



Planning

**MAJOR PROJECT ASSESSMENT:
COBAKI ESTATE
RESIDENTIAL DEVELOPMENT
COBAKI LAKES**

Proposed by LEDA MANORSTEAD PTY LTD

Director-General's
Environmental Assessment Report
Section 75I of the
Environmental Planning and Assessment Act 1979

November 2010



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EXECUTIVE SUMMARY

This is a report on a concept application by LEDA Manorstead Pty Ltd to carry out a residential development at Cobaki Lakes ("the proposal").

The proponent seeks concept approval to develop 605.45 hectares of land as a residential development to be known as Cobaki Estate. The proposed development comprises:

- Seventeen residential precincts with a mix of housing types including detached houses, townhouses and multi-unit housing to a maximum of 3 storeys, comprising approximately 5,500 dwellings;
- A mixed use Town Centre and Neighbourhood Centre to a maximum of 3 storeys of retail, commercial, community and residential uses;
- Community and education precincts including 2 public primary schools;
- Active and passive open space areas covering approximately 87 ha of land;
- Environmental protection areas covering approximately 194 ha of land;
- Access network of roads, public transport routes and pedestrian/cycle paths;
- Landscaping and vegetation management; and,
- Utility services infrastructure.

The concept proposal includes a request to modify the *Tweed Local Environment Plan 2000* as it relates to the site. This request includes a reduction in the minimum lot size and a number of rezonings across the site in order to: improve the configuration of environmental protection and residential zoned land; reduce the number of zone types; and, finalise exact zone boundaries. The application of site-specific exempt and complying development provisions and development controls (the Cobaki Development Code) has also been requested.

The estimated project cost of the development is \$416 million. The proposal has the potential to provide approximately 5700 full time equivalent jobs during construction and 150 full time equivalent operational jobs.

During the exhibition of the concept plan, the Department received 13 submissions from public authorities and 49 submissions from the public. Due to the complexity and length of time taken to develop the Cobaki Development Code the Department separately exhibited it. 174 submissions were received on this aspect of the proposal.

Key issues considered in the Department's assessment included:

- Planning framework, including the Cobaki Development Code;
- Urban design and subdivision layout;
- Traffic and access;
- Flora and fauna;
- Aboriginal cultural heritage;
- Stormwater management;
- Climate change and flooding;
- Geotechnical engineering and groundwater;
- Acid sulphate soils;
- Bushfire; and,
- Off-site impacts.

The Department has assessed the merits of the project and is satisfied that the impacts of the proposed development have been addressed via the Proponent's Statement of Commitments and the Department's recommended further assessment requirements, and can be suitably mitigated and/or managed to ensure a satisfactory level of environmental performance. All statutory requirements have been met.

The Department has considered the key issues raised and has recommended a modification to the concept plan and requirements for future applications to ensure residual impacts resulting from the proposal are minimised.

The concept plan has largely demonstrated compliance with the existing environmental planning instruments.

On these grounds, the Department is satisfied that the site is suitable for the proposed development and that the project will provide the following benefits:

- Major contribution toward housing targets for the Tweed Shire as identified by the Far North Coast Regional Strategy;
- Provision of a diverse housing choice on the fringe of an existing urban area;
- Approximately 103 additional hectares zoned for conservation;

- Provision of a new East-West wildlife corridor;
- Improvements to ecological and recreational connectivity;
- Rehabilitation of important threatened species and ecological community habitats across the site;
- Construction of major road linkage;
- Protection of Aboriginal cultural heritage; and,
- Improved stormwater control and management.

The Department considers the proposal to be in the public interest and subsequently recommends that the project be **approved** subject to modifications to the concept plan.

CONTENTS

EXECUTIVE SUMMARY	3
1 BACKGROUND.....	6
1.1 THE SITE.....	6
1.2 SITE HISTORY.....	9
2 THE PROPOSED DEVELOPMENT	13
2.1 PROJECT DESCRIPTION	13
2.2 AMENDMENTS TO TWEED LEP 2000	16
2.3 PROJECT AMENDMENTS	17
3 STATUTORY CONTEXT	18
3.1 PART 3A DECLARATION	18
3.2 PERMISSIBILITY.....	18
3.3 EXHIBITION AND NOTIFICATION	18
3.4 MINISTER'S POWER TO APPROVE	18
3.5 ENVIRONMENTAL PLANNING INSTRUMENTS (EPIs)	19
3.6 OTHER PLANS AND POLICIES	19
3.7 ECOLOGICALLY SUSTAINABLE DEVELOPMENT (ESD) PRINCIPLES.....	20
3.8 OBJECTS OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979	21
4 CONSULTATION AND ISSUES RAISED.....	22
4.1 PUBLIC EXHIBITION DETAILS	22
4.2 SUBMISSIONS FROM THE PUBLIC.....	22
4.3 SUBMISSIONS FROM PUBLIC AUTHORITIES.....	23
5 ASSESSMENT OF ENVIRONMENTAL IMPACTS.....	29
5.1 PLANNING FRAMEWORK.....	29
5.2 URBAN DESIGN	34
5.3 TRAFFIC AND ACCESS	36
5.4 FLORA AND FAUNA.....	39
5.5 ABORIGINAL CULTURAL HERITAGE	45
5.6 STORMWATER MANAGEMENT.....	46
5.7 FLOODING AND CLIMATE CHANGE	46
5.8 GEOTECHNICAL ENGINEERING, ACID SULPHATE SOILS AND GROUNDWATER	47
5.9 CONTAMINATION.....	47
5.10 BUSHFIRE	47
5.11 OFF-SITE IMPACTS.....	48
6 CONCLUSION.....	49
7 RECOMMENDATION.....	50
APPENDIX A.....	INSTRUMENT OF APPROVAL 51
APPENDIX B.....	DIRECTOR-GENERAL'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS 52
APPENDIX C.....	COMPLIANCE WITH ENVIRONMENTAL PLANNING INSTRUMENTS 53
APPENDIX D.....	COMPLIANCE WITH OTHER PLANS AND POLICIES 55
APPENDIX E.....	SUMMARY OF PUBLIC SUBMISSIONS 57
APPENDIX F.....	PREFERRED PROJECT REPORT 58
APPENDIX G.....	ENVIRONMENTAL ASSESSMENT 59

1 BACKGROUND

1.1 THE SITE

1.1.1 Site Context And Location

The site, at Cobaki Lakes, covers 17 individual allotments and is located within the local government area of Tweed Shire Council. The entire site is owned by LEDA Manorstead Pty Ltd, who is also the proponent.

The site is located on the New South Wales and Queensland Border approximately 1.5 kilometres west of the Gold Coast Airport and approximately 6 kilometres inland of Tweed Heads (refer **Figure 1**). Adjoining the site to the east is a wetland protected by *State Environmental Planning Policy No.14 – Coastal Wetlands*, Cobaki Creek and the Cobaki Broadwater. Remnant bushland forest areas lie to the west and north of the site and are zoned for environmental protection. Agricultural land primarily used for cattle grazing adjoins the site to the south and to the north-west. To the south-west is a golf course, which is zoned rural.



Figure 1: Site location (Source: Environmental Assessment)

Access to the site is currently off Boyd Street to the north, which provides indirect access off the Gold Coast Highway, and Piggabeen Road to the south providing access off Kennedy Drive and the Pacific Highway. The Tugun Bypass runs in a north – south direction approximately 500 metres from the north eastern boundary of the site.

1.1.2 Existing site features

The site, 605.45 hectares in area, has been primarily used for cattle grazing and other pastoral uses since the early 1900's. It contains farm sheds and some other associated farming infrastructure. Although zoned for residential purposes, the proponent

maintains that existing and continuing use rights allow routine agricultural activities such as the construction and maintenance of drains, fencing, firebreaks as well as cattle grazing to occur over the site. The site forms a natural amphitheatre comprising a low lying and level central plain surrounded by steep rising hillsides on the northern, western and southern sides of the site. Elevations range from the level of the Cobaki Broadwater up through the poorly drained saltmarshes and wetlands and low lying central coastal plains to the foothills, which then extend up to a maximum of approximately 100m AHD at the north-west extremity of the site and around 95m AHD near Mount Woodgee in the northern extremity of the site. **Figure 2** shows a recent aerial photograph of the site.



Figure 2: Aerial Photograph of Cobaki Lakes site

Vegetation on the site includes dry sclerophyll forest, rainforest, woodland, heathland, mangrove forest, grassland and rushland/sedgeland. A range of native species, including a number of threatened flora and fauna species, can be found on the site. (refer **Figure 2** and **Figure 3**).



Figure 3: Scribbly Gum Community

A large portion of the site in the south-east corner is comprised of a Saltmarsh community (refer **Figure 4**). Saltmarsh communities have ecological values which have been recognised at a Commonwealth, State and Local government level. The saltmarsh is also a significant breeding ground for mosquitoes in the district. A series of agricultural drains run through the saltmarsh area (refer **Figure 5**). Dunn's Drain is the main drain, traversing the site in a south-east to north-west direction. A floodgate located at its junction with Cobaki Creek, in the south-east portion of the site, inhibits tidal flows (refer **Figures 6 & 7**). Tides at the higher levels enter the low-lying land in the south of the site by overtopping the bund wall adjacent to Cobaki Creek.



Figure 4: View of coastal saltmarsh from Cobaki Parkway



Figure 5: Agricultural drain through saltmarsh



Figure 6: Tidal floodgate on Dunn's Drain



Figure 7: Dunn's Drain

The site is subject to a number of existing development consents granted by the Tweed Shire Council between 1993 and 2002 for residential subdivision and bulk earthworks. The bulk earthworks have commenced and are completed across large portions of the site. A significant area of vegetation has already been cleared as a result of these earthworks, hence the large areas of bare land that are visible in the aerial photograph in **Figure 2**. The existing consents are discussed in more detail in **Section 1.2** below.

1.1.3 Surrounding development

Beyond the immediately adjoining landuses described in **Section 1.1.1** above is the urban development of the Gold Coast and Tweed Heads and the rural areas of the Currumbin Valley. This includes the residential suburbs of Tugun Heights and Currumbin Waters in the Gold Coast to the north, Tweed Heads to the east, Currumbin Valley and Piggabeen to the west and Bilambil Heights to the south.

1.1.4 Zoning

The site is zoned a mix of the following zones under the *Tweed Local Environmental Plan (LEP) 2000*:

- 2(c) Urban Expansion;
- 2(e) Residential Tourist;
- 6(b) Recreation;
- 7(a) Environmental Protection (Wetlands and Littoral Rainforest)
- 7(d) Environmental Protection (Scenic Escarpments); and,
- 7(l) Environmental Protection (Habitat).

A zoning plan is provided in **Figure 8** below.

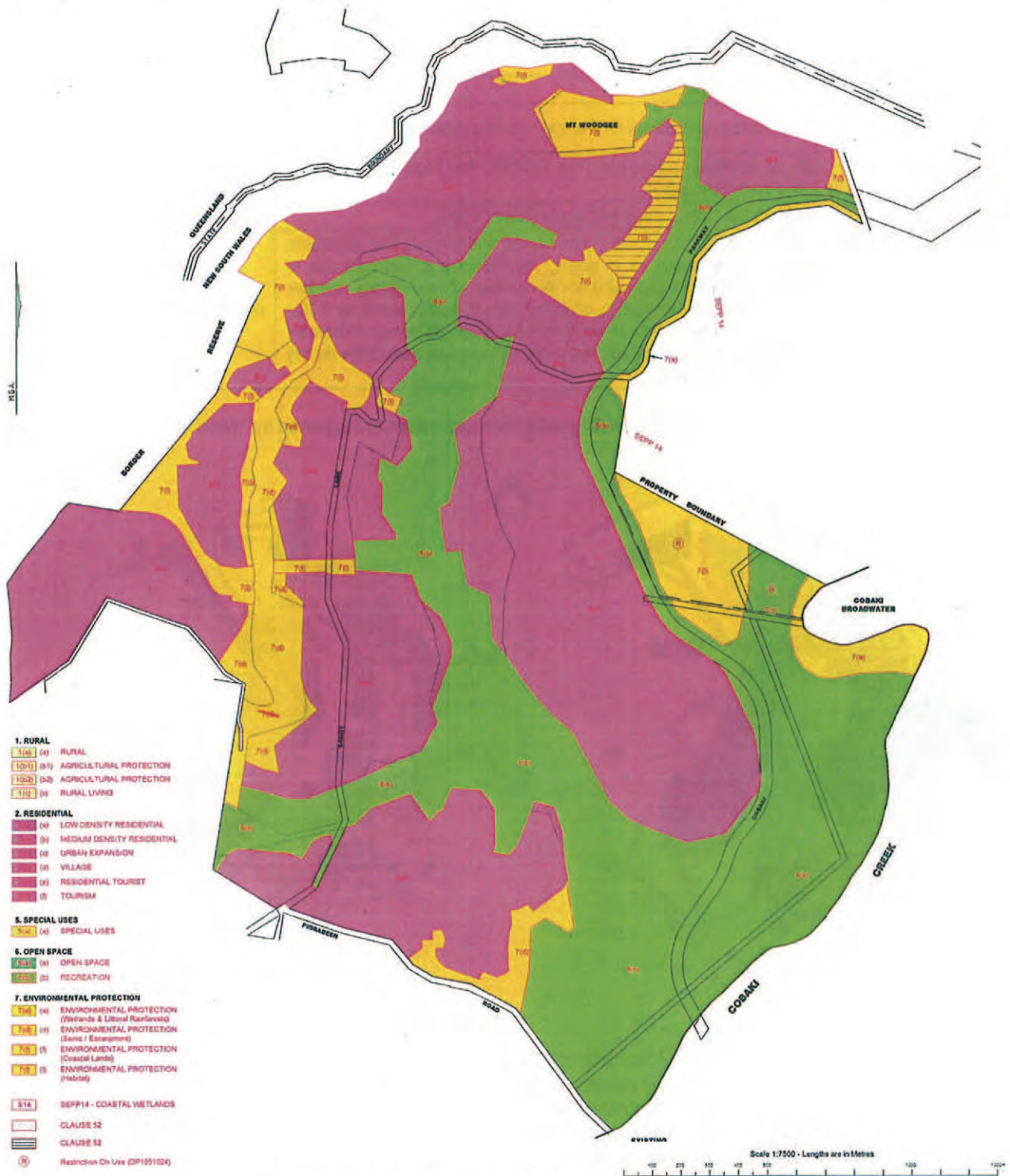


Figure 8: Tweed Local Environmental Plan 2000 Zoning Plan for Cobaki Estate

1.2 SITE HISTORY

1.2.1 Existing Consents

Between 1993 and 2002 seven development consents were granted by Tweed Shire Council across the site for bulk earthworks and residential subdivision. A description of the existing consents is provided in Table 1 below.

Table 1: Existing Development Consents

Tweed Shire Council Consent Reference	Description	Date of Consent
92/315	Boyd Street Extension	5 January 1993

94/438	Bulk earthworks	27 January 1995
S94/194	730 lot residential subdivision parcels - Parcels 1-5 & 13 Englobo Parcels (The Entrance, The Sand Ridge)	19 September 1995
96/271	Bridge over Cobaki Creek	8 April 1997
S97/54	430 lot residential subdivision – Parcels 7-10 (The Knoll, Piggabeen)	21 October 1997
K99/1124	560 lot residential subdivision (The Foothills, The Plateau, Valley East, Valley West, East Ridge)	21 July 2000
1162/2001 DA	8 management lots and bulk earthworks (Town Centre)	8 October 2002
Modification K99/1124	to Modifications to Stage 1 and 2 including: amendments to road alignments and lot layouts; reduction in staging; modifications to finished levels to reduce steepness; modification to the number of low density, medium density and duplex allotments; increased area of public reserve by 5.3ha; additional residue lot; reduced minimum lot size from 650sqm to 450sqm for low density residential lots; and, reduced minimum dimensions of low density and dual occupancy lots.	6 March 2009

Figure 9 and Figure 10 illustrate the extent of the existing subdivision and earthworks approved by Tweed Shire Council across the site.

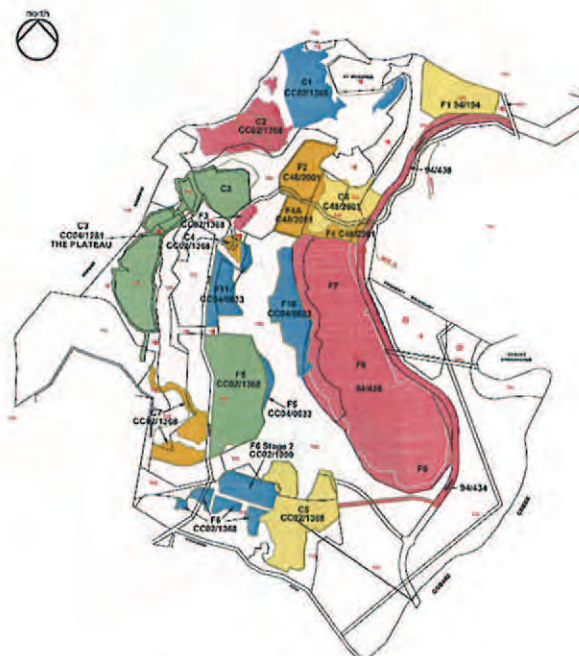
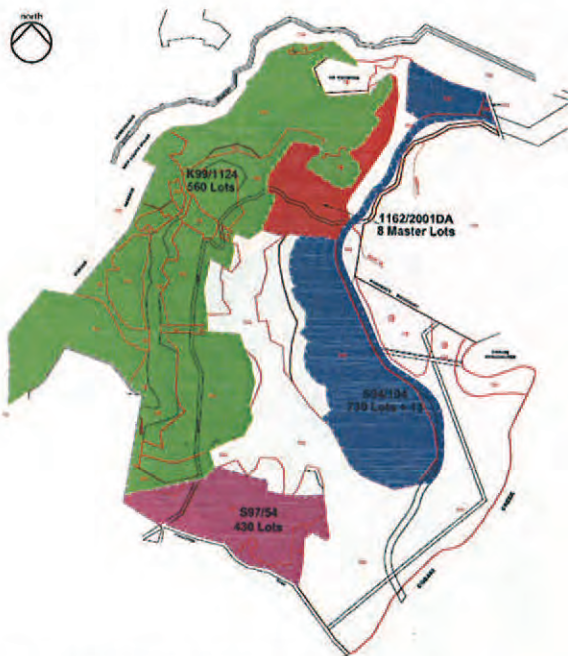


Figure 9: Existing subdivision consents

Figure 10: Existing earthworks approvals

All the Tweed Shire Council consents have been commenced and remain in force. Substantial earthworks have been undertaken on the site in accordance with existing consents. The majority of these have involved the filling of flood-prone residential zoned land and construction of roads. The proponent intends to continue with and complete these works. A description of the existing certification obtained for bulk earthworks and civil engineering works is provided in Table 2 below. Any Part 3A concept plan approval will not affect existing consents, approvals or certifications of earthworks shown in Figure 10, allowing their completion.

Table 2: Existing Certification for Bulk Earthworks and Civil Engineering Works

Year of Issue	Certificate Reference	Works Completed	Works In Progress
1995	PF3880/90	Fill areas F1, F7, F8 & F9 and earthworks for Cobaki Parkway	Civil design and construction of Cobaki Parkway from Cobaki Estate boundary to Town Centre roundabout
2000	CC29/2000	Earthworks for Boyd Street extension	Civil design and construction of Boyd Street extension from western ramp of Boyd Street overpass to Cobaki Estate boundary
2002	CC02/1099	Fill area F6 Stage 2	None
2003	CC048/2001	Cut area C6 and fill areas F2, F4 & F4A	None
2004	CC04/1281	None	Cut Area C3, earthworks for road up to plateau and adjacent urban areas and the

			balance of earthworks to plateau east to accommodate residential development
2005	CC02/1368-01	None	Cut area C7, earthworks for road up to plateau and balance of remaining earthworks to accommodate residential development
2008	Modification to CC02/1368	None	Extension to fill area F3, filling to balance urban area to same level as adjacent completed fill to mitigate flooding
2008	Modification to PF3880/90	None	Extension to fill areas F7, F8 & F9, filling to balance urban area to same level as adjacent completed fill to mitigate flooding

Since the existing consents were issued, there has been a significant change in market requirements and in planning philosophy. In addition, there are still parts of the site which are not covered by an appropriate regulatory framework. Following a review by the proponent of planning for the Cobaki Estate site a concept plan application was lodged with the Department. The concept plan application aims to provide a holistic approach to site planning and allow for a more appropriate urban design outcome based on current market trends. The existing consents will remain in force under the concept plan. Future project/development applications will be required to over-ride the existing consents and ensure that development on the site is generally consistent with the concept plan.

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).

2 THE PROPOSED DEVELOPMENT

2.1 PROJECT DESCRIPTION

2.1.1 Project Summary

The proponent seeks concept approval to develop 605.45 hectares of land as a residential development to be known as Cobaki Estate. The proposed development comprises:

- Seventeen residential precincts with a mix of housing types including detached houses, townhouses and multi-unit housing to a maximum of 3 storeys, comprising approximately 5,500 dwellings covering 296.86 ha of developable land, including roads;
- A mixed use Town Centre and Neighbourhood Centre to a maximum of 3 storeys with a combined land area of approximately 18.8 ha, of retail, commercial, community and residential uses;
- Community and education precincts including 2 public primary schools over 8 ha of land;
- Active and passive open space areas covering approximately 87 ha of land;
- Environmental protection areas covering approximately 194 ha of land;
- Access network of roads, public transport routes and pedestrian/cycle paths;
- Landscaping and vegetation management; and,
- Utility services infrastructure.

The estimated project cost of the development is \$416 million. The proposal has the potential to provide approximately 5700 full time equivalent jobs during construction and 150 full time equivalent operational jobs.

The concept plan exhibited in the EA is illustrated in **Figure 11** below and the final proposed concept plan layout is illustrated in **Figure 12**.

2.1.2 Neighbourhood Precincts

Each of the 17 neighbourhood precincts will contain a diverse range of housing types and densities, including:

- Traditional detached dwellings on an average 550sqm lot;
- Zero lot housing on 350 - 450sqm lots;
- Terrace housing on 120 - 250sqm lots;
- Attached dwellings on corner allotments (400 - 1,200sqm); and,
- Unit development in strategic locations throughout the site.

2.1.3 Dwelling Yield and Types

The concept plan proposes approximately 5500 dwellings on the site with a mix of dwelling types as described in the Development Code. Detailed precinct dwelling yields will be provided in subsequent project/development applications. Areas of medium density housing are proposed to be located close to areas of higher amenity such as the Town or neighbourhood centres, open space or environmental protection areas or areas with scenic views.

2.1.4 Town Centre/Neighbourhood Centre

The Town Centre/Neighbourhood will have the ability to support a range of commercial and retail uses, such as business premises, medical centres, restaurants, hotels and shops as well as some higher density residential uses including seniors housing.

2.1.5 Open Space

A range of open space will be provided that will cater for organised active sports, such as sports ovals, as well as passive recreational opportunities in the central open space area and local neighbourhood parks.

2.1.6 Building Height

A "Height of Buildings" plan sets the proposed building heights across the site. The maximum height of buildings proposed across the site is 3 storeys. However, on the ridgeline, buildings are limited to a maximum of 8m above finished ground level.

2.1.7 Roads

Access to the site will initially be achieved via an extension of Boyd Street to the subject site, creating the Cobaki Parkway (as illustrated on the concept plan). Cobaki Parkway will extend from Boyd Street at the northern end of the development to Piggabeen Road in the south, via a bridge to be constructed over Cobaki Creek.

The traffic generated by the proposed development will result in the following road upgrades:

- A new intersection at Boyd Street and the Gold Coast Highway;
- Widening of Boyd Street to 4 lanes when a specific threshold of traffic volume is reached; and

- New Cobaki Creek Bridge to Piggabeen Road at a time to be agreed with Tweed Shire Council.

The traffic generated by the proposal will also contribute to the need to widen the western section of Kennedy Drive to 4 lanes. The external road works are all subject to Deeds of Agreement between the proponent and the relevant road authorities, as outlined in Section 1.2.2 above.

The Deed of Agreement with the Queensland DMR limits the development to a maximum of 3,500 lots until an interchange is constructed at Boyd Street with the Tugun Bypass or some other alternative traffic arrangement is made to cater for the increase in traffic generated by the development beyond this threshold.

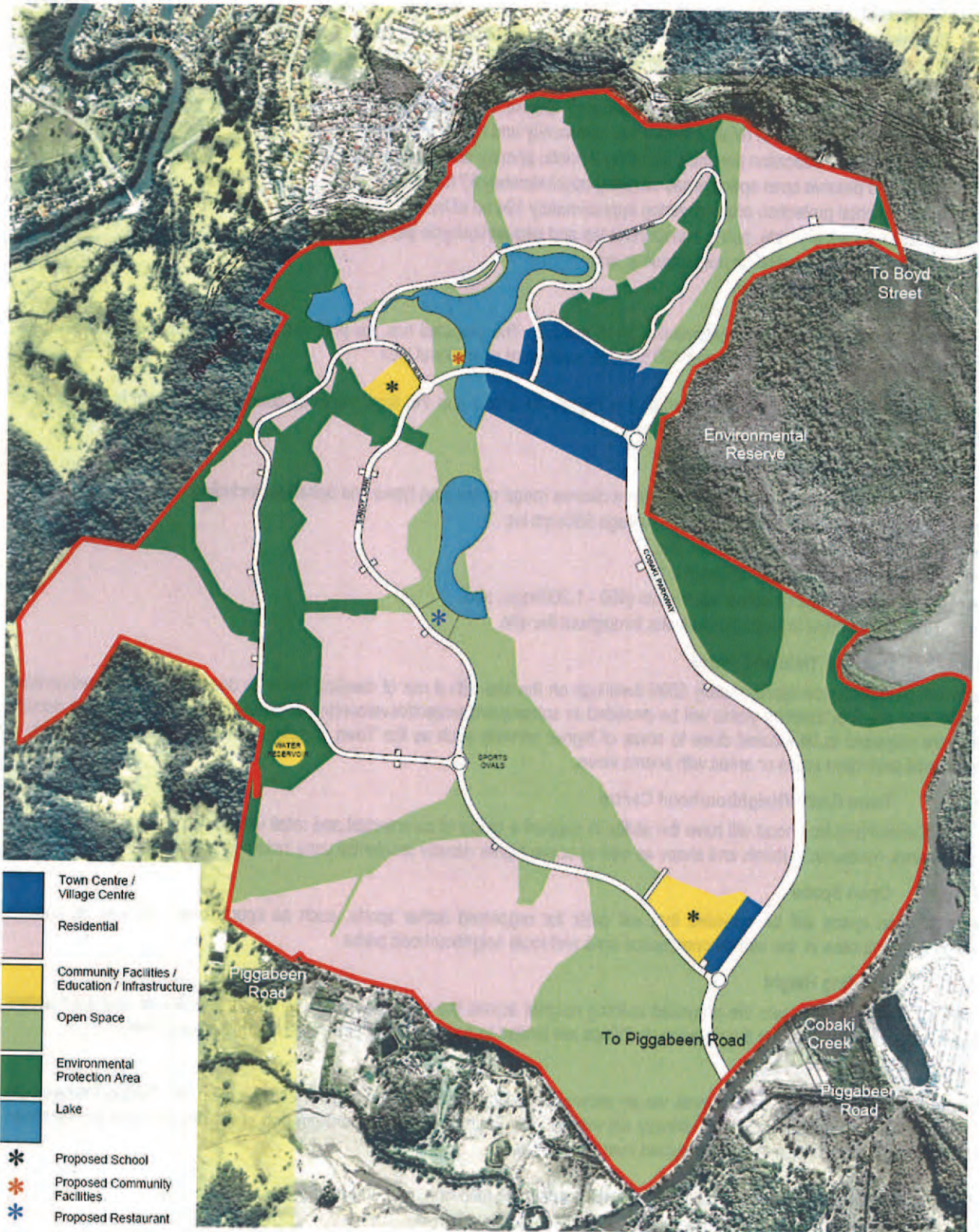


Figure 11: Concept Plan as exhibited in the EA.

