposes. Yeats also advise that the road capacity of Road No.10 and Road No.14 has been checked to ensure the Q100 flow can be contained within the roads reserve.

### Infrastructure Engineer Assessment.

Information Request	Applicant's Response	Is Response Satisfactory?	Action
1) Provide additional detail of the potential staging of intersection treatments at the Cobaki Parkway / Sandy Road junction, taking into account RTA warrants for traffic signals;	Staging details provided. Provide channelised t-intersection initially, to be upgraded to signals at later stage when warrants met. Signalisation will not be triggered by P1, P2 and P6.	Satisfactory, however the signalisation of this intersection requires approval of the NSW Roads and Traffic Authority. This can be addressed in conjunction with a future stage of the Estate.	Nil - issue resolved until future development stage triggers signalisation of intersection.
2) Provide a traffic network masterplan for the Cobaki Estate that shows	Cobaki Master Plan Traffic Planning	Generally satisfactory. This has been reviewed by Council's	The report to JRPP should note that the

Information Request	Applicant's Response	Is Response Satisfactory?	Action
estimated ultimate daily traffic volumes on all collector and distributor roads;	Assessment (CRG) provided as Annexure 4.	traffic engineer who only raises a query regarding the assumed 50% split of generated vehicles trips that leave the Estate. From experience this should be more like 65-70%. While this does not have a significant bearing on Tweed Shire's road network, it could influence the developer's dealings with QMR and GCCC in satisfying their respective road deeds of agreement.	assumed 50% split of generated vehicles trips that leave the estate is not supported, but does not have a bearing on Council's assessment.
3) Provide a cycleway/pedestrian shared user path network masterplan for the Cobaki Estate;	Cobaki Overall Connectivity Network Plan provided with landscaping documentation in Annexure 5.	Satisfactory	Nil - issue resolved
4) Provide further consideration for the provision of a shared user path ("hike and bicycle route") within the northern APZ given limited potential for surveillance;	Trail is an optional off-road path.	Satisfactory. Trail does not provide a formal network link for pedestrian and bike users, and will only be used for recreational purposes. While surveillance will be limited, restricting access to this area will be more problematic.	Nil - issue resolved
5) By others			
6) All on-street carparking required for plex dwellings must be provided as additional to normal parallel kerb-side parking (e.g. angle parking);	This is inconsistent with the adopted Development Code. Plans have been amended to remove on-street carparking for plexes adjacent to open space areas.	While on-street parking arrangements are still considered contrary to Council's DCP-A2, the amended parking details appear compliant with Development Code and are therefore satisfactory.	Nil - issue resolved
7) Provide concept details for shared bin collection points (dimensions, locations, construction type);	Additional details provided on Plans of Development in Annexure 1. Concrete pad 1.0m wide x 2.2m long per residence.	Satisfactory. Waste Manager recommends minimum 2.0m per residence. Details can be resolved with construction certificate application.	Nil - issue resolved
8) Clarify ownership of private shared access places, and amend the Plans of Development	Shared access places will be Council road reserves, but of	Satisfactory	Nil - issue resolved

Information Request	Applicant's Response	Is Response Satisfactory?	Action
accordingly (i.e. show battleaxe handles on lots, and areas covered by reciprocal right of carriageway);	driveway construction only. Plans amended accordingly.		
9) Amend the Plans of Development to indicate the locations of road slow points and deflected t-junctions, as proposed by the Traffic Impact Assessment, and amend nominated driveway locations as necessary;	Plans of Development amended in Annexure 1 to show indicative locations of deflected t-junctions and speed bumps.	Unsatisfactory. Location of traffic calming devices is generally consistent with original CRG report, however Plans of Development show speed humps, rather than slow points. Speed humps are not a preferred traffic calming device.	Apply consent conditions requiring traffic calming device details (location and design) with CC application, and updated Plans of Development based on approved CC.
10) Widen Road No.1 and the southern portion of Road No.7 to a minimum 9m pavement width as required to comply with the bus route road cross-section in Development Design Specification D1 - Road Design, in order to make this loop road available as a bus route, and ensure that as many lots as is practical are within a 400m walking distance to a bus route, as required by DCP-A5 Subdivision Manual;	Road No.1 and No.7 widened to 9m. Amended plans Annexure 3.	Satisfactory.	Nil - issue resolved.
11) Obtain concurrence from local bus operators for the proposed bus route network, and include future bus stop locations on the Plans of Development;	Transit Group Australia indicated bus routes satisfactory, written response to be provided. Bus stop locations identified in Annexure 4.	Unsatisfactory. Bus stops not shown on Plans of Development. Concern about spacing of bus stops along loop road.	Apply conditions of consent regarding design of bus stop locations, and updated Plans of Development with CC.
12) Confirm that driveway locations are compatible with engineering and landscaping plans to avoid obvious conflicts (street trees, gully pits, light poles, electrical / telecommunication infrastructure etc.), and nominate driveway locations for detached dwellings;	Driveway locations added to street tree landscaping plans in Annexure 5. Gully pits to be located accordingly in CC.	Satisfactory	Nil - issue resolved
13) Amend the "Development Controls" listed on the Plans of	Development Control 3.2 amended to	Satisfactory	Nil - issue resolved.

Information Request	Applicant's Response	Is Response Satisfactory?	Action
Development to state that Council, rather than the Design Review Panel, may approve alternate driveway locations, in accordance with the Roads Act;	clarify approvals on structure of Plans of Development in Annexure 1.		
14) Multiple access driveways shown for plex lots shall be minimised, and where alternate driveway locations are proposed, these should be depicted with a different colour or symbol;	"Preferred" and "alternate" driveway locations labelled on Plans of Development in Annexure 1.	Satisfactory	Nil - issue resolved.
15) Address conflicts with the location of driveways on zero-lot lines and the requirement to provide clear sight triangles at the street frontage in Council's Driveway Specifications and Australian Standard AS2890.1:2004 (Figure 3.3);	Development Controls 3.3 and 9.4 amended on Plans of Development in Annexure 1.	Satisfactory	Nil - issue resolved.
16) Amend landforming plans to comply with DCP-A5 Subdivision Manual and Development Design Specification D6 - Site Regrading (and therefore the Cobaki Development Code). Specifically this should eliminate any interallotment retaining walls used to achieve lot grades less than 10%, and where interallotment walls are permitted, these must not exceed 1.2m in combined height and the footprint must not be counted in lot area or setback calculations. Amended landforming plans must clearly show the location and height of all retaining structures (batters and walls) and finished ground level contours. A single landforming plan for each precinct (to be printed at a large size) would be appreciated;	Landforming plans amended to limit retaining wall height to 1.2m. Revised cut and fill plans in Annexure 3.	Generally satisfactory. Retaining wall plan has now been provided, which confirms maximum wall height of 1.2m, except for one limited section of 3m high wall fronting open space area at the north western extent of P2. Engineering report still refers to a 2 tiered wall of total 2.4m height, however this is not shown on plans (development Engineer confirms that tiered walls have been deleted from plans). The most significant non-compliance with D6 is the use of these walls to reduce lot grades below 10%. However in the case of Cobaki Estate, where a Development Code overrides other Council landforming policies that limit further lot level excavations and permits small lot housing, it is considered that the construction of	As all walls in the private realm will be 1.2m or less, no additional consent conditions are required.

Information Request	Applicant's Response	Is Response Satisfactory?	Action
		continuous, properly designed, certified retaining walls in conjunction with the subdivision civil works is an appropriate approach.	
NOTE: Request to provide sewerage easements within the detached dwelling lots (item 16 of memo) withdrawn from RFI following workshop with applicant.			
17) Provide additional detail in the Erosion Sediment Control Plan to ensure that the proposed sediment basins are sized and located correctly for the bulk earthworks phase of the subdivision considering local soil properties, examine potential modes of failure and containment options, and reflect amendments to the landforming plan as required above. All control measures must be consistent with any approved erosion and sediment control plan for the Central Precinct;	Amended ESCP provided in Annexure 3.	Unsatisfactory. Basin sizing references QLD standards, and provides for average catchment slopes of 0-5%, which is too low. Plans do not reflect staging and diversion of clean upstream catchments around excavation areas.	Additional detail required with construction certificate. Condition recommended
18) Provide a Design Flood Level Map, showing the area inundated by the design flood event (being the 100 year ARI climate change scenario as previously modelled) in and around the Central Precinct, to the proposed ultimate landform. The map shall provide peak flood level contours at 0.1m intervals;	Design Flood Level Map provided in Annexure 3.	Unsatisfactory. While the format is generally acceptable, the graphic does not extent along the minor drain for Precinct 1. This does not affect the overall acceptability of the subdivision however.	Version C design flood level map to be provided by consultants, to be referenced in consent conditions
19) The landscaping plan shall be amended to extend embellishment works for the Major Central Open Drain south of Sandy Road to connect to works proposed as part of Precinct 6;	Landscaping Plans amended in Annexure 5.	Satisfactory	Nil - Issue resolved
20) Amend the landscaping plans for the Major Central Open Drain in the Central Precinct in accordance with Council's previous requirements provided for the Central Precinct Project Application Preferred Project Report, or any	Swale treatment in landscaping plans amended in Annexure 5. Proposed cross section has ground covers, but will accept grass.	Generally satisfactory. Council remains concerned about the maintenance liabilities for the proposed landscaping (ground covers etc) in the Major Central Open Drain. Needs to be consistent with approval for	Apply consent conditions prescribing the required cross section and landscaping of the Major Central Open Drain.

Information Request	Applicant's Response	Is Response Satisfactory?	Action
subsequent approval. The landscaping concept should provide a grassed/turfed swale cross section, with a rock lined channel at the invert. The rock lined channel may incorporate meanders and fringe native vegetation to give the channel the appearance of a natural watercourse. Batter grades, sub-soil drainage and landscaping shall be designed to minimise maintenance requirements for the Major Central Open Drain;		Central Precinct.	
21) The landscaping plan shall be amended to provide a grassed/turfed swale cross-section for Minor Open Drains 6 and 7, with batter grades, sub-soil drainage and landscaping designed to minimise maintenance requirements;	Swale treatment in landscaping plans amended in Annexure 5.	Generally satisfactory.	Apply consent conditions prescribing the required cross section and landscaping of the Minor Open Drains.
22) The request to reduce minor drainage systems from Q5 to Q2 capacity is not supported, and landforming and drainage concepts should be amended to comply with Development Design Specification D5 - Stormwater Drainage Design;	Section 5.2 Annexure 3 amended accordingly.	Satisfactory	Nil - issue resolved
23) Include major drainage systems (Q100 flow paths etc.) in stormwater engineering plans, including preliminary confirmation that these systems meet Council and QUDM standards in public areas (roads, open space, pedestrian areas etc). This must include consideration of surcharge points from the catch drains provided with the northern fire trails. Adequate safety factors (FoS 1.5 applied to rainfall intensities) and freeboards (0.5m to adjoining residential land) should be applied to major drainage system design;	Engineering plans amended in Annexure 3.	Unsatisfactory - Engineering plans show major flow paths diagrammatically with large arrows only. No engineering detail has been provided. Concern is raised regarding the obstruction of major flowpaths at: <ul style="list-style-type: none"> <li>• Upstream of intersection Rd 10 and 14</li> <li>• Bottom of Rd 9</li> <li>• Continuation of Rd 16 through drainage reserve (this appears to be a high point in the earthworks plan)</li> </ul>	Additional information provided to Development Engineer from developer's consultants. Resolved issue at Road 10/14 and Road 9. Other areas remain unresolved. Apply consent conditions in consultation with Development Engineer so issue can be dealt with at CC stage.

Information Request	Applicant's Response	Is Response Satisfactory?	Action
		<ul style="list-style-type: none"> <li>• Intersection Rd 1 and 3</li> <li>• Intersection Rd 1 and 2</li> </ul>	
24) Provide consideration of Council's existing water quality objectives for suspended solids, phosphorus and nitrogen in the Site Based Stormwater Management Plan and MUSIC modelling, and where these cannot be met, justify adoption of the Water By Design pollutant reduction targets;	Sections 4.2 and 4.6 Annexure 3 amended.	Generally satisfactory. The developer has proposed to implement best practice water sensitive urban design, in accordance with SEQ Water By Design, rather than carry out "deemed to comply" stormwater treatment under D7. This has been workshopped extensively by Council officers and the developer's consultants. Council is aware that the existing water quality objectives prescribed by the Tweed Urban Stormwater Quality Management Plan (TUSQMP) may not be practically achievable (particularly total nitrogen). The TUSQMP is currently being updated as a result, and as an interim measure, the water quality objectives set out in Water By Design standards have been adopted for Cobaki Estate. This is currently being formalised in D7 amendments. These interim water quality objectives are shown to be met by the proposed treatment system. It should be noted that this approach is conservative, as the treatment train modelled does not allow for any additional "polishing" of stormwater in the receiving vegetated open drains.	Apply conditions of consent.
25) Amend landscaping plans for the area between Precincts 1 and 2 to separate stormwater	Landscaping plans in Annexure 5 amended accordingly.	Unsatisfactory. Landscaping Plans still show bio-filtration areas as "natural	Apply conditions of consent removing all drainage areas



Information Request	Applicant's Response	Is Response Satisfactory?	Action
conveyance and treatment areas from regeneration and other environmental management zones, and to be consistent with engineering plans.		regeneration" areas. These areas are drainage infrastructure that will be maintained accordingly, and must be excluded from such area calculations.	from environmental areas calculations.

## Bushfire

Council Request for Further Information <i>January 2011</i>	Proponent Response to Further Information Request <i>March 2011</i>	Council Response <i>April 2011</i>
Amend the PoD to clearly indicate the width of all Asset Protection Zones	The PoD has been amended to show these dimensions (refer Annexure 1)	Noted
Amend the PoD to include level of construction required for dwellings/buildings adjacent to Asset Protection Zones in accordance with Planning for Bush Fire Protection 2006 and Australian Standard 3959 2009 Construction of Building in Bush Fire Prone Areas	A revised note is provided on the amended PoD in relation to requirements for Bushfire APZ and level of construction (BAL) under AS3959.2009 (Annexure 1)	It is noted that this will be addressed at the DA or CDC stage for future dwelling applications.
Amend the PoD to demonstrate that all bushfire affected lots (i.e. where the APZ extends onto Lot boundaries) are to be encumbered to this effect with a Section 88B instrument under the NSW Conveyancing Act. Bushfire affected Lots are denoted with hatching on the PoD but a statement should be made as to which Lots are bush fire affected and are to be encumbered by a s88b instrument.	It is not necessary to place requirements for the PoD to require a Section 88B instrument. If that was intended then it would more appropriately be addressed by way of a consent condition. Notwithstanding this it is considered that a specific 88B instrument relating to bushfire APZs is unnecessary as Council Bushfire Planning Maps, Planning for Bushfire Protection 2006, AS-3959.2009 and the Cobaki Development Code provide the appropriate controls to guide the design of future development on bushfire prone land.	Noted that it is not necessary to place requirements within the PoD to require a Section 88B instrument.  However condition C8 of Part 3A Cobaki Estate concept approval states that " <i>all (bushfire) affected lots are to be encumbered to this effect with a Section 88B instrument under the NSW Conveyancing Act.</i> "  This will be conditioned.
Delete small areas of structured open space between the rear of property boundaries and the fire trail and delete	The PoD has been amended to reflect these drafting anomalies	Noted

Council Request for Further Information January 2011	Proponent Response to Further Information Request March 2011	Council Response April 2011																				
the fire trail between Lot 266 and Lot 325 in Precinct 2. This fire trail is superseded by a perimeter road in this location and is not considered necessary. A 20m APZ is sufficient provided there is adequate access for ongoing APZ maintenance in this location.																						
The proposed vegetation treatment of the APZ (as detailed in the JWA 2010 Ecological Assessment) is not supported. Revegetation to create ecological buffers within the Outer Protection Areas of APZs is also not supported. In preference, APZs should be grassed so they can be slashed regularly to ensure fuel management and the APZ marked on the ground where occurring against buffers or regeneration/revegetation areas to delineate the separate management requirements of these two areas.	Council is invited to condition that the vegetative treatment within the proposed APZs are to be provided in accordance with Planning for Bushfire Protection 2006. Fire retardant species have been added to the updated "Precinct 1 & Precinct 2 Fire Trail Locality" plans prepared by Planit Consulting - refer Annexure 5. The Concept Plan Approval indicated that the Ecological Buffer was to comprise an APZ. The proposed vegetative treatment is intended to be fire retardant, low maintenance and with separation in canopy to comply with requirements of an APZ.	Council will accept the proposed revegetation treatment beyond the required 20m wide APZ, to assist with bank stabilisation and provide a buffer to retained or regeneration areas as it is noted in numerous locations that the proposed APZ is wider than the required 20m APZ. The required 20m wide APZ will need to be surveyed and marked on the ground (permanent stakes) to delineate the reduced fuel zone. This will be conditioned. Once Council accepts dedication of the APZ it will be added to Council APZ maintenance register and get periodically slashed throughout the year.																				
The Bush Fire Risk Management Plan must clearly demonstrate that the proposed public road design for Precincts 1 and 2 is compliant with acceptable solutions for access – public roads in Planning for Bush Fire Protection, with particular regard to public road widths and design, location of parking and reticulated water supply, dead end road design requirements and road grades, cross-fall and curves	The Precinct 1 & 2 road design (widths/crossfalls/curves) and layout is compliant with TSC Development Control Plan 2008 Section A5 - Subdivision Manual. Regular access points are provided from the public road to the perimeter fire trail arrangement. On street parking is provided on the road network for Precinct 1 & 2. Reticulated water loop mains are documented on the Yeats Preliminary	Table 4.1 of Planning for Bush Fire Protection 2006 below provides the minimum widths for public roads that are not perimeter roads for safe access of firefighting vehicles in urban areas <table><tr><th>Curve radius (inside edge) (metres)</th><th>Swept Path (metres width)</th><th>Single lane (metres width)</th><th>Two way (metres width)</th></tr><tr><td>&lt;40</td><td>3.5</td><td>4.5</td><td>8.0</td></tr><tr><td>40-69</td><td>3.0</td><td>3.9</td><td>7.5</td></tr><tr><td>70-100</td><td>2.7</td><td>3.6</td><td>6.9</td></tr><tr><td>&gt;100</td><td>2.5</td><td>3.5</td><td>6.5</td></tr></table> Source: AS 2890.2 – 2002.  All roads except laneways appear compliant with minimum widths required for two-way roads. Laneways are only 5.5m or 6.0m and therefore non-compliant. Minimum two-way	Curve radius (inside edge) (metres)	Swept Path (metres width)	Single lane (metres width)	Two way (metres width)	<40	3.5	4.5	8.0	40-69	3.0	3.9	7.5	70-100	2.7	3.6	6.9	>100	2.5	3.5	6.5
Curve radius (inside edge) (metres)	Swept Path (metres width)	Single lane (metres width)	Two way (metres width)																			
<40	3.5	4.5	8.0																			
40-69	3.0	3.9	7.5																			
70-100	2.7	3.6	6.9																			
>100	2.5	3.5	6.5																			

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	<p>Services Plans (YC0229-2M5-SK03 to Sk05).</p> <p>Additional comment in respect to the provision of reticulated water is provided below.</p>	<p>road width is 6.5m. Minimum road widths in order to provide safe access for fire fighting vehicles will be conditioned.</p> <p>Dead end roads must not be more than 200 metres in length and incorporate a minimum 12 metre outer radius turning circle and must be clearly signposted. Roads number 4 and 17 are dead end but are not more than 200m in length. These roads must incorporate a minimum 12 metre outer radius turning circle and must be clearly signposted. This will be conditioned.</p> <p>Requirements relating to access to reticulated water supply will be conditioned</p>
<p>The Bush Fire Risk Management Plan must clearly demonstrate that the proposed fire trail design for Precincts 1 and 2 is compliant with acceptable solutions for access – fire trails in Planning for Bush Fire Protection, with particular regard to minimum carriageway width, maximum grade, connection of the fire trail to the through road system and capacity of access roads to be used as reversing bays (in the absence of passing bays). Fire trails will be required to be gated and locked as a condition of development consent (as per PBP).</p>	<p>The updated Bushfire Trail network is consistent with and actually an improvement to the design endorsed by Tweed Shire Council in March 2009 during the modification of the development consent K99/1124 (refer to Condition 7C of that modified consent which calls up drawings including Michel Surveys Plan no. 6400-163 &amp; Brad Lees Plan No.DA01 to DA22). Compliance with the PFBP 2006 under the current proposal is summarised as:-</p> <ul style="list-style-type: none"> <li>• Formation width 6m wide (clear zone)</li> <li>• Vertical clearance greater than 4m (clear zone)</li> <li>• Maximum grade of trail is less than 10 degrees (18%)</li> <li>• The crossfall of the trail is less than 10% (18%)</li> <li>• No passing bays are provided however multiple access/exit points are provided to the road/trail network at spacing less than 200m</li> <li>• Drainage and erosion controls are provided</li> <li>• The trail will be dedicated to Council</li> </ul>	<p>Yeats Engineering Drawings - Precinct 1 and 2 Fire Trail Longitudinal Sections show fire trail grades. According to drawings, the maximum fire trail grade is 9 degrees. This is compliant with PFBP which requires maximum grades of 15 degrees if sealed and 10 degrees if unsealed. This will be conditioned.</p> <p>Yeats Engineering Drawings - Precinct 1 and 2 Fire Trail Cross Sections show fire trail crossfall which is compliant with PFBP.</p> <p>Yeats Road Typical Sections show a Typical fire trail cross section with a carriageway width of 5m which is compliant with PFBP. An additional 0.5m strip on each side of the trail must be kept clear of bushes and long grass. This is likely to be incorporated in the table drain/batter and so will meet the PFBP minimum carriageway width of 4m with an additional 1m cleared strip either side of the trail. This will be conditioned.</p> <p>The proposal provides for reversing bays rather than passing bays. PFBP states that reversing bays must be six metres wide (of trafficable gravel or sealed road surface) and eight metres deep to any gates with an inner minimum turning radius of six metres and outer minimum radius of 12 metres.</p> <p>The proponent has not demonstrated that reversing bays are compliant with PFBP to ensure fire tankers can utilise these, particularly in the absence of passing bays.</p> <p>According to PFBP, the fire trail system must be connected to the through road system/property access road at frequent intervals of 200m or less.</p> <p>Access points between the fire trail and road network (also acting as reversing bays) are</p>