Concept Plan

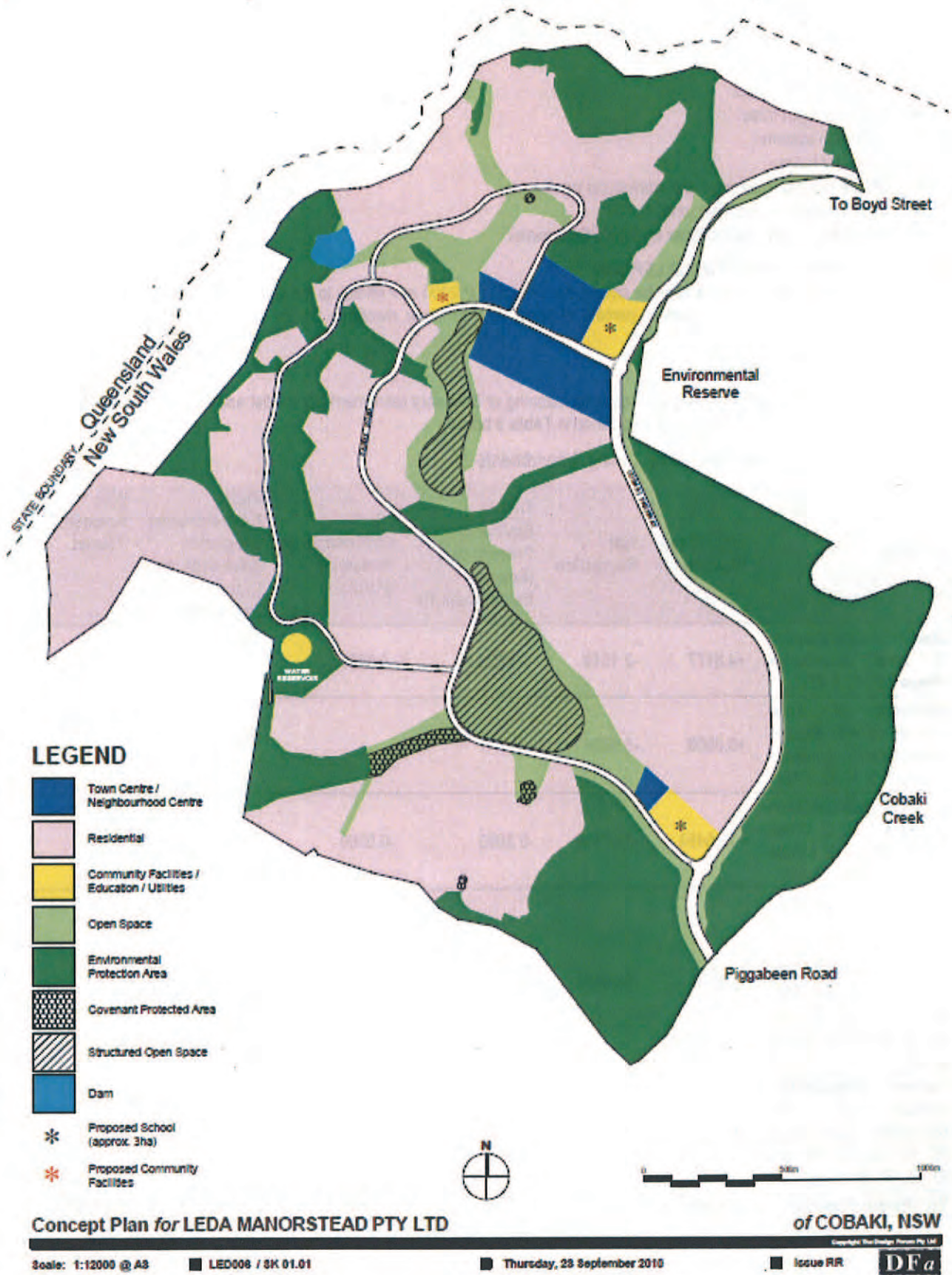


Figure 12. Final Proposed Concept Plan (Addendum to PPR September 2010)

2.1.8 Stormwater Management

The Stormwater Concept Plan for the site proposes a series of 'treatment train' options in accordance with the principles of Water Sensitive Urban Design to manage the impacts of development and improve the quality of stormwater runoff discharges from the site into Cobaki Broadwater. The proposal includes a series of 4 different types of water 'treatment trains' that apply according to slope gradients and soil type to manage the quality of stormwater runoff from the site. The stormwater management measures in the 'treatment trains' include the following:

- vegetated swales;
- bioretention trenches;
- gross pollutant traps;
- infiltration systems;
- rainwater tanks;
- diffuse low-flow discharge and stormwater treatment;
- high flow bypass channels; and
- discharge of fully treated water to Cobaki Broadwater.

2.2 AMENDMENTS TO TWEED LEP 2000

The concept plan also seeks that the Minister amend the Tweed LEP 2000 as it relates to the site, via an Order, to refine some of the existing zone boundaries, rezone certain parcels of land, and to allow dwellings on lot sizes less than 450sqm in the 2 (c) Urban Expansion.

2.2.1 Zoning Amendments

The proponent proposes a total of 64 areas requiring rezoning or boundary refinement (for full list and assessment see Section 5). These amendments fall into six categories as outlined in Table 3 below.

Table 3: Summary of Areas Affected by Zoning Amendments

Category	2(c) Urban Expansion	6(b) Recreation	7(d) Environmental Protection (Scenic Escarpment)ha	7(l) Environmental Protection (Habitat)	7(a) Environmental Protection (Wetlands and Littoral Rainforest)	2(e) Residential Tourist
Clause 52 determination of zone boundaries (Areas 2-7, 41 & 47)	+4.6177	-2.1519	-2.0825	-0.3833		
Alignment of zone boundaries with existing development consents (Areas 8, 9, 10, 42 & 48)	+5.8508	-5.6234	-	-	-0.2274	
General rationalisation additions to 2(c) Urban Expansion zone (Areas 11-22, 34, 60, 66 & 69)	+15.6494	-14.7439	-0.3995	-0.5060		-9.6732
General rationalisation additions to 7(l) Environmental Protection (Habitat) zone (Areas 23-26, 28A, 28B, 29, 31, 35-39, 40, 43, 45, 46, 49-52, 54, 55, 56 & 65)	-8.5079	-98.0452	-	+106.5531		
General rationalisation addition to 6(b) Recreation zone (Area 27, 44, 48, 57, 58, 59, 61, 62, 63, 64 & 68))	-4.4974	+4.4974	-	-		
Net Changes Proposed	+22.7858	-116.0670	-2.4820	+105.6638	-0.2274	-9.6732

The most significant of the proposed rezonings involve the transfer of approximately 98 hectares of 6(b) Recreation zoned land, which supports endangered Coastal Saltmarsh to Environmental Protection zoning and the transfer of 14 hectares of 6(b) Recreation

zoned land and 9.6 hectares of 2(e) Residential Tourist zoned land to the 2(c) Urban Expansion zone. It is intended to rezone all 2(e) zoned land on the site to 2(c), as no tourist development is intended. Other rezonings involve refinements to zone boundaries as required by clause 52 of the Tweed LEP and the creation of Environmental Protection zoned and Open Space zoned connective corridors in particular locations on the site. These LEP amendments are discussed in more detail in **Section 5**.

2.2.2 Minimum Lot Size for Dwelling Houses

The Tweed LEP 2000 currently prohibits dwelling houses on lots smaller than 450sqm in the 2(e) zone. While not prohibited in the 2(c) zone, the zoning table specifies that dwelling houses on an allotment of at least 450sqm are permissible with consent in the zone. The concept plan proposes a mix of housing types and densities including dwellings on lots ranging from 120sqm to 1,200sqm. As such, the proponent requests that the Minister amend the Tweed LEP via an Order to allow a minimum lot size of 120sqm within the 2(c) zone on the Cobaki Lakes site.

The Department supports the proposed amendment to the minimum lot size to allow a range of housing choice across the site, and increased densities around the Town Centre and other accessible locations. This is discussed in more detail in **Section 5** of this report.

2.3 COBAKI DEVELOPMENT CODE

The proponent raised, within the EA, the intention to request, at a later stage, that site-specific development controls and design guidelines, including an exempt and complying code, be applied to the site. The Cobaki Development Code was provided as part of the preferred project report and separately exhibited. The Cobaki Development Code consists of two parts, Part A of which is a site-specific Exempt and Complying Development Code ('the code'), this 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. 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. The Development Code is discussed in more detail in **Section 5** of this report.

2.4 PROJECT AMENDMENTS

2.4.1 Preferred Project Report

A preferred project report (PPR) was submitted on 30 June 2010 and subsequently amended on a number of occasions until it was accepted by the Department on 26 October 2010, incorporating the following amendments:

- Deletion of lakes;
- Deletion of nominated restaurant site;
- Deletion of project and site sales offices within 6(b) zone;
- Relocation of northern school site;
- Amendment to southern school site and neighbourhood centre;
- Change to town centre precinct boundary;
- Relocation of east-west environment protection corridor;
- Additional area of structured open space;
- Widening of Cobaki Parkway Reserve;
- Realignment of part of Sandy Road;
- Withdrawal of 'Release Areas' staging plan;
- Final Tweed LEP zoning amendments;
- Final covenant protected areas;
- Final concept plans;
- Revised ecological reports and management plans;
- Amended Statement of Commitments; and
- Changes to future stage applications for development approval.

The PPR was placed on the Department's web site. The Cobaki Development Code was provided as part of the PPR and was separately exhibited.

2.5 CONCURRENT PROJECT APPLICATION

The Department is concurrently assessing project application 08_0200 for the Cobaki Estate Central Open Space and Riparian Corridor. The project provides development details for the earthworks required for the main drainage corridor through the centre of the site, landscaping of the central open space parkland areas and the revegetation and rehabilitation of the Environmental Protection-zoned areas of the site.

3 STRATEGIC AND STATUTORY CONTEXT

3.1 STRATEGIC PLANNING

The Cobaki Estate site has been zoned for residential development for over 20 years, having first been zoned by Tweed Shire Council for urban development in 1988 under the then *Tweed Local Environmental Plan 1987*. The site, and its potential dwelling yield, form an important part of the Tweed Shire Council's Residential Development Strategy and is taken into account in the Council's Strategic Plan 2004-2024. The intent that Cobaki Estate be a site for future urban development is reinforced by its inclusion in the Far North Coast Strategy.

The Far North Coast Regional Strategy states that the population of the Far North Coast Region has been increasing by an average of 2500 people each year. The Regional Strategy plans for an overall population of 289,000 by 2031, representing an additional 60,400 people for the period 2006-31. Tweed is one of the local government areas to have seen the largest population increases since the 1980s and this will continue to be the case with large inflows of people from other areas of NSW as well as from South-east Queensland.

The Strategy has set an individual dwelling target for the Tweed of 19,100 additional new dwellings to 2031. The Cobaki Estate site is an important component of the Far North Coast Regional Strategy and is capable of supporting a significant part of the Strategy's dwellings target. The 5500 proposed dwellings for the site would satisfy approximately 29% of the 19,100 new dwelling requirement.

3.2 PART 3A DECLARATION

The project is a Major Project under *State Environmental Planning Policy (Major Projects) 2005* (as in force at the time) being a subdivision for residential purposes for more than 25 lots in the NSW Coastal Zone. The opinion was formed by the Director-General as delegate on 24 January 2007.

3.3 PERMISSIBILITY

Under the Tweed LEP 2000, the site is zoned 2(c) Urban Expansion, 2(e) Residential Tourist, 6(b) Recreation, 7(a) Environmental Protection (Wetlands and Littoral Rainforest), 7(d) Environmental Protection (Scenic Escarpments) and 7(l) Environmental Protection (Habitat). The proposal is generally consistent with the objectives of each of the zones. However, the concept plan proposes a number of rezonings, as outlined in **Section 2.2** and is partly prohibited as it proposes lot sizes less than 450sqm in the 2(e) zone.

Notwithstanding, under Section 75O of the EP&A Act 1979 and the transitional provisions in Clause 80A of the EP&A Regulation 2000, the Minister may approve a concept plan that is partly prohibited despite it being in a sensitive coastal location. In addition, in making a determination, the Minister may amend the Tweed LEP 2000 by an Order under Section 75R(3A) of the Act to amend the relevant zone boundaries and minimum lot sizes in the concept plan as has been recommended by the Department.

3.4 EXHIBITION AND NOTIFICATION

The Department has exhibited the EA in accordance with section 75H (3) of the Act. Due to the EA being exhibited during the Christmas/New Year period it was placed on extended public exhibition for 62 days from 17 December 2008 until 16 February 2009 and submissions were invited in accordance with section 75(H) of the Act. Adjoining landowners were notified in both NSW and Queensland.

The addition of the Cobaki Development Code to the proposal at PPR stage required separate exhibition and this took place from 13 January until 26 February 2010.

3.5 MINISTER'S POWER TO APPROVE

The purpose of this submission is for the Director-General to provide a report on the project to the Minister for the purposes of deciding whether or not to grant approval to the project pursuant to Section 75J of the Act. Section 75I(2) and Clause 8B of the Regulation set out the scope of the Director-General's report to the Minister. Each of the criteria set out therein have been addressed below, as follows:

Table 4 – Compliance with Section 75I(2) and Clause 8B Criteria

Section 75I(2) Criteria	Response
A copy of the proponent's environmental assessment and any preferred project report	The proponent's EA is included at Appendix G whilst the preferred project report is set out for the Ministers consideration at Appendix F .
Any advice provided by public authorities on the project; and	All advice provided by public authorities on the project for the Minister's consideration is discussed in detail in Section 4.3 below.
A copy of any report of the Planning Assessment Commission in respect of the project, and	The Planning Assessment Commission was not involved in the assessment of this project.
A copy of or reference to the provisions of any State	An assessment of each relevant State Environmental

Environmental Planning Policy (SEPP) that substantially govern the carrying out of the project	Planning Policies that substantially govern the carrying out of the project is set in Appendix C .
A copy of or reference to the provisions of any environmental planning instrument that would (but for this Part) substantially govern the carrying out of the project and that have been taken into consideration in the environmental assessment of the project under this Division	An assessment of the development relative to the prevailing EPI's is provided in Appendix C .
Any environmental assessment undertaken by the Director-General or other matter the Director-General considers appropriate.	The environmental assessment of the project is this report in its entirety.
A statement relating to compliance with the environmental assessment requirements under this Division with respect to the project.	The environmental assessment requirements under this Division, issued on 21 August 2007 are in Appendix B . The Department is satisfied that the EA submitted in support of the concept application complies with these requirements. A detailed assessment of how the proponent has addressed these issues is provided in Section 5 of this report.
Clause 8B Criteria	Response
An assessment of the environmental impact of the project.	All relevant environmental impacts associated with the development are discussed in Section 5 of this Report. ESD is discussed in Section 3.7 of this Report.
Any aspect of the public interest that the Director-General considers relevant to the project.	The public interest is discussed in Section 5 of this Report.
The suitability of the site for the project.	The site is considered suitable for the project as it is identified in the Far North Coast Regional Strategy and Tweed Shire Council's strategic planning documents for residential development.
Copies of submissions received by the Director-General in connection with public consultation under section 75H or a summary of the issues raised in those submissions.	All submissions provided by agencies are summarised at Section 4.3 . A summary of public submissions is included at Appendix F .

The Department has met its legal obligations and the Minister has the power to determine this project.

3.6 ENVIRONMENTAL PLANNING INSTRUMENTS (EPIs)

3.6.1 Application of EPIs to Part 3A of the Act

To satisfy the requirements of section 75(2)(d) and (e) of the Act, this report includes references to the provisions of the environmental planning instruments that substantially govern the carrying out of the project and have been taken into consideration in the environmental assessment of the project. EPIs that are relevant to the project are as follows:

- State Environmental Planning Policy (Major Projects) 2005;
- State Environmental Planning Policy No.14 – Coastal Wetlands;
- State Environmental Planning Policy No.44 – Koala Habitat Protection;
- State Environmental Planning Policy No.55 – Contaminated Land;
- State Environmental Planning Policy No.71 – Coastal Protection;
- State Environmental Planning Policy (Infrastructure) 2007;
- North Coast Regional Environmental Plan; and,
- Tweed Local Environmental Plan 2000.

A detailed assessment of compliance with the relevant EPIs is in **Appendix C**.

3.7 OTHER PLANS AND POLICIES

The proposal has been considered against the following non-statutory documents:

- Tweed Development Control Plan 2007;
- Far North Coast Regional Strategy;
- NSW Coastal Policy 1997; and,
- NSW Coastal Design Guidelines.

A detailed assessment against these controls can be found in **Appendix D**. The proposal is generally consistent with the objectives of these controls.

3.8 ECOLOGICALLY SUSTAINABLE DEVELOPMENT (ESD) PRINCIPLES

There are five accepted ESD principles:

- (a) decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations (the integration principle);
- (b) 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 (the precautionary principle);
- (c) the principle of inter-generational equity - that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations (the inter-generational principle);
- (d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making (the biodiversity principle); and
- (e) improved valuation, pricing and incentive mechanisms should be promoted (the valuation principle).

With respect to ESD, the Act adopts the definition in the *Protection of the Environment Administration Act 1991* including the precautionary principle, the principle of inter-generational equity, the principle of conservation of biological diversity and ecological integrity, and the principle of improved valuation, pricing and incentive mechanisms. The Department has considered the proposed development in relation to the ESD principles and has made the following conclusions:

3.8.1 Integration Principle

In making its recommendation on the proposed development, the Department has taken into consideration environmental, social and economic matters. The development will provide for the expected population growth of the region and have a positive impact on the local economy and society through the creation of a diverse range of new residential accommodation close to Tweed Heads. Further, the Town Centre and Neighbourhood Centre will provide future employment opportunities for the community.

3.8.2 Precautionary Principle

The EA submitted has identified and assessed the range of environmental impacts of the proposal. The modified proposal includes the following:

- The rehabilitation and ongoing maintenance of the Coastal saltmarsh Endangered Ecological Community (EEC);
- Provision of compensatory measures for the unavoidable loss of areas of threatened species habitat and EEC;
- A stormwater management system that incorporates Water Sensitive Urban Design principles in order to maintain water quality and quantity leaving the site; and
- A commitment to providing appropriate Acid Sulfate Soils management in accordance with detailed plans.

The proponent has proposed appropriate measures in their Statement of Commitments that will manage the potential environmental impacts of the development. Additional environmental studies and assessments will be prepared for future Project Applications and Development Applications for the detailed design and construction of development including subdivision, buildings, landscaping and engineering works.

3.8.3 Inter-Generational Principle

The proposal will contribute to the supply of housing choices and provision of recreational parkland and environmental conservation areas to meet the needs of current and future generations. The development provides a range of additional residential development opportunities now and into the future in the Tweed Shire. The project will seek to minimise its ecological footprint, and provide a relative degree of local and regional self-reliance and capacity for future adaptability, through:

- appropriate planning and design approaches;
- protection and rehabilitation of the saltmarsh EEC;
- consideration of the effects of climate change on flooding across the site.

In particular the development will provide a variety of housing for future generations. Further, the development will provide community facilities, a Town Centre and neighbourhood centre for use now and in the future.

3.8.4 Biodiversity Principle

The proponent has provided an assessment of the impacts on existing flora and fauna on and adjacent to the site. Mitigation measures and management strategies will be implemented to prevent any potential environmental impacts, such as:

- Protection of approximately 194 ha under environmental protection zoning;
- Rehabilitation of native vegetation on the site including EECs;
- Provision of wildlife corridors; and
- Commitment to providing off-site offsets for EECs, threatened species habitat and native vegetation where impacts cannot be avoided.

3.8.5 Valuation Principle

The cost of infrastructure and measures to ensure an appropriate level of environmental performance of development on the site will be incorporated into the cost of development on the site.

3.9 OBJECTS OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

The objects of any statute provide an overarching framework that informs the purpose and intent of the legislation and gives guidance to its operation. The Minister's consideration and determination of a project application under Part 3A must be informed by the relevant provisions of the Act, consistent with the backdrops of the objects of the Act.

The objects of the Act in section 5 are as follows:

- (a) to encourage:
 - (i) the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,
 - (ii) the promotion and co-ordination of the orderly and economic use and development of land,
 - (iii) the protection, provision and co-ordination of communication and utility services,
 - (iv) the provision of land for public purposes,
 - (v) the provision and co-ordination of community services and facilities, and
 - (vi) the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and
 - (vii) ecologically sustainable development, and
 - (viii) the provision and maintenance of affordable housing, and
- (b) to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and
- (c) to provide increased opportunity for public involvement and participation in environmental planning and assessment.

Of particular relevance to the assessment of the subject application is consideration of the Objects under section 5(a). Relevantly, the Objects stipulated under section 5(a) (i), (ii), (iii) (iv), (v), (vi), (vii) and (viii) are significant factors informing the determination of the application.

The Department has considered the Objects of the Act, including the encouragement of ESD in the assessment of the project application.

4 CONSULTATION AND ISSUES RAISED

4.1 PUBLIC EXHIBITION DETAILS

The EA was exhibited for 62 days from 17 December 2008 to 16 February 2009. Notification of the exhibition was given in the following local papers:

- Tweed Daily News;
- Tweed Sun;
- Tweed Link; and,
- Gold Coast Bulletin.

Exhibition locations were at:

- Department of Planning Head Office, Bridge Street, Sydney;
- Department of Planning North Coast Office, Grafton;
- Nature Conservation Council, Kent Street, Sydney;
- Tweed Shire Council, Murwillumbah; and,
- Tweed Shire Council, Branch Office, Tweed Heads.

The EA was also provided for download on the Department's website.

Letters were sent to adjoining landowners in both Queensland and NSW and relevant government agencies in both States, including Tweed Shire Council and Gold Coast City Council, notifying them of the exhibition and inviting a submission. A total of 49 public submissions were received, comprising 41 letters of objection, 1 letter of support and 7 others. 13 submissions were received from public authorities being:

- Tweed Shire Council;
- Gold Coast City Council (GCCC);
- Department of Environment, Climate Change and Water (DECCW);
- Roads and Traffic Authority (RTA);
- Queensland Department of Transport and Main Roads (QIDTMR);
- NSW Office of Water (NoW);
- Industry and Investment (I&I);
- Department of Education and Training (DET);
- Department of Health (NSW Health);
- Department of Housing (DoH);
- Land and Property Management Authority (LPMA) formerly Department of Lands (DoL);
- Northern Rivers Catchment Management Authority (Northern Rivers CMA); and
- Rural Fire Service (RFS).

Of the public authority submissions, all agencies raised concerns with the exception of DET, NSW Health and RFS, which provided comment on the proposal.

A PPR was lodged on 30 June 2010. However, due to further negotiations and refinements to the concept plan the PPR was further amended. The final PPR was accepted on 26 October 2010. As the changes to the nature of the project were not significant, it was not re-exhibited but was placed on the Department's website.

4.1.1 Exhibition of the Development Code

The Cobaki Development Code was lodged as part of the PPR. As this was a significant part of the proposal it was exhibited from 13 January until 26 February 2010. Notification was given in the same newspapers as the EA was and provided for download on the Department's website. 174 submissions were received from the public, including one letter of support.

4.2 SUBMISSIONS FROM THE PUBLIC

4.2.1 Summary of issues raised by the public

The following issues were raised in the public submissions:

- Flora and fauna
- Koalas;
- Traffic and access;
- Social and environmental impacts;

- Utilities infrastructure;
- Rezoning;
- Bushfire;
- Acid sulphate soils;
- Climate change;
- Stormwater management;
- Urban design;
- Strategic context;
- Off-site impacts;
- Consultation;
- Section 94 contributions;
- Mosquito management;
- Ecological sustainable development;
- Public transport;
- Aboriginal heritage;
- Community services; and,
- Employment lands.

A breakdown of the issues raised is provided in **Figure 13**.

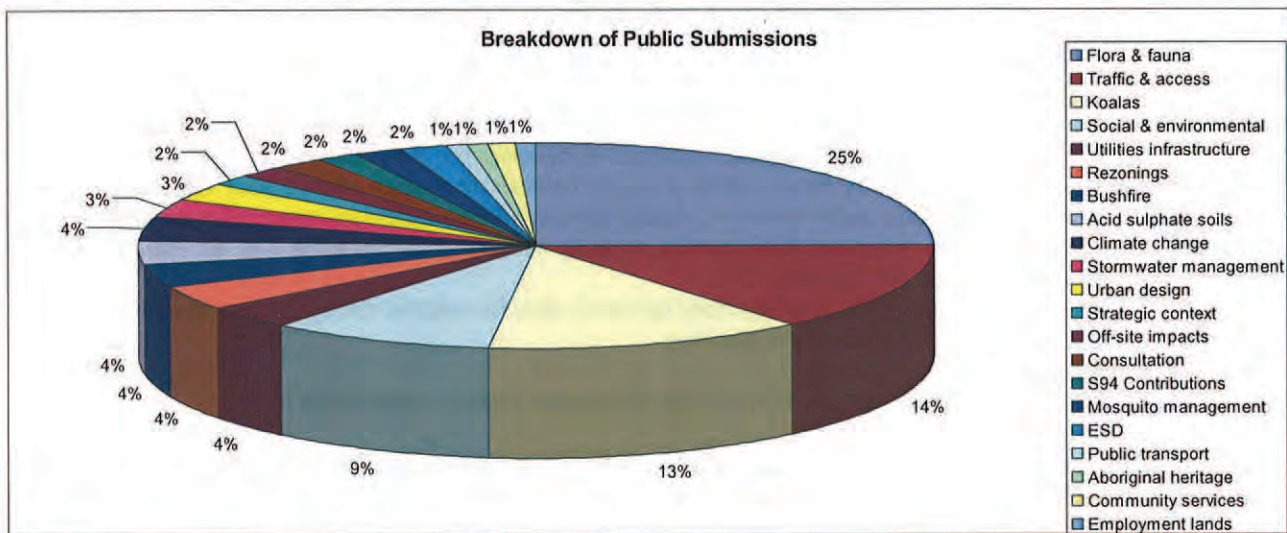


Figure 12: Breakdown of Public Submissions

The key issues of concern raised by the public were the impacts on flora and fauna (25%), traffic and access (14%), koalas (13%) and the overall social and environmental impacts (9%).

The key issues of concern raised by the public in relation to the Cobaki Development Code were Tweed Shire Development Control standards not being followed, smaller lot sizes than current Tweed LEP 450m² minimum, infrastructure, environmental issues, population increase, potential rate increases and not enough community consultation.

An assessment of the key issues from the above lists can be found in **Section 5** of this report. A detailed summary of the public submissions has been provided at **Appendix E**.

The proponent's response to submissions is in **Appendix F**.

4.3 SUBMISSIONS FROM PUBLIC AUTHORITIES

The following submissions were received from public authorities:

4.3.1 Tweed Shire Council

Tweed Shire Council provided a lengthy (48 page) detailed submission on the concept plan. Council's key areas of concern are summarised as follows:

- Planning
 - Provision of employment land within the site is considered critical.
 - Insufficient detail on how walkable catchments will be achieved, how the proposal provides for affordable housing, urban design (height & density), and the proposed multi-use community hall.

- Further justification required on proposed location of various land uses.
- Development and Design Codes should be provided for assessment with the concept plan (N.B the Development Code did not form part of the exhibited EA).
- A Public Transport Plan should be provided.
- Inconsistencies with the controls in Council's Development Control Plan, *Section A1 – Residential and Tourist Development* Code should be identified and justified.
- Justification for a 4,000sqm supermarket, 5,000sqm retail and 1,000sqm of community facilities is required.
- The matrix should be clear that the sales office and restaurant uses within the open space domain are only permissible in locations shown on the concept plan.
- Insufficient justification provided for areas of rezoning
- Approvals for Precincts 1 and 2 under the section 96 modification of development consent K99/1124, should be relinquished if the concept plan is approved.
- Bushfire management
 - Insufficient detail on how the requirements of *Planning for Bushfire Protection* (2006) will be achieved.
 - The analysis may have underestimated the required APZs in some locations.
 - APZs should be located on existing cleared land, rather than created through additional clearing.
- Open Space
 - How much will be dedicated for Open Space (structured and unstructured, private and public).
 - Strategies to allow for sources of funding for maintenance of open space should be provided.
 - Given the insufficient detail in relation to the construction and management methods for the lakes, Council cannot agree to take responsibility for future maintenance of the lakes at this stage.
- Traffic / Roads
 - The need for a road link to Piggabeen Road via the Sandy Lane alignment is not addressed.
- Environmental Health Issues
 - The Statement of Commitments (SoC) should include the requirement that the Site Audit Statement for the Turners Cattle Tick Dip Site be submitted to Council at the completion of the remediation.
 - The SoC should include the requirement for a Stage 2 Detailed Contamination Investigation Assessment.
 - A 250m wide vegetated buffer should be provided between adjacent agricultural areas and proposed residential areas so as to be consistent with Council's proposed inclusion under Schedule 8 of the *Protection of the Environment (Clean Air) Regulation 2002*.
 - Noise reports / impacts should be estimated up-front to allow for mitigation through preventative measures such as appropriate buffers and land use allocation.
- Telecommunications
 - Fibre communications cabling should be used for telecommunications infrastructure.
- Water / Sewer
 - Council presently does not have capacity within its current bulk water supply system or within its sewer treatment plants and trunk conveyancing systems to cater for the proposed overall development, however, the proposed 30 year capital works plans foreshadowed this proposal and augmentation has been planned for.
 - The SoC should include a commitment that the developer will provide a detailed water distribution infrastructure report and detailed sewerage infrastructure report prior to the next stage of development applications.
- Environment / Ecology
 - The following rezonings are not supported for ecological reasons: Area 2, 3, 4, 6 and 16. The recreation of habitat as an offset is not supported.
 - To ensure the long-term environmental outcomes, areas to be managed primarily for nature conservation should be retained under an Environmental Protection zoning, eg: saltmarsh.
 - Review the Scribbly Gum Management Plan to ensure conservation.
 - The extent of Scribbly Gums on recent aerial photographs appears to show a substantially diminished area of Gums. Clarification is required on how clearing of Scribbly Gums has occurred lawfully.
 - The performance criteria for rehabilitation and maintenance of environmental areas and the proposed terms of management should be agreed with Council. Estimated costs should be established along with strategies for sourcing funding to allow Council management of environmental areas in perpetuity.
 - The Saltmarsh Rehabilitation Plan (SRP) is very broad without specifics or scientific analysis provided to justify or detail the mechanics of the proposal. The SRP should be amended to address management of stormwater including bank erosion management, enhancement of riparian corridors and consideration of climate change.
 - A much more detailed ASSMP should be prepared and reviewed.
 - Further consideration of ecological buffers is required.
 - Clarification on the extent of the removal of koala food trees and Wallum froglet habitat is required.
 - A further detailed study on water quality parameters is required before restoration of degraded wetlands and re-creation and planting of additional wetland can be considered adequate compensation for loss of known habitat.
- Stormwater / Landforming
 - A single coherent landforming plan for the whole site should be provided.

- Insufficient detail to ensure that adequate drainage infrastructure is able to be provided to cater for external and internal runoff catchments, and convey these flows in a continuous and sustainable manner to the lawful point of discharge, Cobaki Creek.
- The catchment plan contains insufficient detail to properly account for the steep terrain and existing watercourses and gullies around the site.
- Demonstrate that a stormwater management system can be achieved for both the construction and operational phases of the subdivision.
- SEPP No.50 – Canal Estate Development should be considered in relation to the proposed lakes.
- The proponent must accept all applicable Development Contributions Plans, including rates and works schedules, prior to approval of the Concept Plan (without negotiation).
- Amend SoC to commit the developer to conduct more detailed flood impact analyses taking account of updated sea level rise information in future project/development applications.

4.3.2 Gold Coast City Council

GCCC raised the following issues:

- Capacity of Boyd Street. The number of dwellings should be limited to 2,000 until such time as the complete road network, including the Boyd Street Interchange, is in place.
- Any proposal for development exceeding 2,000 dwellings must trigger negotiations with GCCC and the DMR to negotiate the required road upgrades.
- Vegetation located within the 'Cross Border Wildlife Movement Corridor' should be retained.
- It is unclear if the 81 hectares of proposed open space is public or private open space and how structured and casual open space is being provided. Further clarification of these details is required to ensure that the proposed development is providing adequate usable public open space and will not adversely impact on Gold Coast City recreational facilities.
- The application should consider the impact of the scale of the proposed retail/commercial centre on the broader network of activity centres, including those in Gold Coast City.
- Public transportation and the importance of linkages with the future heavy and light rail corridors within Gold Coast should be more comprehensively explored and further information provided for assessment.
- It is not clear whether the development expects any reliance on GCCC's water and wastewater network. Gold Coast Water requests further information to clearly identify how the development will be serviced for water supply and sewerage.

4.3.3 Department of Environment, Climate Change and Water

The DECCW raised the following issues:

- Biodiversity
 - An off-site offset strategy is the most appropriate mechanism to address the loss of habitats and threatened species across the development site. The package should be finalised, to DECCW's satisfaction, prior to determination. Any offset package should be able to demonstrate that it achieves an environmental outcome that meets the "maintain or improve" benchmark.
 - DECCW is not confident that the 22.44ha of threatened flora habitat and 22.28ha of remnant vegetation to be retained in open space areas will persist into the future and recommends that these potential impacts be offset.
 - The loss of Wallum froglet habitat is significant (80.64ha) and the retention of 39.07ha in open space areas and only 2.22ha within environmental protection areas is likely to result in an adverse impact to the local Wallum froglet population.
 - Larvicides used for managing mosquitoes at the site may be toxic to the Wallum froglet.
 - The EA has not considered the dispersal requirements and sensitivity of Wallum froglets to water quality with regard to the location of the proposed additional habitat.
 - Alternative habitat for Wallum froglets, which is not currently protected, should be secured to offset the likely adverse impacts to the local population as a result of the development proposal.
 - Re-creation of an EEC is not supported as it is uncertain, unproven, very difficult and likely to take an extended period of time to establish.
 - The "low" conservation status of the Scribbly Gum Community is not justified. The Scribbly Gum Community should be managed for conservation purposes. If this is not possible, then a suitable off-site offset should be considered.
 - The proposed offsets for threatened flora and fauna and EECs are inconsistent with the "*Principles for the use of biodiversity offsets in NSW*".
 - The EA relies heavily on the regeneration and revegetation of EECs and threatened species habitat as an offset to their net loss at the site. Whilst DECCW supports the regeneration and revegetation of EECs and habitat, this measure on its own is not considered an adequate offset for the loss of these areas, even where the area to be regenerated or revegetated is greater than the area to be lost or impacted.
 - The use of nest boxes when used alone or in conjunction with the proposed on site rehabilitation is not considered to be a suitable offset for the loss of established hollow bearing trees at the site.
 - The proposed re-created Freshwater Wetland EEC, in the central portion of the site, is not a suitable offset for the threatened Black-necked Stork known to occur at the site.

- The EA does not indicate where tree hollows occur or the number to be removed from the site.
- The identified EECs, the Scribbly Gum Community and the Wallum froglet habitat, including forage habitat should be rezoned to Environment Protection.
- The full extent of impacts to threatened species should be identified prior to determination.
- **Aboriginal Cultural Heritage**
 - DoP should satisfy itself that adequate consultation has occurred with the Aboriginal community.
 - The proponent should identify the proposed extent of impacts to the 19 cultural sites within the project area and detail any proposed mitigation strategies, including offsets. Where impacts to Aboriginal objects and places cannot be avoided, the proponent should develop proposals that reduce the extent and severity of impacts using reasonable and feasible measures. Any measures proposed should be negotiated between the proponent and the Aboriginal community.
 - The auger process proposed in the Excavation Strategy is not an appropriate technique to obtain sufficient information to clarify the history of Aboriginal occupation of this area. A test pitting program using manual excavation is recommended.
 - The proposed archaeological subsurface investigations should be completed prior to determination.
 - Six specific conditions of approval are recommended to protect Aboriginal Cultural Heritage values.
- **Climate Change and Flooding**
 - The Concept Plan should be reviewed and reconsidered in light of the findings of the updated Tweed Valley Floodplain Risk Management Study and Plan, which incorporates the most recent IPCC (2007) sea level rise scenarios.
 - The implementation of best practice water sensitive urban design across the site is of paramount importance to maintain the current water quality status of the Cobaki Broadwater.

4.3.4 NSW Roads and Traffic Authority

The RTA raised the following issues:

- The proposed development has no approval or agreement with the RTA concerning the provision of additional ramps at Boyd Street overpass and lanes on the Tugun Bypass.
- The traffic data indicates that Kennedy Drive will be at capacity. This will have an impact on the existing Pacific Highway and Kennedy Drive Interchange's road infrastructure. This needs to be investigated to identify any improvements that might be required to maintain its safety and efficiency.
- The information provided does not address the RTA's issues and relates mainly to the impacts on the Queensland and Tweed Shire Council's road networks. The guarantee of a connection to the Tugun Bypass is critical to the success of the project.

4.3.5 Queensland Department of Transport and Main Roads

The QIDTMR raised the following issues:

- Although QDTMR's planning for the Tugun Bypass does not preclude future interchange connections at Boyd Street, the cost of providing such a connection will, for the most part, need to be met by others.
- Connecting Boyd Street to the Tugun Bypass would increase traffic on the Bypass to a level where additional Pacific Motorway through lanes would be needed. Therefore, the cost of the overall roadworks would be substantial. Such infrastructure is unlikely to be justifiable or warranted for another 20 years.
- The Boyd Street connection to the Tugun Bypass cannot be assumed by the current concept application.
- Any approval issued for Cobaki Lakes should be limited to ensure the capacity of Boyd Street at four lanes with no connection to the Tugun Bypass is not exceeded. Development beyond this limit, should be preceded by a new traffic impact assessment that is informed by future development of the overall road network of the Tweed Shire.

4.3.6 NSW Office of Water

The NoW raised the following issues:

- Detail of various water management structures and infrastructure has not been provided to allow adequate technical assessment. Subsequent DAs should remain Integrated Development where the need for licensing and approvals under water legislation can be assessed, and reviewed for their technical and environmental adequacy.
- The need for freshwater lakes is unclear. Their integration with and impact on drainage flows, and the source of water to maintain water height, need to be clarified.
- Pumping of saline water from Cobaki Creek has water management and licensing implications for NoW. The impact of introducing saline creek or estuary water into a proposed freshwater lake system also needs further consideration, particularly when freshwater wetland rehabilitation is to occur downstream.
- NoW has major reservations about the practicality of lakes for amenity purposes which cannot be sustained.
- It is not clear to what extent climate change induced sea level rise has been factored into the flood assessment. Given the low lying nature of much of the floodplain, this may be a very important issue to address for effective discharge of stormwater from the development.
- NoW can provide no endorsement of the works on the main drainage route as so few details are available, and many soil and geotechnical factors remain to be addressed.

- A plan of identified ASS areas was not provided.
- A key requirement for future precinct development applications will be the accurate identification of subsoil ASS risk and management when earthwork and engineering specifications are available.
- The boundaries between various mapped geotechnical categories need to be more clearly defined before detailed precinct and individual plans can be finalised.
- Construction activity encroaching into the floodplain or drainage lines should be avoided as much as possible.
- Water management structures should be relatively shallow and constructed above natural ground level wherever possible.
- Incidental groundwater entering excavation or construction areas will need to be discharged to surface drainage after treatment for acidity and after meeting any water quality discharge standards. Interception and discharge of groundwater requires approval and/or licensing by NoW under water legislation. While NoW is not opposed to this treatment option, there is insufficient detail to quantify the likely volumes of impacts of this dewatering.
- It is assumed, but not specifically stated in the EA, that the existing groundwater monitoring bores on the site are registered and licensed with NoW. This needs to be verified and corrected if they are not licensed.
- It is recommended that a comprehensive Stormwater Management Plan (SWMP) be required with specific sections on groundwater, surface water, stormwater and erosion and sediment control.
- It is recommended that all water monitoring proposed for the various aspects of the project be integrated into a consolidated document, such as a SWMP.

4.3.7 Department of Housing

The DoH raised the following issues:

- There is no mention of a mix of one, two, three or four bedroom stock, of a mix of tenure (purchase and rental) nor of affordability or price points of the proposed housing, even in the proposed first release area.
- There does not appear to be any investigation of demand and supply for community services and facilities likely to be generated by the development.
- The demographic analysis does not look at project household growth by household type, nor does it examine income, employment or tenure.
- Affordability has not been discussed.

The DoH requested that:

- The report on future demographics be expanded to examine, at a minimum, income, employment, bedroom mix and tenure.
- The Department of Planning consider a voluntary planning agreement for the provision of affordable housing on the site. one option is that 3% of land and completed dwellings, dispersed over the development, be provided for affordable housing, with title to the Land and Housing Corporation and managed by a community housing provider.
- A proportion of adaptable housing be negotiated, to provide for older residents and to enable residents to age in place.

The DoH also noted its support for the proposed mix of lot sizes and dwelling types and would like to see this embedded in subsequent development/project applications, along with a mix of bedrooms across the dwelling types.

4.3.8 Land and Property Management Authority

The LPMA raised the following issues:

- The assessment of off-site impacts does not address the impacts on the environmental values of Crown Reserve 90227 and Part Crown Reserve 755740 to the north and west of the subject site.
- Significant concerns regarding the inadequate recognition of the impacts of the projected resident population on the nearby coastal Crown reserve system through the exponential increase in visitation and recreational use.
- The Concept Plan does not adequately support or protect the vegetation corridor and threatened species habitat provided by Crown Reserve 90227 and Part Crown Reserve 755740. Urban precincts 1 and 2 should be redesigned to provide a 100 metre buffer to the adjoining Crown reserve with this area to be revegetated.
- A management plan for the Open Space and Environmental Protection Areas should include Crown Reserve 90227 and part Crown Reserve 755740.
- The EECs between the development and Cobaki Creek should be included as Environmental Protection Areas.
- Appropriate low key pedestrian access to the Cobaki Broadwater needs to be established to prevent informal pedestrian access.
- Excavation associated with the construction of wetlands will disturb acid sulphate soils. All storm and groundwater will need to be appropriately treated on site prior to any discharge into Cobaki Creek or Cobaki Broadwater. A high flow discharge will not be supported if there is any potential for acid discharge.
- Independent monitoring of ASS should be undertaken during and post construction.
- Approval is required for any works on Crown land, including those below MHWM in Cobaki Creek and Cobaki Broadwater such as stormwater outlets, tidal gates and the proposed subterrain pumping system to pump water from Cobaki Creek to the constructed wetlands.
- The use of only endemic species throughout the landscaped areas is strongly encouraged.
- Application will need to be made for the closure of the many road reserves within the site.
- No APZs are to be located on Crown land.

- An ongoing pest species control program needs to be developed and implemented to reduce impacts on the adjoining Crown reserves and other areas of high environmental value.
- The proposed location of the water reservoir within the vegetated section of the Environmental Protection Area should be reconsidered.
- The majority of the freshwater wetland EEC through the centre of the development site will be landscaped. It is difficult to identify the loss of this EEC, however, it appears that it will be substantial.

4.3.9 Northern Rivers Catchment Management Authority

The NRCMA raised the following issues:

- A 10 metre buffer is particularly narrow for an effective buffer zone. A narrow buffer zone conflicts with the intent of the Catchment Action Plan (CAP) target B4-Threatened Species, which aims to implement actions for the protection of threatened species.
- A minimum buffer width of 50m between native vegetation/habitat as well as ecosystem and wildlife corridors to residential areas and urban development should be provided, in accordance with the NRCMA's "Living and Working in Rural Areas – a handbook for managing land use conflict issues on the NSW North Coast".
- The development must comply with the *Native Vegetation Act 2003* in terms of native vegetation removal and the applicant must demonstrate how the proposal complies with the Act.
- A native vegetation maintenance program of a minimum 5 years is supported. However, further to this, a developer funded local community capacity development program should be established which would aim to develop the skills and enthusiasm of the local residents to enable ongoing protection of the remnant native habitat in their area.

4.3.10 Industry and Investment

The I&I raised the following issues:

- There is limited information in the EA about the proposed sub-terrain pumping system for the freshwater wetland.
- There are potential challenges and need for ongoing management to variously 'enable salty water to be pumped from Cobaki Creek into the constructed wetlands' and 'remove saline water from the constructed wetlands'.
- Impacts on fish and aquatic animals via entrainment within the pumping system and the proposed approach to treatment of biofouling have not been addressed.
- The location of the pump in Cobaki Creek has not been identified, nor has pumping rate volumes.
- Supportive of the objectives of the Saltmarsh Rehabilitation Plan. However, recommend that upon appropriate completion of management activities by the developer, the saltmarsh land areas east of the Cobaki Parkway be rezoned from 6(b) Recreation to 7(l) Environmental Protection (Habitat) and then dedicated to the appropriate authority (Council or LPMA).

4.3.11 Department of Education and Training

The DET raised the following issues:

- The provision of two State primary schools is consistent with DET's previous advice. The location of the two primary school sites is agreed to in principle.
- The need and timing of the two schools will be dependent upon the eventual scale of residential development.

4.3.12 Department of Health

The DoH raised the following issues:

- Consideration should be given to ensuring key health and community facilities both within and external to the development can be accessed by all residents, including the aged, children, people with a disability and the economically disadvantaged.
- Inclusion of bike paths, footpaths and adequate lighting will encourage participation in healthy activities, eg: walking, cycling.
- Provision of public transport for access to and from the development.
- Inclusion of retirement housing.

4.3.13 Rural Fire Service

The RFS raised the following issues:

- The Asset Protection Zones (APZs) proposed are generally acceptable, however, further site specific assessment of the slope vegetation will be required for internal APZs adjoining retained vegetation within the site.
- APZs are to be managed at the commencement of building works.
- Water, electricity, gas, public road access and fire trails are to comply with *Planning for Bushfire Protection (2006)*.
- Future Special Fire Protection Purpose development applications are likely to be subject to the requirements of section 79BA of the EP&A Act 1979 and section 100B of the *Rural Fires Act 1997*.
- New construction is to comply with Australian Standard AS3959-1999 'Construction of buildings in bush fire-prone areas'.

Issues raised in agency submissions have been addressed in the PPR. Outstanding issues are discussed in more detail in **Section 5**.

5 ASSESSMENT OF ENVIRONMENTAL IMPACTS

Key issues considered in the Department's assessment of the Environmental Assessment (EA) and the Preferred Project Report (PPR) and consideration of the proponent's draft Statement of Commitments include the following:

- Planning framework, including zoning amendments and the Development Code;
- Urban design;
- Traffic and access;
- Flora and fauna;
- Aboriginal cultural heritage;
- Stormwater management;
- Climate change and flooding;
- Geotechnical engineering and groundwater;
- Acid sulphate soils;
- Contamination;
- Infrastructure;
- Bushfire;
- Off-site impacts; and
- Public Interest.

Some of these issues were resolved following consultation with the proponent, or were directly addressed via the proponent's Statement of Commitments or the Department's recommended terms of approval. Significant issues are discussed in detail below.

5.1 PLANNING FRAMEWORK

This concept plan application sits within a strategic planning framework as discussed in **Section 3.1**. An appropriate level of assessment is carried out at each stage of the planning process to ensure that the proposed development is appropriate for the site. The stages of the process relevant to this site are set out below.

5.1.1 Concept Plan

A concept plan, which is not dissimilar to a statutory masterplan, provides a general layout and main elements of a proposal and provides detail on development controls for the site. Section 2.1 of this report provides a description of the concept plan proposal the subject of this report. In short, concept approval for 17 residential precincts, town and neighbourhood centres, community facilities and school sites, open space and environmental protection areas is requested as are a number of amendments to the Tweed LEP. The proposal also proposes that development controls for the site be provided by way of a site-specific exempt and complying development code and site-specific development controls (the Cobaki Estate Development Code). Future development must be generally consistent with any concept plan approval. Amendments to the Tweed LEP will require separate Ministerial approval as will the site specific exempt and complying code. Albeit, they have been considered in this report.

5.1.2 Cobaki Estate Development Code

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 450m²) 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 450m², and the *Codes SEPP* currently applies only to lots greater than 450m²; 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 Cobaki Estate Development Code.

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

Part A

The code establishes minor development ancillary to dwelling houses and commercial development (in the town and neighbourhood 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, and granny flats), and certain other development as complying development. Development identified on a plan of development as a lot 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 certifier), and a design review panel (DRP) or architect's pre-approval certificate (certifying assessment of complying development against 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, seniors' housing, apartments, town/neighbourhood centre development). DAs will be submitted to the DRP for a statement of compliance against the 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 planning provisions, as follows:

1. Precinct plan –

- lot sizes, street patterns, connections between parks, public spaces, main streets, services, infrastructure and natural features, 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.

Planning response:

The code is a simple and efficient means to control and guide development of the site, particularly innovative dwelling types on small lots. It will foster housing diversity, choice, affordability and flexible design; and promote development responsive to the environmentally sensitive site and market considerations identified by the developer.

Cost savings and greater affordability are expected in house construction due to faster approvals. The nominated lot approach will mean that simple development can be categorised as exempt development or processed quickly as complying development. The code preserves the intent of the Codes SEPP.

The Department supports implementation of the code as part of the Concept Plan approval and recommends that the Minister endorse the Code accordingly. The best mechanism is for the Minister to make a s75P(2)(d) Order, and this is reflected in the attached Concept Approval.

5.1.3 Future Development Assessment

A concept plan approval may specify which stages of development will be subject to Part 3A (project applications) of the Act (if any) and which will be subject to Part 4 (development applications) of the Act. It is during the assessment of these future stages that the detail of subdivision, dwelling construction and environmental protection area management will be assessed. The Department is concurrently assessing project application 08_0200 for the Cobaki Estate Central Open Space and Riparian Corridor. The proponent has also requested that Precinct 5 be assessed by the Department under Part 3A of the Act with any further project to be assessed under either Part 4 or Part 5 of the Act, as relevant. The Department supports this request.

5.1.4 PROPOSED AMENDMENTS TO TWEED LOCAL ENVIRONMENTAL PLAN 2000

The concept plan seeks a number of amendments to the *Tweed Local Environmental Plan 2000* (LEP). These include changes to zonings and zone boundaries and changes to the minimum lot size permissible. The proponent initially proposed 27 areas to be rezoned. Following exhibition, concerns were raised about long-term protection measures for the areas of the site to be rehabilitated. In response the proponent submitted a revised rezoning proposal as part of the PPR totalling 64 areas. An initial request to amend the LEP in relation to the permissibility of site development and sales offices in the 6(b) zone has since been withdrawn.

The main revised rezoning proposals include: rezoning an 84 hectare area of endangered Coastal Saltmarsh from 6(b) Open Space to 7(l) Environmental Protection (to be dedicated to Council following rehabilitation by the proponent in accordance with the Saltmarsh Rehabilitation Plan) and rezoning of the 9.6 hectares of 2(e) Residential Tourist zone on the site to 2(c) Urban expansion. The revised rezonings were established in consultation with the Department of Environment, Climate Change and Water (DECCW) and as described in **Section 2.2**, these fall into six categories, see **Table 5**.

Table 5: Summary of Areas Affected by Zoning Amendments

Category	2(c) Urban Expansion	6(b) Recreation	7(d) Environmental Protection (Scenic Escarpment)ha	7(l) Environmental Protection (Habitat)	7(a) Environmental Protection (Wetlands and Littoral Rainforest)	2(e) Residential Tourist
Clause 52 determination of zone boundaries (Areas 2-7, 41 & 47)	+4.6177	-2.1519	-2.0825	-0.3833		
Alignment of zone boundaries with existing development consents (Areas 8, 9, 10, 42 & 48)	+5.8508	-5.6234	-	-	-0.2274	
General rationalisation additions to 2(c) Urban Expansion zone (Areas 11-22, 34, 60, 66 & 69)	+25.3226	-14.7439	-0.3995	-0.5060		-9.6732
General rationalisation additions to 7(l) Environmental Protection (Habitat) zone (Areas 23-26, 28A, 28B, 29, 31, 35-39, 40, 43, 45, 46, 49-52, 54, 55, 56 & 65)	-8.5079	-98.0452	-	+106.5531		
General rationalisation addition to 6(b) Recreation zone (Area 27, 44, 48, 57, 58, 59, 61, 62, 63, 64 & 68))	-4.4974	+4.4974	-	-		
Net Changes Proposed	+22.7858	-116.0670	-2.4820	+105.6638	-0.2274	-9.6732

Amendments to Zonings and Zone Boundaries

A large number of zone boundary changes and rezonings are proposed. An assessment of these amendments has been undertaken and is appended at **Appendix G**.

Changes to minimum lot size

An intrinsic part of the proposal is to provide a variety of housing lot sizes suited to a number of different dwelling types. The current LEP specifies a minimum lot size of 450m² in the 2(c) and 2(e) zones that apply to the Cobaki Estate site. The concept plan proposes that the minimum lot size for the site be revised down to 120m².

The proponent lists a number of planning principles in support of this proposal:

- Supplying housing choices to meet demographic changes and demands;
- Increasing densities around centres and accessible locations well served with infrastructure and amenities;
- Maintaining visual landscape values;
- Optimising urban form and design quality with interesting places and streetscapes;
- Easing urban sprawl and development pressure on environmentally sensitive land; and
- Making efficient use of natural resources.

Tweed Shire Council generally supports the principle of smaller lot sizes as it allows for urban consolidation, however Council stated that acceptability was dependent on design quality and location in relation to services, community facilities and public transport.

Clause 52 of the Tweed LEP 2000

The proponent has requested that as part of the proposed amendments to the Tweed LEP that reference to the site in Clause 52 be removed as the proposed amendments to zone boundaries clarify the position of the boundaries through survey and Clause 52 is no longer necessary. A number of the proposed rezonings are affected by Clause 52 of the Tweed LEP 2000. This clause requires that, in affected areas, the surveyed zone boundary line is to achieve the primary objective of the most environmentally sensitive or restrictive of the zones involved. The proponent is of the opinion that their survey line, assessed by their ecologist, achieves this objective of Clause 52.

Planning Response

Overall the Department supports the proposed zone boundary amendments. The Department, along with the DECCW, have worked with the proponent on the zoning pattern for the site, in order to provide a better strategic and ecological response than the current LEP provides. The Department is now satisfied that all of the proposed rezonings and boundary adjustments result in an improved planning outcome for the site.

The amended zoning pattern has resulted in the additions of wildlife corridors and other linkages between Environmental Protection zoned land and Recreation zoned land that provide new recreational and ecological connectivity throughout the site. The current LEP only provides limited ecological connectivity between the Border Reserve to the west of the site and the Cobaki Broadwater to the east. The zoning amendments provide a new east-west corridor through the middle of the site, which completes a corridor the full width of the site, improving wildlife movement and ecological connectivity. A number of other amendments enhance the connectivity between areas of Environmental Protection and Open Space throughout the site, most notably in the north-west of the site where a zoning amendment from Urban Expansion to Open Space has created a major new linkage from the Border Reserve through to the main Open Space Reserve through the centre of the site and the Environmental Protection zoned land in the north of the site. The Department is also satisfied that residential zoned areas are of an appropriate location and dimension to be able to support future dwellings without undue constraints of bushfire, topography, flooding or sensitive native habitat.

With regard to proposed smaller lot sizes for the site the Department is of the opinion that the proposal is reasonable, and while residential lots of this size have not been a feature of the Tweed Shire previously, the proposal is consistent with the provision of a variety of dwelling types in order to maximise affordability and land-use efficiency on a site that has been identified in the Far North Coast Regional Strategy as important for the provision of housing in a high growth area and important in helping the Tweed Shire meet its housing targets. The Council supports smaller lot sizes for the site. The proponent has demonstrated that suitable dwelling types can be provided for a range of lot sizes below the current 450m² minimum. The proposed Cobaki Estate Development Code, which has had substantial input from Tweed Shire Council, and the future Design Guidelines will assist in ensuring good quality urban design outcomes are achieved across the site, including on these smaller lots.

The Department is satisfied that Clause 52 of the Tweed LEP has been adequately addressed and that any references to this site can be removed from this clause of the Tweed LEP 2000.