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	<p>as Operational Land - Public Footway/fire Trail</p>	<p>provided at chainage 170, 340, 520 and 700 in Precinct 1 fire trail and chainage 180, 300, 460 and 580 in Precinct 2 fire trail. In Precinct 1 fire trail there is no provision for access between the fire trail and road network between chainage 700 and 980 a distance of 280m. In Precinct 2 fire trail there is no provision for access between the fire trail and road network between chainage 0 and 240 - a distance of 240m, chainage 580 and 820 - a distance of 240m and chainage 850 and 1280 - a distance of 430m.</p> <p>Therefore for Precinct 1 and 2 fire trails, additional access (to act also as reversing bays) will need to be provided where intervals are greater than 200m. This will be conditioned.</p> <p>The proponent notes that the trail will be dedicated to Council as Operational Land - Public Footway/fire Trail. PFBP notes that if fire trails are placed under Council management, Council is liable for the ongoing costs of maintenance. PFBP also notes that where a fire trail is proposed to be vested in Council, ongoing funding of maintenance should be considered.</p> <p>It will be conditioned that fire trails must be compliant with Planning for Bushfire Protection 2006 prior to their acceptance by Council.</p> <p>It is also reiterated that fire trails will be required to be gated and locked as a condition of consent.</p>
<p>The Bush Fire Risk Management Plan must clearly demonstrate that the proposed reticulated water supply for Precincts 1 and 2 is compliant with acceptable solutions for services in Planning for Bush Fire Protection.</p>	<p>Refer comments above</p> <p>The reticulated water loop mains are documented on the Yeats Preliminary Services Plan (YC0229-2M5-SK03 to SK05).</p> <p>Tweed Shire Council Design Specification D11 requires hydrants at minimum spacing of 60m (which is more regular than the PFBP requirement of 80m spacing).</p> <p>The water mains are required to be designed to accommodate fire fighting flows and pressure in accordance with the Building Code of</p>	<p>Noted.</p> <p>Acceptable solutions for services will be conditioned where required.</p>

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	<p>Australia.</p> <p>An updated Water Network Analysis for Precinct 1 &amp; 2 has been included in this submission. These details are provided in - refer to Annexure 3.</p>	
<p>In conjunction with the required amendments to the proposed earthworks such that they comply with Council's DCP and Design Specification D6, the batters proposed with the fire trails needs to be flattened to (at a minimum) comply with the NSW RFS Planning for Bushfire Protection 2006.</p>	<p>The updated Bushfire Trail is consistent with the trail design endorsed by Tweed Shire Council in March 2009 during the modification of the development consent K99/1124.</p> <p>However the trail proposed in this proposal has been regraded to accommodate flatter batters - refer Annexure 3 for detailed cross sections at 20m intervals. The batters submitted are considered to be an appropriate solution given:</p> <ul style="list-style-type: none"> <li>• The existing approvals that apply to this part of the site as modified under the current Planning for Bushfire Protection Guidelines (under which earthworks have been undertaken).</li> <li>• The hazard is upslope from the residential property, which make the 'fire run' in a direction away from the asset.</li> <li>• The landscaping of the batter with low maintenance, fire retardant species.</li> <li>• The location of a fire trail through the APZ to facilitate maintenance access if and when required.</li> <li>• The difficult grades that apply to this part of the site and the</li> </ul>	<p>It is noted that the bush fire hazard is upslope of the asset. However this relates to the width of the APZ not the slope. A reduced APZ is required in areas where the bush fire hazard is upslope of the development as is the case with Precincts 1 and 2. The slope has been set as less than 18 degrees by PFBP to ensure APZ maintenance is practical and soil stability is not compromised in addition to negating the potential for crown fires.</p> <p>It is also noted that the location of a fire trail through the APZ will assist in accessing these areas for maintenance.</p> <p>Site constraints i.e. steep grades, are also noted. However ensuring APZs can be managed in the long term to ensure protection of life and property in the event of a fire is critical.</p> <p>A review of cross-sections of the Precinct 1 and 2 fire trails revealed that whilst some batters within the APZs had lessened in slope, they predominantly still exceeded 18 degrees, and in many cases exceed 30 degrees.</p> <p>With reference to proposed APZs and the modification of the development consent K99/1124, condition 24A states "Asset protection zones are not to be located in areas where slopes exceed 18 degrees." Therefore the proposal is not compliant with the modification of the development consent K99/1124</p> <p>The proponent plans to dedicate fire trails and it is assumed also the associated APZs to Council therefore Council must be confident it can manage APZs effectively in line with its responsibilities under the Rural Fires Act.</p> <p>Proposed APZs for Precincts 1 and 2 are non-compliant with Planning for Bush Fire Protection as slopes exceed 18 degrees and therefore the proposal is not compliant with condition C8 and Statement of Commitment</p>

<b>Council Request for Further Information January 2011</b>	<b>Proponent Response to Further Information Request March 2011</b>	<b>Council Response April 2011</b>
	need to minimise the use of retaining structures as well as the need to provide appropriate drainage from the upstream catchment of the State Border Reserve.	9 of the Part 3A Cobaki Concept Approval, and consent condition 24A of K99/1124 as amended by s96 application.  Accordingly Council will not accept APZ that have slopes of 18 degrees or greater. This will be conditioned.

### Open Space Officer Assessment

<b>Item</b>	<b>Information request</b>	<b>Comment on response</b>	<b>Action required</b>
4	Further consideration for a hike and bicycle route	Applicant has provided such a plan – 'overall connectivity network plan'. RSU supports the concept of 'off road' bicycle opportunities such as mountain biking	Nil
19	Landscape plan be amended to extend central open space drain to connect with Precinct 6 works	Response is appropriate	Nil
20	Amend landscape plans for major central open space drain	Strong concern is expressed regarding the plantings proposed for the central drain shown in the Precinct 1 & 2 Landscape and Open Space Document – Swale Cross Section. The turf between the swale and the low flow drain is acceptable, however the balance of the area requires more professional consideration. Council staff maintain the plantings proposed, with no canopy cover, will mean significant weed incursion and ongoing public complaints. The other option is for mown grass, which also has drawbacks of ongoing commitment to mowing, and concerns that areas will over time become boggy and difficult to mow as the area has minimal fall.	A consent condition be prepared, highlighting councils existing concerns and requiring: <ul style="list-style-type: none"> <li>An assessment be undertaken by a consultant skilled in natural area management to identify the best planting methods, including plant selection, for that site. Tweed Shire Council will require input to selection of the successful candidate.</li> <li>A trial be undertaken onsite to determine whether the plantings recommended can be expected to be successful in the long term</li> </ul>
21	Amend landscape plan to provide grass swale cross section for minor open drains 6 and 7	Cross sections provided. The same issue described under item 20 above is applicable here	As for item 20 above

25	Amend landscape plans for area between precincts 1 & 2 to separate stormwater areas from regeneration and environmental management	Amended landscape plans do not show any regeneration or environmental land, but does separate stormwater from casual open space	Nil
71	<p>A clear summary of the following categories of Open Space was requested:</p> <ul style="list-style-type: none"> <li>Structured Open Space (Sportsfields)</li> <li>Casual Open Space: Parks to meet casual open space requirements</li> <li>Residual Open Space: Land additional to structured and casual open space but not designated environmental protection:</li> <li>Land designated environmental protection</li> <li>Stormwater and treatments – wetlands and bio retention</li> </ul>	<p>Incomplete response, however the information is sourced elsewhere – annexure 3 'Plan of proposed subdivision precinct 6 drainage reserves and parks Plan no. 6400-218'</p> <p>Note: The same request was made at the concept stage and no response received. DoP approved concept plan while the information remains outstanding</p>	<p>Assessing authorities and TSC land management units to note:</p> <p>1. TSC calculates that Precinct 1 &amp; 2 includes the following public land dedication. No such summary information has been provided by the applicant.</p> <ul style="list-style-type: none"> <li>Structured Open Space Nil</li> <li>Casual OS 2.02ha (excludes 0.14ha covenant area)</li> <li>Residual OS Nil</li> <li>Environmental OS 13.11ha (includes covenant area and fire trail)</li> <li>Drainage reserve 4..13ha</li> </ul> <p>2. Applicant has made statements about retaining environmental land in their ownership. This must be confirmed before approval</p>
72	Clarification sought on amount of casual open space	<p>Response states 1.935ha of casual open space to be dedicated</p> <p>Land dedication plans now submitted show 2.02ha will be dedicated</p>	Nil
73	Provide an open space park dedication plan	<p>Provided</p> <p>NRMU &amp; engineers to note – the environmental protection areas and drainage systems are not included in this dedication plan</p>	Consent condition required stating park dedications will be as per this park dedication plan
74	Amend typical street tree cross sections to comply with D14		Nil
75	Levels for all open space areas must be	Levels provided	Nil



	confirmed with contours on landscape plan		
76	Review of all playground risk ratings is sort	Playground risk rating for park 2 too high. To address this, applicant must relocate the equipment (including softfall) to be 30m from the road, and relocate the adjoining low flow drains to maximise distance from the equipment. This was repeatedly requested during previous discussions	Applicant must relocate the equipment (including softfall) to be 30m from the road, and relocate the adjoining low flow drains to maximise distance from the equipment
77a	Typographical error in number sequence	Error acknowledged and corrected	Nil
77b	Applicant incorrectly describes minimum areas for parks as 'desirable'. The areas are required, not desirable.	Applicant disagrees. The response is not acceptable	Applicant and approval authorities to be aware the minimum areas are <u>required</u> , not desirable. It is at the discretion of Council whether some areas can be negotiated.
78	Clarify open space being either casual or revegetation area	Information provided	Nil
79	Provide for a neighbourhood park, with redesign to address nearby risks	Neighbourhood park proposed however mounding is provided to decrease sight lines and address risk of road and low flow drain.  Such requirements are not acceptable in a newly designed subdivision	Applicant must relocate the equipment (including softfall) to be 30m from the road, and relocate the adjoining low flow drains to maximise distance from the equipment
80	Clarify park 1 being both casual open space and revegetation	Information provided	Nil
81	Management issue caused by inclusion of 'Covenant Area' within park 2	Information provided  Internal issue to be resolved – who is to manage this site, NRMU or RSU?	Consent condition required stating a management plan is required for the covenanted area providing: <ul style="list-style-type: none"> <li>History of the site, vegetation included and why it is covenanted</li> <li>How the area is to be managed in terms of vegetation management and public access</li> </ul>
82	Redesign park 2 to address issues related to covenanted area	Mounding provided but more action required	As for item 79 above

	and adjacent road and drain		
83	Further information provided on embellishment of park 1	provided	Nil
84	Indicate hike and bike routes	Connectivity network plan provided	Nil
85	Reconcile naming/numbering system for all parks	Completed	Nil
86	Provide an overall strategy for park purpose and theming	Local , neighbourhood and sportsfields addressed	Nil

**(c) Suitability of the site for the development**

The site has been zoned for urban purposes for at least twenty years with current development consents and construction certificates for subdivision in operation. The site is bounded by rural, rural residential, sensitive wetlands, the Cobaki Broadwater, Crown Land and residential development across the Queensland NSW State border.

The Cobaki Estate site is 593.53 hectares in area with Precincts 1 and 2 consisting of 66.91 hectares. The relief ranges from 5m AHD to 90 m AHD approximately.

The site contains land zoned environmental protection.

The site is subject to bushfire threat.

Asset Protection Zones are proposed to manage the impacts of bushfire threat. Management plans and buffers are proposed to mitigate adverse impacts on sensitive areas within the site.

Extensive earthworks have been undertaken on the site under existing consents. The site is suitable for residential development.

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

The application was exhibited from 19 January to 21 February 2011 and extended by Council resolution until 21 March 2010. Thirty submissions were received from the public including the Gold Coast Airport Limited. Submissions were received from Gold Coast City Council, Department of Industry and Investment –Fisheries and Queensland Department of Main Roads.

1.1 RESPONSE TO NSW INDUSTRY AND INVESTMENT SUBMISSION		
SUBMITTER'S ISSUE	APPLICANT'S RESPONSE	COUNCIL'S RESPONSE
On 23 February 2011 the Department of Industry and Investment made a	Noted.	Noted

submission to Tweed Shire Council. The submission states that the proposal does not trigger approvals under the Fisheries Management Act 1994.		
That invert of s/w outlets be set at or above natural ground level, be consistent with best practice water sensitive urban design (WSUD).	Agreed. This detail will be shown in the Construction Certificate Application (Civil) where this detail is required.	Agreed
Ensure Erosion & Sedimentation Control Plans be consistent with most recent version of Landcom's Managing Urban stormwater: Soils & Construction Manual.	Agreed. This detail will be shown in the Construction Certificate Application (Civil) where this detail is required.	Agreed
<b>1.2 RESPONSE TO QLD MAIN ROADS SUBMISSION</b>		
<b>SUBMITTER'S ISSUE</b>	<b>APPLICANT'S RESPONSE</b>	<b>COUNCIL'S RESPONSE</b>
<p>On 15 February 2011 the Queensland Department of Main Roads made a submission to Tweed Shire Council.</p> <p>The purpose of the submission was to ensure that the existing arrangements as set out in the 1997 Deed are carried forward in the approval of the proposed development. In this regard the Department of Main Roads has requested that a condition be placed on the development consent that refers to the works required under the existing Deed.</p>	<p>The proposed condition seeks to 'interpret' the deed and is therefore considered to be ambiguous and unnecessary.</p> <p>The Concept Plan Statement of Commitments clearly outlines Leda's intention in respect to implementing the Deed as a legally binding contract. The Deed documents specific contractual obligations and responsibilities of both parties.</p> <p>Any condition of the consent should simply refer to the deed which is a binding contract between the parties. It is unnecessary and inappropriate to attempt to derive a condition from the deed.</p>	<p>The deeds will not be reinterpreted, a condition will be imposed requiring the deeds to be fulfilled where required and where relevant.</p>
<b>1.3 RESPONSE TO GOLD COAST CITY COUNCIL SUBMISSION</b>		
<b>GOLD COAST CITY COUNCIL ISSUE</b>	<b>APPLICANT'S RESPONSE</b>	<b>COUNCIL'S RESPONSE</b>
<p>By letter dated 16 March 2011 Gold Coast City Council forwarded a submission to Tweed Shire Council which included copies of previous submissions made in relation to the Concept Plan Application and DA10/0800.</p>	<p>The relevant part of the submission to this application is the resolution of Council to endorse and forward a copy of the submission prepared by the Sustainable City Future Committee to Tweed Shire Council in relation to the Cobaki Lakes Development (Precincts 1, 2 and 6).</p> <p>Details of Gold Coast City Council's submission (in relation to DA 10/0800) along with our response to each issue is provided below. As the other attachments relate to the</p>	

	Concept Plan, which is now approved, they do not warrant comment.	
<b>Transport Planning</b>		
<p>1. Pursuant to the NSW Minister for Planning's conditions of approval for the Cobaki Lakes Concept Plan the proponent has prepared a traffic impact assessment report for each development application.</p> <p>The reports indicate that the existing volume of traffic on Boyd Street is around 8,000 vehicles per day (VPD) at the eastern end of Boyd Street (near the Gold Coast Highway) and around 7,200 VPD just east of the Inland Drive intersection. An existing Deed of Agreement between Council and the proponent identifies a trigger point where the proponent must upgrade Boyd Street to four vehicle travel lanes. This trigger point is identified as 800 vehicles per hour crossing the State border in an easterly direction. Council officers consider the trigger point to duplicate Boyd Street aligns with Council's threshold (14,000 VPD) for duplication of the road to four vehicle travel lanes.</p> <p>Notwithstanding the above the reports recommendations relate to the individual precincts. There is no reference to the cumulative traffic generation from all of the proposed precincts.</p>	<p>The proponent has committed to providing traffic studies to support each future Development Application.</p> <p>The trigger for the upgrading of Boyd Street to four lanes required under the Deed with GCCC (800vph at the border, with which GCCC expresses itself satisfied) is expected to be reached when approximately 1400 residences are occupied at Cobaki, substantially in excess of the lot yield the subject of the present applications.</p> <p>Leda has prepared a traffic masterplan in response to Tweed Council request which has dealt with Boyd Street in relation to the above issues.</p> <p>This report "Cobaki Estate - Masterplan Traffic Planning Assessment March 2011" has been prepared by CRG Consulting.</p>	<p>Traffic infrastructure facilities in Queensland will be required to be provided in accordance with the relevant deed. The trip rate lot yield for the trigger of the roadworks is not reached by this application.</p>
<p>As such it is recommended that a staging plan regarding all of the precincts within Cobaki Lakes that indicates the expected timing of</p>		

<p>development and the accumulated traffic generation being directed onto Boyd Street be provided for assessment. Traffic generation through the Cobaki Lakes area to Boyd Street from adjacent developments connecting via Piggabeen Road is also an issue that should be addressed in the reports.</p>		
<p>2. Any recommendation in the traffic impact assessment reports prepared by the proponent that suggest the rate of traffic generation will be reduced due to the precincts' location/proximity to the planned retail/ commercial centre, school and other community facilities is not a valid consideration whilst these facilities remain unestablished. It is considered the applications before Tweed Shire Council for assessment will generate traffic that is aligned with the generally accepted rates for detached residential development.</p> <p>It is recommended that the traffic impact assessment reports be revised and submitted to Council for consideration.</p>	<p>This is acknowledged. However, the Deed with GCCC has no connection with Cobaki internal traffic issues.</p> <p>The "Cobaki Estate - Masterplan Traffic Planning Assessment March 2011 prepared by CRG has effectively addressed this issue taking into account ultimate traffic flows from the overall development. Traffic generation rates have been updated (increased) to reflect accepted standards. Refer additional comments in Item 1 above.</p>	<p>Actual traffic counts will determine when the vehicles per hour trigger has been reached.</p>
<p>3. Although the traffic impact assessment reports prepared by the proponent indicate that the Cobaki Lakes' internal road network makes provision for public transport access, there is no information regarding a bus operator that will service this area and how servicing this area will link to/ coordinate with other bus services within the Gold Coast region.</p> <p>It is recommended that</p>	<p>It is to be expected that a bus operator will emerge as the provision of service becomes viable.</p> <p>Preliminary discussions with Transit Group Australia Pty Ltd (Alan Cavanaugh) have been undertaken in respect to bus route and bus stop provisions. It is understood Mr Cavanaugh has discussed this issue with Tweed Shire Council's Staff. Details are contained within the RFI response submitted to Council. We expect this operator will resolve service linkage issues as the project</p>	<p>See assessment comments regarding bus services.</p>

the traffic impact assessment reports be revised and submitted to Council for consideration.	rolls out.	
<b>Social Planning &amp; Development</b>		
<p>4. The proposed development, notwithstanding the development of the broader site, will result in an influx of new residents (approximately 2-3,000 persons) to the area. As such the demand for health and social services in the southern Gold Coast area will increase. The existing facilities in the area, particularly Coolangatta, for the provision of these services has only a limited capacity to cater for any additional demand that might be generated.</p> <p>Whilst additional health and social infrastructure is intended to be provided within the broader Cobaki Lakes development, the timing of its provision is unknown and subject to further development application.</p> <p>It is recommended that Tweed Shire Council consider the sequential provision of health and social infrastructure with the population increase at Cobaki Lakes.</p>	This is a matter for Tweed Council.	Community facilities will be provided via s.94 contribution funds, broader health and social services are provided by State and Federal Government and will be the subject of funding via the budget process. Expansion of services will occur as the population expands as suggested in the submission.
<b>Parks &amp; Recreational Services</b>		
<p>5. Despite the Cobaki Lakes Concept Plan approval and notwithstanding the differences in the requirements/standards for the provision of open space between Gold Coast City Council and Tweed Shire Council the amount of structured open space proposed to cater to the needs of the</p>	<p>Open Space, including structured sports fields will be provided in accordance with Tweed Shire Council's Subdivision Manual - Tweed Development Control Plan Section A5.</p> <p>Compliance with Tweed Shire Council open space requirements will result in substantially more than 15 hectares being dedicated and embellished within the Cobaki Development. These facilities</p>	Structured open space will be provided in accordance with Council's requirements to serve the population at the Cobaki Estate. The central open space and drainage corridor area has been approved by the Department of Planning via a project application. The open space area will be embellished and dedicated as adjacent precincts are released.