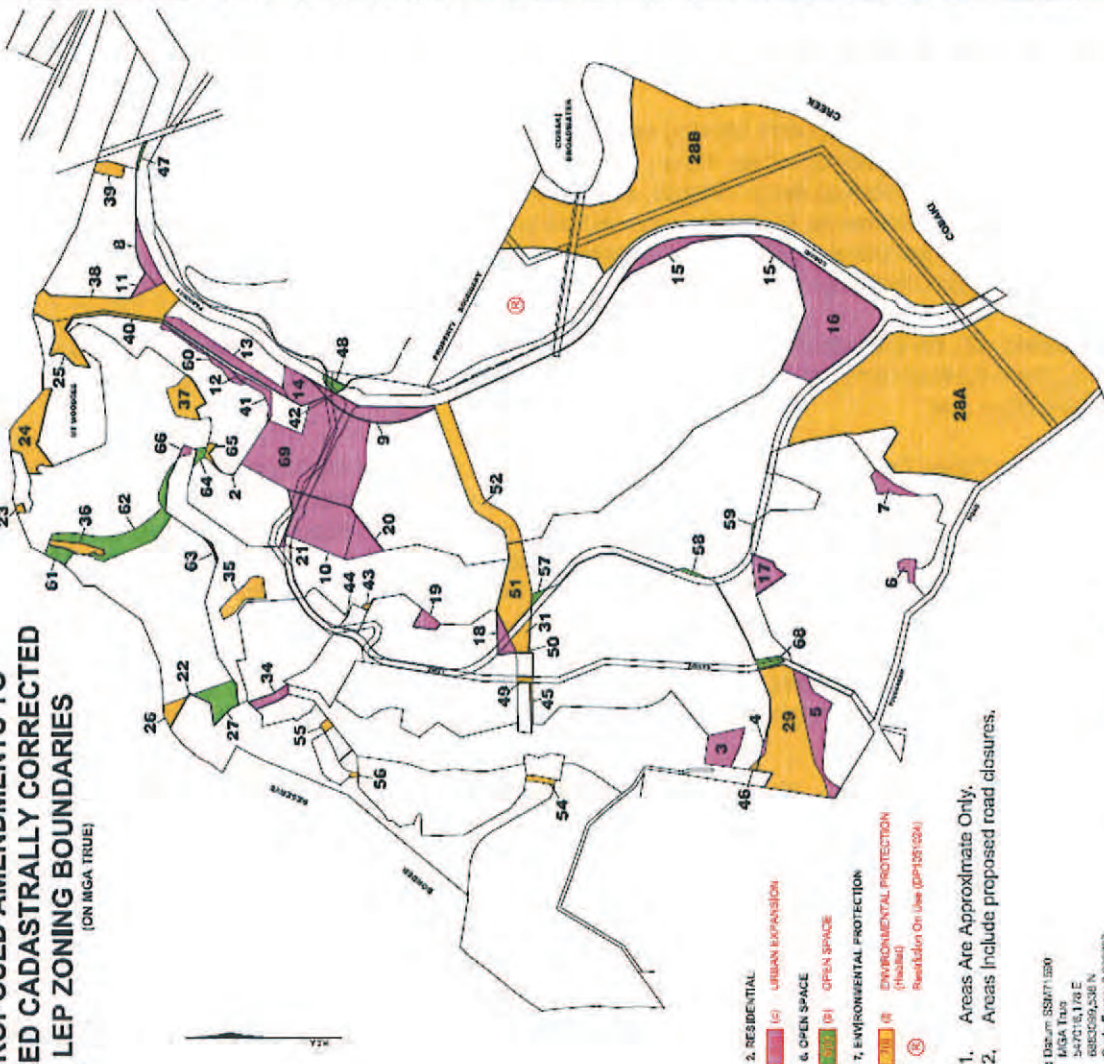
COBAKI LAKES
PROPOSED AMENDMENTS TO
TWEED CADASTRALY CORRECTED
LEP ZONING BOUNDARIES
(ON MGA TRUE)

PLAN No 5- 6400-202F
SCALE: 1:7500 @ A1
DATE: 30/05/2010

60	4462m ²
61	3654m ²
62	24279m ²
63	555m ²
64	1425m ²
65	1262m ²
66	934m ²
68	2299m ²
69	96732m ²

29	59760m ²
31	4704m ²
34	3995m ²
35	8840m ²
36	4854m ²
37	12030m ²
38	34540m ²
39	4115m ²
40	3451m ²
41	3036m ²
42	1m ²
43	436m ²
44	112m ²
45	873m ²
46	578m ²
47	741m ²
48	2273m ²
49	1034m ²
50	93m ²
51	22753m ²
52	27568m ²
54	1846m ²
55	1194m ²
56	511m ²
57	1039m ²
58	783m ²
59	318m ²

2	56m ²
3	12360m ²
4	1020m ²
5	21240m ²
6	3144m ²
7	5321m ²
8	7293m ²
9	16024m ²
10	35190m ²
11	2876m ²
12	513m ²
13	14350m ²
14	10910m ²
15	16570m ²
16	75570m ²
17	8310m ²
18	4703m ²
19	3480m ²
20	9328m ²
21	408m ²
22	85m ²
23	748m ²
24	20770m ²
25	9755m ²
26	3716m ²
27	10510m ²
28A	349740m ²
28B	490360m ²



- 2. RESIDENTIAL
- 3. URBAN EXPANSION
- 4. OPEN SPACE
- 5. OPEN SPACE
- 6. ENVIRONMENTAL PROTECTION (Rural)
- 7. ENVIRONMENTAL PROTECTION (Rural)
- 8. Areas Are Approximate Only.
- 9. Areas Include proposed road closures.

Notes:
Dwg No: 55871/550
MGA True
5-7015178 E
680059138 N
Scale Factor: 0.999927



Figure 14: Plan of proposed zoning amendments
©NSW Government
November 2010

5.2 URBAN DESIGN

5.2.1 Urban Design

At this stage the proposed layout of the Cobaki Estate site is broad-scale and conceptual. It is intended that detailed designs will be submitted with subsequent precinct applications. From the proponent's point of view this allows maximum flexibility for the mix of dwelling types within each precinct, while also allowing some certainty about the location of major infrastructure, community assets and town and neighbourhood centres. Finer-grained design details to be provided in these subsequent applications will be required to be consistent with the concept plan approval and, where relevant with the Cobaki Development Code.

The concept plan layout of the site generally follows the layout of previous Tweed Shire Council approved development areas. Residential uses are spread across the majority of the site, with Open Space areas and Environmental Protection zoned Coastal saltmarsh generally on the more level areas of the site and forested Environmental Protection zoned land on the sloping areas. A Town Centre (approximately 18 ha) with a mix of commercial, retail, community and higher density residential uses is proposed toward the north of the site at the junction of the Cobaki Parkway and Sandy Lane, with a smaller Neighbourhood centre proposed toward the south of the site. The "vision" for the development, as stated in the EA, indicates that "areas of higher density will be located close to areas of greater amenity such as the Town Centre and the central open space area". It is understood that medium and higher density development is to be located around the town and neighbourhood centres, but also around points of interest, such as parks, environmental features and the like, and will be essentially scattered through the low density areas of development. Higher density developments, such as residential flat buildings are likely to be located closer to the town and neighbourhood centre.

The design philosophy is to provide walkable, connected neighbourhoods with easy access to the amenities and services within Cobaki Estate and ensuring that bus stops are able to be provided within easy walking distance to most of the site. The Town Centre is proposed to provide approximately 9500m² of retail space and up to 200 multi units. The retail space is intended to be able to provide for daily and weekly shopping needs for the future population of Cobaki Estate. Provision for two public primary schools on the site is proposed adjacent to the two centres. A range of Open Space, including playing fields and local parks and a Town Square is also proposed.

In comments provided back to the proponent following exhibition of the EA both the Department and Council raised a number of issues relating to the lack of detail on urban design. The proponent responded to these issues in their PPR by providing amendments to the layout incorporating design changes, such as changing the location of the northern school site, the deletion of the lakes, an increase in Environmental Protection Areas and the provision of a site-specific Development Code. In addressing Council concerns the proponent has also held intensive workshops to further refine the Cobaki Development Code with the Council. The proponent has also committed to the provision of a site masterplan at each further application stage.

Following discussion with the Department of Education the position of the northern school site was moved to its current corner location to bring it into the town centre, allowing traffic movements to be reduced and to allow the school to be located on more level, and less bushfire prone, land.

The refinement of the Cobaki Estate Development Code has progressed to a standard which is acceptable to the Department (see detailed assessment at 5.1.4) and for the most part to Council. Along with the concept plan the Development Code including future design guidelines will be the guiding document for urban design for the site. The subdivision controls in the Cobaki Development Code will set the controls for the locations of the nominated lot types, specifying where medium and higher density development can be located. This will ensure that there is an appropriate mix of low and medium density development throughout the site.

The Council raised issues over the lack of employment land on the site although the site has not been identified within any planning strategy as requiring dedicated employment lands such as industrial or business parks. However, the Town and Neighbourhood Centres provide employment opportunities in the commercial, retailing and community uses. The two schools will provide further employment opportunities.

The Department is satisfied that urban design issues have been dealt with appropriately for the site.

5.2.2 Dwelling Yield and Density

The concept plan seeks approval for dwelling numbers and densities. However, only indicative dwelling yields and densities were provided for the concept plan in its entirety, not for each individual precinct. The proponent was asked to confirm whether actual or indicative yields are to be considered and to provide further detail in relation to yields across each of the precincts.

The PPR provided no further details on proposed densities or yields to be provided on the site, however the proponent has proposed after discussions with Council, an addition to their Statement of Commitments whereby for each application for subdivision a masterplan will be provided detailing, amongst other things, densities by precinct.

Planning Response

The Department is of the opinion that as this is a concept plan that provision of concept level of detail is acceptable. For such a large site detail on exact locations of higher density development and housing targets can generally be left to the Precinct planning stage. As a result of the recommendations made by a Planning Assessment Commission review of a similar size development at Kings Forest (06_0318) the proponent has agreed to the Department's recommendation to require all future applications for residential subdivision to provide a plan which: details the mix of densities in each precinct; demonstrates adoption of the neighbourhood planning principles in the Far North Coast Regional Strategy; details the objectives for the location of housing of various densities; details the proposed number and size of dwellings in each stage and precinct; details sites for seniors housing and support facilities; demonstrates the implementation of the levels of accommodation provided for in the approved concept plan; details sites for higher density development; and details discussions with Tweed Shire Council. This is consistent with the Statement of Commitment by the proponent to provide a greater level of detail with each subdivision application.

5.2.3 Future Demographics and Affordable Housing

The EA provided an analysis on future demographics and the likely demand for infrastructure and services. The results of this analysis have been used to inform the likely estimated final population for the site, (currently estimated at approximately 12,000 people at project completion) and the estimated dwelling mix. The exact dwelling mix cannot be provided at this stage as this is likely to change with market demand over the 15-20 year development horizon. It is expected that 300-450 dwellings per year may be developed and a range of housing types and choices will be provided to respond to the incoming population.

An analysis was undertaken of the existing facilities within 5 kilometres of the site to determine what, if any, services needed to be augmented or provided on site. The Cobaki Estate site is intended to be self-sufficient, however it is expected that there will be utilisation of, in particular, community facilities such as hospitals, high schools, beaches and the like external to the site. The concept plan provides for community facilities including two primary schools, child care centres, and playing fields on site as well as making provision for community centres, aged care facilities and the like.

The analysis has provided an estimated demand for retail services on the site, which has informed the provision of retail floor space and land uses within the Town Centre and Neighbourhood Centre. The analysis concludes that the site centres strategy is consistent with the Tweed Retail Strategy.

In its submission during exhibition of the EA the Department of Housing requested that the report on future demographics in the EA be expanded to examine, at a minimum, income, employment, bedroom mix and tenure and that the Department of Planning consider a voluntary planning agreement for the provision of affordable housing on the site. Housing suggested that one option is that 3% of land and completed dwellings, dispersed over the development, be provided for affordable housing, with title to the Land and Housing Corporation and managed by a community housing provider. It was recommended that a proportion of adaptable housing be negotiated, to provide for older residents and to enable residents to age in place.

Planning Response

The mix of product types will be nominated at the subdivision stage on the Plan of Development submitted with each future project/development application. The Department is satisfied that the information requested by the Department of Housing can be provided as supporting documentation at this more detailed stage of assessment. The Department recommends that with the first application for residential subdivision, a study to determine the need for affordable housing provision for the Cobaki Estate be provided. The study should address the following: the likely future demographics of the population of the Cobaki Estate and immediate locality by household type, income, employment and tenure; the need for affordable housing both for rental and purchase in the Cobaki Estate and immediate locality; a plan showing the possible location of affordable housing on the Cobaki site in the various precincts; and, an investigation of mechanisms for the provision of affordable housing, including any role for community housing providers or the potential use of Voluntary Planning Agreements. The proponent will also need to consult with Tweed Shire Council and Housing NSW -Centre for Affordable Housing in the preparation of the study.

5.2.4 Open Space

The open space and landscape concept for the site comprises major open space and environmental protection corridors, freshwater lakes and wetlands, and local parks. The proponent was requested to provide a plan and a breakdown that clearly indicates the proposed amounts of environmental protection areas, structured (sports fields) open space and unstructured open space (parklands), including the total area to be dedicated to Council.

The Gold Coast City Council also requested further clarification of these details to ensure that there would be no adverse impact on Gold Coast City recreational facilities. The cost of maintaining future open space was a concern to Tweed Shire Council, in particular the freshwater lakes, and as such, the proponent was asked to provide strategies to allow for sources of funding.

After reviewing the submissions on the exhibited EA and after discussions with Council and State agencies the proponent has removed the freshwater lakes from the concept plan. Further refinements to the zonings on the site have also changed the mix of Open Space, Residential and Environmental Protection zoned land. Most notably large areas of Open Space zoned land to the south

of the proposed Cobaki Parkway extension are proposed to be rezoned to Environmental Protection in order to facilitate long-term protection and rehabilitation of areas of saltmarsh in this location.

Planning Response

An amended concept plan provided by the proponent in response to comments on the PPR shows that the alignment of Sandy Lane has been modified partly in order to provide a usable layout for playing fields to the east of Sandy Lane. The Tweed DCP B7 identifies a 266 hectare open space requirement which includes public and private open space as well as environmental protection land. The concept plan proposal includes approximately 88 hectares of Public Open Space and approximately 188 hectares of Environmental Protection zoned land. Council have stated that for a population of 12,000 people a need is created for 20.4 hectares of structured open space and 13.5 hectares of casual open. The PPR shows that these requirements can be met. Future precinct applications will provide more detail on the locations and configurations for smaller areas of casual open space.

The Department is satisfied that the size and location of structured Open Space for the Cobaki Estate is appropriate for the size of the site and the estimated future population. The Department is also satisfied that casual open space requirements can be accommodated at future Precinct Project/Development application stages. The Department's recommended further assessment requirements include that future applications for subdivision demonstrate the provision of an adequate area of structured and casual open space in accordance with Council's minimum requirements.

5.3 TRAFFIC AND ACCESS

The concept plan proposes a distributor and neighbourhood collector road network. The main distributor road, the Cobaki Parkway, is planned to connect the site to Boyd Street and the Gold Coast Highway to the north (Fig 15) and to Piggabeen Road, Kennedy Drive and the Pacific Highway/Tugun Bypass to the south (Fig 16). Construction of the Cobaki Parkway from the northern boundary of the site to the existing salt marsh has approval under Council DA 94/194 and the bridge over Cobaki Creek has approval under DA 96/271. Approval to construct the remaining section of Cobaki Parkway has been sought through the Central Open Space Project Application (MP08_0200). Local and minor streets, including associated traffic assessments, will be included in all future applications. The Department engaged a specialist traffic consultant, Halcrow, to review the proponent's assessment of traffic planning with regards to issues raised by the Department and other agencies. A discussion of traffic and access issues generally is provided below.

5.3.1 Internal Road Network

The applicant is seeking concept approval for the internal distributor and connector roads only. The concept plan indicates four main roads within the site, these are the Cobaki Parkway (a modified arterial road), Sandy Lane (neighbourhood connector road), Plateau Road (low volume neighbourhood connector road) and Ridgetop Road (access street). While the streets comply with Tweed Shire Council's engineering specifications for the width of the relevant road types, the EA did not include any information to justify the proposed road hierarchy within the site.

Further detail on the road hierarchy and traffic generation rates was requested but was unable to be provided in the PPR as this level of planning, including densities and layout, has not been undertaken and is subject to more detailed design in future subdivision applications. The inclusion of the four main roads within the site is considered appropriate at concept level as they indicate how each precinct and land use can be accessed. The proposed road hierarchy is considered suitable with the four-lane Cobaki Parkway providing access to and through the site from the south and the north and the two lane neighbourhood connector Sandy Road providing access to the major land uses including retail centres and community facilities.

The Department accepts that much of the detailed road design will be considered at future application stages. Future access design will need to detail the local street network, engineering/infrastructure investigations, traffic impact analysis of the major intersections, and the analysis of safety and efficiency of road uses. These considerations will need to comply with Council, RTA and Ausroad requirements and road development strategies. Suitable crossing points for wildlife will need to be considered in road designs, consistent with an updated Fauna Management Plan. A recommended further assessment requirement reflects this.

The proponent has committed to ensuring that the design of internal roads are consistent with the Cobaki Development Code and that there will be restrictions on direct access to the Cobaki Parkway. The Department is satisfied with the road network layout as proposed in the concept plan. Issues of final alignments, detailed design and associated engineering and dimensions and placement of wildlife culverts can occur at project/development application stage.

5.3.2 External Road Network

To the north, the Deed of Agreement with the Queensland Department of Transport and Main Roads (QDTMR) (formerly Queensland Department of Main Roads) limits the development to 3,500 dwellings until an interchange providing access to the Tugun Bypass is constructed, or some other appropriate traffic arrangement is made to cater for the additional traffic generated by any development in excess of 3,500 dwellings. The RTA considers that a connection to the Tugun Bypass is critical to the success of the project, however, the RTA, QDTMR, GCCC and Tweed Shire Council have advised that there is no certainty that the Interchange will be constructed. Furthermore, the GCCC believe that, despite the Deed of Agreement, the number of dwellings should be limited to 2,000 until such time as the complete road network, including the Boyd Street Interchange, is in place.



Figure 13: Road Network to North East of Cobaki Estate

Notwithstanding, the proponent has not considered any other options to manage traffic beyond the 3,500 lot threshold if the Boyd Street Interchange is not constructed.

To the south, Council noted that the need for an alternative road link to Piggabeen Road via the Sandy Road alignment has not been addressed. The proponent has since provided a Statement of Commitment that this issue will be addressed with the development application for Precincts 9 and 10. Although the RTA has no issue in principle with the proposal, concern was raised that the traffic data indicated that Kennedy Drive will be at capacity once the site has been fully developed. This will have an impact on the existing Pacific Highway and Kennedy Drive Interchange and therefore needs to be investigated to identify any road infrastructure improvements that might be required to maintain its safety and efficiency.

The Department needs to be certain that appropriate access can be provided to the site. It is understood that a Pacific Highway and Adjacent Arterial Roads Master Plan Steering Committee has been formed by QDTMR, TSC, GCCC and the RTA to determine, amongst other things, if the Boyd Street Overpass should be upgraded to a full interchange. At present, the proposed development has no approval or agreement concerning the provision of additional ramps at the Boyd Street overpass and lanes on the Tugun Bypass. Tweed Shire Council had advised that the Committee is still carrying out investigations.

Although the QDTMR's planning for the Tugun Bypass does not preclude future interchange connections at Boyd Street, the QDTMR has advised that the cost of providing such a connection will, for the most part, need to be met by others. Connecting Boyd Street to the Tugun Bypass would increase traffic on the Bypass to a level where additional Pacific Motorway through lanes would be needed. Therefore, the cost of the overall roadworks would be substantial. The QDTMR advises that such infrastructure is unlikely to be justifiable or warranted for another 20 years and agrees that the Boyd Street connection to the Tugun Bypass cannot be assumed by the current concept application.

The construction of the Cobaki Bridge will connect Kennedy Drive and Piggabeen Road with the Cobaki Parkway, which runs through the site. The proponent argues that this will effectively reduce the amount of traffic on Kennedy Drive as residents from Bilambil and Tweed Heads West will use the Cobaki Parkway to access Tweed Heads and Queensland. However, Council's traffic modelling indicates that the capacity of Kennedy Drive will be deficient in the ultimate traffic scenario, and will only be moderately relieved if an interchange is constructed at Boyd Street with the Tugun Bypass.



Figure 14: Road Network to South East of Cobaki Lakes Site

The recommended conditions of approval address requirements for future project and development applications for subdivision to address the capacity of the surrounding external road network.

5.3.3 Public Transport

The EA identifies design and planning objectives for the proposal. One of these objectives encourages the use of public transport by ensuring bus stops and bus routes are within easy walkable distance to most of the site. The EA made a number of references to the provision of bus stops, but nothing specific regarding the number or location of bus stops was provided. The proponent was requested to provide further detail on public transport planning.

As part of the PPR the proponent revised the access network plan to include potential bus routes. The Access Network and Potential Bus Route Plan shows that at least 90% of allotments are within 400m of a potential bus route.

The Department has recommended a further requirement for an assessment of the viability of the bus network and timing of the network implementation. This would need to be done in consultation with local bus operators to determine their preferred access arrangements, integration with existing/planned services and the potential for new services. The assessment should also identify existing and proposed public transport services and infrastructure in the local area including bus services and public transport interchanges. It is considered acceptable for detailed design of bus stop locations, footpaths and cycleways to be done at future project/development application stages.

5.3.4 Road Noise

Sandy Road and Cobaki Parkway have the potential to generate traffic volumes that will have an adverse noise impact on the proposed residential areas adjacent to these roads. The traffic assessment in the EA noted that an acoustic assessment had not been provided as part of the concept plan however it is intended that an assessment would accompany each future application for

subdivision potentially affected by road noise. The proponent was asked to provide further detail on this issue with reference to the RTA's Guide to Road Traffic Noise.

As part of the PPR the proponent has revised their Statement of Commitments to include a commitment to the provision of relevant reports to address this issue and achieve relevant NSW standards for residential noise in dwellings. The Department considers that issues of traffic noise will be able to be satisfactorily addressed at future detailed design stage and is satisfied that this issue has been addressed satisfactorily at this concept planning stage.

5.4 FLORA AND FAUNA

The proposal will require the removal of vegetated land and threatened species habitat. A large proportion of these areas already have approval to be cleared under existing Tweed Shire Council consents however, additional areas are proposed to be cleared under the current concept plan application.

The EA proposed the removal of 197.64 hectares of vegetated land, however it was stated that 178.88 hectares of clearing had existing Council approval and only 18.76 hectares was newly proposed clearing. Of this total vegetation clearance 16.59 hectares comprise Endangered Ecological Communities (EECs). Threatened fauna habitat will also be affected, with approximately 43.7 hectares of Wallum froglet proposed to be removed.

Further changes to the proposal were made following comments received from Council and State agencies on the PPR. This resulted in the proponent undertaking an update of the ecological assessment for the proposal including updating the vegetation mapping for the site. Since the original vegetation mapping for the EA had been undertaken further clearing has occurred under previous Tweed Shire council consents. The updated ecological assessment (2010) now states that of the 473.86 hectares of vegetation on the site 305.62 hectares is proposed to be removed. The majority of the vegetation to be cleared (252.66 hectares) is grassland with scattered trees which has been subject of grazing and slashing for many years.

5.4.1 Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* assessment

The proponent referred the proposal to the Commonwealth on 17 October 2009. 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 *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). On 9 July 2010 the Commonwealth advised that they were undertaking an assessment on the preliminary documentation supplied by the proponent. 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.

5.4.2 Endangered Ecological Communities and Threatened Flora

As outlined in the EA the proposal requires the removal of areas of vegetation that are listed under the *Threatened Species Conservation Act 1995* as Endangered Ecological Communities (EEC). Much of the low-lying wetland, floodplain and saltmarsh EECs have been severely degraded by cattle grazing, drainage construction, fragmentation and periodic slashing over many years. Of the approximately 109 hectares of EEC on site the EA had initially proposed to remove 16.59 hectares of EEC however due to updated vegetation mapping and changes in the design of the proposal brought about, in part, by the removal of the central lakes the proposal now requires the removal of approximately 40.82 hectares of EEC.

Freshwater Wetland EEC

Of the 40.82 hectares of EEC proposed to be removed from the site 25.68 hectares comprises the Freshwater Wetland on Coastal Floodplains EEC. This EEC occurs through the centre of the site where the main drainage line and structured open space is proposed to be constructed. This is the subject of the Cobaki Open Space and Riparian Corridor Project Application 08_0200 currently being assessed by the Department.

The proponent proposes to offset this loss of EEC through both on-site regeneration and rehabilitation of other areas of this EEC. A number of management plans have been provided that will guide this work. Where appropriate Freshwater Wetland EEC offset areas are not available on the subject site the proponent has committed to securing off-site offsets which are to be agreed to with DECCW and formalised in a Voluntary Planning Agreement prior to the impact occurring.

Both DECCW and the Department have supported this approach to ensuring that the Freshwater Wetland on Coastal Floodplains EEC

Coastal saltmarsh EEC

Much of the southern tip of the site consists of areas of saltmarsh of varying quality, ranging from high quality with a high diversity of species, to more degraded areas where cattle have been allowed to graze for many years. All of the saltmarsh on the site is the Coastal Saltmarsh EEC. It is proposed to remove 10.25 hectares of this EEC from the site. Most of the saltmarsh (approximately 9.2 hectares) proposed to be removed has become isolated from the main body of saltmarsh by the alignments of the Cobaki Parkway and Sandy Road. It is intended to rezone this area from Open Space to Urban Expansion. The balance of the Saltmarsh EEC proposed to be removed is due to minor realignments of both Cobaki Parkway and Sandy Road.

Further limited disturbance to the saltmarsh is likely to occur as a result of ridge and mosquito management works requiring the filling and levelling of sections of the main area of saltmarsh within the south of the site. Years of disturbance by cattle and changes to the tidal regime in this area of the site have created large areas where water can pool and stagnate creating ideal breeding conditions for mosquitoes.

In order to offset the loss of 10.25 hectares of Coastal Saltmarsh EEC the proponent proposes to rezone the remaining areas of saltmarsh (46.93 hectares) from Open Space to Environmental Protection, rehabilitate and regenerate this saltmarsh community and revegetate an additional 25.49 hectares with saltmarsh and Swamp Oak EEC species.

Due to the importance of water quality and saltmarsh for fish breeding within the Cobaki Broadwater, the Department of Industry and Investment (Fisheries) expressed particular interest in the rehabilitation of the saltmarsh on the site and how mosquito management was to be undertaken. The Department of Industry and Investment (Fisheries) attended a site inspection with the Department and the proponent in order to gain a first hand understanding of the level of intervention required within the saltmarsh to ameliorate the mosquito breeding conditions. The site inspection and subsequent comments on the draft Saltmarsh Rehabilitation Plan have resulted in an outcome that the Department and Industry and Investment (Fisheries) can support at concept plan level. Further detail will be required on this aspect of Saltmarsh Rehabilitation Plan prior to any works being undertaken in this part of the site. This is reflected in the Department's recommended further assessment requirements.

The Department is of the opinion that proponent's proposal to protect 46.93 hectares of saltmarsh through rezoning to Environmental Protection and by committing to rehabilitation of this area is a good environmental outcome.

Other Species

Threatened flora species such as the Spiny gardenia and Fine-leaved tuckeroo are generally found within EECs being retained in the north and north-west of the site. Open space-zoned buffers around these areas will assist to protect these species as well as the EECs.

The Department is satisfied that measures have been proposed to provide adequate protection and management to EECs and threatened flora on site and that satisfactory commitments have been made to provide appropriate off-site offsets for those impacts that cannot be avoided on-site.

5.4.3 Fauna

Koalas and koala habitat

Figures provided within the PPR show that approximately 39.27 hectares of potential koala habitat occurs on site. Approximately 9.24 hectares of potential forage habitat will be removed as a result of the proposal. Consent to remove this vegetation has already been granted under previous Tweed Shire Council development consents. The proponent states that as no records of a resident koala population have been found on the site the proposal cannot impact on any koala population.

An assessment of koala habitat, as required under SEPP 44 Koala Habitat Protection was not provided in the EA. The proponent corrected this error by undertaking the required assessment in the PPR, which concluded that although part of the site meets the criteria for potential koala habitat, no core koala habitat is present on the site, due to the absence of evidence of a resident population. As such, a Koala Plan of Management was not required to be prepared.

After exhibition of the EA the Department asked the proponent to provide further details on koala habitat surveys undertaken on the site. In response, within the PPR, the proponent states that in 2009 every koala food tree on the site was located and assessed for the presence of koalas and/or scats. No koalas were recorded and no scats were detected. This data was presented as an overlay on the concept plan and shows that 70% of potential Koala habitat that occurs on the site will be retained within Open Space or Environmental Protection areas (see **Figure 17**). Through the rezoning process new wildlife corridors have been created. These will be regenerated or revegetated as appropriate and will link areas of on-site koala habitat to areas of koala habitat off-site, offsetting the loss of secondary koala habitat on the site approved by historical development consents.

The Department is satisfied that koala habitat on the site will be adequately protected. DECCW has not raised loss of koala habitat on the site as a major issue.

Wallum froglet

The Wallum froglet, a threatened species listed as vulnerable in NSW, occurs on the site mainly in low lying areas in the vicinity of the Cobaki Parkway alignment and the main North-South drainage line that runs through the centre of the site. Most of the habitat on-site is considered by the proponent to be of only limited value to the froglet as it has been subjected to vegetation clearance and regular slashing. The froglet has been recorded in large numbers within wetland habitats adjacent to the site.

Approximately 79 hectares of Wallum froglet foraging habitat is considered to occur on the site with approximately 87% of this likely to be removed as part of the proposal. As noted in the addendum to the PPR, impacts to the froglet may include alteration of water

quality and hydrology in drainage lines due to construction and ongoing development impacts, introduction of weed species into core habitat areas, increased competition from disturbance-adapted native and exotic fauna.

Offset measures proposed for the removal of freshwater wetland habitat on the site include:

- re-creation of 4.75 hectares of high quality wetland habitat, specifically designed to provide core habitat for the Wallum froglet;
- the provision of 19.52 hectares of freshwater wetland vegetation associated with the stormwater conveyance and treatment infrastructure on the site; and
- appropriate off-site offsets to be provided to the satisfaction of DECCW.

The DECCW has raised concerns with the proposal to re-create 2.5 hectares of the Wallum froglet habitat on part of the site mapped as saltmarsh, noting that it is unlikely to be suitable as core Wallum froglet habitat. The Department is of the opinion that due to the species sensitivity to water quality impacts that it is unlikely that any Wallum froglet population will be able to persist on the site in the long-term. The DECCW support the provision of an offsite off-set for this species. The Department is satisfied that the proponent's Statement of Commitment to provide off-site offsets in consultation with DECCW (see 5.5.4) will ensure that there will be a net gain regionally in habitat for this species.

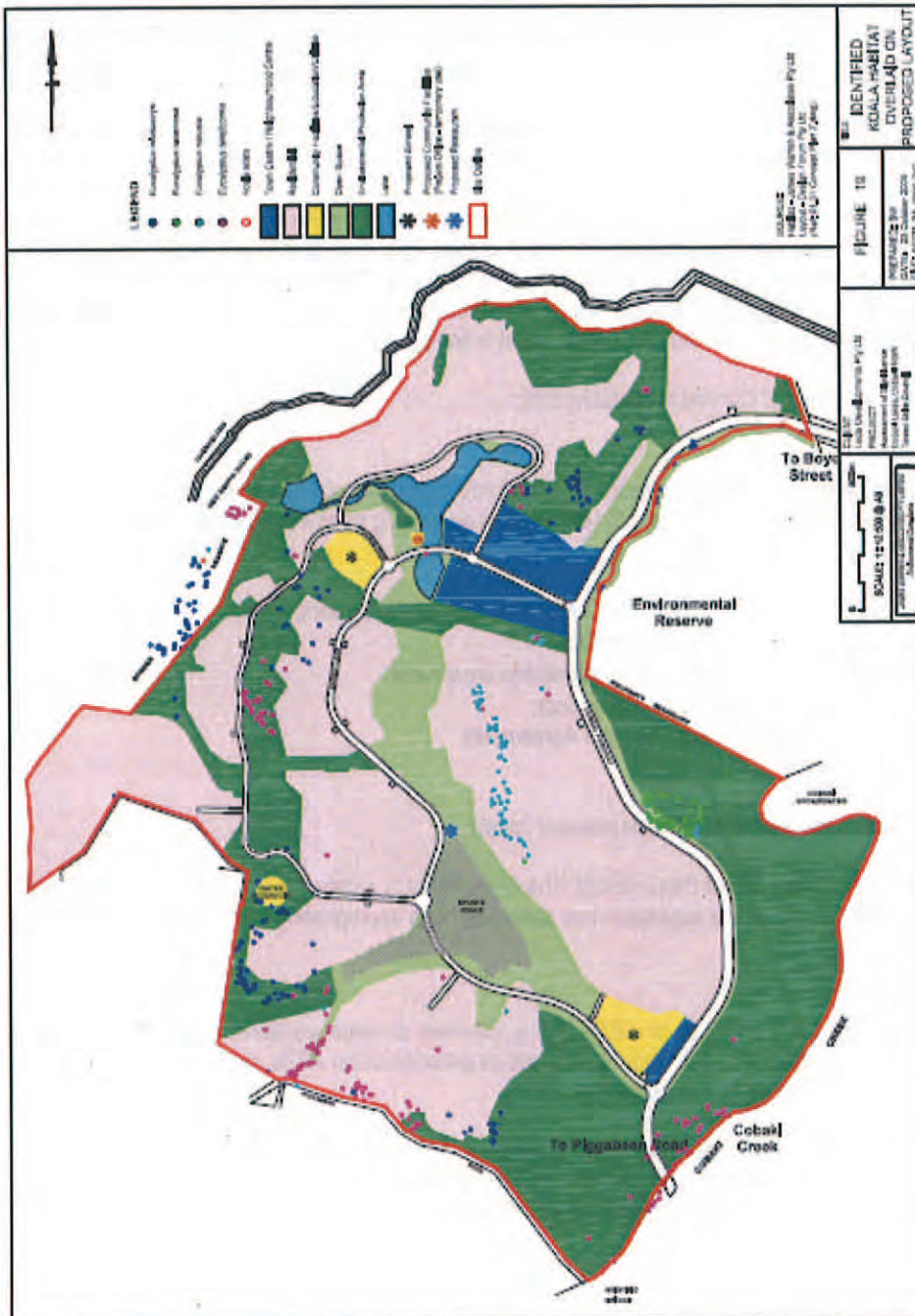


Figure 17. Potential Koala Habitat On-site Overlain on concept plan

Other fauna

A number of other threatened fauna have been recorded on or adjacent to the site and the site currently provides habitat that is suitable for a number of other threatened species.

The proposal will have a major impact on the wetland habitats of the Brolga, Black-necked stork and the Wallum sedge frog, however the proponent has committed to the provision of off-site offsets for impacts on Freshwater Wetlands which will benefit these species. The proponent has also committed to implementing a Fauna Management Plan.

The Department considers that the impact of the proposal on these species has been avoided where possible and that the remaining impacts have been mitigated through habitat enhancement and a commitment to implement habitat rehabilitation and fauna management plans and where impacts cannot be mitigated, the provision of off-site offsets has been committed to. The Department recommends that in the interests of ensuring that impacts of the future population of Cobaki Estate on the native fauna habitat on the site and in the adjacent wetland habitats of the Cobaki Broadwater is minimised that future project/development applications for residential lots demonstrate that cats are totally prohibited.

5.4.4 Offsets

The initial amelioration measures proposed to reduce the impacts on threatened flora, threatened species habitat and EECs relied on regeneration of degraded areas of native vegetation, replanting of threatened plant species and recreation of EECs.

Whilst the Department and DECCW support the regeneration of EECs and threatened species habitat, this measure on its own is not considered an adequate offset for the loss of other areas containing EECs and threatened species habitat on the site.

The Department requested the proponent to provide further consideration of appropriate offsets for the loss of EECs and threatened species habitat on the site and advised that if certainty was required in relation to total yield and subdivision layout, off-site offsets should be investigated. The Department is of the opinion that a combination of on-site and off-site offsets is the most appropriate mechanism to address the loss of habitats and threatened species across the Cobaki Estate development site. The Department advised the proponent that the Department would work with the DECCW to assist in finding appropriate offsets.

The proponent has provided an updated Statement of Commitment stating that:

Environmental Outcomes

Offsets will be provided for impacts on Freshwater Wetlands and associated Wallum Froglet habitat, impacts resulting from approved bushfire hazard reduction works within native vegetation areas, and for any impacts on existing trees in the Scribbly Gum Reserve.

Measure

The proponent will enter into separate Planning Agreements with DECCW for the offset of the following impacts:

- on Freshwater Wetlands and associated Wallum Froglet habitat;
- from approved bushfire hazard reduction works within native vegetation areas; and
- on existing trees within the Scribbly Gum Reserve should this occur.

The proponent will fulfil its obligations in accordance with these Planning Agreements.

Timing for Completion

Before any work are commenced that may cause or contribute to the relevant impact.

The DECCW has provided its support for this Statement of Commitment. The Department is satisfied that the issue of provision for offsets for impact on threatened species, EECs and native vegetation has been dealt with appropriately and a satisfactory outcome has been reached.

5.4.5 Ecological Buffers

The EA proposed a minimum 10 metre vegetated buffer to all EECs and a minimum 5 metre vegetated buffer to all retained threatened flora on the site. The proponent has stated that ecological buffers will be provided within APZs, noting that existing Tweed Shire Council bulk earthworks approvals do not provide for any ecological buffers.

The Department advised the proponent that the buffers proposed were inadequate and that further justification was required for anything less than a minimum vegetated buffer of 50 metres should be provided to all EECs and threatened flora on the site. A reduced width may be considered subject to appropriate justification for the buffer width at each location. The buffer width would be dependent on what the buffer is supposed to be protecting.

The proponent responded by:

- providing increased buffers to several patches of vegetation on the site;
- removing unnecessary APZs from buffers to other patches;

- increasing the connection of some small patches of vegetation with larger areas of vegetation;
- justifying reduced buffers in other areas on the grounds of:
 - steep topography (in the case of Mt Woodgee);
 - the Cobaki Parkway providing a buffer to SEPP 14 Wetlands and Coastal Saltmarsh EECs; and
 - as areas requiring buffers were already within areas proposed to be zoned Environmental Protection and that these areas themselves were surrounded by Open Space zoning further protection was not necessary.

The Department considers that appropriate ecological buffers have been provided on the site.

5.4.6 Wildlife Corridors

A number of regional and sub-regional wildlife corridors cross through the site (refer **Figure 18**). Large areas of the site that are included in these corridors have been cleared in accordance with the various existing Tweed Shire Council development consents. In particular, significant areas of the Piggabeen, McPherson Sub-Regional Corridors and the Cobaki-Terranora Regional Corridor have been cleared as a result of the existing Council approvals. Further areas are proposed to be cleared as part of the concept plan. As such, the proposed development has the potential to reduce the overall effectiveness of these wildlife corridors.

The proponent proposes the following amelioration measures to address the impacts on the wildlife corridors:

- Retention and rehabilitation of all the intertidal communities occurring east of the Cobaki Parkway in the Cobaki-Terranora Regional Corridor;
- Rehabilitation works within the Piggabeen and McPherson Sub-Regional Corridors; and,
- Retention and rehabilitation of saltmarsh communities in the Cobaki Sub-Regional Corridor.

Additionally, many of the rezonings improve connectivity across the site. A comparison of the current Tweed LEP and the proposed concept plan shows that there are new dedicated Environmental Protection-zoned wildlife corridors across the site (in particular the East-West corridor through the middle of the site) as well as new and enhanced Open Space corridors linking Environmental Protection-zoned land (in the North-West of the site).

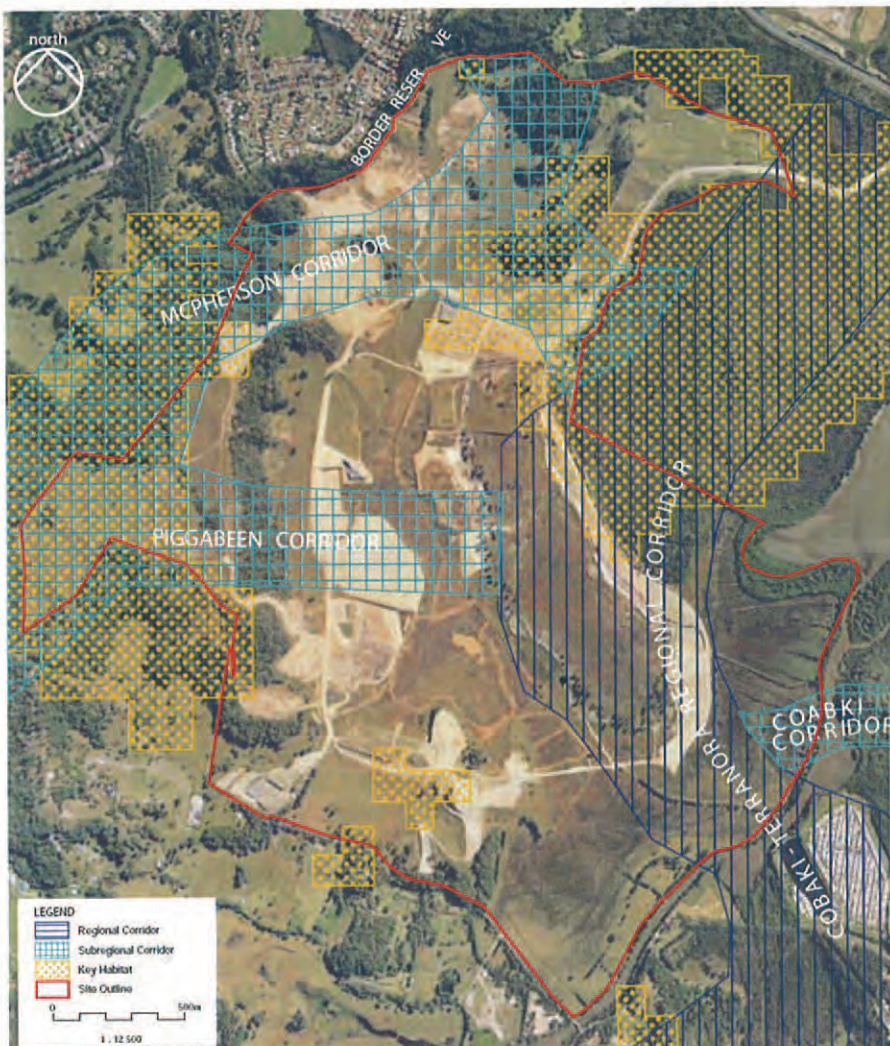


Figure 18: Regional and Sub-Regional Wildlife Corridors within the Subject Site

It is considered that the impact on wildlife corridors has been significant to date due to clearing under the existing Tweed Shire Council consents. However this has been taken into account in assessing the proposed width and extent of the rehabilitation works, particularly in the Piggabeen and McPherson Sub-Regional Corridors. Any revegetation of these areas is considered to be a gain and a positive outcome of the concept plan approval. In addition to the rehabilitation of the two east-west sub-regional corridors, a third east-west corridor will be created in the south of the development site. This is a newly created wildlife corridor and therefore considered to be a significant positive ecological outcome as a result of the concept plan process. The corridors are to be protected by open space or environmental protection zoning. The DECCW has worked with the proponent to ensure adequate and appropriately zoned corridors are provided on the site.

The Department considers that appropriate wildlife corridors have been provided on the site and represent a good planning and conservation outcome.

5.4.7 Scribbly Gum Community

A remnant Scribbly Gum vegetation community occurs in the south of the site. While not a threatened community at the State level it is significant in the Tweed. The community is proposed to be managed as open space parkland, although there is no proposal to rezone the land from Residential to Open Space zoning. Approximately 50% of the Scribbly Gum community in the Scribbly Gum Management Area (SGMA) in the southern end of the site is proposed to be removed due to public safety concerns. **Figure 19** illustrates the location and extent of the community. The EA, as exhibited, identified the area as having only "low conservation" value however the Department requested further information on the ecological significance of this community.



Figure 19: Location of Scribbly Gum Community (in yellow)

Further assessment showed that parts of the existing community of Scribbly Gums are affected by white ants and a number of the trees are dying. In addition, a number of trees on the eastern side of the community, closest to the Cobaki Parkway, appear to be affected by earthworks being undertaken for construction of the road. The proponent recognises that the Scribbly Gum Community has both aesthetic and ecological importance. However, it is likely that the community will diminish naturally over time as the trees senesce and die, as the white ant infestation spreads and further works are done for the adjacent residential development and road construction in the future. The proponent acknowledges that due to the significance of this community, any loss of trees within the community should be adequately offset.

As such, the proponent proposes to retain the community within a park within the residential urban area for as long as possible, in accordance with the Scribbly Gum Management Plan. However, it is recognised that the community is likely to be negatively impacted by surrounding development over time. The proponent has updated their Statement of Commitments as discussed above at 5.4.4.

The Department is satisfied that the issue of management of the existing Scribbly Gum Community is appropriate and that provision for an offset for the future decline of this community has been addressed.

5.4.8 Management Plans

A number of management plans have been submitted to support the ecological assessment provided within the EA and PPR. These include:

- Site Regeneration and Revegetation Plan;
- Freshwater Wetland Rehabilitation Plan;
- Saltmarsh Rehabilitation Plan;
- Scribbly Gum Management Plan;
- Vegetation Management Plan;
- Fauna Management Plan; and a
- Principal Buffer Management Plan.

The Department is generally satisfied with these plans however, as acknowledged by the proponent, most of the plans are likely to require stage-specific updating to ensure that the plans remain relevant and effective. The Department has also recommended that measurable performance criteria be incorporated into the rehabilitation plans benchmarked against reference sites within adjacent conservation reserves and that the reporting required as part of each plan be consolidated into one monitoring report.

5.5 ABORIGINAL CULTURAL HERITAGE

5.5.1 Aboriginal Cultural Heritage

Both the Department and the DECCW raised concerns about the proponent's Aboriginal archaeological assessment submitted with the EA. As a result the Department engaged an external specialist consultant to undertake a critical review of the November 2008 *Preliminary Aboriginal Cultural Heritage Assessment* (ACHA) and February 2008 *Cultural Heritage Management Plan* (CHMP) documents prepared by *Everick Heritage Consultants Pty Ltd* for the proponent.

The proponent was provided with the results of the review and requested to provide a final Aboriginal Cultural Heritage Assessment (following sub-surface testing) and a final CHMP to give the Minister certainty that there are no areas of significance in areas that are identified for development. The Excavation Strategy was amended by the proponent to reflect the requirements of DECCW and the Department's consultant. Excavations were carried out across the site to determine the extent of the cultural sites and to salvage significant artefacts in consultation with the registered Aboriginal stakeholders.

The final Cultural Heritage Assessment, dated April 2010 (CHA) and the Cultural Heritage Management Plan, dated April 2010 (CHMP) were also submitted to the Department on 15 April 2010. The CHA summarises previous archaeological assessments carried out on the site and outlines the consultation process with the Aboriginal community. Through this review and consultation process, the areas of the Cobaki and Terranora Broadwater have been identified as being of great significance to the Aboriginal people. With much of the surrounding areas having been destroyed through various construction activities, the Aboriginal Stakeholders state that this heightens the cultural significance of archaeological sites within the Cobaki Estate project site. While the CHA determined that there is little likelihood that undisturbed Aboriginal archaeological sites or objects will exist on previously disturbed/cleared land, modelling was used to identify three areas of archaeological sensitivity which were targeted for excavation, termed the Front Paddock, the Back Paddock and the Sand Ridge.

The CHA and CHMP recommend that 10 Cultural Heritage Parks (CHP's) be established in areas which will ensure that a representative sample of the cultural material will be retained. They recommend further areas of land be recognised as Cultural Heritage Protection Areas and recommend an activity response hierarchy for minor development activities within these areas. Almost all of the Cultural Heritage Protection Areas are contained within proposed Environmental Protection zones. This approach is supported by Aboriginal stakeholders and is considered to be an acceptable approach to the long term conservation of this site. As agreement could not be reached among all Aboriginal Stakeholders regarding a suitable 'Keeping Place', the CHA and CHMP recommends that any Aboriginal cultural material removed from the project site be catalogued and handed into the care and control of the Tweed Byron Local Aboriginal Land Council.

The CHA and CHMP were referred to DECCW for comment. DECCW advised that the CHA has been undertaken in accordance with the ACH assessment guidelines and that DECCW supports the site specific recommendations. DECCW also noted the evidence of support from the local Aboriginal community for the management strategies proposed. DECCW similarly offered support for the CHMP. The proponent has committed to implementing the requirements of the Cultural Heritage Management Plan.

The Department is satisfied that this issue has been dealt with satisfactorily and to an appropriate level of detail.

5.6 STORMWATER MANAGEMENT

Concept level detail describing the proposed water management structures and infrastructure was provided in the exhibited EA. A variety of stormwater treatments are proposed to work in conjunction, the combinations dependent on the underlying soil type and

slope of the land. Treatment types include infiltration systems, vegetated swales, constructed wetlands, the use of rainwater tanks and bioretention trenches.

Future development on the site under the concept plan has potential for stormwater-related impacts relating to:

- the quantity and quality of water including sediment and nutrient loads entering the areas of Coastal saltmarsh EEC in the south of the site, Cobaki Creek and Cobaki Broadwater;
- increased use of water resources, including groundwater; and
- flooding on the site.

The Department is currently assessing a Project application for the site, which deals with the Central Open Space and Drainage Corridor (08_0200) which provides a greater level of detail on the intended stormwater management for the site. Through this assessment process a number of amendments have been made to the proposed stormwater management system which in turn affect the concept plan.

A number of agencies raised concerns with the original stormwater management proposal: DECCW in their submission on the EA raised concerns about the potential for increased amount of runoff draining from the site with elevated levels of nutrients, particularly dissolved inorganic nitrogen) and highlighted the importance of the implementation of best practice water sensitive urban design in order to maintain the current status of the Cobaki Broadwater; the Department of Industry and Investment (Fisheries) raised concerns about sediment laden runoff impact on the Cobaki Broadwater and the Coastal saltmarsh EEC, both important fisheries resources; The Office of Water raised concerns with potential groundwater and ASS impacts related to construction and operation of the Lakes and central drainage channel; and, Council raised issues with maintenance of the proposed Lakes.

Following these concerns over the initial stormwater quality concept plan, and a number of subsequent iterations, the proponent has made significant changes to the design of their stormwater management system. The Lakes have been removed from the proposal due to the significant challenges in regard to water quality control and maintenance, which has entailed a change to the methodology for managing stormwater quality. The level of the main open drainage channel through the centre of the site has been raised to ensure that its base remains clear of any groundwater or ASS impacts. The stormwater treatment train is to be delivered in stages generally in conjunction with the delivery of individual precincts. The Department is supportive of these amendments.

The first project application, including detailed stormwater plans, is currently undergoing assessment by the Department. The Department is satisfied that there is sufficient space within the site to be able to provide appropriate stormwater management infrastructure that will ensure that water quality is of an appropriate standard. Further assessment requirements requiring detailed stormwater management plans, based on water sensitive urban design, be provided with each project/development application have been recommended by the Department.

5.7 FLOODING AND CLIMATE CHANGE

The central portion of the site is at a very low elevation. Much of the saltmarsh and wetland areas will potentially become subject to tidal inundation for a significant percentage of the time.

The Preliminary Flood Impact Assessment submitted with the exhibited EA required further information to be provided. The proponent was asked to consider the scenarios for rainfall intensity and sea level rise outlined in the DECC 'Practical Consideration of Climate Change' guideline. It was also recommended that the concept plan be reviewed and reconsidered in light of the draft flood modelling results of the updated Tweed Valley Floodplain Risk Management Study and Plan, which incorporates the most recent IPCC (2007) sea level rise scenarios.

LEDA advised that it is preparing a comprehensive flood assessment of the site for the first project application for Cobaki Estate. The flood assessment will have regard to the following elements to determine the new flood planning level for Cobaki Estate:

- a sea level rise scenario of 0.90 metres;
- a 10% increase in rainfall intensity for sensitivity testing;
- the detailed flood modelling results from the Tweed Valley Flood Study; and
- consideration of freeboard of 0.5 metres;

It is noted that the approach to the flood assessment has the support of the Department and Tweed Shire Council and the Department accepts that the information provided to date is adequate for concept plan stage.

A revised Statement of Commitments has been provided in the PPR to ensure flood studies submitted with future project and development applications address relevant government policies on climate change and set detailed flood protection levels.

5.8 GEOTECHNICAL ENGINEERING, ACID SULPHATE SOILS AND GROUNDWATER

The Department engaged a specialist engineering consultant, GHD, to review the proponent's assessment of geotechnical engineering, acid sulphate soils and groundwater management measures. A discussion of their findings is provided below.

5.8.1 Geotechnical Engineering

GHD advised that from a geotechnical perspective the Cobaki Estate development site is largely a level "earthworks" site. There are however, some peripheral hillsides adjoining the central level areas and they will require appropriate geotechnical consideration.

Previous studies have sub-divided the proposed development site into 4 geological zones, with 5 categories of geotechnical constraints. GHD considered this to be a reasonable approach and it would appear that geotechnical constraints have been taken into account in the layout of the proposed concept plan. Notwithstanding the above, detailed geotechnical studies will need to be carried out to support future Project and Development Applications for any excavation and building work. Appropriate further assessment requirements have been recommended in this regard.

5.8.2 Acid Sulfate Soils and Groundwater

While it was recognised that the documentation is 'concept stage', the approach/content of the acid sulphate soil assessment and the generic nature of the Acid Sulphate Management Plan (ASSMP) procedures provided in the exhibited EA did not provide an appropriate, whole site ASS strategy document.

The proponent is of the opinion that the overall assessments undertaken to date are sufficient for a concept plan assessment and has agreed to do further detailed acid sulphate soils mapping and assessment at the project/development application stage for subdivision. Similarly, detailed groundwater management plans are to be submitted at each project/development application stage for subdivision.

The Department is satisfied that ASS issues have been adequately addressed for concept plan stage and have included a requirement for a detailed comprehensive ASS assessment and ASSMP to be submitted with subsequent Project and Development Applications for subdivision in the concept plan Instrument of Approval.

5.9 CONTAMINATION

There are sites within Precincts 10 and 17 requiring further contamination assessment and/or remediation, related to past agricultural activities. The proponent has undertaken a preliminary site contamination assessment and has committed to detailed contamination investigations, as required by SEPP 55 - Remediation of Land, as part of relevant future project/development applications.

As part of the Central Open Space and Riparian Corridor Project Application 08_0200, which includes Precinct 17, remediation is proposed to be undertaken on the Turners Dip site, in accordance with a Remediation Action Plan approved by Tweed Shire Council in 2003. This will require a site audit statement to be issued prior to registration of the first plan of residential subdivision as proposed in the Statement of Commitments for the project application 08_0200.

The Department is satisfied that this issue has been dealt with satisfactorily.

5.10 BUSHFIRE

The Cobaki Estate site contains significant areas of bushfire prone land as a result Asset Protection Zones, provision of utilities, public roads and fire trails should comply with *Planning for Bushfire Protection 2006* (PBP 2006). In the PPR the proponent has updated their Statement of Commitments to commit to managing bushfire risk in accordance with PBP 2006.

The bushfire assessment provided in the concept plan found that the site can accommodate bushfire protection measures in accordance with the PBP 2006. Residential areas adjacent to the saline wetlands in the east of the site will be effectively separated by Cobaki Parkway (as proposed), and as such an asset protection zone (APZ) will already be in place. For residential areas in the south of the site, Piggabeen Road already provides some separation from scattered eucalypt vegetation adjacent to the site. Some nominal additional setback may be required to achieve APZs.

The Department is satisfied that appropriate APZs can be provided to the site and that the bushfire hazard will be able to be managed in accordance with *Planning for Bushfire Protection 2006*. The provision of details on bushfire management measures and final locations and dimensions of any necessary APZs will be required, under the Cobaki Development Code, to be submitted with Plans of Development for future subdivision.

5.11 OFF-SITE IMPACTS

The majority of adjacent land use is agricultural, mostly grazing land or low intensity horticulture (a small banana plantation to the south west) requiring minimal buffers. North and north-west boundaries abut the Crown border reserve, the LPMA had requested substantial buffers to this reserve in the vicinity of Precincts 1 and 2, however these Precincts are the subject of an existing approved development consent issued by Tweed Shire Council. As such, any buffers have been considered and applied to these precincts by Council in their assessment.

The proponent has committed to providing further detail on appropriate buffer widths and management for each future project/development application in order that site specific recommendations are made on appropriate buffer distances to ensure any urban/rural land use conflict is minimised.

The Department is satisfied that the issue of off-site impacts has been satisfactorily addressed for this concept level proposal.

5.12 INFRASTRUCTURE AND SECTION 94 CONTRIBUTIONS

According to the EA since the site has been zoned for urban development since the late 1980's. Council and other infrastructure service providers, such as Country Energy and Telstra, have planned for the expansion of their networks and associated infrastructure to cope with the growth of the Cobaki Estate over the next 20 years. There are no impediments, from the point of view of utility infrastructure provision, for the planned future population of approximately 12,000 people on the Cobaki Estate site.

The Department is satisfied that essential infrastructure can be supplied to the site and that infrastructure service providers have planned for this future expansion of their networks. Details of how service infrastructure is to be provided will be required at each project/development application stage.

The Minister for Planning has made a direction under Section 94E of the Act that the maximum monetary contribution to be levied for residential lots on the Cobaki Estate site is \$30,000 per lot.

5.13 AFFORDABLE HOUSING

The proposal is for a mix of lot sizes and dwelling types. This will provide housing choice for a range of segments of the housing market, with smaller dwelling types on smaller lots and some unit dwellings will sell for a lower price than larger dwellings or dwellings on larger lots.