<p>expected cumulative population of the overall Cobaki Lakes development is considered insufficient.</p> <p>Existing open space facilities, particularly structured open space, in the southern Gold Coast area are over capacity. Council will need to provide up to at least five (5) district sports fields in the next ten (10) years should the expected population growth for the southern Gold Coast area be recognised. Any deficiency in the provision of sporting fields in Cobaki Lakes will further exacerbate demand for the use of open space facilities within the Gold Coast.</p> <p>The Cobaki Lakes area represents an ideal opportunity to strategically master plan a district sporting facility. To ensure that the recreational needs of the community living within Cobaki Lakes is catered for it is recommended that an area of land at least 15ha (unencumbered and suitable for sports park) is dedicated to Tweed Shire Council.</p> <p>In regard to the current applications that have been lodged with Tweed Shire Council it is necessary that the proponent demonstrate how the amount of proposed open space will contribute towards satisfying the requirements for sufficient structured open space in the short-term and within the overall development. As such it is recommended that a staging plan for the provision of structured open space for all of the precincts within</p>	<p>will no doubt be of use to Gold Coast residents.</p> <p>Proponent is committed to providing such space in sequence with the extent of residential development and in accordance with Council's subdivision guidelines and standards.</p> <p>A Staging Plan for Precincts 1, 2 &amp; 6 has been prepared for the open space dedication as part of the response to Tweed Shire Council's information request. Timing will be subject to market conditions as development progresses.</p>	
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<p>Cobaki Lakes be provided to Council for assessment. The staging plan must also indicate the expected timing for when the structured open space is likely to be provided i.e. as part of the development of which precinct etc.</p>		
<p><b>Strategic &amp; Environmental Planning &amp; Policy</b></p>		
<p>6. The proposed development site (Precincts 1 and 2) is located within, and directly adjacent, to a critical bioregional corridor being the Currumbin to Currumbin Valley and Currumbin to Cobaki Broadwater Bioregional Corridor. The corridor runs from the Currumbin headland directly into the Cobaki Broadwater as well as from the headland along the border and links various areas of ecologically significant value within this border region to the Springbrook plateau.</p>	<p>Submissions were invited in the Concept Plan assessment process and these matters have been settled by the Concept Plan Approval.</p>	<p>Ecological issues including threatened species management including buffers has been considered as part of the application. Sensitive areas have been zoned environmental protection.</p>
<p>It is recommended that any development within this area have regard to the location of the critical bioregional corridor with specific reference to the intent to achieve a corridor of 500m in width, protection of significant ecological features, minimisation of pinch points within the corridor and provision of adequate buffers to all vegetation that forms part of the corridor.</p>		
<p>7. The proposed development intends to establish 916 allotments for residential purposes and a number of other residual allotments for open space and infrastructure purposes. Whilst later precincts of the Cobaki Lakes development is intended to establish a mixed-use retail/</p>	<p>Retail/commercial services within Cobaki will be provided as population demand makes them viable, possibly with some temporary subsidisation by the developer. This is the normal progression of development of this type.</p> <p>It is anticipated that, in time, the quality of the Cobaki retail offering will attract considerable patronage from</p>	<p>The ultimate development will include a vibrant town centre that will be accessible to residents via a variety of travel means such as walking cycling, bus and private car. It is agreed that the early residential stages will be reliant on external services however this will reduce as the population grows and the critical mass increases to support viable on site facilities</p>

<p>commercial centre there is limited information pertaining to the timing of this centre and the extent of the employment opportunities that this centre will provide to the future community.</p> <p>It is considered that this type of development outcome continues to contribute toward maintaining an urban environment dominated by cars and other personalised motorised transport. As such it is recommended that the timing for the establishment of the retail/ commercial centre be investigated so that the future population of Cobaki Lakes is not solely reliant on services provided external to site. It is also recommended that the range of employment types and opportunities within the future centre be sufficient to support the population of the Cobaki Lakes development so as to create a more sustainable community.</p>	<p>the Tugun area. Again, development uncertainties preclude meaningful programming.</p> <p>The employment opportunities that development of the Town Centre Precinct will generate will be those provided by economically viable retail, commercial and related enterprises, and will therefore be decided by the proprietors of such businesses.</p>	
2.1 RESPONSE TO TWEED DISTRICT RESIDENTS AND RATEPAYERS ASSOCIATION SUBMISSION		
SUBMITTER'S ISSUE	APPLICANT'S RESPONSE	COUNCIL'S RESPONSE
<p>The proposal should include an Acid Sulfate Soil Management Plan.</p>	<p>In accordance with Condition C5 of the Concept Plan Approval the Acid Sulfate Soil Management Plan will be lodged during the Construction Certificate Phase. It is not relevant and necessary to lodge the ASMP with this application (under the DA phase). The ASMP will be lodged once the detailed Civil Design is completed, in order to determine the extent of disturbance (if any) to potential Acid Sulfate Soils.</p>	<p>Precincts 1 and 2 are low risk with regards to ASS given the elevation of the site. However preparation of an ASS management plan will be a condition of consent.</p>
<p>The proposal should include a Plan of Management for the entire site.</p>	<p>We are not sure what the association mean in relation to a 'Plan of Management for the entire site', however various Management Plans are already approved and in force</p>	<p>Relevant detailed management plans will be required prior to release of the construction certificate.</p>

	<p>under the Concept Plan approval. Various other stage specific updates of the approved Management Plans are to be endorsed prior to the issue of a Construction Certificate for civil works. The matters of detail to be included in the updates to the Management Plans will be settled in accordance with the civil design.</p>	
<p>Exhibition under the Environmental Protection and Biodiversity Conservation (EPBC) Act should be undertaken.</p>	<p>Matters in relation to the EPBC Act are addressed in the Development Application, specifically Annexure 4, which contains the Ecological Assessment.</p> <p>Outside of this application, the Cobaki development project has recently been placed on Exhibition. Advertisements were placed in The Australian, Sydney Morning Herald and Tweed Daily on Monday 21 February 2011. Documentation was loaded onto the James Warren &amp; Associates (JWA) web site 21 February 2011.</p> <p>The exhibition period (30 Bus days) closed on 4 April 2011 in accordance with the obligations of the EPBC Act.</p> <p>8 responses were received of which 3 were support letters for the submission from "Tweed Heads Environment Group".</p> <p>Response to these submissions is currently being prepared by JWA for lodgement back to the Federal Assessment Authority for determination.</p>	<p>Processes under the Commonwealth Legislation are separate to the DA process under the EP&amp; A Act.</p>
<b>2.2 RESPONSE TO FRIENDS OF THE KOALA SUBMISSION</b>		
<b>SUBMITTER'S ISSUE</b>	<b>APPLICANT'S RESPONSE</b>	<b>COUNCIL'S RESPONSE</b>
<p>Seeks deferment of determination until koala issues north of Tweed River are further investigated.</p>	<p>A motion similar to the request in this submission was raised by Cr Milne at Council's meeting of 15 March 2011. This motion did not obtain Council support.</p> <p>Furthermore we submit that Koala issues in relation to this site were thoroughly assessed and resolved under the consideration and approval of the Concept Plan.</p> <p>Refer to the correspondence attached between Leda and Dr Steve Phillips regarding this</p>	<p>Deferment is not appropriate for this issue. Information provided by Dr Phillips provided at the end of this section.</p>

	matter.	
<b>2.3 RESPONSE TO HASTINGS POINT PROGRESS ASSOCIATION SUBMISSION</b>		
<b>SUBMITTER'S ISSUE</b>	<b>APPLICANT'S RESPONSE</b>	<b>COUNCIL'S RESPONSE</b>
First part of submission is same as "Group 1" issues.	These issues are addressed within Section 3.1 of this response.	
balance of this submission records support for particular extracts from report by Dr Phillips, Jan 2011	Refer to the correspondence attached between Leda and Dr Steve Phillips in response to the 'Koala' issues raised.	Refer to Council response to submitter 2.2 above.
<b>2.4 RESPONSE TO TWEED HEADS ENVIRONMENT GROUP SUBMISSION</b>		
<b>SUBMITTER'S ISSUE</b>	<b>APPLICANT'S RESPONSE</b>	<b>COUNCIL'S RESPONSE</b>
Criticism of Cultural Heritage Management Plan.	The Cultural Heritage Management Plan was approved under the Concept Plan. Refer comments in Section 2.5 in relation to addressing the McDonald submission.	CHMP is approved and see additional comment from Heritage consultants at the end of this section.
Stormwater management issues.	The stormwater issues raised were resolved in the approval of the Concept Plan Approval MP06_0316 and Central Open Space Major Project Approval MP08_0200.  Both approvals endorsed the "Stormwater Quality Concept Plan – Sept 2010" prepared by Yeats. The endorsed reporting was prepared in consultation with DOP, and referral agencies TSC, Department of NSW Industry & Investment (Fisheries), NSW Office of Water and DECCW.	Refer to relevant parts of Section C for detailed assessment.
Assessment of the development application awaits the outcome of EPBC application	The EPBC matter has been addressed in the information accompanying the Development Application.  Refer other EPBC response comments covered in relation to this matter in 2.1 above.	Refer to Council's response to submitter 2.1 above.
Same issues as raised in Gold Coast City Council submission.	These issues are addressed within Section 1.3.	
<b>2.5 RESPONSE TO JACKIE MCDONALD SUBMISSION</b>		
<b>SUBMITTER'S ISSUE</b>	<b>APPLICANT'S RESPONSE</b>	<b>COUNCIL'S RESPONSE</b>
Concern with various matters relation to cultural heritage and in particular consultation and cultural heritage management plans.	This submission has been included amongst 'organisational responses' it appears to assert representation of Aboriginal group or groups.	Refer to Council's response to submitter 2.4 above.

	<p>This submission has been specifically addressed in the attached letter prepared by Everick Heritage Consultants dated 28 March 2011.</p>	
<b>2.6 RESPONSE TO GOLD COAST AIRPORT SUBMISSION</b>		
<b>SUBMITTER'S ISSUE</b>	<b>APPLICANT'S RESPONSE</b>	<b>COUNCIL'S RESPONSE</b>
<p>This submission seeks a condition requiring aircraft noise potential to be brought to attention of all purchasers in writing due to their intended light aircraft operations.</p>	<p>A submission was received from Gold Coast Airport dated 21 March 2011. The nature of the submission seeks to restrict responsibility of the airport due to a perception that the airport has a right to limit the use of the Cobaki site for residential development.</p> <p>The scope of the Cobaki residential project has been established for many years (dating back to the 1980's) by its zoning and DCP. These were long-since in place when the airport was privatised in its acquisition by Queensland Airports Limited in May 1998, by which time Development Consents for residential subdivision had also been issued. (S94/194 and DA97/54).</p> <p>In 1999 the company changed its name to Gold Coast Airport Pty Ltd. In 2003 it was acquired by Queensland Airports Limited, an Australian Public Company. Further development consents for Cobaki had by then issued (K99/1124 and 1262.2001DA), such that nearly the entire urban-zoned area of Cobaki was the subject of development approvals.</p> <p>The group's 2010 Annual Report records that for that year it had gross revenues of \$123m and earnings before interest, tax, depreciation and amortisations of \$60m. Accordingly Queensland Airports Limited is a substantial, well-resourced enterprise.</p> <p>There was the opportunity in the privatisation of 1998 for the potential of approved neighbouring residential expansion to be thoroughly considered. The same opportunity was available in the 2003 takeover for consideration of the then extent of approved development and</p>	<p>It is intended that Council will include information on Section 149 certificates regarding aircraft noise.</p> <p>It should be noted however that the site is not within the Australian Noise Exposure Forecast (ANEF) contours.</p>

	<p>potential for further approvals under the DCP. At each time all the information was on the public record and readily obtainable.</p> <p>The first point, then, is that the possible development of Cobaki precedes the privatisation of the airport and it is not open to its proprietors now to raise concern about this potential impact on its business.</p>	
	<p>The Director General's Assessment Requirements obliged Leda to consult with Gold Coast Airport (GCA). This we did, and the Environmental Assessment that went on public exhibition in December 2008 consequently recorded that "Gold Coast Airport confirmed that the development site is outside of the Airport Lighting Zone and ANEF Zones". Nothing more than that had been raised by GCA in our consultation with it.</p> <p>No submission from GCA was received by DoP in response to the public exhibition. Nothing was said by GCA when the Preferred Project report was posted to DoP's web site. It was not until 1 March 2010 that GCA was again heard from.</p> <p>Putting this itself aside, the important second point is that GCA's submission was considered by DoP at the Concept Plan stage in the context of its making recommendations to the Minister, who declined not to impose any conditions or obligations responsive to GCA's concerns. The Concept Plan approval has resolved the matter.</p> <p>We note that the GCA's letter states that "almost uniquely in the area surrounding the airport the Cobaki Lakes locality is almost completely undeveloped...". As a result, GCA concludes, Cobaki will "continue to be subject to very large numbers of light aircraft...".</p> <p>This statement is not well founded and is ignorant of the extensive planning history that applies to the Cobaki site. In fact, Cobaki is a residential development site which has been confirmed through a</p>	

	<p>series of development consents which have been commenced and the most recent approval of a Concept Plan by the Minister for Planning.</p> <p>The expansion of the airport's light aircraft operations foreshadowed by GCA will have to address that precondition. Leda will not accept any related imposition upon its pre-established development rights.</p>	
<b>2.7 RESPONSE TO WOYUNG ACTION GROUP SUBMISSION</b>		
<b>SUBMITTER'S ISSUE</b>	<b>APPLICANT'S RESPONSE</b>	<b>COUNCIL'S RESPONSE</b>
Koala Habitat	Comments regarding koala population are incorrect. Please refer to correspondence between Leda and Dr Steve Phillips.	Refer to Council's response to submitter 2.2 above.
Water Conservation and Dual Reticulation	<p>Rainwater tanks are mandated for each dwelling. Dual reticulation was comprehensively considered in conjunction with Council and subsequently declined by Council.</p> <p>In addition to this fact, TSC commissioned a Shire wide "Demand Management Strategy" to investigate possible reductions on the demand for potable water resources. The MHW report investigated 5 scenarios for Greenfield developments which included Cobaki. Dual Reticulation was included in the five scenarios investigated. The MHW report dated December 2009, recommended Greenfield Development Scenario 1 - Implementation of BASIX including rainwater tanks be adopted.</p>	Refer to relevant parts of Section C of this report for detailed assessment on this issue.
	Dual reticulation was ruled out by MHW on the basis of costs to the community, developer and council. A considerable amount of energy is required, to treat and transport recycled water, producing significant greenhouse emissions. On this basis no dual reticulation is proposed.	
Bike Paths	<p>Paths will be provided in accordance with Tweed Shire Council standards.</p> <p>An Overall Connectivity Network Plan has been</p>	To be provide in accordance with standard requirements.



	prepared for pathway linkages as part of the response to Tweed Shire Council's information request.	
EECs not protected	The ecological impact of the proposal including ecologically endangered communities were thoroughly assessed and addressed in the Concept Plan and Central Open Space Approval/s. EECs are again addressed in the Development Applications. In addition a separate Planning Agreement between DECCW and Leda is to be entered into before any works are commenced that may cause or contribute to the relevant impact (as a commitment under the Concept Plan). Leda /DECCW are currently working through the details of the agreement.	Refer to relevant parts of Section C of this report for detailed comment.
<b>3.1- RESPONSE TO GROUP 1 SUBMISSIONS (MARION RIORDAN, JON KEAR-COLWELL, JOANNA GARDNER AND CHRIS DEGENHARDT)</b>		
<b>SUBMITTER'S ISSUE</b>	<b>APPLICANT'S RESPONSE</b>	<b>COUNCIL'S RESPONSE</b>
Cobaki is the only viable threatened species recovery area north of Tweed River.	Refer correspondence between Leda and Dr Steve Phillips.	Refer to Council's response to submitter 2.2.
A 500m wide fauna corridor should be provided through the site.	The movement corridors for fauna through and around the site has been assessed and approved by the Concept Plan Approval.	Refer to relevant parts of Section C of this report for detailed comment.
Dual reticulation system, stormwater harvesting should be provided.	Rainwater tanks are mandated for each dwelling.  Dual reticulation was comprehensively considered in conjunction with Council and subsequently declined by Council.  Refer Demand Management Strategy comments in Section 2.7.	Refer to relevant parts of Section C of this report for detailed comment.
The site is flood prone land and that filling is unjustifiable.	Extent of filling determined since 1990's as reflected in commenced development consents. Filling of the site has been reaffirmed through the endorsed Concept Plan and Project Application flood modelling studies. The flood modelling is consistent with Council's recently adopted Development Control Plan, Section A3 which incorporates climate changes scenarios in addition to 10% rainfall intensity increases. This approach has been endorsed by Council's Planning and Infrastructure Engineer Danny	Refer to detailed engineering assessment in Section C of this report.

	Rose.	
Claims sea level rise not considered.	Climate change levels have been incorporated in the flood modelling together with increased rainfall intensities – refer comments above.	Refer to relevant parts of Section C of this report for detailed comment.
No on site food production/trade via farmers markets etc	On site food production not required but is certainly not excluded by the Concept Plan. Trade formats are a matter for the future community.	Not considered to be a relevant planning matter.
Use of sports fields for drainage unacceptable	Sports fields are entirely separate to the proposed drainage reserves. The sports fields are designed to comply with Councils standards in relation to the extent, size, shape and flood immunity requirements. Updated details have documented within the "Landscape and Open Space Document". These details are contained in the response recently lodged with Council.	The issues identified in respect to the proposed sporting fields and the overall drainage scheme for the site are considered to be independent of each other.
Sports fields will dominate central space	The central space comprises a central drainage area, parks and sports fields. Public open space will be of sufficient area to meet Council requirements. Preliminary landscape details are included.	Open space will provided in accordance with Council's requirements.
Use of environment areas for open space is "inevitable", unacceptable	No environmental protection area within the site is proposed to be used as open space.	Environmental open space areas separate from useable open space.
Road widths too small, lack of footpaths both sides	Road widths and footpath provision complies with Council's standard requirements.	Infrastructure to be provided in accordance with Council standards
Hoop Pines for street trees are not appropriate nor is the red colour theme.	The objector's opinions are noted. The proposed design within "Landscape and Open Space Document" generally complies with Council's published guidelines.	Street trees will comply with Council's requirements. The red colour theme provides an identifiable location and is not opposed by Council officers.
<b>3.2- RESPONSE TO GROUP 2 SUBMISSIONS (BYGOTT, DIXON, MADDEN, PECATS, RILEY AND SWEENEY)</b>		
<b>SUBMITTER'S ISSUE</b>	<b>APPLICANT'S RESPONSE</b>	<b>COUNCIL'S RESPONSE</b>
Cobaki is the only viable threatened species recovery area north of Tweed River.	Refer correspondence between Leda and Dr Steve Phillips.	Refer to Council's response to submitter 2.2.
<b>3.3 RESPONSE TO GROUP 3 SUBMISSIONS (LEES, MCKAY, PIERCE, NILLIHEN)</b>		
<b>SUBMITTER'S ISSUE</b>	<b>APPLICANT'S RESPONSE</b>	<b>COUNCIL'S RESPONSE</b>
Cobaki is the only viable threatened species recovery area north of Tweed River.	Refer correspondence between Leda and Dr Steve Phillips.	Refer to Council's response to submitter 2.2.