The Housing NSW submission on the EA stated that ensuring a mix of lot sizes and dwelling types is not sufficient to ensure that any housing in Cobaki Estate site will be affordable. It was requested that further demographic analysis be undertaken and that measures are put in place to ensure a reasonable amount of affordable housing is provided and that a proportion of housing be adaptable to provide for older residents and to allow residents to age in place.

The proponent remains opposed to any requirement to provide a proportion of affordable housing and believes that the demographics for the newly developing areas of the Tweed Coast do not support this type of requirement, however in light of the recommendations made by a Planning Assessment Commission review of a similar size development at Kings Forest the proponent has agreed to the Department's recommendation to require, with the first application for residential subdivision, an assessment of the need for affordable housing.

6 CONCLUSION

In summary this concept plan proposal, with a Construction Investment Value in excess of \$416 million will provide benefits to NSW in the form of approximately 5,500 new dwellings over the next 20 years to help satisfy housing demand on the Far North Coast and assist in achieving key priorities in the *NSW Government State Plan (2010)* such as housing supply and affordability, as well as protecting native vegetation, biodiversity, land, rivers and coastal waterways. The proposal will provide significant construction and ongoing employment opportunities.

Importantly, the proposal provides the framework for the provision of a mix of housing types including detached housing, terraces and other attached dwellings, mixed use town and neighbourhood centres, community and education facilities and a business park. The site specific exempt and complying development code developed for the site will assist in faster approval times leading to more affordable housing. The proposal will, through the proposed rezonings, increase the amount of Environmental Protection zoned land by 103 ha and also provide for measures to protect the total 194 ha of Environmental Protection zoned land on the site.

The Department has considered the key issues raised and has recommended modifications to the concept plan, and requirements for future applications to ensure the satisfactory addressing of these issues and minimal impacts as a result of the proposal. Key modifications and further assessment requirements include:

Modifications:

1. Preparation of a Flora and Fauna Monitoring Report to be provided to the Department, including baseline monitoring before construction starts. This report is to collate all monitoring and reporting requirements from the various management plans for the site and identify any required corrective actions.

Further Requirements:

1. Management plans for the site are to be updated at each stage of development where relevant.
2. With each further application submit a:
 - Plan of Development;
 - Bus Network Implementation Plan;
 - Traffic impact analysis on the external road network;
 - Road Traffic Noise Assessment;
 - Bushfire Assessment;
 - Geotechnical Assessment;
 - Stormwater Management Plan;
 - Groundwater and Acid Sulfate Soils Assessment;
 - Flooding and Climate Change Assessment;
 - Plan detailing housing densities and locations;
 - Demonstration of provision of adequate Open Space in accordance with Council's minimum requirements; and
 - Demonstration of implementation of the Cultural Heritage Management Plan.
3. Demonstrate that each further application for residential subdivision or for the construction of dwellings or commercial premises is consistent with Part B of the Cobaki Development Code.
4. Demonstrate that the keeping of cats within the site is prohibited.

The proposed development will provide a number of benefits including:

- Creation of housing for up to 12,000 people;
- Jobs, both operational (potentially 150) and construction (potentially 5700), throughout the life of the project;
- Provision of a range of new housing types and forms;
- Provision of new social and commercial infrastructure for the Cobaki Estate site and surrounding areas;
- Rehabilitation of large areas of the site for the creation of new habitat; and,
- Conservation of threatened and vulnerable plant and animal species.

The concept plan has largely demonstrated compliance with the existing environmental planning instruments.

On these grounds, the Department considers the site to be suitable for the proposed development and that the project is in the public interest. Consequently, the Department recommends that the project be approved, subject to the modification to the concept plan and further assessment requirements for future applications.

7 RECOMMENDATION

It is recommended that the Minister:

- (A) consider the findings and recommendations of this report;
- (B) **approve** the concept plan for the project, under section 75O *Environmental Planning and Assessment Act, 1979*; subject to modification of the concept plan and further assessment requirements; and sign the Determination of the Major Project; and,
- (C) sign the Instrument of Approval at **Appendix A**.

Prepared by:



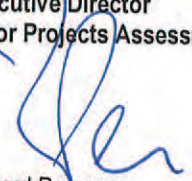
Stuart Withington
Senior Planner
Regional Projects

Endorsed by:



8.11.10

Chris Wilson
Executive Director
Major Projects Assessment



13/11/10

Richard Pearson
Deputy Director-General
Development Assessment and Systems Performance

APPENDIX A. INSTRUMENT OF APPROVAL

Concept Approval

Section 750 of the *Environmental Planning and Assessment Act 1979*

I, the Minister for Planning, pursuant to Part 3A of the *Environmental Planning & Assessment Act 1979* (Act), determine:

- a. Under section 750 of the Act, to approve the concept plan referred to in Schedule 1 subject to the modifications in Schedule 2 and the proponent's Statement of Commitments in Schedule 3;
- b. Under section 75P(1)(a) of the Act, that further environmental assessment be subject to the requirements set out in Schedule 2; and
- c. Under section 75P(1)(b) of the Act, 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.

The modification and further assessment requirements are required to:

- Encourage the orderly future development of the site;
- Ensure adequate mitigation of environmental impacts of future development; and
- Ensure protection and restoration of threatened species and their habitat.



The Hon Tony Kelly MLC
Minister for Planning

Sydney, - 6 DEC 2010 2010

SCHEDULE 1

PART A—TABLE

Application made by:	Leda Manorstead Pty Ltd
Application made to:	Minister for Planning
Project Application Number:	06_0316
On land comprising:	Cobaki Lakes, Lot 1 DP 570076, Lot 2 DP 566529, Lot 1 DP562222, Lot 1 DP 570077, Lot 1 DP 823679 and Lots 46,54, 55, 199, 200, 201, 202, 205, 206, 209, 228 and 305 DP 755740
Local Government Area	Tweed
For the carrying out of:	<ul style="list-style-type: none">• 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; and• roads and pedestrian and bicycle network.

PART B—NOTES RELATING TO THE DETERMINATION OF MP NO. 06_0316

Responsibility for other consents / agreements

The Proponent is solely responsible for ensuring that all additional consents and agreements are obtained from other authorities, as relevant.

Appeals

The Proponent has the right to appeal to the Land and Environment Court in the manner set out in the *Environmental Planning and Assessment Act 1979* and the *Environmental Planning and Assessment Regulation 2000*.

Tweed Shire Council Consents

This concept plan does not affect DA 92/315, DA 94/438, DA S94/194, DA 96/271, DA S97/54, DA K99/1124 or DA 1262/2001 approved by Tweed Shire Council.

PART C—DEFINITIONS

In this approval,

Act means the *Environmental Planning and Assessment Act 1979*.

Advisory Notes means advisory information relating to the approved development but do not form a part of this approval.

BCA means Building Code of Australia.

Council means Tweed Shire Council.

DECCW means the Department of Environment Climate Change and Water.

Department means the Department of Planning.

Director-General means the Director-General of the Department or his/her nominee.

Environmental Assessment means the Environmental Assessment prepared by JBA Urban Planning Consultants Pty Ltd and dated December 2008, including all Appendices.

Minister means the Minister for Planning.

Project means the project as described in Term A1 to this approval.

PCA means a Principal Certifying Authority and has the same meaning as Part 4A of the Act.

Preferred Project Report means the Preferred Project Report prepared by JBA Urban Planning Consultants Pty Ltd dated October 2009 and the Addendum dated June 2010.

Proponent means Leda Manorstead Pty Ltd or any party acting upon this approval.

Regulation means the *Environmental Planning and Assessment Regulation 2000*.

Subject Site has the same meaning as the land identified in Part A of this schedule.

SCHEDULE 2

MODIFICATIONS AND REQUIREMENTS FOR FUTURE APPLICATIONS

PART A—TERMS OF CONCEPT APPROVAL

A1 Project Description

Concept plan approval is granted for the Cobaki Estate project as described below:

- Residential development for approximately 5,500 dwellings;
- Town Centre and neighbourhood centre for future retail and commercial uses;
- community and education facilities;
- open space;
- wildlife corridors;
- landscaping and vegetation management;
- environmental protection areas and rehabilitation of environmentally sensitive land;
- water management areas;
- roads, bicycle and pedestrian network; and
- utility services infrastructure.

A2 Project in Accordance with Plans

The project is to be undertaken generally in accordance with the following drawings:

Design, Landscape and Survey Drawings			
Drawing No.	Revision	Name of Plan	Date
LED006/ SK 01.01	RR	Concept Plan-for Cobaki	23 September 2010
LED006/SK01.02	CC	Development Matrix	23 September 2010
LED006/ SK 01.03	FF	Cobaki Lakes Height Controls	23 September 2010
LED006/ SK 01.05	EE	Cobaki Lakes Access Network Plan and Potential Bus Route	23 September 2010
LED006/ SK 01.07	P	Cobaki Lakes Open Space Network Plan	23 September 2010
LED006/ SK 01.09	BB	Precinct Location Plan	23 September 2010
LED006/SK 01 06	I	Road Hierarchy Plan	11 June 2010
6400-184C Sheets 1 & 2		Cobaki Lakes Areas To Be Protected By Covenant	13/9/2010

except for:

- (1) any modifications which may be necessary for the purpose of compliance with the BCA and any Australian Standards incorporated in the BCA;
- (2) otherwise provided by the terms of this approval.

A3 Project in Accordance with Documents

The project is to be undertaken generally in accordance with the following documents:

Environmental Assessment

- (1) Cobaki Lakes Estate Concept Plan Environmental Assessment Report prepared by JBA Urban Planning Consultants P/L, Volumes 1, 2, 3 and 4 December 2008.

Preferred Project Report

- (2) Preferred Project Report prepared by JBA Urban Planning Consultants P/L, Volumes 1, 2 and 3, October 2009.
- (3) Addendum to Preferred Project Report prepared by JBA Urban Planning Consultants P/L, June 2010

Additional Information

- (4) Final Cobaki Lakes Aboriginal Cultural Heritage Assessment prepared by Everick Heritage Consultants P/L, April 2010.
- (5) Final Cobaki Lakes Cultural Heritage Management Plan prepared by Everick Heritage Consultants P/L, April 2010.
- (6) Revised Site Regeneration and Revegetation Plan prepared by James Warren and Associates P/L, October 2010.
- (7) Revised Saltmarsh Rehabilitation Plan prepared by James Warren and Associates P/L, October 2010.
- (8) Revised Freshwater Wetland Rehabilitation Plan prepared by James Warren and Associates P/L, October 2010.
- (9) Cobaki Estate Development Code.
- (10) Final Statement of Commitments, 4 November 2010.

A4 Inconsistencies

- (1) In the event of any inconsistency between:
 - a) The terms of this approval and the Statement of Commitments (at Schedule 3), the terms of this approval prevail;
 - b) The terms of this approval and the drawings/documents referred to in A3 and A4, the terms of this approval prevail; and
 - c) Any drawing/document listed in A2 and A3 and any other drawing/document listed in A2 and A3, the most recent document shall prevail to the extent of the inconsistency.
- (2) If there is any inconsistency between this concept plan approval and any project approval or development consent, this concept plan approval shall prevail to the extent of the inconsistency.

A5 Limits of approval

Lapse Provision

This concept plan approval shall lapse five (5) years after the date this concept approval is endorsed by the Minister, unless works the subject of any related application are physically commenced, on or before that lapse date. The Director-General may extend this lapse date if the proponent demonstrates to the satisfaction of the Director-General that the project remains current, appropriate and reflective of the best use of the site at the date the approval would otherwise lapse.

PART B—MODIFICATIONS TO THE CONCEPT PLAN

B1 Flora and Fauna Monitoring Report

Within 12 months of this approval, or as otherwise determined by the Director-General, the Proponent shall prepare a draft outline of a Flora and Fauna Monitoring Report to the satisfaction of the Director-General. The aim of the report is to collate and synthesise all monitoring and reporting requirements contained in the documents listed in A3.

The draft outline of the Flora and Fauna Monitoring Report shall set out the proposed timeframe and duration for ongoing monitoring with reference to locations within the Cobaki Estate, stages of development and the specific issues listed below.

The draft outline of the Flora and Fauna Monitoring Report shall be prepared by a suitably qualified person/s and include, but not be limited to:

- (1) Aims, objectives and methodology for monitoring and reporting;
- (2) Baseline monitoring data focusing on existing populations of threatened species, including Wallum frog species;
- (3) Performance criteria against which the effectiveness of the various separate management plans, required as part of this approval, dealing with fauna, buffers, weeds, vegetation, Scribbly Gums, and saltmarsh and freshwater wetlands can be measured. Relevant benchmark reference vegetation communities are to be nominated from within surrounding conservation estates;
- (4) Actual performance against the above criteria;
- (5) Any required corrective actions;
- (6) Monitoring and reporting of fauna usage within the Environmental Projection zones; and
- (7) Adaptive management procedures to ensure that the various separate management plans remain relevant and effective.

The Monitoring Reports are to be provided to the Department of Planning, DECCW, Tweed Shire Council and Industry and Investment – Fisheries.

PART C— REQUIREMENTS FOR FUTURE APPLICATIONS

Pursuant to sections 75P(1)(a) and 75P(2)(c) of the Act the following requirements apply, as relevant, with respect to future stages of the project to be assessed under Parts 3A, 4 or 5, as relevant, of the Act:

C1 Plan of Development

A Plan of Development must be submitted with each future application for subdivision on the Cobaki Estate site. The Plan of Development must, at a minimum, include the following information:

- (1) Location and width of Asset Protection Zones.
- (2) Level of construction required for dwellings/buildings adjacent to Asset Protection Zones in accordance with *Planning for Bushfire Protection 2006 and Australian Standard 3959 – 1999 – Construction of Building in Bushfire Prone Areas*.
- (3) Type of development permissible on each lot, eg: zero lot housing, plex housing, etc.
- (4) Fill and finished floor levels requirements on flood prone lots in accordance with the requirements of Tweed Shire Council's *Development Control Plan – Section A3 – Flood Liable Land* (or any replacement document).
- (5) All other matters specified for Subdivision in the Cobaki Development Code.

C2 Implementation of Part B of the Cobaki Development Code

All future project/development applications for residential subdivision or for the construction of dwellings or commercial premises must demonstrate consistency with Part B of the Cobaki Development Code.

C3 Housing Densities

All future applications for each stage of development for residential subdivision are to provide a plan which:

- (1) Details the mix of densities in each precinct;
- (2) Demonstrates adoption of the neighbourhood planning principles in the Far North Coast Regional Strategy;
- (3) Details the objectives for the location of housing of various densities;
- (4) Details the proposed number and size of dwellings in each stage and precinct;
- (5) Details sites for seniors housing and support facilities;
- (6) Demonstrates the implementation of the levels of accommodation provided for in the approved concept plan;
- (7) Details sites for higher density development; and
- (8) Details discussions with Tweed Shire Council.

C4 Management and Restoration Plans

- (1) All future applications are to include, where relevant, stage-specific management plan updates to the Site Regeneration and Revegetation Plan, Freshwater Wetland Rehabilitation Plan, Fauna Management Plan, Vegetation Management Plan, Scribbly Gum Management Plan, Principal Buffer Management Plan, Landscape Concept Plan, Stormwater Concept Plan, Cultural Heritage Management Plan, Preliminary Acid Sulfate Soils Management Plan providing, where relevant, details on

timelines for implementation of recommended works including maintenance periods, funding arrangements and measurable performance and completion criteria.

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 another.

(2) Construction Environmental Management Plan (CEMP)

All future applications are to include stage-specific CEMPs that detail measures to address the impacts of construction including, but not limited to: erosion and sediment control (in accordance with *Managing Urban Stormwater-Soils & Construction Version 4, Landcom 2004, or the latest version*); protection of fauna (generally in accordance with the Fauna Management Plan – Cobaki Lakes PPR 2009); groundwater and acid sulfate soils; and, protection of trees and vegetation to be retained (generally in accordance with the Vegetation Management Plan, Cobaki Lakes PPR 2009).

(3) Restoration Plans

Detailed regeneration and revegetation plans for each Rehabilitation and Management Precinct as detailed in the Site Regeneration and Revegetation Plan (SRRP) are to be prepared as per the SRRP.

These detailed plans for each Rehabilitation and Management Precinct, as well as the Revised Saltmarsh Rehabilitation Plan and Freshwater Wetland Rehabilitation Plan are to include, but not be limited to:

- a. performance objectives detailing measurable performance and completion criteria;
- b. Detailed planting species list, composition and density for each vegetation community and, for EECs to be rehabilitated, this is to include ground, mid and canopy species and species composition must be benchmarked against a reference EEC community;
- c. Details on creek bank erosion management;
- d. timing and responsibilities; and
- e. developer maintenance period reflecting completion criteria.

(4) Buffer Management Plan

The stage-specific Buffer Management Plans are to be prepared as per the Overview Buffer Management Plan – Cobaki Lakes – Preferred Project Report (James Warren & Associates 2009) including, but not limited to, rehabilitation and revegetation strategies, bushfire protection measures, weed management, fencing, biodiversity and water quality monitoring and reporting.

(5) Flora and Fauna Monitoring Plan

Updates to the Flora and Fauna Monitoring Report are to be provided in accordance with the draft outline to be approved by the Director-General.

C5 Groundwater and Acid Sulfate Soils Assessment

- (1) In order to ensure the protection of groundwater quality and the water quality of Cobaki Creek and Broadwater, a detailed Acid Sulfate Soils (ASS) assessment and ASS Management Plan (ASSMP), if required, addressing groundwater and acid sulfate soils must be submitted prior to issue of the construction certificate for the central open space and prior to issue of future precinct earthworks construction certificates. The ASS assessment report must be carried out generally in accordance with the ASSMAC Guidelines (1988) by a suitably qualified person and must contain the following information, as a minimum:

-
- a. A plan showing the locations of all monitoring and test points (boreholes, test pits, wells/groundwater sampling, soils sampling, surface water sampling, monosulfides sampling etc);
 - b. Plots of water level and quality with time;
 - c. Spatial and depth distribution of ASS soils, corrected to include TAA plus oxidisable sulphur, and using the ASSMAC recommended action level (>18 mols H+/t) for the site. This should also address the inferred soft ASS marine clays present beneath the sand ridge;
 - d. Typical treatment levels/distribution of AASS and PASS soils on site (where investigated), to current/correct standards;
 - e. A detailed ASSMP with actions for determining ASS conditions ahead of excavation, handling of groundwater levels and quality, detailed management procedures for surface waters and flood routing, interaction (short and long term) of the groundwater with surface water in order to prevent the formation of monosulfides, materials evaluation and handling, materials balance, stockpile treatment, validation testing, monitoring systems with trigger levels, contingency actions, protection for structural elements, evaluation of off-site impacts etc.
- (2) All future applications where the use of groundwater or the interception of the groundwater table is proposed, the proponent, after consulting with the NSW Office of Water, is to submit detailed Site Water and Groundwater Management and Monitoring Plans, supported by baseline groundwater monitoring conducted for an appropriate period, for the approval of the relevant consent authority prior to the issue of a construction certificate.

C6 Stormwater Management

- (1) A detailed stormwater management plan must be submitted with each project/development application for subdivision of each precinct in the concept plan generally in accordance with the Stormwater Quality Concept Plan – Cobaki Lakes Development – September 2010 Revision 02 – Yeats. The Stormwater Management Plan must address and outline measures, based on Water Sensitive Urban Design Principles which address impacts on the surrounding environment, drainage and water quality controls for the catchment at construction, maintenance and operational stages. The stormwater management plans are to be submitted to the satisfaction of the Council following consultation with the DECCW, NSW Office of Water and Industry and Investment (Fisheries).
- (2) Each stormwater management plan is to include groundwater considerations, a detailed design layout plan for the preferred stormwater treatment train showing location, size and key functional elements of each part of the system. MUSIC modelling, or equivalent, must be undertaken to demonstrate appropriate water quality objectives are being achieved.
- (3) All future project/development applications for subdivision of each precinct in the concept plan 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.

C7 Geotechnical Assessments

- (1) In order to ensure the stability of development lots, a detailed geotechnical assessment prepared by a suitably qualified person must be submitted with each future development application for subdivision. The assessments must, at a minimum, include the following:
 - a. A geotechnical map of the site clearly showing ground surface contours, geotechnical engineering soil types and geotechnical hazards. The delineation of hazards should include hazard locations and possible hazard impact areas. That map should be occupied by an explanatory text describing the nature and delineation of soil types and hazard types. The map and text should be prepared by a suitably experienced geotechnical practitioner; and
 - b. A synthesis site plan clearly showing ground surface contours and the locations of all test pits, boreholes and monitoring wells drilled on the site to date.
- (2) Any hillside construction must be in accordance with 'Some Guidelines for Hillside Construction and Practice', Appendix G of *Landside Risk Management* by Australian Geomechanics 2002.

C8 Bushfire Assessment

In order to ensure the protection of property and assets, a detailed bushfire assessment and management plan, prepared by a suitably qualified person, must be submitted with each future project/development application for subdivision. The assessment must, at a minimum, demonstrate consistency with the requirements of *Planning for Bushfire Protection 2006*. All asset protection zones must be clearly specified on the Plan of Development and all affected lots are to be encumbered to this effect with a Section 88B instrument under the *NSW Conveyancing Act 1919*.

C9 Flooding and Climate Change

- (1) In order to ensure the protection of life and property during a flood event, a comprehensive flood assessment of the site must be submitted with the first project/development application for residential subdivision. The flood assessment must have regard to the following elements to determine the new flood planning level for Cobaki Estate:
 - a. a sea level rise scenario of 0.90 metres;
 - b. a 10% increase in rainfall intensity for sensitivity testing;
 - c. the detailed flood modelling results from the Tweed Valley Flood Study; and
 - d. consideration of freeboard of 0.5 metres.
- (2) All future applications for each stage of development are to incorporate any recalibrations of the Tweed Shire Council flood model.
- (3) A preliminary development landform for the entire site is to be provided with the first project/development application for residential subdivision to allow comprehensive flood modelling to be carried out, but not in such a way as to preclude necessary modifications to land forms in subsequent stages of development.
- (4) All future applications for residential subdivision shall provide an updated Design Flood Level Map showing peak flood levels for local and regional flood events at 0.1m contours and a detailed flood impact assessment for all flood liable land.

C10 Affordable Housing

The proponent shall provide, with the first application for residential subdivision, a study to determine the need for affordable housing provision for the Cobaki Estate site. The study shall address the following:

-
- a) The likely future demographics of the population of the Cobaki Estate site and immediate locality by household type, income, employment and tenure;
 - b) The need for affordable housing both for rental and purchase in the Cobaki Estate site and immediate locality;
 - c) A plan showing possible location/s of affordable housing on the Cobaki Estate site in the various precincts; and,
 - d) Investigation of mechanisms for the provision of affordable housing, including any role for community housing providers or the potential use of Voluntary Planning Agreements.

The proponent is to consult with Tweed Shire Council and Housing NSW -Centre for Affordable Housing in the preparation of the study.

C11 Traffic Management

In order to ensure that the capacity of the surrounding external road network in both Queensland and New South Wales is not exceeded, each future project/development application for subdivision must be accompanied by a detailed traffic assessment in accordance with the RTA's *Guide to Traffic Generating Developments*. The traffic assessment must take into account both the additional traffic from the Cobaki Estate development as well as the cumulative impacts of any new developments in the Tweed Shire and the Gold Coast City Council area.

All traffic assessments undertaken that reveal traffic impacts requiring mitigation on the Queensland road system shall be referred to Queensland authorities for comment. Traffic management works required by the development on the Queensland side of the State's border shall be undertaken in accordance with the requirements of the Queensland authorities and/or deeds with those authorities.

C12 Road Traffic Noise Impact Assessment

In order to determine appropriate noise attenuation requirements adjacent to the Cobaki Parkway, a road traffic noise impact assessment must be undertaken in accordance with RTA guidelines as part of each project/development application for residential subdivision. Details of noise attenuation measures (buffers, mounds, acoustic walls, construction standards) are to be provided as part of each project/development application for residential subdivision.

C13 Open Space

All future applications for subdivision are to demonstrate the provision of an adequate area of active and passive open space in accordance with Council's minimum requirements.

C14 Restrictions on Cats

All future development applications must demonstrate that the keeping of cats within the Cobaki Lakes site shall be totally prohibited and that all residential lots are to be encumbered to this effect with a Section 88B instrument under the *NSW Conveyancing Act 1919*.

C15 Cultural Heritage Management Plan

All future applications for each stage of development are to demonstrate the implementation of the recommendations of the Cultural Heritage Management Plan, including the requirement for site specific management strategies for each of the identified sites of cultural heritage significance as they relate to the area of the application.

C16 Bus Network

All future applications for each stage of development for residential subdivision are to ensure that adequate provision has been made for public transport in accordance with the Cobaki Lakes Access Network Plan and Potential Bus Route Revision EE, dated 23 September 2010.

C17 Contamination Assessment

A Stage 2 Contamination Assessment is to be prepared for Precincts 10 and 17. Each Stage 2 Contamination Assessment is to identify any contamination on site and provide for appropriate mitigation measures in accordance with the provisions of *State Environmental Planning Policy No. 55 – Remediation of Land*.

C18 Tweed Shire Council Development Consents

Future project/development applications for each stage of development are to outline the status of Tweed Shire Council development consents DA 92/315, DA 94/438, DA S94/194, DA 96/271, DA S97/54, DA K99/1124 or DA 1262/2001 and include a detailed description of how these consents relate to the application.