Water Quality Concerns	Resolved by Concept plan approval, Project approval for central open space and DA submissions.	Stormwater and erosion and sedimentation control management plans will mitigate potential impacts.
<b>3.4 RESPONSE TO HOGAN AND CRIPPS SUBMISSION</b>		
<b>SUBMITTER'S ISSUE</b>	<b>APPLICANT'S RESPONSE</b>	<b>COUNCIL'S RESPONSE</b>
Environmental concerns including Koala habitat.	Refer correspondence between Leda and Dr Steve Phillips.	Refer to Council's response to submitter 2.2.
Over development and inappropriate land use zoning.	The proposed density of development, lot sizes and development types were comprehensively addressed in the Concept Plan Approval. The proposed development is consistent with the Concept Plan.	Serviceable urban zoned land should be utilised, the proposal is not considered to be over development.
<b>3.5 RESPONSE TO S &amp; J HENSON SUBMISSION</b>		
<b>SUBMITTER'S ISSUE</b>	<b>APPLICANT'S RESPONSE</b>	<b>COUNCIL'S RESPONSE</b>
Objects to "mini city" & asks Council why no dwelling entitlement to <i>their</i> property.	The proposal is consistent with the Approved Concept Plan.	The site has been identified as a greenfield release area for a long period of time the Concept Plan has been approved and the application is the first subdivision associated with the Concept Approval. Dwelling entitlements exists via the provisions in the current and former Local Environmental Plans and Interim Development Orders, this issue has no relevance to the development application under consideration.
Asks Council why no dwelling entitlement to <i>their</i> property.	Not relevant to this application	See above
<b>3.6 RESPONSE TO CORBUTT, FLETCHER &amp; FOSTER SUBMISSION</b>		
<b>SUBMITTER'S ISSUE</b>	<b>APPLICANT'S RESPONSE</b>	<b>COUNCIL'S RESPONSE</b>
Flooding concerns	Refer to Flood Modelling reports prepared and approved under the Concept Plan and Project Application. Refer flood modelling comments in Section 3.1	Refer to flooding assessment in Section C of this report.
Traffic concerns	The "Cobaki Estate - Masterplan Traffic Planning Assessment March 2011 prepared by CRG has effectively addressed this issue taking into account ultimate traffic flows from the overall development.	Refer to traffic assessment in Section C of this report.
<b>3.7 RESPONSE TO SCHINDLER SUBMISSION</b>		
<b>SUBMITTER'S ISSUE</b>	<b>APPLICANT'S RESPONSE</b>	<b>COUNCIL'S RESPONSE</b>
Traffic concerns	Resolved by Concept Plan approval – refer comments above in Section 3.6	See above
Employment	Concerns noted.	It is considered likely that the Cobaki

		development will stimulate a range of employment options over the long term.
Water use	Concerns noted.	See previous comments regarding water and water reuse .
<p>Environmental concerns</p> <p>a) Filling/tree removal for flood mitigation</p> <p>b) burning of wood piles</p> <p>c) old trees should fenced off so wildlife can use them</p> <p>d) Comments on wetland values, reports seeing a Jabaru once off Piggabeen Road</p> <p>e) Kingfisher needs termites nests</p> <p>f) Koalas do occur north of the river, possibility to re-establish</p> <p>g) Wallum sedge fog and long nosed Pottoroo should be saved</p> <p>h) Council should encourage use of rear renewable energy.</p>	<p>a) Work to be in accordance with approvals, consistent with the Concept Plan – refer comments in Section 3.1</p> <p>b) Noted</p> <p>c) Agreed</p> <p>d) Noted</p> <p>e) Noted</p> <p>f) Refer to letter by Dr Steve Phillips</p> <p>g) Agreed</p> <p>h) The option to install renewable energy generators on future dwellings is a matter for future dwelling owners.</p>	<p>Earthworks have been previously approved under existing consents or are to be undertaken in accordance with current standards, threatened species are to be managed in accordance with management plans, renewable energy can be undertaken by future residents.</p>
<b>3.8 RESPONSE TO LINDY SMITH SUBMISSION</b>		
<b>SUBMITTER'S ISSUE</b>	<b>APPLICANT'S RESPONSE</b>	<b>COUNCIL'S RESPONSE</b>
Concerns about Concept Plan approval conditions in relation to DA.	The issues identified have been addressed in the application material and in the response to Council's information request. None of the matters raised would have any material impact on the proposal or compliance with the Concept Plan conditions. The application is to be assessed on its merits by Council and for determination by the Joint Regional Planning Panel.	As stated in Section C of this report, updated management plans have been provided however it is Council's preference that final management plans are provided prior to release of the construction certificate as it provides Council with the opportunity to condition the requirements of the management plans.
Reference to GHD report to DoP.	This issue was resolved by approval of the Concept Plan and has no bearing on the present development application. Cardno Bowler Geotechnical Engineers have had extensive involvement with the site including supervision of earthworks commenced on the	Geotechnical information provided is adequate. The site is low risk and further information has been conditioned to be provided at the construction certificate stage.

	<p>site and completion of a broadscale geotechnical assessment of the site. Cardno Bowler documentation in relation to relevant geotechnical matters has been provided to support the Development Application and raises no adverse geotechnical issues.</p>	
Reference to CEMP.	<p>The application is accompanied by a CEMP - statement of intent. The statement provides a detailed structure of the CEMP, which pulls together the environmental management plans and information in relation to the development for use during the construction phase. The final CEMP is to be provided prior to the issue of a Construction Certificate. It will not present any information that is not contained in the other management plans that accompanied the Concept Plan approval or the updates that are to be finalised once the civil design is finalised for each precinct. – Refer additional comments above in Section 2.5.</p>	<p>See comments in Section C of this report regarding management plans.</p>
Stormwater management.	<p>Details regarding stormwater management have been prepared and are contained within the application material.</p>	<p>Refer to Section C of this report for assessment of stormwater issues.</p>
Flooding.	<p>Flooding issues were resolved at the Concept Plan stage. The application includes a detailed Design Flood Level Map as required by the Concept Plan conditions. The levels on that map include climate change levels and the highest levels of both a 'regional' and 'localised catchment' event as modelled on the site. Refer additional comments in Section 3.1</p>	<p>Refer to Section C of this report for assessment of flooding issues.</p>
Development Code.	<p>The Development Code was adopted at the Concept Plan Stage and is an assessment tool for this application. The submitter appears to incorrectly assume that the Development Code forms part of this application.</p>	<p>The Code has been approved by the Minister for Planning and forms part of the assessment instruments for applications.</p>
Flora & Fauna issues	<p>The Management Plans for the site were all approved under the Concept Plan. Stage specific updates are to relate to works within each precinct, but are essentially updates to the already approved management plans that already apply to the site.</p>	<p>Refer to Section C of this report for assessment of flora and fauna issues and related management plans.</p>

	<p>The application has provided precinct based management plans in respect to the ecological issues – refer JWA Ecological Assessment Report – Precinct 1 &amp; 2 Dec 2010.</p> <p>The report has scoped the extent of works required for Precinct 1 &amp; 2 in regard to :-</p> <ol style="list-style-type: none"> <li>1. Regeneration &amp; Revegetation Management Plan Areas 1 &amp; 3</li> <li>2. Buffer Manage Plan</li> <li>3. Freshwater Wetland Plan</li> </ol> <p>We believe this satisfies our obligation under the Concept Plan approval and provides council with sufficient information to endorse this application.</p>	
	<p>Further updates will be provided once the civil design is finalised to address the final design detail. These updated Management Plans shall be consistent with the Management Plans approved under the Concept Plan. Council maintains a hold point on the developer to ensure that the 'updates' are appropriate given that these plans are to be approved prior to the release of the Construction Certificate for civil works.</p>	
Cultural Heritage.	<p>Cultural Heritage issues have been thoroughly investigated as part of the Concept Plan Approval and were also addressed in the Development Application material. Please refer also to the letter prepared by Everick Heritage Consultants dated 28 March 2011 in response to queries raised in relation to this process.</p>	<p>Cultural Heritage Management Plan approved. See additional information provided at the end of this section from Everick Consultants.</p>
<b>3.9 RESPONSE TO STUART SUBMISSION</b>		
<b>SUBMITTER'S ISSUE</b>	<b>APPLICANT'S RESPONSE</b>	<b>COUNCIL'S RESPONSE</b>
Water & Flooding.	<p>Flooding issues were resolved at the Concept Plan and Project Application stage. The application includes a detailed Design Flood Level Map as required by the Concept Plan conditions. The levels on that map include climate change levels and the highest levels of both a 'regional' and 'localised catchment' event as</p>	<p>Refer to assessment of flooding issues in Section C of this report.</p>

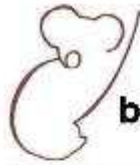
	modelled on the site.	
Koalas. Asserts Cobaki is only viable/threatened species recovery area north of Tweed River	<p>A motion similar to the request in this submission was raised by Cr Milne at Council's meeting of 15 March 2011. This motion did not obtain Council support.</p> <p>Furthermore we submit that Koala issues in relation to this site were thoroughly assessed and resolved under the consideration and approval of the Concept Plan.</p> <p>Refer to the correspondence attached between Leda and Dr Steve Phillips regarding this matter.</p>	Refer to Council's response to submitter 2.2.
Refers to GCCC submission re 500m corridor	Submissions were invited in the Concept Plan assessment process and these matters have been settled by the Concept Plan Approval.	The approved concept plan approval has defined the physical parameters of the development site.
Multiple use of buffers	The use of Buffers as Asset Protection Zones was incorporated in the Management Plans that were approved under the Concept Plan Approval.	The proposed asset protection zones and buffers have been assessed and are considered acceptable.
Location of sportsfields & parks	The location of active open space was settled in the Concept Plan Approval. The proposal will meet and exceed the area requirements for open space. This is in addition to the many hectares of land which is to be dedicated as environmental protection and fauna corridors. Passive open space is well located and sized to comply with Tweed Shire Council's subdivision requirements.	Active and passive open space is to be provided. The location of the sportsfields has been approved by the NSW Department of Planning under the Project Application. The local parks are located within the residential precincts.
Dogs.	Resolved by Concept Plan approval. The proposal includes establishment of paths for walking and cycling, including dual use of fire trails as walking tracks which will provide kilometres of walking routes. Off-leash areas will be a matter for Council.	Dogs have not been prohibited, however, cats have been. Dog walking areas will be available.
Local food production and farmers markets.	On site food production not required but is certainly not excluded by the Concept Plan. Trade formats are a matter for the future community.	Not a relevant planning consideration.
Hoop pines not appropriate	The objector's opinions are noted. The design of the Landscape Architect is preferred. Refer comments in Section 3.1.	Proposed landscaping assessed and considered to be generally acceptable.
Roads too narrow.	Road widths and footpath provision complies with Council's standard requirements. Refer comments in Section 3.1.	Roads will comply with Council standards
Sea level rise	Climate change levels have been incorporated within the flood modelling for the site. Refer	Refer to detailed flooding assessment in Section C of this report.



	comments in Section 3.1.	
Colour red in landscape theme	Please refer to the design statement in the landscape drawings. The red theme is supported by the developer.	Refer to Council response to submitter 3.1.
<b>3.10 RESPONSE TO TURNER SUBMISSION</b>		
<b>SUBMITTER'S ISSUE</b>	<b>APPLICANT'S RESPONSE</b>	<b>COUNCIL'S RESPONSE</b>
General sentiments about population growth, Concept Plan, alleged donations, planning, affordability, threatened species, community Strategic Plan	These matters were resolved in the approval of the Concept Plan. No donations have been made to Tweed Shire Council. The objector may be referring to the Application Fees for subdivision and bulk earthworks Construction Certificate?	Issues raised assessed in this report, many issues of an ideological nature beyond the scope of this development application.
Koalas. Assert Cobaki could be only viable/threatened species recovery area north of Tweed River	A motion similar to the request in this submission was raised by Cr Milne at Council's meeting of 15 March 2011. This motion did not obtain Council support.  Furthermore we submit that Koala issues in relation to this site were thoroughly assessed and resolved under the consideration and approval of the Concept Plan.  Refer to the correspondence attached between Leda and Dr Steve Phillips regarding this matter.	Refer to Council response to submitter 2.2.
Buffers	This matter was addressed in the Buffer Management Plan approved under the Concept Plan Approval.	Refer to detailed assessment in Section C of this report.
Water conservation and quality	Comprehensively considered in conjunction with Council. This matter has been resolved by approval of the Concept Plan.	Refer to detailed assessment in Section C of this report.
Flooding.	Flooding impacts including the effects of climate change have been incorporated in the flood model.	Refer to detailed assessment in Section C of this report.
Community Strategic Plan	The strategic plan is a long term vision document for Council planning and not a development assessment tool. Strategic objectives were considered in approval of the Concept Plan Approval.	Issues raised not specific to the current application. The Iconic Landscapes Strategy is a tourism based program and is not a planning policy for development assessment consideration. However the Green Cauldren status of the Tweed is important to the community and in this regard the Cobaki site has been identified as an urban development site for many years and has been zoned accordingly and approvals issued for subdivision. The Iconic Landscapes strategy does not preclude urban zoned land from being developed.
<b>3.11 RESPONSE TO ALBANESE SUBMISSION</b>		
<b>SUBMITTER'S ISSUE</b>	<b>APPLICANT'S RESPONSE</b>	<b>COUNCIL'S RESPONSE</b>

Traffic concerns	External traffic issues were resolved in the approval of the Concept Plan Approval.	Refer to Section C of this report for detailed traffic assessment.
Lot sizes	Lot sizes were resolved in the approval of the Concept Plan Approval.	Lot sizes have been approved by the Minister for Planning.
Public consultation, donations, availability of information	The Development Application has been publicly exhibited for approximately 34 days. All information relating to the proposed subdivision has been available on Council's web site and in hard copy for viewing at Council offices at Tweed Heads and Murwillumbah.	Exhibition of the application has been undertaken. Information has been available in hard and electronic formats.  Donations are regulated in relation to development applications. Any reference to donations related to this application is erroneous.
	No donations have been made to Tweed Shire Council. The objector may be referring to the Application Fees for subdivision and bulk earthworks Construction Certificate?	
Acid sulfate soils	Acid sulfate soils were considered in assessment of the Concept Plan. Assessments are to be undertaken in accordance with the Concept Plan Condition C5 and a Management Plan (if required) prior to the issue of a Construction Certificate. Refer additional comments in Section 2.1.	Refer to detailed assessment in Section C of this report.
<b>3.12 RESPONSE TO CLUNNE SUBMISSION</b>		
<b>SUBMITTER'S ISSUE</b>	<b>APPLICANT'S RESPONSE</b>	<b>COUNCIL'S RESPONSE</b>
Threatened species impacts	Impacts of the proposed development have, in relation to threatened species, been assessed and addressed in the approved Concept Plan and in the Ecological Assessment accompanying this Development Application.	Refer to detailed assessment in Section C of this report.
Stormwater management & water conservation	Stormwater management has been addressed in accordance with Tweed Shire Council requirements.	Refer to detailed assessment in Section C of this report.
Flooding and earthworks	The proposed earthworks and flood modelling are consistent with the Approved Concept Plan.	Refer to detailed assessment in Section C of this report.
Development Code	The Development Code was approved under the Concept Plan and applies over the site subject to this Development Application. The minimum lot sizes were also approved under the Concept Plan.	Development Code previously approved by the Minister for Planning.
Koalas. Defer approval until further studies.	A motion similar to the request in this submission was raised by Cr Milne at Council's meeting of 15 March 2011. This motion did not obtain Council support.  Furthermore we submit that Koala	Deferral for further studies is not justified. Refer to Council's response to submitter 2.2.

	<p>issues in relation to this site were thoroughly assessed and resolved under the consideration and approval of the Concept Plan.</p> <p>Refer to the correspondence attached between Leda and Dr Steve Phillips regarding this matter.</p>	
Inadequate consultation	<p>Notwithstanding the Concept Plan approval process which was subject to separate exhibition, this Development Application has been publicly exhibited for approximately 34 days.</p> <p>All information relating to the proposed subdivision has been available on Council's web site and in hard copy for viewing at Council offices at Tweed Heads and Murwillumbah.</p>	Exhibition has been undertaken in accordance with Council's development control plan and council's resolution to extend the exhibition period.
Sportsfields are inadequate and in drainage areas.	The quantum of sports fields proposed exceeds Tweed Shire Council requirements. The proposed sports fields meet Council's requirements in terms of flood immunity and are not drainage reserves. Drainage reserves are separate to the proposed public open space areas.	Refer to Council's response to submitter 3.1.
Council Code of Conduct, political factions.	We are not aware of any 'concession' or 'preferential treatment' that has been provided to the developer. The reference to the elected Council's role in determining this application is irrelevant as the application is to be determined by the Joint Regional Planning Panel.	The application has been assessed on its merits in accordance with the NSW Environmental Planning and Assessment Act.



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Mr. Reg van Rij  
Leda Developments Pty Ltd  
Level 1, 48 Cavill Ave  
Surfers Paradise QLD 4217

March 30, 2011

Dear Reg

I refer to your e-mail of the 28<sup>th</sup> March regarding the importance of the Cobaki site in terms of potentially assisting the recovery of koalas north of the Tweed River. My points below are essentially framed in response to the three matters outlined in your e-mail.

1. Given that Cr. Milne contacted me via telephone in the week preceding the motion to Council, it is likely that I am the person referred to in terms of providing the "expert advice". I do stress however – as I did to Cr. Milne – that options for recovery of koalas north of the Tweed River is a matter to be resolved by Tweed Shire Council's Koala Advisory Group (KAG) under the umbrella of a Comprehensive Koala Plan of Management for the Tweed Coast that is yet to be prepared.

2. Examination of aerial photography covering that area of the Tweed Coast north of the Tweed River and south of the Queensland border will confirm that the "Cobaki location generally" (your words) does support the largest expanse of lowland Swamp Sclerophyll Forest containing the preferred koala food tree species Swamp Mahogany and Forest Red Gum, and that this area is linked to other areas of koala habitat directly adjoining the Cobaki Broadwater, including an area of compensatory habitat acquired as part of the Tugun bypass project. Were it to be determined that it would be in the best interests of recovering koalas north of the Tweed River by consolidating the remaining animals into a single population, I would have no hesitation in identifying this particular area as my preferred choice for such an exercise.

3. Given what I have said in the preceding paragraph, any assertion that the Cobaki site (which I now interpret to be lands owned by Leda) is 'integral' to koala recovery in the area is arguable because of the existing extent of habitat historical disturbance/habitat fragmentation. Subject to establishment of a viable resident koala population in the aforementioned area (which would take at least 10 – 15 years), the Cobaki site could potentially assist by offering areas of ancillary habitat for colonization and use by koalas and/or facilitating dispersal to other areas. Regardless, there is a strong body of scientific literature inferring that large tracts of unfragmented bushland offer better

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1 of 2

chances of occupancy/residency by koalas than do fragmented areas, this again being a consideration in my choice of those lands referred to in 2, above, rather than the Cobaki development site *per se*.

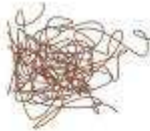
Your e-mail also asked if I had any further comment relating to those issues referred to above. In the context of koala management I do not, save perhaps for the peripheral issue of habitat connectivity principles generally. The ridgeline forming the northern boundary of the Cobaki site does offer one of the few – if not the only – opportunity to effectively link coastal lowlands with more upland areas to the west. In my professional opinion and from the broader perspective of a landscape ecologist, that a regional habitat link has not been achieved along this ridgeline through appropriate planning measures by State and Local Government authorities on both sides of the border is a disappointing outcome overall. Should any opportunities remain within the Cobaki development precincts to assist in this regard, I can do no more than add my support to any further measures that may be possible.

Don't hesitate to contact me directly if you require any further information.

Yours Sincerely



Dr. Stephen Phillips  
Managing Director/Principal Ecologist



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Our Ref: EV.78

28 March 2011

Mr Reg van Rij  
Leda Developments  
PO Box 1914 Paradise Centre  
SURFERS PARADISE QLD 4217

Dear Reg,

**RE: RESPONSE TO COMMUNITY COMMENTS  
PRECINCTS 1, 2 AND 6 DEVELOPMENT APPLICATIONS  
PROJECT: COBAKI LAKES RESIDENTIAL DEVELOPMENT**

We refer to Mrs Jackie McDonald's submission to the Tweed Shire Council dated 21 March 2011.

Everick has had the pleasure of working with Mrs McDonald on this project since 2007. Her dedication and enthusiasm in participating in the management of Aboriginal cultural heritage at Cobaki Lakes is commendable. We do not intend this response to in any way to diminish the value of her input, and we look forward to working with her in the future.

In response to Mrs McDonald's comments (italicised) relating to the Everick Cultural Heritage Management Plan (April 2010):

- *4.2 (c) Purpose of the CHMP appears to be inconsistent with 12.2 Construction works within Cultural Heritage Protection Areas. In 12.2 it documents 11 activities that may occur in the CHPA that have the potential to impact on the cultural landscape. The CHPA's have never been investigated for cultural heritage values so no activities are supported in these areas until an assessment has been carried out.*

The CHMP was provided to all Registered Aboriginal Stakeholders for comment on 18.12.09. Community meetings were held on 16 January 2010 and 17 March 2010 to discuss the proposed management strategies. Mrs McDonald attended the on site meeting in March. At no stage were any concerns raised over the proposed management of the Cultural Heritage Protection Areas (CHPA's).

The statement in Section 4.2 (c) of the CHMP reads: "*this CHMP seeks to .. (c) set up a process through which Areas identified in **Appendix 1** are the subject of Traditional Owner consultation and further archaeological investigation as soon as possible.*" Appendix 1 identified a series of CHPA's. It is the general principle that these areas will be largely protected, and subject to limited ground disturbance. In the event that any ground disturbance is planned, representatives of the Aboriginal Stakeholders will be invited to survey and in most cases monitor initial ground disturbance (see Section 12.2).

It is our considered opinion that this strategy represents the only reasonable option for identifying cultural heritage within the CHPA's. This strategy has been informed by the results of approximately 6 weeks of archaeological test excavations. The results of the test excavations on the hill slopes, when

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compared with the results of the initial archaeological survey, demonstrated that surveying is a particularly poor method of identifying cultural heritage in these areas.

- *4.3 Prior Studies in the development area. The selected statements from prior reports are indicative of the level of, or lack of community consultation at the time the reports were written, 1981 and 1990.*

Ian Lilly (1981) and Jay Hall (1990) undertook Aboriginal consultation consistent with the general requirements of the time. Mrs McDonald is correct, their studies did not involve the extensive community consultation undertaken by Everick during the 2010 assessment. The Aboriginal communities input into the 2010 assessment added considerably to our knowledge of the cultural landscape within which the Cobaki Lakes is situated. Accordingly, the recommendations in the Lilly and Hall reports, being that no further assessment was required, were not followed during the Everick 2010 assessment.

- *4.4 Details of prior studies on surrounding lands. One of my recommendations was to record findings from a number of reports that were also available. Eleven of those reports are referenced on page 9 and 10 of the CHMP. Two more, Archaeological Test Excavation Report Zone 10 Tugan Bypass May 2007 and Results of Cultural Heritage Assessment of Hideaway @ Currumbin. A report for Devine Ltd by Eastern Yugambah Ltd October 2006 are not mentioned. Disappointingly, no detail from any of the 11 reports is recorded in the CHMP and therefore the size and scale of the cultural landscape, as we know it, is not being recognised or recorded.*

The CHMP was one of three cultural heritage reports that were produced in preparation for Cobaki Lakes development. The other two were the Cultural Heritage Assessment (April 2010) and the Summary Excavation Report (December 2009). The Aboriginal Stakeholders for the Project were consulted during the production of each of these.

It is the role of the Cultural Heritage Assessment to contain detail on past heritage assessments in the region. This is the information on which the management strategies of the CHMP are based. The CHMP on the other hand, is a working document that is to be used by Leda Developments and their contractors to ensure they are managing cultural heritage appropriately. It is intended to contain clear and unambiguous statements. For this reason, it does not go into detail on past assessments.

During consultation, Mrs McDonald requested that a list of past assessments be included in the CHMP, so as to demonstrate the cultural significance of the surrounding region. Everick inserted Section 4.2 as a result.

The reference for the report on Zone 10 of the Tugan Bypass will be added to Section 4.2 of the CHMP. The 2006 Eastern Yugambah Report on Hideaway has not been provided to Everick by representatives of Eastern Yugambah (now the Gold Coast Native Title Group). As this was an assessment undertaken within Queensland, Everick has no other means of gaining access to this report. Should it be provided to Everick, it will be reviewed in the Cultural Heritage Assessment and referenced in the CHMP.



In response to Mrs McDonald's further concerns (*italicised*):

- *6(a) Responsibilities of the Developer. I question when the CHMP is activated because, to date, I have not received any progress reports.*

A progress report was provided to all Registered Aboriginal Stakeholders, including Mrs McDonald, on 14 March 2011. A copy of the progress report correspondence has been emailed to Mrs McDonald in response to her correspondence on 28 March 2011 to which this letter responds.

- *12.1 General Management Rationale. The CHMP admits that 'many Aboriginal objects within the back paddock will be lost during construction' and I also believe that to be the truth, based on my observations during the excavation work. However, there are other areas on the ridgeline near the seven Cultural Heritage Parks that have no cultural heritage status under the CHMP.*

The area of 'ridgelines' to which Mrs McDonald refers are within the area referred to as the Back Paddock in the CHMP. Seven Cultural Heritage Parks (CHP's) are situated within this area. Their purpose is to conserve a representative sample of Aboriginal cultural heritage within this landscape. Three of these are situated on the ridge lines within the Back Paddock.

Each of the CHP's is the subject of stringent requirements under the CHMP to ensure they are protected. The remainder of the Back Paddock will be subject to development.

- *As a group, members of the registered Gold Coast Native Title Group have not been actively engaged in developing the CHMP and have not been provided with a copy of the final CHMP.*

Representatives of the Gold Coast Native Title Group (GCNTG) registered their interest in being consulted over the project on 30 August 2007. They have been consulted in the same manner as all other Registered Aboriginal Stakeholders for the project. On 17 June 2008, Everick held discussions with authorised representative of the GCNTG Kym Yuke, over how to best consult with the groups members. Suggestions such as establishing a mailing list were raised. Everick has received no response to this invitation.

Everick notes that the GCNTG have recently had a native title claim registered over an area that includes the Cobaki Lakes Residential Development. While this provides no particular legal status with regard to cultural heritage, Everick would welcome the GCNTG's future participation in this project.

Yours faithfully,

Dr Richard Robins  
Director  
Everick Heritage Consultants

Innovative Heritage Solutions

## (e) Public interest

The key public interest issues associated with the subdivision is the balance between managing the impacts of the development and provision of serviced residential land to cater for population growth.



The Cobaki site has been identified as a greenfield development site for twenty years and is mapped in the Far North Coast Regional Strategy as an existing urban footprint. The location of the site adjacent to the Cobaki Broad water makes it a sensitive location that requires appropriate management and control of impacts. It is considered that the relative impacts of the subdivision are able to be controlled and mitigated so that the development can proceed and the public interest issues are balanced.

## **SECTION D - OPTIONS FOR DETERMINATION AND CONCLUSION**

### **OPTIONS:**

1. Determine the application in accordance with the recommendation.
2. Make an alternate determination

### **LEGAL/RESOURCE/FINANCIAL IMPLICATIONS:**

If the applicant is dissatisfied with the determination a right of Appeal exists in the NSW Land and Environment Court.

### **POLICY IMPLICATIONS:**

Nil

### **CONCLUSION:**

The proposal represents the first stages of a large residential development that is part of a Concept Approval issued by the Minister for Planning. The proposal has been required to resolve competing objectives involving environmental issues, infrastructure provision, the interstate road network and diversified housing. Cobaki is a key strategic site for the Tweed, the Far North Coast and NSW. It is considered that the proposal accords with Concept Approval and incorporates measures to mitigate the likely adverse impacts.

## **RECOMMENDATION:**

That Development Application DA10/0800 for a Cobaki Estate subdivision of precinct 1 and 2 comprised of 475 residential lots (including 1 residual lot) and lots for drainage, open space and urban infrastructure (JRPP) at Lot 1 DP 562222; Lot 2 DP 566529; Lot 1 DP 570077; Lot 1 DP 823679; Lots 46, 54, 55, 199, 200, 201, 202, 205, 206, 209, 228, 305 DP 755740, No. 73 Sandy Lane; Lot 1 DP 570076 Piggabeen Road, Cobaki Lakes be approved subject to the following conditions:

## **GENERAL**

1. The development shall be carried out and completed in accordance with the following Plans and Reports listed below except where varied by the conditions of this consent.

### **PLANS**

- Master Plan Precinct 1 & 2 prepared by Design Forum Architects dated 15/03/2011.
- Precinct 1 & 2 Plan prepared MPS Architects dated March 2011
- Plan of Development prepared MPS Architects dated March 2011
- Precinct 1 POD Detail 1 prepared MPS Architects dated March 2011
- Precinct 1 POD Detail 2 prepared MPS Architects dated March 2011
- Precinct 2 POD detail 1 prepared MPS Architects dated March 2011
- Precinct 2 POD detail 2 prepared MPS Architects dated March 2011
- Precinct 2 POD detail 3 prepared MPS Architects dated March 2011
- Access Network Plan Precincts 1 & 2 prepared MPS Architects dated March 2011
- Cobaki Design Guidelines Precincts 1 & 2 March 2011
- Site Plan of Cobaki Precincts 1 & 2 Proposed Lots 215, 216 & 217 Plan No. 6400-220 Issue A prepared by Michel Group Services dated 3/12/2010.
- Plan of Proposed Subdivision Precincts 1 & 2 Plan No. 6400-221 Issue A prepared by Michel Group Services dated 3/12/2010
- Plan of Proposed Subdivision Precincts 1 & 2 Stages 1A, 1B, 1C, 1D, 1E, 2A, 2B, 2C, 2D & 2E, 2F, 2G, 2H, 2i, Sheet Numbers 2 to 15 Issue A.
- Plan of Proposed Subdivision Precincts 1 & 2 Drainage Reserves and Parks Plan No. 6400-222 Issue A prepared by Michel Group Services dated 3/12/2010
- Plan of Temporary Service EMTS Stage 2A, Plan No. 6400-223 Issue A prepared by Michel Group Services dated 3/12/2010
- Park Dedication Master Plan (Precinct 1, 2 and 6) drawing number YC0229-1P1-SK04 Revision B prepared by Yeats Consulting Engineers
- Park Dedication Detailed Plan (Precinct 1 and 2 ) drawing number YC0229-1P1-SK06 Revision A prepared by Yeats Consulting Engineers.

## REPORTS

- Statement of Environmental Effects prepared by Darryl Anderson Consulting Pty Ltd dated December 2010
- Response to Information Request & Amendment of Development Application No.DA10/0800 prepared by Darryl Anderson Consulting Pty Ltd dated March 2011
- Ecological Assessment Cobaki Lakes Precincts 1 & 2 James Warren and Associates December 2010
- Bushfire Risk Management Plan Bushfire Safe Pty. Ltd. December 2010
- Cobaki Estate Affordable Housing Study (Final Version print date 14.1.2011) prepared for Leda Manorstead Pty Ltd by Hill PDA and dated November 2010.
- Traffic Noise Assessment dated 17 November 2010 prepared by CRG.
- Master Plan Traffic Planning Assessment dated 16 March 2011 prepared by CRG.
- Landscape and Open Space Document Precinct 1 &2 prepared by Planit Consulting March 2011 Drawing No's. 1 to 22
- Cultural Heritage Management Plan April 2010 Everick Consultants Pty Ltd
- Engineering Services Report Cobaki Precinct 1 & 2 March 2011 Revision 02.

### Inconsistency between documents

In the event of an inconsistency between the conditions of this consent and the plans and reports referred to above the conditions of this consent prevail to the extent of the inconsistency. In the event of an inconsistency between the Statement of Environmental Effects prepared by Darryl Anderson Consulting Pty. Ltd. dated December 2010 and the Response to Information Request & Amendment of Development Application No.DA10/0800 prepared by Darryl Anderson Consulting Pty. Ltd. dated March 2011 the Response to Information Request & Amendment of Development Application No.DA10/0800 prepared by Darryl Anderson Consulting Pty. Ltd. dated March 2011 prevails to the extent of the inconsistency.

[GEN0005]

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's Development Control Plan Part A5 - Subdivision Manual and Council's relevant Development Design and Construction Specifications unless otherwise altered by the provisions of the Cobaki Estate Development Code.

[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. Council advises that the site is flood liable with Design Flood Levels as illustrated on the 0.1m contour Cobaki Design Flood Level Map Q100 Event (Including Climate Change), Drawing YC0229-11M4-SK10 Rev C.

The minimum habitable floor level for dwellings within Precincts 1 and 2 is 500mm above the determined flood level as defined by the 0.1m contour Design Flood Level Map, current at the time, unless notified otherwise by Council.

The Design Flood Level Map shall be updated to include Works As Executed levels for bulk earthworks and any other works that may affect flood behaviour and submitted to Council prior to issue of a subdivision certificate for each stage.

[GEN0195]

6. The proposed traffic signals at the Sandy Road / Cobaki Parkway intersection and at the first intersection on Sandy Road west of Cobaki Parkway must be approved by the Roads and Traffic Authority of NSW, prior to Council endorsing associated Construction Certificate approval for such works. Should such approvals not be obtained, roundabout intersection treatments must be considered.

[GENNS01]

7. This consent is subject to the fulfilment of all relevant, existing Deeds of Agreement requirements.

[GENNS02]

8. Should connection to gas be required for the subdivision, an amendment or separate application will be made to provide relevant details and gain approval for those works.

[GENNS03]

9. Prior to the issuing of a Construction Certificate under DA10/0800, all existing consents over the Cobaki Estate applicable to Precinct 1 & 2, must be modified where relevant, pursuant to Section 80A(1) of the EP&A Act 1979 (as amended) and Regulation, to be consistent with this consent.

[GENNS04]

10. In accordance with Condition 38 of Project Application MP08\_0200, no works shall be undertaken within the Precinct 1 and 2 area that may impact upon (or contribute to an impact upon) the freshwater wetlands and associated downstream Wallum Froglet habitat area until an appropriate agreement is entered into between the Proponent and the Office of Environment and Heritage that offsets the project's impact on biodiversity. This agreement shall include provision for alternative offsets to be delivered should monitoring indicate that an appropriate wetland environment is not achieved after an appropriate time. Evidence of such an agreement shall be forwarded to the Director General no later than 5 working days prior to works commencing in those areas.
11. No works may be undertaken within areas adjacent Precinct 1 and 2 that will result in removal of native vegetation from Environmental Protection zoned land.
12. Development must be undertaken in accordance with the requirements of any approved Site Regeneration and Restoration Plans, Habitat Restoration Plans, Threatened Species Management Plans and all other approved management plans relevant to the Precinct 1 and 2 development.
13. In order to preserve the natural habitat of the site and surrounding areas, no occupant, tenant, lessee or registered proprietor of the site or part thereof may own or allow to remain on the site or any part thereof any cat.
14. Prior to registration of any plan for residential subdivision, the proponent must demonstrate compliance with all matters committed to and all relevant conditions detailed within Concept Plan MP06\_0316.

15. Cattle must be removed and fenced out from the site of any proposed vegetation retention, revegetation and restoration works as illustrated in Figure 4 of the *Revised Site Regeneration and Revegetation Plan* by James Warren and Associates dated October 2010, prior to the registration of any plan of residential subdivision for the Cobaki Lakes Estate.
16. Evidence must be submitted to Council prior to the registration of any plan of residential subdivision, demonstrating that works have been undertaken in accordance with the Revised Saltmarsh Rehabilitation Plan by James Warren and Associates dated October 2010 and as specified with Condition 65 of MP08\_0200.
17. All personnel involved in initial ground surface disturbance activities shall undergo a Cultural Heritage Induction training session before commencing any construction activities. The induction must be presented by an appropriately qualified person(s) and provide specific information in relation to processes to be followed should any Indigenous items be uncovered as well as the types of and identification criteria for cultural heritage material that may be uncovered. Notwithstanding the above, the induction shall be undertaken in accordance with the terms and requirements of the Final Cobaki Lakes Cultural Heritage Management Plan prepared by Everick Consultants P/L.
18. The proponent must maintain Asset Protection Zones for Precinct 1 and 2 for a period of five years from the date of the issue of the first subdivision certificate for Precinct 1 or 2. The APZs must be regularly slashed to ensure a reduced fuel zone and Council is to be notified on each occurrence. Council will audit APZs annually, prior to the bush fire danger period, to ensure APZs are compliant with Planning for Bush Fire Protection 2006 and in order to meet its reporting requirements under the Rural Fires Act 1997. If APZs are not compliant, the proponent must undertake the necessary works as directed by Council and within the timeframe specified by Council. An unconditional bond will be held in the favour of Council to be utilised in the event of non compliance with this condition. At the completion of the five year maintenance period the proponent will submit to Council evidence including financial records that the maintenance of the APZ is in accordance with the detailed APZ performance assessment and can be maintained with minimal resources in a cost effective manner without compromise of its function to the satisfaction of the General Manager or delegate. Release of the bond will be dependant upon the performance of the carrying out the requirements of this condition.
19. The applicant shall take and maintain appropriate measures to the satisfaction of Council's General Manager or delegate to restrict and/or prevent access by future residents of Precinct 1 and 2 to areas of potential contamination as identified within the Stage 1 Preliminary Site Contamination Assessment Cobaki Lakes Concept Plan dated May 2008. Such measures shall remain until the Stage 2 Detailed Site Contamination Assessment as recommended within the Preliminary Site Contamination Assessment has been carried out and such areas have been either remediated to an extent suitable for the proposed use of the areas or found to be uncontaminated.
20. 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

21. The recommended strategy contained in the Cobaki Estate Affordable Housing Study (Final Version print date 14.1.2011) prepared for Leda Manorstead Pty Ltd. by Hill PDA and dated November 2010 is to be undertaken.
22. All approvals, licenses and consents from applicable Government Agencies and Authorities are to be obtained where required.
23. The requirements of the Cultural Heritage Management Plan relevant to Precincts 1 and 2 are to be carried out in accordance with the Plan.

#### **PRIOR TO ISSUE OF CONSTRUCTION CERTIFICATE**

24. **Prior** to the issue of a Construction Certificate for each stage of development, 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 non-compliance with the conditions of this consent which are not being addressed to the satisfaction of the General Manager or his delegate.

The bond can be requested to be refunded, if not expended, when the Subdivision Certificate for that stage of development is issued.

[PCC0275]

25. 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 applicable 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]

26. Where earthworks result in the creation of batters and/or cuttings greater than 1m high and/or slopes within allotments 17<sup>0</sup> (1:3.27) or steeper, such slopes shall be densely planted in accordance with a detailed Landscaping Plan endorsed by Council. This Plan shall accompany the Construction Certificate application and shall be consistent with all other Management Plans.

Such Plans shall generally incorporate the following and preferably be prepared by a landscape architect:

- (a) Contours and terraces where the height exceeds 1m.
- (b) Cover with topsoil and large rocks/dry stone walls in terraces as necessary.
- (c) Densely plant with native species to suit the aspect/micro climate. Emphasis to be on trees and ground covers which require minimal maintenance. Undergrowth should be weed suppressant.
- (d) Mulch heavily (minimum 300mm thick) preferably with unwanted growth cleared from the estate and chipped. All unwanted vegetation is to be chipped and retained on the subdivision.

[PCC0455]

27. All fill is to be graded at a minimum of 1% so that it drains to the street or other approved permanent drainage system.

Catch drains shall be provided on the top side of all retaining walls in accordance

with Council's Development Design Specification D6 – Site Regrading.

All earthworks shall be contained wholly within the subject land. Detailed engineering plans of cut/fill levels and perimeter drainage shall be submitted with the Construction Certificate application for Council approval.

[PCC0485]

28. Construction Certificates for bulk earthworks and civil works may be issued and the carrying out of bulk earthworks may be commenced prior to the issue of a Construction Certificate for civil works where it can be demonstrated all works are compatible.

[PCC0495]

29. Prior to the issue of a Construction Certificate, documentary evidence shall be submitted to Tweed Shire Council demonstrating that a Controlled Activity Approval (CAA) under the Water Management Act 2000 has been obtained where relevant for works within 40m of waterfront land (as defined under the Water Management Act 2000) or any works that involve an aquifer interference activity as defined under the Water Management Act 2000.

[PCC0575]

30. Site regrading and associated stormwater drainage is to be designed to address internal drainage of the site, as well as the conveyance of external catchments up to the Q100 storm event through the site.

All major drainage systems shall meet Council and QUDM standards in public areas (roads, open space, pedestrian areas etc), including consideration of surcharge points and drainage relief points associated with the catch drains provided with the northern fire trails.

Detailed engineering plans of fill levels and drainage shall be submitted for Council approval.

[PCC0675]

31. 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 a Construction Certificate, where relevant. Safe public access shall be provided at all times.

[PCC0865]

32. 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
    - Clearly showing pre and post development levels (spot levels and contours) at a legible scale.
    - Comply with the provisions of Council's Design Specification D6 – Site Regrading.
    - Batter slopes on drain cross sections and in public open space areas shall not exceed 1:4 (v:h), unless otherwise authorised by

Council.