SCHEDULE 3

STATEMENT OF COMMITMENTS

Final Statement of Commitments

Project Component	Environmental Outcome	Commitment	Timing for Completion
<p>1. Concept Plan</p>	<p>1.1 Development is carried out generally in accordance with the approved Concept Plan and Development Code</p>	<p>1.1.1 Every application for subdivision to create separate lots is to include a plan indicating the broader context of the application. This indicative plan will show:</p> <ul style="list-style-type: none"> ▪ actual and proposed densities by precinct (or other identified nodes); ▪ the distribution or indicative distribution of surrounding open space/parks; ▪ connector roads; and ▪ trunk stormwater drainage. 	<p>At each relevant stage of development.</p>
<p>2. Visual impact of development</p>	<p>2.1 Key attributes of the natural visual landscape of the Cobaki Estate site (being the topographical amphitheatre, remnant band of bushland, Cobaki Broadwater forest and wetland, and proposed new central open space precinct) are retained and rehabilitated.</p> <p>2.2 The visual impact of subdivision and building development is managed.</p>	<p>2.1.1 In those areas of the site not proposed for urban development the natural landscape will be retained and rehabilitated where applicable in accordance with the relevant environmental management plans appended to the Concept Plan and Development Code.</p>	<p>At each relevant stage of development.</p>
<p>3. Road access</p>	<p>3.1 Road access to the north through Boyd Street and Gold Coast Highway has capacity to accommodate traffic generated by such development that occurs under the Concept Plan.</p>	<p>2.2.1 Future project applications and development applications will be generally consistent with the development controls for the detailed design of subdivisions and buildings in each precinct as set out in the Cobaki Development Code.</p> <p>3.1.1 The proponent will meet its legal obligations assigned in the Boyd Street Road Works Deed between Gold Coast City Council and Calsonic Management Services Pty Ltd dated 8 July 1993.</p>	<p>At each relevant stage of development.</p> <p>As specified in the Deed.</p>

Project Component	Environmental Outcome	Commitment	Timing for Completion
		<p>3.1.2 Every subdivision application will be supported by a traffic study demonstrating that Boyd Street has, at the time of the application, sufficient capacity to accommodate the additional traffic generated by the subdivision.</p> <p>3.1.3 The proponent will meet its obligations in the Deed between it and the State of Queensland acting through the Department of Main Roads dated 3 February 1997 in relation to the construction and use of a signalised intersection between Boyd Street and the Gold Coast Highway.</p>	<p>As part of each relevant Project Application or Development Application for subdivision.</p> <p>As specified in the Deed.</p>
		<p>3.1.4 The proponent will meet its legal obligations assigned in the Deed between Tweed Shire Council and Calsonic Management Services Pty Ltd dated 6 August 1993.</p>	<p>As specified in the Deed.</p>
<p>3.2 Road access to the south through the Cobaki estate and over Cobaki Creek to connect with Piggabean Road is provided to accommodate traffic generated by the development under the Concept Plan.</p>		<p>3.2.1 The proponent will dedicate to Council all the Cobaki Parkway Road Reserve from the north eastern boundary of the property to Cobaki Creek, in accordance with the approved Concept Plan. The cost of this land dedication, and the manner in which it will be treated as a credit against the proponent's obligations to pay contributions under Section 94, will be in accordance with the Deed between Tweed Shire Council and Calsonic Management Services.</p>	<p>Progressively as the construction of relevant stages of two lanes of Cobaki Parkway is completed and in conjunction with Council accepting handover of each section of road.</p> <p>The initial dedication will be the road reserve from the Boyd Street Overpass to the roundabout between precincts 6 & 7.</p> <p>The proponent will dedicate the balance of the road reserve within five (5) years of the initial dedication.</p>
		<p>3.2.2 The proponent will construct two lanes of Cobaki Parkway, in accordance with Tweed Shire Council's requirements, from the toe of the ramp on the western side of the overpass at the intersection of Boyd Street and the Tugun Bypass to the southern-most roundabout on Cobaki Parkway at its intersection with Sandy Road. These works will be constructed progressively to access each phase of the development as it is released.</p>	<p>At each relevant stage of development</p>

Project Component	Environmental Outcome	Commitment	Timing for Completion
		<p>3.2.3 The proponent will construct two lanes of Cobaki Parkway, in accordance with Tweed Shire Council's requirements, from the southern-most roundabout with Sandy Road to the Cobaki Creek, a two lane bridge over Cobaki Creek and a connection to Piggabeen Road.</p>	<p>In accordance with the proponent's development program, provided that such works shall be completed no later than 12 months after 3000 allotments have been created.</p>
		<p>3.2.4 The proponent shall provide, in the subdivision design of Precincts 9 & 10, for the southern section of Sandy Road to connect to Piggabeen Road in order to provide an alternative connection to Cobaki Parkway.</p>	<p>When the development application or project application is submitted for the subdivision of Precincts 9 & 10.</p>
		<p>3.2.5 Road connection between Cobaki Parkway and Piggabeen Road, either via the Cobaki Creek Bridge or through Precincts 9 & 10, will not be opened to the public for vehicle access until such time as a tick control facility has been installed to the satisfaction of the NSW Department of Primary Industries.</p>	
		<p>3.2.6 The proponent will meet its legal obligations assigned in the Deed between Tweed Shire Council and Calsonic Management Services Pty Ltd dated 6 August 1993.</p>	<p>As specified in the Deed</p>
		<p>3.2.7 The proponent will in good faith enter into negotiations with Tweed Shire Council with the objective of completing, if necessary, a Deed between the parties replacing the Deed between Council and Calsonic Management Services Pty Ltd dated 6 August 1993.</p>	<p>Upon approval of the Concept Plan</p>
<p>3.3 Internal roads and access arrangements are designed and constructed to contemporary standards of safety and efficiency.</p>	<p>3.3.1 Internal roads, car parking and loading/ servicing facilities will be designed and constructed in accordance with the Cobaki Development Code. 3.3.2 Direct vehicle access off Cobaki Parkway will be restricted to one left in/left out point serving the Town Centre commercial/retail zone, subject to a supporting traffic report acceptable to Council. No residential lots will have direct vehicle access onto Cobaki Parkway.</p>		<p>As part of each stage of development.</p>

Project Component	Environmental Outcome	Commitment	Timing for Completion
<p>4. Flora and Fauna Management</p>	<p>4.1 Areas of saltmarsh on the site are rehabilitated and protected.</p>	<p>4.1.1 The provisions of the Revised Saltmarsh Rehabilitation Plan, Cobaki Lakes, Preferred Project Report (James Warren & Associates, October 2010) will be implemented.</p>	<p>Commencement of rehabilitation works prior to registration of any plan of subdivision. Works will proceed in a regular manner with the objective of achieving the timeline and milestones set out in the Revised Saltmarsh Rehabilitation Plan.</p>
	<p>4.2 Areas of Scribbly Gum trees are conserved and managed.</p>	<p>4.2.1 The provisions of the Scribbly Gum Management Plan, Cobaki Lakes, Preferred Project Report (James Warren & Associates, 2009g) will be implemented.</p>	<p>Commencement of management works prior to registration of any plan of residential subdivision. Works will continue in accordance with the requirements of the Scribbly Gum Management Plan.</p>
	<p>4.3 Native vegetation is regenerated.</p>	<p>4.3.1 The provisions of the Revised Site Regeneration and Revegetation Plan, Cobaki Lakes, Preferred Project Report (James Warren & Associates, October 2010) will be implemented.</p>	<p>Commencement of rehabilitation works prior to registration of any plan of residential subdivision for adjacent land. Work will then proceed in accordance with the Revised Site Regeneration and Revegetation Plan until they are completed and dedicated to Tweed Shire Council.</p>
	<p>4.4 Removal of native vegetation is appropriately managed.</p>	<p>4.4.1 The provisions of the Vegetation Management Plan, Cobaki Lakes, Preferred Project Report (James Warren & Associates, 2009d) will be implemented.</p>	<p>At relevant stages of development.</p>
	<p>4.5 Threatened fauna species are appropriately managed.</p>	<p>4.5.1 The provisions of the Fauna Management Plan, Cobaki Lakes, Preferred Project Report (James Warren & Associates, 2009e) will be implemented. 4.5.2 The provisions of the SEPP 44 Assessment – Cobaki Lakes - Preferred Project Report (James Warren & Associates, 2009h) will be implemented.</p>	<p>Commencement of works prior to registration of any plan of residential subdivision on or adjacent to the relevant fauna habitat. Works will continue in accordance with the Fauna Management Plan.</p>

Project Component	Environmental Outcome	Commitment	Timing for Completion
	4.6 Areas of native vegetation are protected.	4.6.1 The provisions of the Overview Buffer Management Plan – Cobaki Lakes - Preferred Project Report (James Warren & Associates, 2009) will be implemented.	Commencement and progress of works prescribed in area-specific Buffer Management Plans prior to registration of any plan of residential subdivision. Works will be completed in accordance with the relevant buffer management plan.
	4.7 Freshwater wetlands are rehabilitated.	4.7.1 The provisions of the Revised Freshwater Wetland Rehabilitation Plan, Cobaki Lakes, Preferred Project Report (James Warren & Associates, October 2010) will be implemented.	Commencement of rehabilitation works prior to registration of any plan of residential subdivision for adjacent land. The works will then proceed in accordance with the Revised Freshwater Wetland Rehabilitation Plan, until they are completed and dedicated to Tweed Shire Council.
	4.8 Offsets will be provided for impacts on Freshwater Wetlands and associated Wallum Froglet habitat, impacts resulting from approved bushfire hazard reduction works within native vegetation areas, and for any impacts on existing trees in the Scribbly Gum Reserve.	4.8.1 The proponent will enter into separate Planning Agreements with DECCW for the offset of the following impacts: <ul style="list-style-type: none"> - on Freshwater Wetlands and associated Wallum Froglet habitat; - from approved bushfire hazard reduction works within native vegetation areas; and - on existing trees within the Scribbly Gum Reserve should this occur. The proponent will fulfil its obligations in accordance with these Planning Agreements.	Before any works are commenced that may cause or contribute to the relevant impact.

Project Component	Environmental Outcome	Commitment	Timing for Completion
<p>5. Biting Midge & Mosquito Control</p>	<p>5.1 Biting midge and mosquitos are appropriately managed.</p>	<p>5.1.1 The provisions of the Biting Midge & Mosquito Control Plan (Mosquito Consulting Services, May 2008) will be implemented.</p>	<p>Commencement of rehabilitation works prior to registration of any plan of residential subdivision for adjacent land. Works will then proceed in a regular manner with the objective of achieving the timeline and milestones set out in the Biting Midge & Mosquito Control Plan</p>
<p>6. Stormwater and flood management</p>	<p>6.1 Stormwater on the site is appropriately managed.</p>	<p>6.1.1 Stormwater Management Plans, generally in accordance with the Stormwater Quality Concept Plan (Yeats Consulting Engineers, Revision 02, September 2010) and Council's DCP and referenced Development Design Specification D7-Stormwater Quality Version 1.3 will be prepared as part of future Development Applications and Project Applications, and implemented.</p> <p>6.1.2 Water sensitive urban design (WSUD) measures may be implemented generally in accordance with the Stormwater Management Plan (Yeats Consulting Engineers, Revision 02, September 2010) in areas where geotechnical and slope parameters are compatible. Additional road reserve widths shall be provided in accordance with Council's standard road cross-sections to accommodate roadside drainage swales and similar WSUD measures where these are provided.</p>	

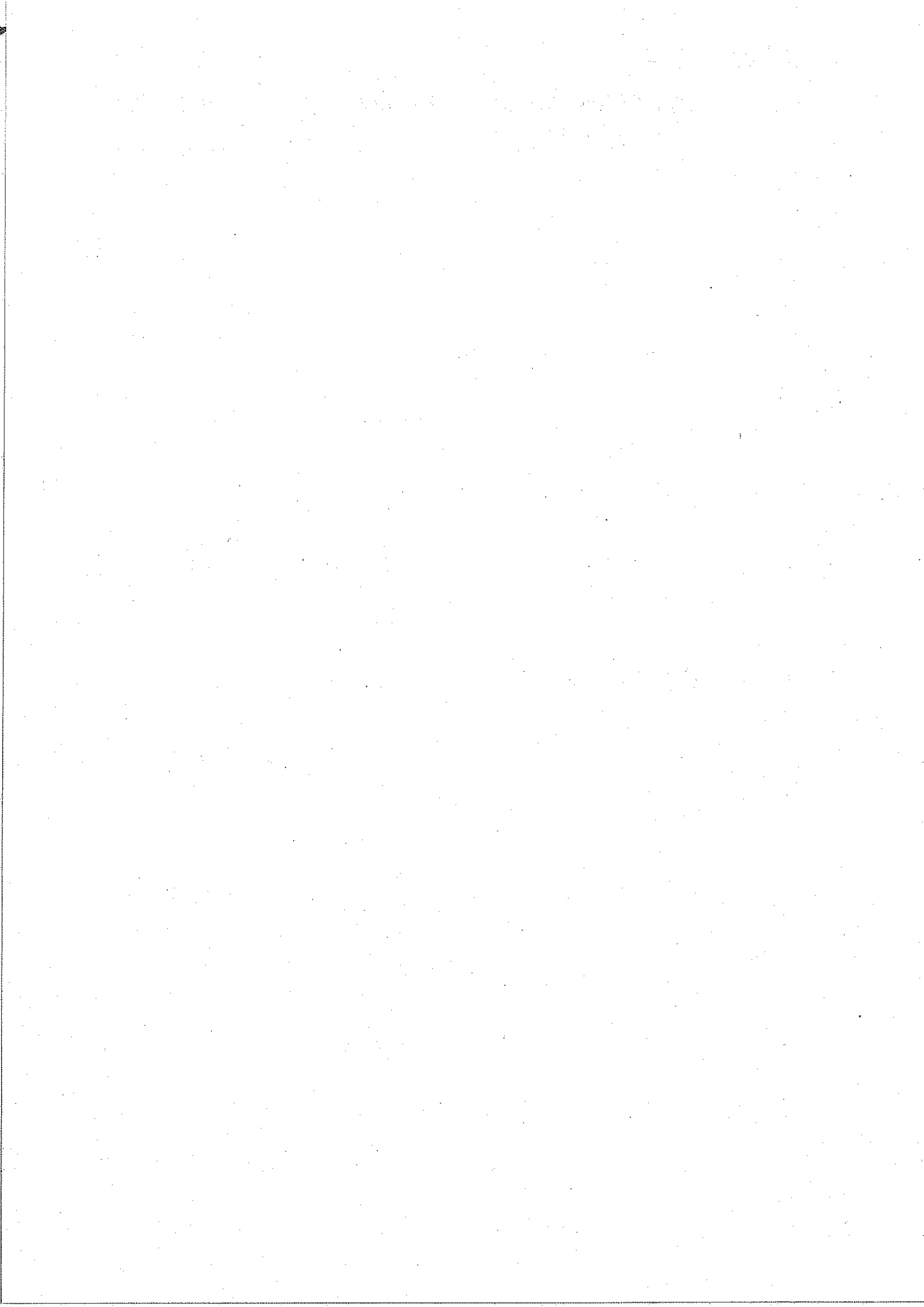
Project Component	Environmental Outcome	Commitment	Timing for Completion
		<p>6.1.3 Erosion and sediment control plans shall be prepared and implemented as part of future project and development applications for each stage of development. These plans shall address the construction phase of the subdivision works, as well as interim measures for the subsequent urban development within each precinct, to remain in place until such time as permanent stormwater quality control measures can reasonably operate to the satisfaction of Council.</p> <p>6.1.4 Downstream trunk drainage easements will be registered in favour of Council, and the construction and future construction of downstream trunk drainage infrastructure and its dedication to Council secured to the satisfaction of Council, as part of the subdivision certificate process for each relevant urban precinct. A six (6) month defects liability period for the trunk drainage shall commence at the time of dedication to Council.</p> <p>6.1.5 The proponent will provide safety measures as required by Council around public stormwater drainage infrastructure in all cases where the design of the drainage infrastructure cannot satisfactorily limit risk exposure to members of the public.</p>	<p>As part of the completion of infrastructure works for each stage of development.</p>
	<p>6.2 Flood protection is provided in the design of development.</p>	<p>6.2.1 Development shall be in accordance with Council's DCP Section A3- Development of Flood Liable Land.</p> <p>6.2.2 The proponent will provide a Design Flood Level Map with each development and project application for land subject to flooding in the design flood event (being the 100 year ARI flood event, taking into account climate change impacts 0.9m sea level rise plus 10% increased rainfall intensity). The map will show peak flood levels for local and regional flood events at 0.1m contours. The map will be used as the basis for determining fill and floor levels for adjoining precincts.</p> <p>6.2.3 The proponent will provide detailed flood impact assessments for development and project applications on flood liable land. The flood impact assessment will include updates to the Design Flood Level Map.</p>	<p>As part of development and project applications, where relevant.</p>

Project Component	Environmental Outcome	Commitment	Timing for Completion
7. Groundwater Management	7.1 Groundwater is appropriately managed.	7.1.1 The provisions of the Groundwater Management Plan (Gilbert & Sutherland, April 2008) will be implemented. 7.1.2 Groundwater Management Plans will be provided in relation to each future Development Application or Project Application where the use of groundwater is proposed or where it is proposed to intercept the groundwater table.	Submission of Management Plans prior to approval of earthworks Construction Certificate applications.
8. Management of soils and geotechnical conditions	8.1 Geotechnical conditions are appropriately managed.	8.1.1 The Broadscale Geotechnical Investigation - Cobaki Lakes (Cardno Bowler, February 2010) will be implemented to support earthworks, civil construction and building work.	As part of project applications and development applications for earthworks, civil and building works.
	8.2 Acid sulphate soils (ASS) are appropriately managed.	8.2.1 Detailed ASS investigations and ASS Management Plans will be prepared, for the detailed design and construction of areas of potential acid sulphate soils, and implemented.	Submission of investigation reports and Management Plans prior to approval of Construction Certificate applications.
	8.3 Contaminated sites are appropriately managed.	8.3.1 Detailed contamination assessments of potentially contaminated land will be undertaken, and, if required, Remediation Action Plans implemented. 8.3.2 Site audit statements will be obtained where necessary to verify the remediation of any contaminated land in accordance with relevant NSW guidelines.	As part of project applications and development applications for each relevant stage of development.
9. Bushfire Protection	9.1 Bushfire protection measures are included in development.	9.1.1 Development will comply with the guidelines <i>Planning for Bushfire Protection 2006</i> . 9.1.2 Bushfire management plans will be prepared and submitted with all relevant development applications.	As part of project applications and development applications for each relevant stage of development.
10. Interface with surrounding land	10.1 Agricultural buffers, ecological buffers, and appropriate measures for management of generic impacts on and from adjacent land are included in development.	10.1.1 The recommendations of the Agricultural Buffer and Off-Site Impacts Assessment (Gilbert & Sutherland, May 2008) will be implemented.	As part of each stage of development, where relevant.

Project Component	Environmental Outcome	Commitment	Timing for Completion
11. Aboriginal Cultural Heritage Conservation	11.1 Aboriginal cultural heritage on the site is appropriately conserved.	11.1.1.1 The requirements of the Cultural Heritage Management Plan (CHIMP) (Everick, April 2010) will be implemented in relevant areas.	All stages of work
12. Road noise	12.1 Dwellings meet residential noise standards.	12.1.1 Future project applications and development applications for subdivision or housing adjacent to subarterial, distributor and connector roads are to include an acoustic report that addresses the potential impacts of road noise, and includes measures to mitigate noise and achieve relevant NSW standards for residential noise levels in dwellings.	As part of each stage of development, where relevant.
13. Ownership and management of open space and environmental protection zones	13.1 The long term ownership and management of open space and Environmental Protection areas is secured	13.1.1 The main central open space corridor on the western side of Cobaki Parkway, being the subject of Project Application No 08-0200, is to be constructed and landscaped in stages. The proponent will offer to dedicate this land to Council in stages, such dedication to occur upon the works being completed.	In accordance with the proponent's development program and relevant Management Plans.
		13.1.2 The environmental protection zone on the eastern side of Cobaki Parkway adjacent to Cobaki Creek is to be rehabilitated, and biting midge and mosquito controlled, in accordance with the relevant Management Plans. The proponent will offer to dedicate this land to Council, such dedication to occur upon the works being completed.	
		13.1.3 The remaining environmental protection-zoned areas adjacent to each development precinct will be rehabilitated and/or landscaped as part of the development of the adjacent development precinct, in accordance with the relevant Management Plans. The proponent will offer to dedicate these areas to Council, such dedications to occur upon the works in respect of each area being completed.	In accordance with the proponent's development program and relevant Management Plans.
		13.1.4 The proponent will offer to execute the relevant covenants in favour of Council in respect of areas identified to be so protected.	In accordance with the proponent's development program and relevant Management Plans.

Project Component	Environmental Outcome	Commitment	Timing for Completion
14. Tweed Shire Council DCP	14.1 Development at the Cobaki Estate is generally consistent with the Tweed Shire Council DCP and Development Design and Construction Specifications to the extent that the provisions thereof are not inconsistent with the Cobaki Concept Plan and Development Code which take precedence.	<p>13.1.5 The proponent will provide easements or other lawful mechanisms acceptable to Council that are reasonably necessary to enable Council to undertake regular environmental management and/or the maintenance of infrastructure within reserves (including drainage, open space, sewer, water and roads), particularly within areas zoned Environmental Protection.</p> <p>14.1.1 Future project applications and development applications are to be generally consistent with the Tweed Shire Council DCP and Development Design and Construction Specifications to the extent that the provisions thereof are not inconsistent with the Cobaki Concept Plan and the Cobaki Development Code.</p>	<p>Prior to the commencement of works in the central open space. In accordance with Council's requirements</p> <p>At each stage of development.</p>

APPENDIX B. DIRECTOR-GENERAL'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS



Attachment 1
Director-General's Environmental Assessment Requirements
 Section 75 of the Environmental Protection Act 1979

Application number
06_0316
Project
A Concept Plan for the following: <ul style="list-style-type: none"> • residential development; • town centre; • schools; and • open space.
Location
Lot 1 DP 570076, Lot 2 DP 566529, Lot 1 DP 562222, Lot 1 DP 570077, Lot 1 DP 823679, Lots 46, 54, 55, 199, 200, 201, 202, 205, 206, 209, 228 & 305 DP 755740, Cobaki Lakes, off Piggabeen Road Tweed Heads
Proponent
Leda Manorstead Pty Limited
Date issued
21 August 2007
Expiry date
21 August 2009
General requirements
<p>The Environmental Assessment (EA) for the Concept Plan must include:</p> <ol style="list-style-type: none"> 1. An executive summary; 2. An outline of the scope of the project including: <ul style="list-style-type: none"> • any development options; • justification for the project taking into consideration any environmental impacts of the project, the suitability of the site and whether the project is in the public interest; • outline of the staged implementation of the project if applicable; 3. A thorough site analysis including constraints mapping and description of the existing environment; 4. Consideration of any relevant statutory and non-statutory provisions and identification of any non-compliances with such provisions, in particular relevant provisions arising from environmental planning instruments, Regional Strategies (including draft Regional Strategies) and Development Control Plans. 5. Consideration of impacts, if any, on matters of national environmental significance under the Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i>; 6. An assessment of the potential impacts of the project and a draft Statement of Commitments, outlining environmental management, mitigation and monitoring measures to be implemented to minimise any potential impacts of the project; 7. The plans and documents outlined in Attachment 2; 8. A signed statement from the author of the Environmental Assessment certifying that the

- information contained in the report is neither false nor misleading; and
9. An assessment of the key issues specified below and a table outlining how these key issues have been addressed.

Key Issues for Concept Plan Application

The EA for the **Concept Plan** must address the following key issues:

1. Structure Plan – Land Uses, Subdivision and Urban Design

- 1.1 Provide a Structure Plan for the site that identifies location of indicative landuses, densities, road and open space networks, residential development, town/neighbourhood centres and schools and protection of areas of environmental significance. The Structure Plan is to include:
- (a) consideration of the site's context, topography, opportunities and constraints;
 - (b) identification of areas capable of achieving more intensive land uses, that provide increased housing supply and choices and promote social and economic development;
 - (c) consideration to provision of employment lands (other than retail) to assist development of a self-sustaining community;
 - (d) identification of any inconsistencies with the Tweed LEP 2000, relevant DCPs and policies in relation to key planning controls; and
 - (e) consideration of the *Far North Coast Regional Strategy's* Neighbourhood Planning Principles, specifically addressing the need for affordable housing and for housing diversity.
- 1.2 Consideration of the integration and compatibility of the proposed land uses (eg residential properties, town centres, schools, open space and environmental protection areas) and potential impacts such as access arrangements for each use, traffic, buffers, density controls; suitability of the proposed development with the surrounding area and visual impacts in the context of adjoining and surrounding development and from all publicly accessible areas.
- 1.3 Where land proposed for development adjoins land that is currently used for agriculture, a conflict assessment will be required including investigating measures to avoid land-use conflict, consistent with the principles of the Northern Rivers Farmland Protection Project.
- 1.4 Demonstrate the consistency of the proposal with the *NSW Coastal Design Guidelines*, the *Far North Coast Regional Strategy* and *Tweed Council's DCP 16 – Subdivision Manual*.

2. Visual Impact

- 2.1 Address the visual impact of the proposal in the context of surrounding development and relevant mitigation measures. In particular address impacts on the amenity of the foreshore, overshadowing of public reserves, loss of views from public places and cumulative impacts. Consideration of the Gold Coast Airport Lighting Zone Map and the *Commonwealth Airports (Protection of Airspace) Regulations*.

3. Traffic Management and Access

- 3.1 Prepare a Traffic Concept Plan in accordance with the RTAs *Guide to Traffic Generating Development* to include:
- (a) Details and analysis of proposed access to the site;
 - (b) Modelling of the traffic impact on the proposal and existing road network;
 - (c) Assessment of the impacts on the existing and proposed road network and infrastructure such as road junctions using AUSTROADS guidelines to identify mitigation measures;

- (d) Impact on the Tugun Bypass, existing Pacific Highway and Kennedy Drive;
- (e) Impact on Boyd Street and identify the necessary mitigation measures required;
- (f) Development of a matrix to identify the timely provision of road infrastructure;
- (g) Connectivity to existing and future adjoining development;
- (h) Mitigation of the impact of road traffic noise and vibration on the existing and proposed development;
- (i) Location of schools and community facilities away from arterial roads;
- (j) Provision of retail and commercial development without direct access to arterial roads;
- (k) Road networks designed to maintain a safe speed environment;
- (l) Provision of at grade or grade separated traffic management treatments to protect all road users at conflict points;
- (m) Provisions for both public and school bus routes; and
- (n) Pedestrian and bicycle connections to community facilities and existing networks.

4. Flora and Fauna

- 4.1 Demonstrate that the development footprint will not adversely impact on existing native flora and fauna. This should include a consideration of the impact of the proposal on wildlife corridors, any remnant bushland, Koala habitat in accordance with SEPP 44 and consultation with Council and threatened species and their habitats in accordance with the draft *Guidelines for Threatened Species Assessment* (July 2005).
- 4.2 Provide a description of the proposed treatment of any ecological buffers, including interaction with the proposed land uses, asset protection zones, stormwater structures, extent of proposed environmental restoration and enhancement works.
- 4.3 Assess proposed native vegetation clearing with consideration of potential impacts and if applicable, provide details of any offset strategy or other suitable mitigation measures to ensure that there is no net loss of native vegetation values.
- 4.4 Consideration of the provision, management and ongoing maintenance of general public open space.
- 4.5 Provide an assessment against SEPP 14 – Coastal Wetlands.
- 4.6 Address the requirements of Council's DCP 25 – Biting Midge and Mosquito Control.

5. Water Management

- 5.1 Address the requirements of relevant flooding data in relation to access to, within and from the site, the location of land uses and minimum site and floor levels.
- 5.2 Address the impact of the development on the Cobaki Broadwater and nearby existing development, in relation to the flood impacts of the proposal.
- 5.3 Consider impacts, if any, associated with climate change and sea level rise.
- 5.4 Identify the impacts of the development on the existing hydrology, hydrogeology, groundwater and geology of the site. Consideration should be given to flood prone areas; the impact on wetlands, riparian zones, and other important habitat areas and the need for buffers to protect environmentally sensitive lands.
- 5.5 Assess the proposal against the recommendations of the framework for coastal lake sustainability assessment, the *Independent Public Inquiry into Coastal Lakes: Final Report* (April 2002) and the *Healthy Rivers Commission Report into Coastal Lakes and Statement of Joint Intent* (all by the Healthy Rivers Commission of NSW), the Northern Rivers Catchment Action Plan and the Cobaki Broadwater Management Plan.
- 5.6 Address concept drainage and stormwater management issues arising from the development. This should include:
 - (a) demonstrating that drainage and stormwater runoff will not have a significant impact on the surrounding environments downstream of the development (especially water, wetlands, and important habitat areas);
 - (b) demonstrating consistency with the *Tweed Integrated Water Cycle Management* –

	<p><i>Context and Strategy Study (March 2006)</i>; and</p> <p>(c) the identification of any on-site treatment of stormwater and waste water, including recycling, Water Sensitive Urban Design, the need to incorporate dual use reticulation, and drainage infrastructure</p>
6. Contamination and Acid Sulfate Soils	
6.1	Identify potential contamination, acid sulfate soils, and other geotechnical issues on the site and address these in accordance with relevant legislation, planning instruments, and guidelines
7. Noise Impacts	
7.1	Demonstrate that the proposal will be designed, constructed, operated and maintained so that there is no unacceptable level of noise impacts (including traffic noise) on amenity in the locality.
7.2	Consideration of the possible impacts of aircraft noise from the Gold Coast Airport.
8. Bushfire Risk	
8.1	Demonstrate that the future development of the site is consistent with the <i>Planning for Bushfire Protection 2006</i> .
9. Heritage	
9.1	Identify whether the site has significance to Aboriginal cultural heritage and identify appropriate measures to preserve any significance (refer to <i>draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation</i>).
9.2	Identify any other items of European heritage significance and provide measures for conservation of such items
10. Utilities Infrastructure	
10.1	Prepare a utility and infrastructure servicing report (including plans) for the site that includes: <ul style="list-style-type: none"> (a) identification and location of existing and future utility and infrastructure servicing the site; (b) demonstration that the site can be satisfactorily serviced for utility services; and (c) augmentation works necessary to fully service the project, accompanied by indicative cost of these works
11. Future Demographics	
11.1	Identify the likely future community to occupy the site and forecast the community services and facilities required. This Report should: <ul style="list-style-type: none"> (a) identify the likely demographics and community context after analysing and considering similar development within the region; (b) provide an analysis of demographic projections; (c) identify existing facilities and services and the projected demand the development will have on them, as well as any other implications that might arise; (d) detail strategies and actions to satisfy the future demands for facilities and to mitigate any impacts on existing facilities and services required for the development; and (e) identify future facilities and services that will be required as a result of the development
12. Planning Agreements and/ or Developer Contributions	
12.1	Address and provide the likely scope of any planning agreement and/or developer contributions with Council/ Government agencies, including the RTA.
13. Development Staging	

13.1 Identify staging of the development and demonstrate that land supply and demand will be released in an orderly and coordinated manner and will occur in conjunction with associated facilities and services.

14. Off-site Impacts

14.1 Demonstrate that the development will not have any adverse impacts on adjoining lands. This is to include consideration of adjacent land uses, water quality, water quantity, erosion, sedimentation, fire management, fencing, and access.

Consultation

You should undertake an appropriate and justified level of consultation with the following agencies during the preparation of the environmental assessment:

(a) *Agencies or other authorities:*

- Tweed Shire Council;
- Department of Environment and Conservation;
- Roads and Traffic Authority;
- Department of Natural Resources; and
- NSW Rural Fire Service.