- The maximum disturbed area (that has not been permanently vegetated) at any time shall not exceed 5ha.
- Roadworks/furnishings
  - Providing road profiles complying with Council's Design Specification D1 – Road Design, unless approved otherwise by Council.
- Stormwater drainage
- Water supply works
  - In general accordance with Yeats Consulting Engineers - Water Network Analyses, April 2011, Revision 03, unless modified otherwise by the conditions of this Consent.
- Sewerage works
  - In general accordance with Yeats Consulting Engineers - Master Sewer Reticulation Plan Revision C, unless modified otherwise by the conditions of this Consent.
- 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]

33. Each Construction Certificate Application for Civil Works is to include a detailed stormwater management plan (SWMP) for the occupational or use stage of the proposed development prepared in accordance with Section D7.07 of Councils *Development Design Specification D7 - Stormwater Quality*, following consultation and acceptance with the DECCW and Industry & Investment (Fisheries). Such plans will include measures, monitoring and adaptive management actions to ensure appropriate stormwater quality outcomes are achieved.

Permanent stormwater quality treatment shall comply with the *Tweed Urban Stormwater Quality Management Plan* and Councils *Development Design Specification D7 - Stormwater Quality*. Variations to these standards shall only be accepted where they are supported by best practice water sensitive urban design principles entailed in the "Water By Design" guidelines (being a program of the South East Queensland Healthy Waterways Partnership).

All precinct water quality control measures must be located outside of the major central open drain, but may be located within the Central Precinct subject to Council endorsement. Treatment basins must be provided with a facility to bypass major stormwater flow events, or otherwise cater for major storm flows without disturbing captured pollutants or damaging the structure.

Proposed treatment measures other than "deemed to comply" measures under D7 must be supported by engineering calculations, including MUSIC modelling, to



confirm acceptable capacity and efficiency is achieved.

An operational manual for all stormwater quality control devices shall be provided as part of the SWMP. This manual shall be updated as required during the "on-maintenance" period for the device, and the final version of the manual shall be handed over to Council at the formal commissioning of the device at the completion of the maintenance period ("off maintenance").

[PCC1105]

34. Each Construction Certificate Application must include a detailed erosion and sediment control plan (ESCP), prepared in accordance with Section D7.07 of *Development Design Specification D7 - Stormwater Quality*. The submitted Plan must be consistent with any erosion and sediment control plan approved for the Central Precinct.

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". All sedimentation basins are to be located offline of major storm event flowpaths, unless approved otherwise by Council.

The ESCP shall address the proposed staging of subdivision earthworks and the intended sequencing of the following house building phase. Staged construction and establishment of sediment control facilities and water quality treatment shall be in accordance with Water By Design - Technical Design Guidelines (Chapter 5.5).

[PCC1155]

35. An application shall be lodged together with any prescribed fees including inspection fees and approved by Tweed Shire Council under Section 68 of the Local Government Act for the installation of any permanent stormwater quality control devices, prior to the issue of any associated Construction Certificate.

[PCC1195]

36. 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]

37. An applicable, geotechnical assessment, prepared by a registered Geotechnical Engineer must be submitted to the Principal Certifying Authority, prior to the issue of any Construction Certificate.

[PCCNS01]

38. The access roads servicing proposed Lots 612-614 & 702-704 respectively, shall be public roads, providing;

- a sealed turnaround facility at the end of each road, suitable to allow a B99 standard vehicle to turn around,
- a concrete wearing surface (unless approved other wise by Council), and
- a nominated and registered garbage collection area at the entrance to these

public roads.

[PCCNS02]

39. Prior to the issue of a Construction Certificate, Council are to be assured that all essential services for that stage of development are provided for, such that the stage of development being approved does not rely on essential services from future stages.

[PCCNS03]

40. A Sewer Overflow Investigations (Risk Analysis) Report in accordance with Council's Design Specification D12 - *Sewerage System* and the DECCW (NSW EPA) Licensing Guidelines for Sewage Treatment Systems shall be prepared and lodged for Council approval, in conjunction with Construction Certificate applications for the PS2 Sewer Pump Station and LS1 Sewer Lift Station.

[PCCNS04]

- 41# Engineering details submitted with the Construction Certificate application shall include all traffic calming device details, including location and concept design, in accordance with AUSTROADS and Australian Standard AS1742.13 - Manual of Uniform Traffic Devices. Note that vertical deflection devices (speed humps) are generally discouraged in urban areas. All traffic calming devices shall be clearly shown on the Plan of Development.

[PCCNS06]

42. The locations for bus shelters at appropriate spacings and servicing appropriate pedestrian catchments along identified bus routes in compliance with DCP Section A5 - Subdivision Manual and written concurrence of bus operators for the bus shelter arrangements is to be provided with the Construction Certificate application.

[PCCNS07]

43. Driveway accesses for zero-lot line developments shall provide clear sight triangles at the street frontage in accordance with Council's Driveway Specifications and Australian Standard AS2890.1:2004 (Figure 3.3).

[PCCNS08]

44. All areas designated for stormwater conveyance and quality control shall be designated and managed separately from land for environmental purposes, habitat offsets, and/or vegetation regeneration/rehabilitation areas.

[PCCNS09]

45. A detailed landscape plan prepared by a qualified landscape architect must be submitted for all areas of casual open space, structured open space, cycleways, pedestrian links and streetscapes to be dedicated to Council. Such a plan must be approved by the General Manager, Tweed Shire Council or delegate. The plan must be consistent with Council's Subdivision Manual (Section A5 of the Tweed Development Control Plan) and Development Design Specification (D14). Where play equipment is installed a minimum area of 10m around the equipment is to be turfed and the remaining area seeded or turfed as appropriate.

Council has a strong preference for local native species and plant selection must where practical reflect this.

46. 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 nearby hazards and mitigation measures.

New subdivisions approved after development of these guidelines must ensure no playground facility has a Facility Risk Rating exceeding 13 as defined in Table 3A7 of that document, unless otherwise approved by the General Manager or delegate.

47. Further consideration is required regarding the grassing or revegetation of the central drain, and the two northern branches of this drain. A consultant skilled in natural area as well as landscape design is to assess the options available and, with particular reference to minimising maintenance requirements and weed incursion, recommend an appropriate planting plan. The plan is to be prepared to the satisfaction of the General Manager or his delegate and incorporated into the amended landscape plans for the public open space. Areas identified for planting or regeneration will require a 3 year maintenance period, and areas to be grassed will require 12 months maintenance after the Subdivision is registered with the Land Titles Office.
48. Public pathways and shared user paths in areas other than road reserves do not require lighting, except where specified by Council. The use of bollard lighting for public areas, including public pathways and shared user paths, is not permitted. This is to be reflected in the landscape plans.
49. No structures or landscaping designed to provide an entry statement is to be located on public land, including road reserves. This is to be reflected in the approved landscape plan.
50. In accordance with Condition C18 of Concept Plan MP06\_0316, a detailed description is to be provided to the satisfaction of the General Manager or delegate demonstrating compliance with previous Tweed Shire Council consent conditions intended to preserve wildlife corridors and protect and offset threatened species, populations and ecological communities and their habitats outside of the Concept Plan habitat requirements, or relevant reasons (such as subsequent amendments) as to why compliance was not required or may be transferred to current DAs. Such description is to include extracts of all relevant plans referred to in the conditions listed below sufficient to understand the land areas of relevance to the conditions and any overlap with current applications. Additional offset must be proposed if clearing of native vegetation has been undertaken not in accordance with the below development consents. Conditions to be addressed are as follows:
  - (a) D94/0438.04 Conditions 23, 24, 34a, 35, 36a, 37 and 38.
  - (b) K99/1124.06 Conditions 10, 15A, 30, 31, 41, 81, 83A, 90, 91, 92A, 93, 94A, 95A, 96, 97, 98, 99, 100, 101, 102A, 103, 104, 105, 106, 107, 108, 109 and Schedule B (National Parks imposed conditions via concurrence for Species Impact Statement.
  - (c) 1262/2001DA.02 Condition 9, 16, 17, 18.

Where required the development consents are to be modified in accordance with Section 80A(1) of the Environmental Planning and Assessment Act and Regulations to be consistent with this consent.

51. One or more detailed Habitat Restoration Plan(s) must be submitted to and approved by Council in accordance with Council's draft guidelines (attached), and in accordance with specific matters listed in Condition C4 of Concept Plan MP 06\_0316. Such plan(s) must be prepared for Management Areas 1, 2, 3, 4 and 13 of the *Revised Site Regeneration and Revegetation Plan* by James Warren and Associates dated October 2010 and representing compensatory offset for loss of

habitat and Endangered Ecological Communities on the site in areas adjacent to the development. Where offset areas as detailed in the *Revised Site Regeneration and Revegetation Plan* are proposed as an alternate use within the subdivision plan (that is, other than as an environmental protection area such as park or drainage reserve lots), additional EEC and habitat offset areas must be designated elsewhere in a location suitable to the vegetation community and/or threatened species to be protected and their habitat restored, with such areas totalling at least as committed within Concept Plan MP06\_0316. The Habitat Restoration Plan(s) must also include:

- (a) a schedule and timing of works to be undertaken
  - (b) a statement of commitment by the consent holder to funding the proposed works for a minimum 5 year period
  - (c) a statement of commitment by the consent holder that the works will be completed by qualified and experienced bush regeneration personnel.
  - (d) a mechanism to fund in perpetuity the ongoing maintenance of the environmental protection land not proposed to be dedicated to Council.
52. In accordance with Condition C4 of MP06\_0316, each site specific management plan required below is to be prepared for areas of relevance to Precinct 1 and 2, provide details on timelines for implementation of recommended works including maintenance periods, funding arrangements and measurable performance and completion criteria. Further, each plan is to consider all other existing plans for the site to ensure management strategies do not conflict and each plan can be implemented without negatively impacting on the objectives of the other, including:
- a. Site Regeneration and Revegetation Plan
  - b. Freshwater Wetland Rehabilitation Plan
  - c. Fauna Management Plan
  - d. Vegetation Management Plan
  - e. Landscape Plan
  - f. Buffer Management Plan
  - g. Acid Sulfate Management Plan
  - h. Groundwater Management Plan
  - i. Stormwater Management Plan
  - j. Cultural Heritage Management Plan
53. In accordance with Condition B1 of Concept Plan MP06\_0316, the proponent must prepare a Flora and Fauna Monitoring report to the satisfaction of Council. The plan must collate and synthesise all monitoring and reporting requirements contained in all documents and management plans as listed in A3 of MP06\_0316 of relevance to Precinct 1 and 2 and must satisfy the requirements of Condition B1 of MP06\_0316.
54. A detailed Bushfire Management Plan must be provided and approved by Council which demonstrates compliance with *Planning for Bushfire Protection Guidelines 2006* or provides alternate solutions acceptable to Council and sufficient to ensure protection to life, property and environmental areas. The plan must illustrate that compliance with the following specific matters can be achieved or acceptable alternate solutions agreed with Council:

- a. All slopes/batters within Precinct 1 and 2 APZs must be less than 18 degrees to ensure APZ maintenance is practical, soil stability is not compromised and the potential for crown fires negated.
- b. The 20m wide APZ, excluding the fire trail, is to be grassed or turfed. No trees or shrubs or tussock forming species are to be planted within the 20m wide APZ.
- c. Native trees, shrubs and groundcovers may be planted beyond the surveyed and marked 20m wide APZ to provide a buffer to environmental protection areas. Information on plant species, densities and maintenance must be included within the site specific buffer management plan for Precinct 1 and 2.
- d. All fire trails must have a minimum width of four metres, with an additional one metre wide cleared area on each side of the trail.
- e. All fire trails must have a maximum grade of 15 degrees if sealed and not more than 10 degrees if unsealed. The crossfall of all fire trails must not be more than 10 degrees.
- f. All fire trails must have a minimum vertical clearance of four metres to any overhanging obstructions.
- g. Reversing bays along all fire trails must be six metres wide and eight metres deep to any gates and with an inner minimum turning radius of six metres and outer minimum radius of 12 metres.
- h. All fire trails must be connected to the property access road and/or through road system at intervals of 200m or less.
- i. All fire trails must be gated and locked. Gates must be a minimum of 4m wide and must be locked with a key/lock system authorised by Council.
- j. Fire trails are not to be promoted/formally used as an "off-road bike trail" as specified in the Planit Consulting "Cobaki Overall Connectivity Network Plan". Informal recreational use of fire trails is acceptable (i.e. walking/bike-riding).
- k. All roads, including laneways, must comply with the minimum width and turning circle dimensions as detailed in Table 4.1 of Planning for Bushfire Protection 2006.
- l. All roads, including laneways, must not have a crossfall exceeding 3 degrees and must have a maximum grade of 15 degrees.
- m. Curves of all roads must have a minimum inner radius of six metres and curves must be minimal in number, to allow for rapid access and egress.
- n. All roads, including laneways, must have a minimum vertical clearance to a height of four metres above the road.
- o. All dead end roads (shown as road no. 4 and 17 on Yeats drawing YC0229-2M5-D03) must not be more than 200 metres in length and must incorporate a minimum 12 metre outer radius turning circle and must be clearly signposted as a dead end road and direct traffic away from the hazard.
- p. Fire hydrant spacing, sizing and pressures must comply with AS 2419.1 - 2005.
- q. Fire hydrants must not be located within any road carriageway and must be located outside of parking bays to ensure accessibility to reticulated water for fire suppression.

- r. A Monitoring and Fuel Management Program for asset protection zone maintenance in Precinct 1 and 2 must be prepared by the proponent and approved by Council.
55. Asset Protection Zones for Precinct 1 and 2 must be compliant with the acceptable solutions for bush fire protection measures for residential subdivisions as outlined in Section 4.1.3 of Planning for Bush Fire Protection 2006. If APZs are not compliant with acceptable solutions as per Section 4.1.3 of Planning for Bush Fire Protection 2006, then as per the guidelines a detailed performance assessment must be prepared by a Bushfire Planning and Design Certified Practitioner (BPAD) accredited under the Fire Protection Association of Australia and submitted to Council for approval. The performance assessment must include a detailed assessment and demonstration that the APZ can be maintained in the long term with minimal resources in a cost effective manner without compromise of its function to the satisfaction of the General Manager or delegate.
56. The Plans lodged for Construction Certificate must be certified by a Bushfire Planning and Design Certified Practitioner (BPAD) accredited under the Fire Protection Association of Australia as compliant with Planning for Bush Fire Protection 2006
57. Where Acid Sulfate Soils will be disturbed as part of any construction works, an Acid Sulfate Soils Management Plan (ASSMP) shall be prepared for submission to and approval by Council's General Manager or delegate prior to the issue of the construction certificate. The Acid Sulfate Soils Management Plan shall be prepared in accordance with the provisions as set out under section C5 (1) a-e of Part C Requirements for Future Applications Schedule 2 of the Concept Approval dated 6 December 2010.
58. Where the use of groundwater is proposed or where the groundwater table will be intercepted as part of any construction works, a Site Water and Groundwater Management and Monitoring Plan shall be prepared for submission to and approval by Council's General Manager or delegate prior to the issue of the construction certificate. The Site Water and Groundwater Management and Monitoring Plan shall be prepared in accordance with the provisions as set out under section C5 (2) of Part C Requirements for Future Applications Schedule 2 of the Concept Approval dated 6 December 2010.
59. A staging plan detailing the location, mix and type of dwellings to be provided as affordable rental accommodation is to be submitted to Council in accordance with the recommended strategy contained in the Cobaki Estate Affordable Housing Study (Final Version print date 14.1.2011) prepared for Leda Manorstead Pty Ltd. by Hill PDA and dated November 2010.
60. An unconditional bond based on the cost of maintaining the asset protection zones is to be negotiated with the General Manager or delegate prior to the release of the construction certificate.

#### **PRIOR TO COMMENCEMENT OF WORK**

61. All relevant Terms of Approval of the Cobaki Estate Concept Plan (06\_0316) approved by the Minister on 2 December 2010, and of Approval of the Cobaki Estate Project Application – Open Space (08\_0200) approved by the Minister on 28 February 2011 must be satisfactorily completed, as applicable, prior to bulk earthworks or civil works commencing within areas of Precinct 1 and Precinct 2, as applicable.

62. Prior to commencement of work all actions or prerequisite works required at that stage, as required by other conditions or approved management plans or the like under this development application, shall be installed/operated in accordance with those conditions or plans.

[PCW0015]

63. 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, 3<sup>rd</sup> Edition, NSW Government, or
- (b) AS4804 Occupation Health and Safety Management Systems - General Guidelines on Principles Systems and Supporting Techniques.
- (c) WorkCover Regulations 2000

[PCW0025]

64. 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 endorsed retaining walls of combined height 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]

65. 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 commencement of works, 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]

- 66. 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]

- 67. 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.

[PCW0985]

- 68. Prior to the commencement of construction works a Construction Environmental Management Plan (CEMP) must be prepared that covers the area of works. The CEMP shall be consistent with the *Guideline for the Preparation of Environmental Management Plans* (DIPNR, 2004). The CEMP shall include details sufficient to understand and avoid, mitigate and remedy all potential environmental impacts of the proposal during construction. The CEMP must include, but not be limited to all matters specified within Condition 25 of Project Application MP08\_0200 and be submitted to and approved by the PCA no later than one month prior to commencement of construction, or within such period otherwise agreed by the General Manger or delegate.

- 69. In accordance with Condition 26 of Project Application MP08\_0200:

- a. An appropriately qualified Environmental Officer(s), that is to receive the prior approval of Council, must be engaged by the proponent for the duration of the construction works as detailed in the approved CEMP. Their role shall be to oversee environmental compliance of the project until completion conditions have been satisfied.
- b. The Environmental Officer shall also act as liaison officer to consult with potentially affected property owners before and during construction works and shall respond to complaints of an environmental impact nature.
- c. The Environmental Officer must submit a compliance report to Council for information at the completion of each earthworks stage detailing the project's compliance with relevant conditions, management plans and progress on-site. The report must be submitted within 3 weeks of the completion of each stage until the works authorised under this approval are complete.

- 70. A registered Fauna spotter-catcher is to be present during all vegetation clearing works to ensure safe dispersal of fauna.

- 71. Cattle must be removed and fenced out of Management Areas 1, 2, 3, 4 and 13 as shown in Figure 5 of the *Revised Site Regeneration and Revegetation Plan* by James Warren and Associates dated October 2010 prior to the commencement of works.



72. Environmental safeguards (silt curtains, booms etc.) are to be utilised during reconstruction of the drainage line to ensure there is no escape of turbid plumes into the aquatic environment. Erosion and sediment controls must be in place prior to commencing, during and after works.
73. Sand, gravel, silt, topsoil or other materials must not be stockpiled within 50 metres of any drainage line unless surrounded by sediment control measures sufficient to prevent movement off-site.

#### **DURING CONSTRUCTION**

74. All proposed works are to be carried out in accordance with the conditions of development consent, approved management plans, approved Construction Certificate, drawings and specifications.

[DUR0005]

75. During construction, all works required by other conditions or approved management plans or the like shall be installed and operated in accordance with those conditions or plans.

[DUR0015]

76. If during construction works any Aboriginal object or relic is disturbed or uncovered, works are to cease and the Department of Environment, Climate Change and Water are to be notified immediately, in accordance with the provisions of the National Parks and Wildlife Act 1974.

[DUR0025]

77. Construction 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]

78. 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.

$L_{Aeq, 15 \text{ min}}$  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 15dB(A) at the boundary of the nearest affected residence.

[DUR0215]

79. The Principal Certifying Authority is to be given a minimum of 48 hours notice prior to any critical stage inspection or any other inspection nominated by the Principal Certifying Authority via the notice under Section 81A of the Environmental Planning and Assessment Act 1979.

[DUR0405]

80. 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 and that the development is suitable for its intended use shall be submitted to the Principal Certifying Authority upon completion.

[DUR0795]

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

[DUR0815]

82. 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]

83. The surrounding road carriageways are to be kept clean of any material carried onto the roadway by construction vehicles. 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 any Subdivision Certificate.

[DUR0995]

84. 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]

85. All practicable measures must be taken to prevent and minimise harm to the environment as a result of the construction and operation of the development.

[DUR1025]

86. Approved concrete footpaths and cycleways are to be constructed on a compacted base in accordance with Council's Development Design and Construction Specifications and Standard Drawing SD013.

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

[DUR1735]

87. 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]

88. 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]

89. 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]

90. Provision of temporary turning areas and associated signage for refuse vehicles at the end of roads which will be extended in subsequent stages. The temporary turning areas shall be constructed with a minimum 150mm pavement (CBR 45) and shall have a right of carriageway registered over the turning area until such time as the road is extended.

[DUR1835]

91. Any damage caused to public infrastructure during construction of the development shall be repaired in accordance with Council's Development Design and Construction Specifications prior to the issue of any forthcoming Subdivision Certificates.

[DUR1875]

92. Tweed Shire Council shall be given a minimum 24 hours notice to carry out the following compulsory inspections in accordance with the approved Cobaki Estate Development Code, in conjunction with Tweed Shire Council's 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, cycleways - 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 and Lift Stations**

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

#### **Stormwater Quality Control Devices (other than proprietary devices)**

For detail refer to Water By Design - Technical Guidelines

- (a) Earthworks and filter media
- (b) Structural components
- (c) Operational establishment
- (d) Commissioning - on maintenance
- (e) Off maintenance

#### **Others**

Council's role is limited to the above mandatory inspections and does **NOT** 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]

93. All endorsed retaining walls of combined height 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 the associated Subdivision Certificate.

[DUR1955]

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

[DUR2015]

95. 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.

[DUR2035]

96. 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]

97. Drainage Reserve

(a) The proposed drainage reserve is to be incrementally dedicated to Council as applicable, at no cost.

(b) An accurate plan of the proposed drainage reserve shall be submitted to Council 60 days prior to lodgement of Application for Subdivision Certificate (form 13) to allow the land to be classified.

[DUR2295]

98. 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]

99. 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]

100. All waters that are to be discharged from the site shall have a pH between 6.5 and 8.5 and suspended solids not greater than 50mg/l. The contractor shall nominate a person responsible for monitoring of the quality of such discharge waters on a daily basis and the results recorded. Such results shall be made available to Council's Environmental Health Officer(s) upon request.

[DUR2435]

101. The Developer must establish a monitoring program, including reporting to determine the pollutant removal efficiencies of the proposed treatment devices, as per section D7.A12 of the TSC Development Design Specification - D7 Stormwater Quality and if further treatment of the stormwater drainage system is required to ensure the preservation of water quality in Cobaki Creek and Cobaki Broadwater.

Additionally;

- water shall not be released from detention basins until samples have been analysed and shown to meet the criteria outlined in the ESC Program, and.
- regular (three monthly) water quality testing is to be undertaken within the wetland in the vicinity of any discharge points to ensure that acceptable water quality parameters are maintained.

[DURNS01]

102. An accurate plan of the sewage pumping station and lift station sites 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]

103. No retaining walls or similar structures are to be constructed over or within the zone of influence of Council's sewer mains, existing or proposed.

[DUR2705]

104. Erosion and Sediment Control

All erosion and sediment control measures are to be effectively implemented and maintained at or above design capacity for the duration of the construction works, and until such time as all ground disturbed by the works has been stabilised and rehabilitated so that it no longer acts as a source of sediment.

All activities on the site shall be undertaken with the objective of preventing discharge of sediment and other pollutants to lands and/or waters (the receiving environment) during construction activities. In particular the proponent shall ensure all practicable measures are taken to prevent contaminated stormwater from adversely affecting the water quality of Cobaki Creek and Cobaki Broadwater.

[DURNS02]

105. All land for residential development is to be filled to a level no less than the next highest 0.1m Design Flood Level contour, as determined from the latest approved Cobaki Design Flood Level Map Q100 Event (Including Climate Change) Plan, unless notified otherwise by Council.

[DURNS03]

106. A copy of the approved and certified plans, specifications and documents incorporating conditions of approval and certification must be kept on site at all times and must be readily available for perusal by any officer of relevant State Government agencies, Council or the PCA.

107. All persons associated with the development of this site and construction of this building/subdivision are prohibited from permitting dogs, cats and other domestic animals to enter this subdivision locality during construction. This prohibition also applies to all contractors, sub-contractors and other trades persons accessing this site.

108. It is the responsibility of the applicant to restrict public access to the construction works site, construction works or materials or equipment on the site when construction work is not in progress or the site is otherwise unoccupied in accordance with WorkCover NSW requirements and Occupational Health and Safety Regulation 2001.

[DUR0415]

## **PRIOR TO ISSUE OF SUBDIVISION CERTIFICATE**

109. 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]

110. 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.

A Subdivision Certificate shall **NOT** be issued unless the Certifying Authority is satisfied provisions pursuant to Section 109J of the EP&A Act, 1979 have been complied with and the Certifying Authority has sighted Councils contributions sheet and 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:

### **Stage 1A**

Water DSP3: 48.2 ET @ \$11020 per ET	\$531,164
Sewer Banora: 49 ET @ \$5295 per ET	\$259,455

### **Stage 1B**

Water DSP3: 38 ET @ \$11020 per ET	\$418,760
Sewer Banora: 38 ET @ \$5295 per ET	\$201,210

### **Stage 1C**

Water DSP3: 40 ET @ \$11020 per ET	\$440,800
Sewer Banora: 41 ET @ \$5295 per ET	\$217,095

### **Stage 1D**

Water DSP3: 35.8 ET @ \$11020 per ET	\$394,516
Sewer Banora: 37 ET @ \$5295 per ET	\$195,915

### **Stage 1E**

Water DSP3: 49.6 ET @ \$11020 per ET	\$546,592
Sewer Banora: 50 ET @ \$5295 per ET	\$264,750

### **Stage 2A**

Water DSP3: 50.8 ET @ \$11020 per ET	\$559,816
Sewer Banora: 52 ET @ \$5295 per ET	\$275,340

### **Stage 2B**

Water DSP3: 59 ET @ \$11020 per ET	\$650,180
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Sewer Banora: 60 ET @ \$5295 per ET	\$317,700
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**Stage 2C**

Water DSP3: 31.4 ET @ \$11020 per ET	\$346,028
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Sewer Banora: 33 ET @ \$5295 per ET	\$174,735
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**Stage 2D**

Water DSP3: 36 ET @ \$11020 per ET	\$396,720
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Sewer Banora: 36 ET @ \$5295 per ET	\$190,620
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**Stage 2E**

Water DSP3: 36 ET @ \$11020 per ET	\$396,720
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Sewer Banora: 37 ET @ \$5295 per ET	\$195,915
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**Stage 2F**

Water DSP3: 24 ET @ \$11020 per ET	\$264,480
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Sewer Banora: 24 ET @ \$5295 per ET	\$127,080
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**Stage 2G**

Water DSP3: 25 ET @ \$11020 per ET	\$275,500
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Sewer Banora: 25 ET @ \$5295 per ET	\$132,375
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**Stage 2H**

Water DSP3: 20.4 ET @ \$11020 per ET	\$224,808
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Sewer Banora: 24 ET @ \$5295 per ET	\$127,080
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**Stage 2I**

Water DSP3: 1.2 ET @ \$11020 per ET	\$13,224
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Sewer Banora: 1 ET @ \$5295 per ET	\$5,295
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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 MUST BE PROVIDED AT THE TIME OF PAYMENT**

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.

[PSC0165]

111. 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 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.

### **Stage 1A**

- |                                                                                    |             |
|------------------------------------------------------------------------------------|-------------|
| (a) Tweed Road Contribution Plan:                                                  |             |
| 308.1 Trips @ \$999 per Trips                                                      | \$307,792   |
| (\$908 base rate + \$91 indexation)                                                |             |
| S94 Plan No. 4                                                                     |             |
| Sector3_4                                                                          |             |
| (b) Cobaki Lakes - Community Facilities & Open Space:                              |             |
| 48.5 ET @ \$492 per ET                                                             | \$23,862    |
| (\$492 base rate + \$0 indexation)                                                 |             |
| S94 Plan No. 10                                                                    |             |
| (c) Shirewide Library Facilities:                                                  |             |
| 48.5 ET @ \$792 per ET                                                             | \$38,412    |
| (\$792 base rate + \$0 indexation)                                                 |             |
| S94 Plan No. 11                                                                    |             |
| (d) Bus Shelters:                                                                  |             |
| 48.5 ET @ \$60 per ET                                                              | \$2,910     |
| (\$60 base rate + \$0 indexation)                                                  |             |
| S94 Plan No. 12                                                                    |             |
| (e) Eviron Cemetery:                                                               |             |
| 48.5 ET @ \$120 per ET                                                             | \$5,820     |
| (\$101 base rate + \$19 indexation)                                                |             |
| S94 Plan No. 13                                                                    |             |
| (f) Extensions to Council Administration Offices<br>& Technical Support Facilities |             |
| 48.5 ET @ \$1759.9 per ET                                                          | \$85,355.15 |
| (\$1759.9 base rate + \$0 indexation)                                              |             |
| S94 Plan No. 18                                                                    |             |
| (g) Cycleways:                                                                     |             |
| 48.5 ET @ \$447 per ET                                                             | \$21,680    |
| (\$447 base rate + \$0 indexation)                                                 |             |
| S94 Plan No. 22                                                                    |             |

- (h) Regional Open Space (Casual)  
48.5 ET @ \$1031 per ET \$50,004  
((\$1031 base rate + \$0 indexation)  
S94 Plan No. 26
- (i) Regional Open Space (Structured):  
48.5 ET @ \$3619 per ET \$175,522  
((\$3619 base rate + \$0 indexation)  
S94 Plan No. 26

### **Stage 1B**

- (a) Tweed Road Contribution Plan:  
247 Trips @ \$999 per Trips \$246,753  
((\$908 base rate + \$91 indexation)  
S94 Plan No. 4  
Sector3\_4
- (b) Cobaki Lakes - Community Facilities & Open Space:  
38 ET @ \$492 per ET \$18,696  
((\$492 base rate + \$0 indexation)  
S94 Plan No. 10
- (c) Shirewide Library Facilities:  
38 ET @ \$792 per ET \$30,096  
((\$792 base rate + \$0 indexation)  
S94 Plan No. 11
- (d) Bus Shelters:  
38 ET @ \$60 per ET \$2,280  
((\$60 base rate + \$0 indexation)  
S94 Plan No. 12
- (e) Eviron Cemetery:  
38 ET @ \$120 per ET \$4,560  
((\$101 base rate + \$19 indexation)  
S94 Plan No. 13
- (f) Extensions to Council Administration Offices  
& Technical Support Facilities  
38 ET @ \$1759.9 per ET \$66,876.20  
((\$1759.9 base rate + \$0 indexation)  
S94 Plan No. 18

- (g) Cycleways:
  - 38 ET @ \$447 per ET \$16,986
  - (\$447 base rate + \$0 indexation)
  - S94 Plan No. 22
- (h) Regional Open Space (Casual)
  - 38 ET @ \$1031 per ET \$39,178
  - (\$1031 base rate + \$0 indexation)
  - S94 Plan No. 26
- (i) Regional Open Space (Structured):
  - 38 ET @ \$3619 per ET \$137,522
  - (\$3619 base rate + \$0 indexation)
  - S94 Plan No. 26

### **Stage 1C**

- (a) Tweed Road Contribution Plan:
  - 253.5 Trips @ \$999 per Trips \$253,247
  - (\$908 base rate + \$91 indexation)
  - S94 Plan No. 4
  - Sector3\_4
- (b) Cobaki Lakes - Community Facilities & Open Space:
  - 40.375 ET @ \$492 per ET \$19,865
  - (\$492 base rate + \$0 indexation)
  - S94 Plan No. 10
- (c) Shirewide Library Facilities:
  - 40.375 ET @ \$792 per ET \$31,977
  - (\$792 base rate + \$0 indexation)
  - S94 Plan No. 11
- (d) Bus Shelters:
  - 40.375 ET @ \$60 per ET \$2,423
  - (\$60 base rate + \$0 indexation)
  - S94 Plan No. 12
- (e) Eviron Cemetery:
  - 40.375 ET @ \$120 per ET \$4,845
  - (\$101 base rate + \$19 indexation)
  - S94 Plan No. 13
- (f) Extensions to Council Administration Offices  
& Technical Support Facilities

40.375 ET @ \$1759.9 per ET (\$1759.9 base rate + \$0 indexation) S94 Plan No. 18	\$71,055.96
(g) Cycleways: 40.375 ET @ \$447 per ET (\$447 base rate + \$0 indexation) S94 Plan No. 22	\$18,048
(h) Regional Open Space (Casual) 40.375 ET @ \$1031 per ET (\$1031 base rate + \$0 indexation) S94 Plan No. 26	\$41,627
(i) Regional Open Space (Structured): 40.375 ET @ \$3619 per ET (\$3619 base rate + \$0 indexation) S94 Plan No. 26	\$146,117

#### **Stage 1D**

(a) Tweed Road Contribution Plan: 224.9 Trips @ \$999 per Trips (\$908 base rate + \$91 indexation) S94 Plan No. 4 Sector3_4	\$224,675
(b) Cobaki Lakes - Community Facilities & Open Space: 36.25 ET @ \$492 per ET (\$492 base rate + \$0 indexation) S94 Plan No. 10	\$17,835
(c) Shirewide Library Facilities: 36.25 ET @ \$792 per ET (\$792 base rate + \$0 indexation) S94 Plan No. 11	\$28,710
(d) Bus Shelters: 36.25 ET @ \$60 per ET (\$60 base rate + \$0 indexation) S94 Plan No. 12	\$2,175
(e) Eviron Cemetery: 36.25 ET @ \$120 per ET (\$101 base rate + \$19 indexation)	\$4,350

- S94 Plan No. 13
- (f) Extensions to Council Administration Offices  
& Technical Support Facilities  
36.25 ET @ \$1759.9 per ET \$63,796.38  
((\$1759.9 base rate + \$0 indexation))  
S94 Plan No. 18
- (g) Cycleways:  
36.25 ET @ \$447 per ET \$16,204  
((\$447 base rate + \$0 indexation))  
S94 Plan No. 22
- (h) Regional Open Space (Casual)  
36.25 ET @ \$1031 per ET \$37,374  
((\$1031 base rate + \$0 indexation))  
S94 Plan No. 26
- (i) Regional Open Space (Structured):  
36.25 ET @ \$3619 per ET \$131,189  
((\$3619 base rate + \$0 indexation))  
S94 Plan No. 26

### **Stage 1E**

- (a) Tweed Road Contribution Plan:  
319.8 Trips @ \$999 per Trips \$319,480  
((\$908 base rate + \$91 indexation))  
S94 Plan No. 4  
Sector3\_4
- (b) Cobaki Lakes - Community Facilities & Open Space:  
49.75 ET @ \$492 per ET \$24,477  
((\$492 base rate + \$0 indexation))  
S94 Plan No. 10
- (c) Shirewide Library Facilities:  
49.75 ET @ \$792 per ET \$39,402  
((\$792 base rate + \$0 indexation))  
S94 Plan No. 11
- (d) Bus Shelters:  
49.75 ET @ \$60 per ET \$2,985  
((\$60 base rate + \$0 indexation))  
S94 Plan No. 12

- (e) Eviron Cemetery:  
49.75 ET @ \$120 per ET \$5,970  
(\$101 base rate + \$19 indexation)  
S94 Plan No. 13
- (f) Extensions to Council Administration Offices  
& Technical Support Facilities  
49.75 ET @ \$1759.9 per ET \$87,555.03  
(\$1759.9 base rate + \$0 indexation)  
S94 Plan No. 18
- (g) Cycleways:  
49.75 ET @ \$447 per ET \$22,238  
(\$447 base rate + \$0 indexation)  
S94 Plan No. 22
- (h) Regional Open Space (Casual)  
49.75 ET @ \$1031 per ET \$51,292  
(\$1031 base rate + \$0 indexation)  
S94 Plan No. 26
- (i) Regional Open Space (Structured):  
49.75 ET @ \$3619 per ET \$180,045  
(\$3619 base rate + \$0 indexation)  
S94 Plan No. 26

## **Stage 2A**

- (a) Tweed Road Contribution Plan:  
322.4 Trips @ \$999 per Trips \$322,078  
(\$908 base rate + \$91 indexation)  
S94 Plan No. 4  
Sector3\_4
- (b) Cobaki Lakes - Community Facilities & Open Space:  
51.25 ET @ \$492 per ET \$25,215  
(\$492 base rate + \$0 indexation)  
S94 Plan No. 10
- (c) Shirewide Library Facilities:  
51.25 ET @ \$792 per ET \$40,590  
(\$792 base rate + \$0 indexation)  
S94 Plan No. 11

- (d) Bus Shelters:
  - 51.25 ET @ \$60 per ET \$3,075
  - (\$60 base rate + \$0 indexation)
  - S94 Plan No. 12
- (e) Eviron Cemetery:
  - 51.25 ET @ \$120 per ET \$6,150
  - (\$101 base rate + \$19 indexation)
  - S94 Plan No. 13
- (f) Extensions to Council Administration Offices  
& Technical Support Facilities
  - 51.25 ET @ \$1759.9 per ET \$90,194.88
  - (\$1759.9 base rate + \$0 indexation)
  - S94 Plan No. 18
- (g) Cycleways:
  - 51.25 ET @ \$447 per ET \$22,909
  - (\$447 base rate + \$0 indexation)
  - S94 Plan No. 22
- (h) Regional Open Space (Casual)
  - 51.25 ET @ \$1031 per ET \$52,839
  - (\$1031 base rate + \$0 indexation)
  - S94 Plan No. 26
- (i) Regional Open Space (Structured):
  - 51.25 ET @ \$3619 per ET \$185,474
  - (\$3619 base rate + \$0 indexation)
  - S94 Plan No. 26

## **Stage 2B**

- (a) Tweed Road Contribution Plan:
  - 377 Trips @ \$999 per Trips \$376,623
  - (\$908 base rate + \$91 indexation)
  - S94 Plan No. 4
  - Sector3\_4
- (b) Cobaki Lakes - Community Facilities & Open Space:
  - 59.375 ET @ \$492 per ET \$29,213
  - (\$492 base rate + \$0 indexation)
  - S94 Plan No. 10

- (c) Shirewide Library Facilities:  
59.375 ET @ \$792 per ET \$47,025  
(\$792 base rate + \$0 indexation)  
S94 Plan No. 11
- (d) Bus Shelters:  
59.375 ET @ \$60 per ET \$3,563  
(\$60 base rate + \$0 indexation)  
S94 Plan No. 12
- (e) Eviron Cemetery:  
59.375 ET @ \$120 per ET \$7,125  
(\$101 base rate + \$19 indexation)  
S94 Plan No. 13
- (f) Extensions to Council Administration Offices  
& Technical Support Facilities  
59.375 ET @ \$1759.9 per ET \$104,494.06  
(\$1759.9 base rate + \$0 indexation)  
S94 Plan No. 18
- (g) Cycleways:  
59.375 ET @ \$447 per ET \$26,541  
(\$447 base rate + \$0 indexation)  
S94 Plan No. 22
- (h) Regional Open Space (Casual)  
59.375 ET @ \$1031 per ET \$61,216  
(\$1031 base rate + \$0 indexation)  
S94 Plan No. 26
- (i) Regional Open Space (Structured):  
59.375 ET @ \$3619 per ET \$214,878  
(\$3619 base rate + \$0 indexation)  
S94 Plan No. 26

### **Stage 2C**

- (a) Tweed Road Contribution Plan:  
193.7 Trips @ \$999 per Trips \$193,506  
(\$908 base rate + \$91 indexation)  
S94 Plan No. 4  
Sector3\_4



- (b) Cobaki Lakes - Community Facilities & Open Space:  
 32 ET @ \$492 per ET \$15,744  
 (\$492 base rate + \$0 indexation)  
 S94 Plan No. 10
- (c) Shirewide Library Facilities:  
 32 ET @ \$792 per ET \$25,344  
 (\$792 base rate + \$0 indexation)  
 S94 Plan No. 11
- (d) Bus Shelters:  
 32 ET @ \$60 per ET \$1,920  
 (\$60 base rate + \$0 indexation)  
 S94 Plan No. 12
- (e) Eviron Cemetery:  
 32 ET @ \$120 per ET \$3,840  
 (\$101 base rate + \$19 indexation)  
 S94 Plan No. 13
- (f) Extensions to Council Administration Offices  
 & Technical Support Facilities  
 32 ET @ \$1759.9 per ET \$56,316.80  
 (\$1759.9 base rate + \$0 indexation)  
 S94 Plan No. 18
- (g) Cycleways:  
 32 ET @ \$447 per ET \$14,304  
 (\$447 base rate + \$0 indexation)  
 S94 Plan No. 22
- (h) Regional Open Space (Casual)  
 32 ET @ \$1031 per ET \$32,992  
 (\$1031 base rate + \$0 indexation)  
 S94 Plan No. 26
- (i) Regional Open Space (Structured):  
 32 ET @ \$3619 per ET \$115,808  
 (\$3619 base rate + \$0 indexation)  
 S94 Plan No. 26

## **Stage 2D**

- (a) Tweed Road Contribution Plan:  
 234 Trips @ \$999 per Trips \$233,766

	(\$908 base rate + \$91 indexation)	
	S94 Plan No. 4	
	Sector3_4	
(b)	Cobaki Lakes - Community Facilities & Open Space:	
	36 ET @ \$492 per ET	\$17,712
	(\$492 base rate + \$0 indexation)	
	S94 Plan No. 10	
(c)	Shirewide Library Facilities:	
	36 ET @ \$792 per ET	\$28,512
	(\$792 base rate + \$0 indexation)	
	S94 Plan No. 11	
(d)	Bus Shelters:	
	36 ET @ \$60 per ET	\$2,160
	(\$60 base rate + \$0 indexation)	
	S94 Plan No. 12	
(e)	Eviron Cemetery:	
	36 ET @ \$120 per ET	\$4,320
	(\$101 base rate + \$19 indexation)	
	S94 Plan No. 13	
(f)	Extensions to Council Administration Offices & Technical Support Facilities	
	36 ET @ \$1759.9 per ET	\$63,356.40
	(\$1759.9 base rate + \$0 indexation)	
	S94 Plan No. 18	
(g)	Cycleways:	
	36 ET @ \$447 per ET	\$16,092
	(\$447 base rate + \$0 indexation)	
	S94 Plan No. 22	
(h)	Regional Open Space (Casual)	
	36 ET @ \$1031 per ET	\$37,116
	(\$1031 base rate + \$0 indexation)	
	S94 Plan No. 26	
(i)	Regional Open Space (Structured):	
	36 ET @ \$3619 per ET	\$130,284
	(\$3619 base rate + \$0 indexation)	
	S94 Plan No. 26	

## **Stage 2E**

- (a) Tweed Road Contribution Plan:  
227.5 Trips @ \$999 per Trips \$227,273  
(\$908 base rate + \$91 indexation)  
S94 Plan No. 4  
Sector3\_4
- (b) Cobaki Lakes - Community Facilities & Open Space:  
36.375 ET @ \$492 per ET \$17,897  
(\$492 base rate + \$0 indexation)  
S94 Plan No. 10
- (c) Shirewide Library Facilities:  
36.375 ET @ \$792 per ET \$28,809  
(\$792 base rate + \$0 indexation)  
S94 Plan No. 11
- (d) Bus Shelters:  
36.375 ET @ \$60 per ET \$2,183  
(\$60 base rate + \$0 indexation)  
S94 Plan No. 12
- (e) Eviron Cemetery:  
36.375 ET @ \$120 per ET \$4,365  
(\$101 base rate + \$19 indexation)  
S94 Plan No. 13
- (f) Extensions to Council Administration Offices  
& Technical Support Facilities  
36.375 ET @ \$1759.9 per ET \$64,016.36  
(\$1759.9 base rate + \$0 indexation)  
S94 Plan No. 18
- (g) Cycleways:  
36.375 ET @ \$447 per ET \$16,260  
(\$447 base rate + \$0 indexation)  
S94 Plan No. 22
- (h) Regional Open Space (Casual)  
36.375 ET @ \$1031 per ET \$37,503  
(\$1031 base rate + \$0 indexation)  
S94 Plan No. 26

- (i) Regional Open Space (Structured):  
 36.375 ET @ \$3619 per ET \$131,641  
 (\$3619 base rate + \$0 indexation)  
 S94 Plan No. 26

## **Stage 2F**

- (a) Tweed Road Contribution Plan:  
 156 Trips @ \$999 per Trips \$155,844  
 (\$908 base rate + \$91 indexation)  
 S94 Plan No. 4  
 Sector3\_4
- (b) Cobaki Lakes - Community Facilities & Open Space:  
 24 ET @ \$492 per ET \$11,808  
 (\$492 base rate + \$0 indexation)  
 S94 Plan No. 10
- (c) Shirewide Library Facilities:  
 24 ET @ \$792 per ET \$19,008  
 (\$792 base rate + \$0 indexation)  
 S94 Plan No. 11
- (d) Bus Shelters:  
 24 ET @ \$60 per ET \$1,440  
 (\$60 base rate + \$0 indexation)  
 S94 Plan No. 12
- (e) Eviron Cemetery:  
 24 ET @ \$120 per ET \$2,880  
 (\$101 base rate + \$19 indexation)  
 S94 Plan No. 13
- (f) Extensions to Council Administration Offices  
 & Technical Support Facilities  
 24 ET @ \$1759.9 per ET \$42,237.60  
 (\$1759.9 base rate + \$0 indexation)  
 S94 Plan No. 18
- (g) Cycleways:  
 24 ET @ \$447 per ET \$10,728  
 (\$447 base rate + \$0 indexation)  
 S94 Plan No. 22

- (h) Regional Open Space (Casual)  
24 ET @ \$1031 per ET \$24,744  
((\$1031 base rate + \$0 indexation)  
S94 Plan No. 26
- (i) Regional Open Space (Structured):  
24 ET @ \$3619 per ET \$86,856  
((\$3619 base rate + \$0 indexation)  
S94 Plan No. 26

## **Stage 2G**

- (a) Tweed Road Contribution Plan:  
162.5 Trips @ \$999 per Trips \$162,338  
((\$908 base rate + \$91 indexation)  
S94 Plan No. 4  
Sector3\_4
- (b) Cobaki Lakes - Community Facilities & Open Space:  
25 ET @ \$492 per ET \$12,300  
((\$492 base rate + \$0 indexation)  
S94 Plan No. 10
- (c) Shirewide Library Facilities:  
25 ET @ \$792 per ET \$19,800  
((\$792 base rate + \$0 indexation)  
S94 Plan No. 11
- (d) Bus Shelters:  
25 ET @ \$60 per ET \$1,500  
((\$60 base rate + \$0 indexation)  
S94 Plan No. 12
- (e) Eviron Cemetery:  
25 ET @ \$120 per ET \$3,000  
((\$101 base rate + \$19 indexation)  
S94 Plan No. 13
- (f) Extensions to Council Administration Offices  
& Technical Support Facilities  
25 ET @ \$1759.9 per ET \$43,997.50  
((\$1759.9 base rate + \$0 indexation)  
S94 Plan No. 18

- (g) Cycleways:
  - 25 ET @ \$447 per ET \$11,175
  - (\$447 base rate + \$0 indexation)
  - S94 Plan No. 22
- (h) Regional Open Space (Casual)
  - 25 ET @ \$1031 per ET \$25,775
  - (\$1031 base rate + \$0 indexation)
  - S94 Plan No. 26
- (i) Regional Open Space (Structured):
  - 25 ET @ \$3619 per ET \$90,475
  - (\$3619 base rate + \$0 indexation)
  - S94 Plan No. 26

## **Stage 2H**

- (a) Tweed Road Contribution Plan:
  - 109.2 Trips @ \$999 per Trips \$109,091
  - (\$908 base rate + \$91 indexation)
  - S94 Plan No. 4
  - Sector3\_4
- (b) Cobaki Lakes - Community Facilities & Open Space:
  - 21.75 ET @ \$492 per ET \$10,701
  - (\$492 base rate + \$0 indexation)
  - S94 Plan No. 10
- (c) Shirewide Library Facilities:
  - 21.75 ET @ \$792 per ET \$17,226
  - (\$792 base rate + \$0 indexation)
  - S94 Plan No. 11
- (d) Bus Shelters:
  - 21.75 ET @ \$60 per ET \$1,305
  - (\$60 base rate + \$0 indexation)
  - S94 Plan No. 12
- (e) Eviron Cemetery:
  - 21.75 ET @ \$120 per ET \$2,610
  - (\$101 base rate + \$19 indexation)
  - S94 Plan No. 13
- (f) Extensions to Council Administration Offices  
& Technical Support Facilities

21.75 ET @ \$1759.9 per ET (\$1759.9 base rate + \$0 indexation) S94 Plan No. 18	\$38,277.83
(g) Cycleways: 21.75 ET @ \$447 per ET (\$447 base rate + \$0 indexation) S94 Plan No. 22	\$9,722
(h) Regional Open Space (Casual) 21.75 ET @ \$1031 per ET (\$1031 base rate + \$0 indexation) S94 Plan No. 26	\$22,424
(i) Regional Open Space (Structured): 21.75 ET @ \$3619 per ET (\$3619 base rate + \$0 indexation) S94 Plan No. 26	\$78,713

## **Stage 2I**

(a) Tweed Road Contribution Plan: 6.5 Trips @ \$999 per Trips (\$908 base rate + \$91 indexation) S94 Plan No. 4 Sector3_4	\$6,494
(b) Cobaki Lakes - Community Facilities & Open Space: 1 ET @ \$492 per ET (\$492 base rate + \$0 indexation) S94 Plan No. 10	\$492
(c) Shirewide Library Facilities: 1 ET @ \$792 per ET (\$792 base rate + \$0 indexation) S94 Plan No. 11	\$792
(d) Bus Shelters: 1 ET @ \$60 per ET (\$60 base rate + \$0 indexation) S94 Plan No. 12	\$60
(e) Eviron Cemetery: 1 ET @ \$120 per ET (\$101 base rate + \$19 indexation)	\$120

- S94 Plan No. 13
- (f) Extensions to Council Administration Offices  
& Technical Support Facilities  
1 ET @ \$1759.9 per ET \$1,759.90  
(\$1759.9 base rate + \$0 indexation)
- S94 Plan No. 18
- (g) Cycleways:  
1 ET @ \$447 per ET \$447  
(\$447 base rate + \$0 indexation)
- S94 Plan No. 22
- (h) Regional Open Space (Casual)  
1 ET @ \$1031 per ET \$1,031  
(\$1031 base rate + \$0 indexation)
- S94 Plan No. 26
- (i) Regional Open Space (Structured):  
1 ET @ \$3619 per ET \$3,619  
(\$3619 base rate + \$0 indexation)
- S94 Plan No. 26

[PSC0175]

112. The proposed passive parks are to be dedicated as passive open space and suitably embellished at no cost to Council in accordance with the approved landscaping plan.

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. Embellishment arrangements shall be in place prior to the issue of a Subdivision Certificate.

[PSC0195]

113. 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 associated 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 (unless sanctioned otherwise by Council) 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]

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

Alternatively, the developer may elect to pay a cash contribution to the value of the



footpath and cycleway 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]

115. A bond shall be lodged prior to the issue of the Subdivision Certificate to ensure that the associated landscaping is maintained by the developer for a period of 12 months from the date of issue of a Subdivision Certificate. The amount of the bond shall be 20% of the estimated cost of the landscaping or \$3000 whichever is the greater.

[PSC0235]

116. Cash Bond/Bank Guarantee

- (a) A Cash Bond or Bank Guarantee to ensure that the approved Site Regeneration and Revegetation Plan (SRRP) is implemented and completed must be lodged with Council prior to the release of the Subdivision Certificate. The amount of such bond will be based on the cost of environmental repair, enhancement and maintenance works to be undertaken in accordance with the approved SRRP. In this regard, two (2) written quotes from suitably experienced and qualified bush regenerators (to the satisfaction of the General Manager or his delegate) must be submitted to Council which detail the cost of all works associated with the SRRP. The amount of the bond will be equivalent to 100% of the estimated cost of works.
- (b) One third of the Cash Bond or Bank Guarantee will be refunded one year after the initiation of works on submission of certification by a suitably experienced and qualified bush regenerator stating that works are being satisfactorily undertaken in accordance with the approved SRRP. A further one third of the Bond or Bank Guarantee will be refunded 3 years after the initiation of works on submission of certification by a suitably experienced and qualified bush regenerator stating that works have been satisfactorily reached the defined half-way stage of the SRRP. The final one third of the Bond or Bank Guarantee will be released 5 years after the initiation of works on submission of certification by a suitably experienced and qualified bush regenerator stating that the SRRP has been satisfactorily completed.
- (c) Monitoring of the effectiveness of environmental repair, enhancement and maintenance works must be undertaken by an independent and suitably qualified and experienced bush regenerator at yearly intervals following initiation of the Environmental Restoration Plan SRRP works. Reports of this monitoring must provide the basis for the person issuing certification for the bond or bank guarantee refunding stages and must be annually submitted to Council as evidence. Any supplementary or approved adaptive management works deemed necessary by the independent bush regenerator during the life of the SRRP must be undertaken once the need is identified.

[PSC0255]

117. 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.

118. All approved landscaping requirements must be completed to the satisfaction of the General Manager or his delegate **PRIOR** to the issue of an associated Subdivision Certificate. Landscaping must be maintained at all times to the satisfaction of the General Manager or delegate.

119. 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.

120. Prior to the issue of a **Subdivision Certificate**, associated 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 DEVELOPER to prepare and submit works-as-executed (WAX) plans.**

121. All retaining walls with combined height in excess of 1.2m are to be certified by a suitably qualified geotechnical / structural engineer. The certification is to be submitted with the subdivision certificate application and shall state that the retaining walls have been designed and constructed in accordance with AS4678-2002 Earth Retaining Structures and are structurally sound.

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

123. A Section 88B Instrument shall be submitted with the Subdivision Certificate application, for Council's endorsement, for the creation of easements for services, rights of carriageway and restrictions as to user (including restrictions associated with planning for bushfire) 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) Easements (including maintenance requirements) over all relevant surface drains, all subsurface drains and inter-allotment drainage, benefiting and burdening the property owners.
- (c) The location of zero lot lines.
- (d) Restriction as to user prohibiting cats and requiring dogs to be restricted to

suitably sized fenced yards.

- (e) All bushfire affected lots as shown by hatching on the Cobaki Precinct 1 & 2 Plan of Development are to be encumbered to this effect

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.

[PSC0835]

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

[PSC0855]

- 125. 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]

- 126. 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/Lift 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]

127. The six (6) months Defects Liability Period commences upon the registration of the Plan of Subdivision, unless stated otherwise in approved management plans or this consent.

[PSC0925]

128. 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 gravity sewerage systems installed and intended 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]

129. Prior to the release of the Subdivision Certificate the proponent shall:

- (a) Dedicate the proposed drainage reserve at no cost to Council.
- (b) Submit an accurate plan of the proposed drainage reserve to Council 60 days prior to lodgement of Application for Subdivision Certificate to allow the land to be classified.

[PSC1075]

130. Prior to issuing a Subdivision Certificate, reticulated water supply and outfall sewerage reticulation (including household connections) shall be provided to all lots associated with 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.

Fire Hydrants spacing, sizing and pressures shall comply with Council's DCP – Section A5 – Subdivision Manual, associated Development Design and Construction Specifications and AS2419.1-2005.

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]

131. The site of the sewage pumping station and lift 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]

132. 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 all allotments associated with the Subdivision Certificate has been completed.

### 133. **Electricity**

- (a) The production of written evidence from the local electricity supply authority certifying that reticulation and energising of underground electricity 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]

134. In accordance with the Federal Government's National Broadband Network (NBN) initiatives, the Developer is required (at the Developer's expense) to install a fibre ready, pit and pipe network (including trenching, design and third party certification) to NBN CO's Specifications, to allow for the installation of Fibre To The Home (FTTH) broadband services.

[PSC1205]

135. Prior to issue of a Subdivision Certificate, the Design Flood Level Map shall be updated to include Works As Executed levels for Bulk Earthworks, as well as any other works that may affect flood behaviour and submitted to Council.

[PSCNS01]

136. All water quality control devices require a formal asset handover at the completion of the maintenance period ("off maintenance"), whereby all relevant stakeholders will inspect the device and be issued with a current operational manual for the device.

[PSCNS02]

137. As development occurs, an applicable easement for drainage purposes is to be progressively dedicated along the alignment of the central drainage corridor and existing agricultural drain to Piggabeen Creek, provide an unimpeded conveyance and legal point of discharge across the land for the development.

This easement will be extinguished as necessary following construction and dedication of the ultimate drain.

[PSCNS03]

138. Prior to the issue of a Subdivision Certificate, a certificate from a registered Geotechnical Engineer shall be submitted to the Principal Certifying Authority, certifying that:

- The site is stable,
- 100% of primary consolidation settlement (where applicable) is completed / achieved, and
- The site is now considered suitable for its intended purpose.

[PSCNS04]

139. Prior to the issue of a Subdivision Certificate, all relevant bulk earthworks and drainage works (including the northern Sandy Lane culvert) within the Major Central Open Drain shall be completed in accordance with a separate Construction Certificate approval issued in accordance with Condition 16 of MP08\_0200.

[PSCNS05]

140. Prior to the issue of a Subdivision Certificate, all relevant bulk earthworks and drainage works within the Major Central Open Drain, Minor Open Drain 6 and Minor Open Drain 7 shall be completed in accordance with a separate Construction Certificate approval issued in accordance with Condition 16 of MP08\_0200.

[PSCNS06]

141. Prior to the issue of a Subdivision Certificate, the low flow component of the Major Central Open Drain and Minor Open Drains 6 and 7, shall be suitably embellished, to the satisfaction of the General Manager or his delegate, at no cost to Council.

The embellished cross section of the low flow component of the Major Central Open Drain shall generally be grassed / turfed, with a vegetated border to delineate the edge of the rock lined channel (constructed under MP08\_0200).

The embellished cross section of Minor Open Drains 6 and 7 shall generally be grassed / turfed, or low ground covers, subject to a final landscaping plan and consideration of maintenance and flow requirements, to the satisfaction of Council.

[PSCNS07]

142. Dedication of casual open space is to occur as described in the Park Dedication Detailed Plan (precinct 1 & 2) referenced as Yeats YC0229-1P1-SK06 Revision A or in accordance with arrangements agreed to by the General Manager or delegate.
143. Structured open space is to be embellished and dedicated to Council at the rate of 1.7 hectares per 1000 persons or in accordance with arrangements agreed to by the General Manager or delegate.

144. Embellishment of all areas of casual open space, structured open space, cycleways, pedestrian links and streetscapes is to be completed, consistent with the approved landscape plans, to the satisfaction of the General Manager Tweed Shire Council or delegate prior to issue of the Subdivision Certificate. Installation of playground equipment and softfall however will not occur until 20% 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 relevant Subdivision Certificate for each stage. Council will undertake the installation at the appropriate time.

145. A management and maintenance plan is to be prepared for the site described as 'vegetation covenant area' within park 2 (Lot 101). This plan is to describe the site, vegetation on the site to be conserved, its significance and hence why it is a 'vegetation covenant area'. The plan shall also specify management and maintenance actions required, and any restrictions to be imposed in terms of maintenance or public access. The plan must be approved by the General Manager or his delegate.

146. The developer is to undertake maintenance operations on all casual and structured public open space for a minimum of 12 months after the Subdivision is registered with the Land Titles Office. Such maintenance will include all soft landscaping, particularly mowing and weed control. Any power and water consumption costs

during this period must also be met by the developer.

147. Work as Executed Plans 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..
148. The physical extent of the 20m-wide Bushfire Asset Protection Zones (APZs) is to be surveyed and permanently marked on the bushfire hazard side of the APZs to ensure APZs are easily identified for future maintenance.
  149. The proponent is to submit to Council certification by a Bushfire Planning and Design Certified Practitioner (BPAD) accredited under the Fire Protection Association of Australia that the subdivision as constructed is compliant with Planning for Bush Fire Protection 2006
  150. The applicant shall provide certification to Council that remediation of the cattle dip site has been satisfactorily completed to the extent required to enable the proposed use or uses of the site or land on which the cattle dip site was located to be carried out. The certification shall be in the form of a Site Audit Statement (SAS) completed by a NSW EPA Accredited Site Auditor in accordance with the provisions of the Contaminated Land Management Act 1997. The Site Audit Statement (SAS) shall be provided to Council prior to the issue of the first subdivision certificate. Conditions imposed on the SAS shall form part of this consent. Where the SAS conditions, if applicable, are not consistent with this consent, a Section 96 application pursuant to the Environmental Planning and Assessment Act 1979 will be required to ensure the conditions form part of the consent conditions.
  151. Suitable restrictions on title, easements and/or enabling instruments must be created for all allotments containing areas designated for environmental restoration and protection in order to give effect to each of the following items:
    - a. All areas described as Management Areas 1, 2, and 4 as shown in Figure 4 of the *Revised Site Regeneration and Revegetation Plan* by James Warren and Associates dated October 2010 or any alternate biodiversity offset sites agreed by Tweed Shire Council must be rehabilitated and maintained in perpetuity in accordance with the Council-approved site specific Site Regeneration and Revegetation Plan (SRRP).

- b. In the event the environmental management areas named above are not managed in accordance with the approved Site Regeneration and Revegetation Plan (SRRP), Tweed Shire Council access must be enabled on an ongoing basis for the purpose of undertaking environmental restoration and management works in accordance with the Council-approved site specific Site Regeneration and Revegetation Plan (SRRP).
  - c. In the event that Council is required to manage any or all of the environmental management areas named above, the owner will be charged for the cost of undertaking environmental restoration and management works at the current market rate.
152. Shared bin collection areas shall be clearly shown on the Plan of Development, and shall achieve the minimum dimensions of 1.0m deep by 2.0m per residence serviced wide.
153. The Plan of Development is to be amended to depict the locations of approved bus shelters.
154. Submission to Council of the bond for the asset protection zone maintenance.
155. The land designated as the community centre site is to be dedicated to Council at no cost in accordance with the Section 94 Plan No. 10 Cobaki Lakes Public Open space and Community Facilities.