The following agencies and authorities should also be consulted, where relevant:

- Ministry of Transport;
- Department of Education & Training;
- Local Aboriginal Land Council and any relevant local aboriginal organisations;
- Department of Primary Industries;
- Department of Housing;
- NSW Health Department, including North Coast Area Health Service;
- NSW Heritage Office;
- Gold Coast Airport Pty Ltd;
- Northern Rivers Catchment Management Authority;
- Utility and infrastructure providers; and
- NSW Emergency Service agencies.

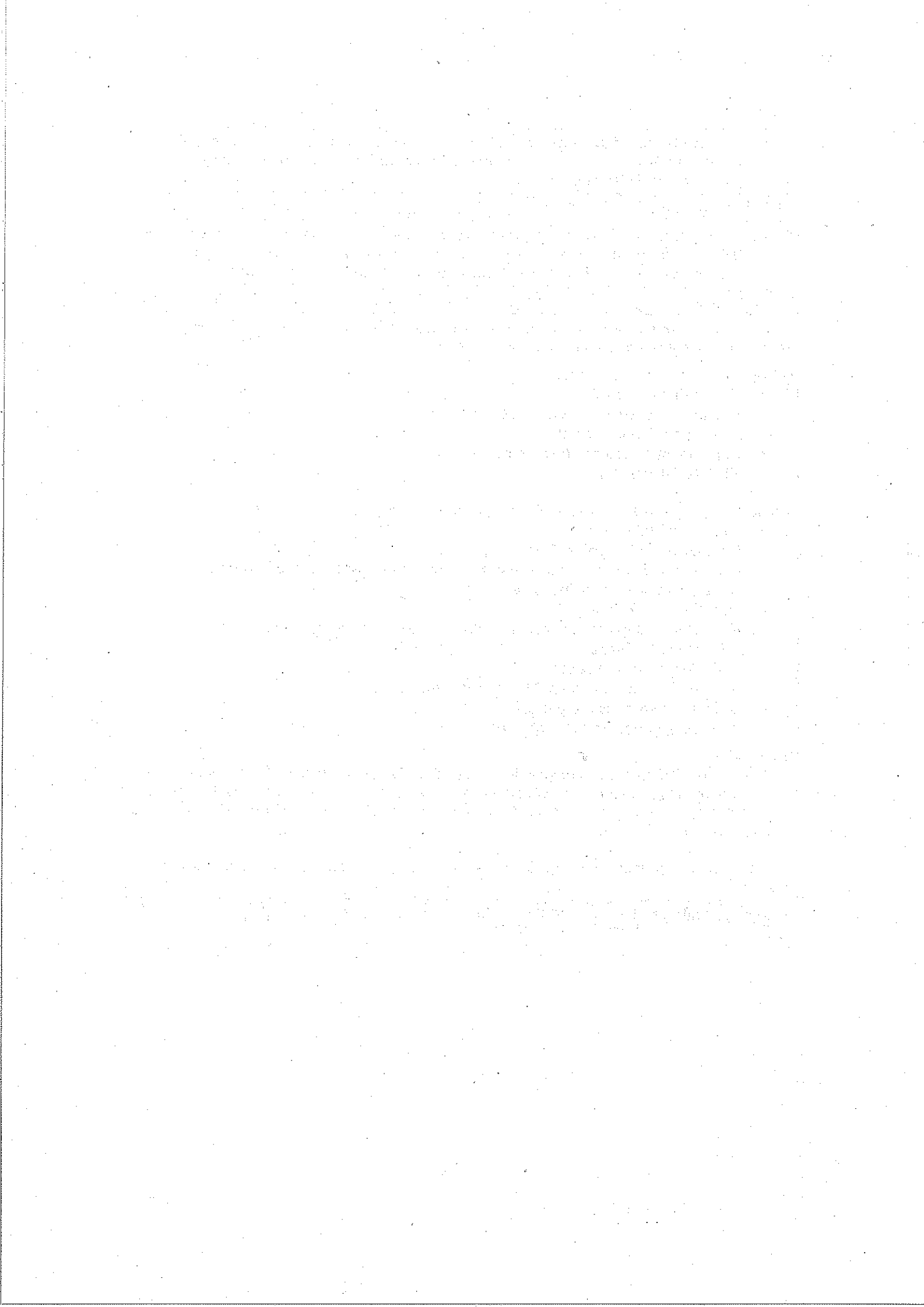
(b) *Public:*

Document all community consultation undertaken to date or discuss the proposed strategy for undertaking community consultation. This should include any contingencies for addressing any issues arising from the community consultation and an effective communications strategy.

The consultation process and the issues raised should be described in the Environmental Assessment.

Deemed Refusal Period

120 days



APPENDIX C. COMPLIANCE WITH ENVIRONMENTAL PLANNING INSTRUMENTS

The Environmental Planning Instruments considered in the assessment of the proposal are:

State Environmental Planning Policy (Major Development) 2005

The project is a Major Project under *State Environmental Planning Policy (Major Projects) 2005* (as in force at the time) being a subdivision for residential purposes for more than 25 lots in the NSW Coastal Zone. The opinion was formed by the Director-General as delegate on 24 January 2007.

State Environmental Planning Policy (Infrastructure) 2007

The Infrastructure SEPP aims to assist in effective infrastructure delivery. Schedule 3 of the SEPP requires the proponent to refer the concept plan to the RTA for developments comprising of 300 or more apartment dwellings, commercial premises with a floor space over 4000m², or subdivision of 200 or more allotments where the subdivision includes opening public roads. In accordance with the SEPP, the application was referred to the RTA on 15 December 2008. RTA's concerns have been addressed in Section 5.

State Environmental Planning Policy No. 14 – Coastal Wetlands

SEPP 14 aims to preserve and protect coastal wetlands. The subject site is immediately to the west of SEPP 14 Wetland number 1, part of the broader Cobaki Broadwater. No development is proposed in the SEPP 14 wetland. It is proposed to separate the development from the adjacent wetland and estuarine environments of the Cobaki Broadwater through the construction of the Cobaki Parkway. Coastal saltmarsh contained on the site that lies to the east of the proposed Parkway and the Broadwater is proposed to be rehabilitated.

State Environmental Planning Policy No. 44 – Koala Habitat Protection

SEPP 44 aims to encourage proper conservation and management of natural vegetation areas that provide habitat for koalas. The SEPP applies to development in the Tweed Shire on land parcels of more than one hectare. In accordance with the SEPP, the existence of Core Koala Habitat must be determined before development consent can be given.

Although part of the site meets the criteria for potential koala habitat, no core koala habitat is present on the site, due to the absence of evidence of a resident population. As such, a Koala Plan of Management has not been prepared.

State Environmental Planning Policy No. 55 – Remediation of Land

SEPP 55 aims to provide controls and guidelines for the remediation of contaminated land. It requires the consent authority to consider the potential for the site to be contaminated. A number of areas within the subject site have been identified to be potentially contaminated, and a preliminary Contamination Assessment was prepared and submitted with the application. The initial assessment indicated that a Stage 2 (Detailed) Site Contamination Assessment is required to confirm the suitability of specific areas of the site for residential development. The Preliminary (Stage 1) report goes on to say that it is likely that any contamination identified during Stage 2 investigations will be manageable and remediation will be possible to facilitate residential development in accordance with the proposed concept plan.

State Environmental Planning Policy No. 71 – Coastal Protection

SEPP 71 applies to development in the coastal zone. A part of the Cobaki site is situated within the Coastal Zone, as defined under the *Coastal Protection Act 1979*. SEPP 71 sets out matters for consideration (clause 8) by a consent authority when determining a Part 3A application. As well, the proposed concept plan needs to be appropriate for the coastal location and suitably located. There needs to be a consistent and strategic approach to coastal planning and management, and a clear development assessment framework.

North Coast Regional Environmental Plan

The North Coast Regional Environmental Plan (North Coast REP) applies to the northern coastal local government areas between Tweed Shire and Hastings- Port Macquarie Shire. The broad provisions of the North Coast REP are to protect the natural environment, encourage built environment which is efficient and attractive, and guide productive and environmentally sustainable development. Specifically, the provisions of the North Coast REP which relate to this development are:

Development in the vicinity of heritage items: There are no heritage items of European significance. For detail on management of Aboriginal Cultural Heritage see 5.6.1.

A consideration of the regional social, economical and visual impacts of the development, and the impact of the development on local amenity: This will be addressed in future project applications.

The adequacy of the available community and welfare services: The town centre and neighbourhood centre are proposed to include land for community and welfare uses. The proposal also includes land for schools and a community facility.

The availability of sporting fields or other specialised recreational facilities: The proposal includes central sporting fields and neighbourhood parks. A public plaza is likely to be provided in the new town centre. There may also be passive access to wetland areas.

Tweed Local Environmental Plan 2000

The *Tweed Local Environmental Plan 2000* (Tweed LEP) sets the planning framework for development in Tweed Shire Council and establishes permissible forms of development and land use. Broadly the aim of the Tweed LEP is to encourage sustainable economic development that is compatible with the area's environmental and residential amenity qualities. The Tweed LEP also establishes the permissible forms of development and land use, pursuant to clause 11. The subject site is zoned 2(c) Urban Expansion, 6(b) Recreation, 7(a) Environmental Protection (Wetlands and Littoral Rainforest), 7(d) Environmental Protection (Scenic/Escarpment) and 7(l) Environmental Protection (Habitat). All proposed developments are in zone 2(c) Urban Expansion. A number of rezonings are proposed as part of the application to ensure that all development is permissible within the respective zones. An amendment to the Tweed LEP is proposed to allow lots less than the 450 m² minimum. There is no development proposed within the 7(a), 7(d) and 7(l) zones, except roads. The proposed development's environmental impacts land will be mitigated through the implementation of management and rehabilitation plans. Detailed environmental impact issues are addressed in **Section 5**.

APPENDIX D. COMPLIANCE WITH OTHER PLANS AND POLICIES

Other plans and policies considered in the assessment of the proposal:

Tweed Development Control Plan 2007

The Tweed Development Control Plan (DCP) applies to all land within the Tweed Shire Council. It provides more specific standards and requirements for permissible development. The development controls which relate to the proposed concept plan are:

Section A3 – Development of Flood Liable Land contains detailed controls for development on flood liable land. Kings Forest has small areas of land which are flood liable in the 1-100 year flood event. Development on flood liable land is discussed in more detail in **Section 5** of this report.

Section A5 – Subdivision contains guidelines addressing environmental constraints, landform, stormwater runoff, drainage, waterways and flooding, buffers, neighbourhood and town structure, movement networks, open space networks, lot layout and infrastructure. No physical works are proposed for the Concept Plan, as all subdivision will be made with future project applications.

Section A6 – Biting Midge & Mosquito Control aims to minimise and control the problem of biting midges and mosquito. The developable areas of the site are considered to be suitable for urban development, but these controls will nevertheless be addressed with future project applications.

Section A14 – Cut and Fill on Residential Land contains controls to ensure earthworks are sympathetic to the site's topography. There are no physical earthworks proposed under the Concept Plan application however minor filling will be required with future project applications to allow parts of the residential development land to be above the 1 in 100 year flood level.

Section B7 – Overall planning intent for Cobaki. Estimates that the site has an approximate capacity for 4700 dwellings. This Section has been largely superseded by the proposed concept plan and Cobaki Development Code.

NSW Coastal Policy 1997

The NSW Coastal Policy sets out the direction for coastal zone management, planning and conservation. It aims to plan for population growth and economic development, without compromising the natural, cultural, spiritual, and heritage values of the coastal zone. The Policy includes objectives relating to sustainable human settlement. The proposed Concept Plan for the site complies with the NSW Coastal Policy.

NSW Coastal Design Guidelines

The NSW Coastal Design Guidelines aims to ensure that future developments are sensitive to natural and urban settings of coastal places. According to Part One of the Guideline which describes and identifies the hierarchy of coastal settlement types, Cobaki appears to fit the description of a New Coastal Settlements. Part two of the Guidelines provides best practice urban design principles aimed to promote environmental sustainability. These include defining the footprint and boundary of development, connecting the open spaces, protecting natural edges, reinforcing the street pattern and having appropriate building designs for a coastal context.

The concept plan is generally consistent with the Guidelines. Passive and active open spaces will be connected by a network of walkways and cycleways. Ecologically sensitive areas are protected by zoning the areas environmental conservation, and implementing ecological buffers in urban expansion zones. Street pattern is reinforced through a high level road network connecting to Boyd Street and Piggabeen Road. Street pattern and building design will be addressed at future project application stages. These issues are discussed in more detail in **Section 5**.

Far North Coast Regional Strategy

The Far North Coast Regional Strategy was adopted to ensure a long term vision is achieved for the far north coastal areas of NSW. The strategy identifies Cobaki as a growth area for urban development. Broadly the Strategy aims to sustainably manage the expected population increase in the region, protect the region's environmental assets, cultural values and natural resources, encourage economic opportunities over the next 25 years. More specifically, the elements of the strategy which applies to Cobaki are:

Environment and Natural Resources: The Strategy requires new development that is adjacent to farmland, waterways, wetlands and areas of high biodiversity value to incorporate buffers. The proposed development incorporates ecological and agricultural buffers in accordance with this Strategy.

Cultural Heritage: The Strategy seeks to identify items of cultural significance in planning instruments, and to ensure that developments are sympathetic and compatible these heritage items. The proposed development seeks to conserve and protect areas of indigenous heritage found on the site in accordance with the Strategy.

Natural Hazards: The Strategy seeks to ensure that future urban development is not located in high natural hazard risk areas. Parts of the Cobaki site are subject to 1 in 100 year flooding. The future urban development locations have been planned to avoid these areas.

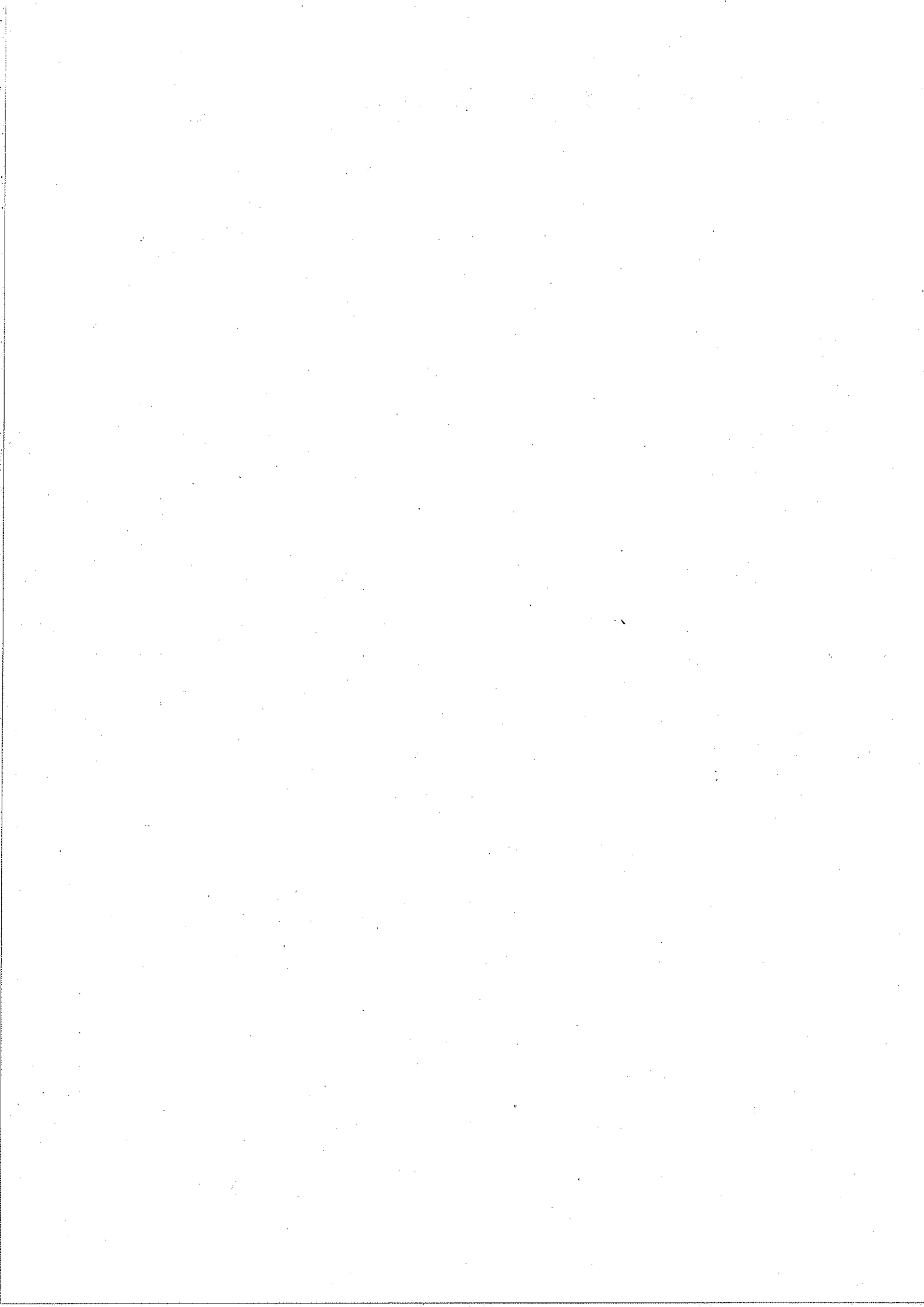
Settlement and Housing: The Strategy targets urban development to an identified hierarchy of towns and villages, and forecasts future demographic trends. It estimates that 19,100 new dwellings will be required in Tweed LGA. This housing demand will be met

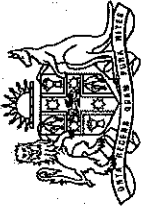
through the development of land only within the identified Town and Village Growth Boundaries. Cobaki has been identified to fall within the Growth Boundary for the Tweed area.

Settlement Character and Design: The Strategy seeks to ensure that new development be based upon the 'neighbourhood planning principles and include a range of well design housing with easy access to services and facilities. This element is addressed in more detail within the proposed Cobaki Development Code.

Water and Energy Resources: The Strategy seeks to maintain and improve water quality through encouraging best practice initiatives. All future developments will include water sensitive urban design principles and meet stormwater run-off targets.

APPENDIX E. SUMMARY OF PUBLIC SUBMISSIONS





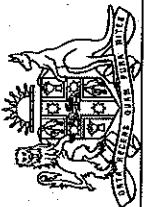
COBAKI LAKES RESIDENTIAL DEVELOPMENT (06_0316)

Summary of Public Submissions (49 submissions received)

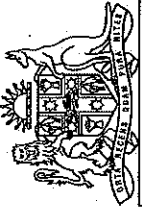
OBJECTIONS TO PROPOSAL (41 objections)	
Topic	Details / Comment
Flora and Fauna	<p>27</p> <ul style="list-style-type: none"> ▪ With a population of 5300 dwellings, the development will bring with it around 1000 cats which will impact on mammals, birds and reptiles. These animals are not considered in a biodiversity assessment. Domestic animals will have a strongly adverse impact on native flora and fauna. ▪ Authorities should place a restrictive covenant / condition on the development preventing the ownership of cats as pets within the community. A policy of no cats and dogs should be implemented to protect wildlife. ▪ Environmental restoration works in all environmental protection zones and open space areas should be funded by the developer for a period of 10 years. ▪ Impacts of stormwater (particularly freshwater) on the saltmarsh. Stormwater should not enter Cobaki Creek and Broadwater. ▪ Developer should commit to manage erosion restoration on Cobaki Creek bank as part of the saltmarsh restoration. ▪ Using Existing Use Rights (EURs) and various piecemeal consents over the decades, developers systematically set about destroying or degrading as much of the ecological value of their site as possible. These EURs include fencing, pasture improvement, fire management and maintenance of drainage channels, which often destroy local and regional fauna movement/dispersal corridors. ▪ Isolated patches or narrow strips of habitat should be fortified through vegetation work beyond the prescribed buffer zones. ▪ Incremental loss of habitat has very significant impacts on fauna and flora through of arboreal shelter/nest sites, loss of forage habitat, loss of terrestrial shelter sites, loss of 'stepping stone' habitat patches used by more mobile species, loss of tree seed resource for natural revegetation processes and loss of genetic diversity in vegetation species. Most of these losses cannot be mitigated for in the short term (20-30 years) through revegetation. Given the current degraded state of much of the habitats remaining on site it is likely that current threatened species populations (or individuals) will no longer exist when revegetated areas reach maturity (80+ years). ▪ Recommend the following additional measures be included in the Fauna Management Plan: <ul style="list-style-type: none"> - An ecologist must inspect all areas, not just treed areas, prior to commencement of clearing works and be present and involved in the process where displaced wildlife may be encountered. The clearing contractor / machinery operator will be required to fully co-operate with the ecologist where specific potential fauna shelter sites (PFSS) are identified. - Clearing of trees containing hollows or other PFSS have been physically examined by the ecologist and any wildlife removed using a cherry picker and chainsaw. Clearing of understorey vegetation first does not always encourage wildlife to vacate their shelter site. ▪ Infrastructure works should be confined, wherever possible, to those parts of the site that have already been cleared of vegetation. ▪ The EA does not address wildlife road related mortality. Wildlife can be prevented from accessing roads by using fauna proof fencing to direct wildlife to under and overpasses. ▪ Additional fauna management measures required include: <ul style="list-style-type: none"> - Glider poles on both sides of any road 15m wide or more, which intersects forested habitat. - No planting of heavy nectar or seed producing species of vegetation in the vicinity (within 20m) of roads without appropriate road side screening to prevent vehicle strike with nectivorous birds, bats, gliders and seed eaters such as birds and gliders. ▪ There is an unnecessary conflict between protection of the Scribbly Gum habitat and provision of public open space. Scribbly Gum habitat should be protected in its entirety not turned into public open space so the proponent can meet the required open space dedication.



OBJECTIONS TO PROPOSAL (41 objections)	
Topic	Details / Comment
Number of references in submissions	<ul style="list-style-type: none"> ▪ The Scribbly Gum area would be better off if fenced and signed to prevent unnecessary human access with periodical weed control. Or divided into 2-3 sections and with an access corridor to allow human access through the area without danger of limbs falling. Fencing should allow fauna access. ▪ The proponent's proposal to fence individual trees or groups of two or three Gums does not allow for recruitment, resulting in the loss of the entire Scribbly Gum community along with its fauna inhabitants. ▪ Aerial photos show that areas of Scribbly Gum have been cleared illegally. The developer should be fined and required to re-establish this unique habitat. ▪ Future road works will need to be sensitively planned to minimise further loss of habitat. ▪ The Scribbly Gum Management Plan is primarily a plan designed to allow tree removal to facilitate urban expansion. There is no consideration of the value of old-growth trees, particularly those containing hollows. ▪ If the Scribbly Gums are a safety hazard, then they should be zoned for Environmental Protection and be managed as a conservation area. Many mature Eucalypts have disappeared in the southern part of the site. ▪ The conservation measures proposed fail the basic test of ecologically sustainability. The on-site sustainability of many threatened species is doubtful and local extinctions are likely, eg: loss of 50% of Scribbly Gum community. ▪ Erecting fences and flower beds around individual Scribbly Gum trees will not allow for natural recruitment or regeneration. ▪ A natural wholistic self-regenerating plan is needed for the Scribbly Gum community. ▪ It is unlikely that the Scribbly Gum Community will be able to regenerate naturally and that habitat values for species (other than birds possibly) will be sustainable. ▪ To provide forage habitat for many of the threatened species would take 50 – 150 years, as mature forest with diverse ecologies is their preferred forage habitat. Revegetation, regeneration and landscape plantings will provide no compensation or amelioration for the loss of habitat for these species. ▪ There has been no serious attempt to nurture the Eucalypt Forest / Woodland on the sandy ridge running north-south on the eastern part of the site as a natural asset or feature. ▪ The property has been steadily degraded by deliberate mass movement of earth and heavy grazing. What remains are isolated pockets of native vegetation that cannot continue to survive by natural regeneration. ▪ Some patches zoned for conservation will be developed, further fragmenting vegetation and creating an increased area of habitat/vegetation subject to edge effects. ▪ It is believed that there is significant variation in the numbers of threatened species reported on the site within the documentation. There are likely to be higher numbers than recorded. ▪ Water storage devices located on a knoll in the middle of the bushland habitat on the western edge of the site should be located to a less sensitive location. ▪ Cane toads and mosquitoes will be difficult to manage in a way that avoids damage to local native ecosystems and populations. ▪ Wildlife is not coping with habitat loss and changes to the environment that we subject them to. When will deforestation / development stop? ▪ The site has 72.8ha of remnant bushland. Earlier in the project it was reported that 90.49ha of remnant bushland. The developer should explain this loss. ▪ The Concept Plan claims that Plans have been prepared with due regard to the conservation of native flora and fauna and ecological communities on site, but TSC has recommended that the Applicant's Plan should be substantially amended. ▪ Obligations apply to the Applicant with respect to the nationally threatened species, the Long-nosed Potoroo and the Wallum Sedge Frog, this has not been attended to. There is no reference in the Concept Plan to desktop studies or targeted studies for the Potoroo nor any mention of potential impacts, whether on or off site. ▪ Wetland migratory birds protected by International Agreements, JAMBA and CAMBA their feeding and roosting habitat sites on the neighbouring Cobaki Broadwater and bordering SEPP14 wetlands on the Cobaki Lakes have not been identified.



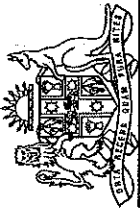
OBJECTIONS TO PROPOSAL (41 objections)	
Topic	Details / Comment
Number of references in submissions	<ul style="list-style-type: none"> ▪ There is no reference in the Concept Plan to the EPBC Referrals Unit and a search of the website shows none has been submitted to date. It is our understanding that the proponents have been requested by DEWHA to refer this action. Has the proposal been referred to DEWHA? ▪ The Tugun Bypass EIS Species Impact Statement Addendum Feb 2005 states that the population of the Long-nosed Potoroo at Cobaki Lakes has been listed as an Endangered Population under Schedule 1 Part 2 of the Threatened Species Conservation Act 1995, yet in the flora and fauna studies in the Concept Plan, the Potoroo is not listed. ▪ Further studies should be undertaken to determine the presence of the Long-nosed Potoroo population, what remedial actions should be required and how these could be meaningfully integrated with the Concept Plan. ▪ Construction of the Boyd Street interchange with the Tugun Bypass will have a much larger footprint than the construction of the overpass. This would be a cumulative impact of construction of the Cobaki Lakes proposal and as such must be given due consideration under the EPBC Act. ▪ Future impacts of the Concept Plan indicate that there is a need to reassess potential future impacts on species of legislative significance as a result of the construction of the interchange and appropriate mitigation measures considered. ▪ The mapping of vegetation communities in Figure 31 does not show the relationship of the site to the Tugun Bypass and whether an interchange would impact on any of these communities. ▪ It is unclear how the ecologist has gathered information on frogs – desktop study or field study? ▪ Wildlife habitat is being fragmented. It is not a workable solution for the wildlife to merely have a proportion of site as wildlife habitat. Habitat needs to be of viable size. ▪ The plans do not show areas of suitable sizes to preserve wildlife and will further contribute to the loss of ecosystems in the area. ▪ The proposal does not appear to include an interchange in the Concept Plan for the future rail interchange. The logical site would appear to place it in an area of Environmental Protection. ▪ There should be an adjustment of the land allocated to the various precincts in order to maintain the required ratio of developed to undeveloped areas and to provide an offset to this further loss of habitat. ▪ Object to habitat loss and fragmentation due to the development. ▪ The Concept Plan proposes offsets and compensation only in areas with development constraints and only outside existing consents. This is contrary to the principles of best practice ecological planning and indicates little regard for the ecological values of the site. ▪ There should be no net loss of native vegetation values. ▪ It is more ecologically appropriate and cost-effective to regenerate existing areas rather than recreating areas of habitat elsewhere. Recreation may not be successful and takes 50 to 100 years, eg: creation of Wallum froglet habitat. ▪ Ecological buffers are very narrow and cannot ensure sustainability of existing remnant vegetation. APZ buffers should be compatible with ecological buffers. ▪ Buffer zones are inadequate. Buffers of 50m should be applied to areas of ecological conservation value. Buffers of 100m should be provided to the SEPP14 wetland. ▪ The development does not take into account the potential impact on the adjacent Cobaki Broadwater, an area of high flora and fauna biodiversity. ▪ Open space included in the saltmarsh area is not appropriate. ▪ The site internal road network will impact on areas of native flora and fauna and wildlife corridors. The extension of Boyd Street to Cobaki parkway has an extremely limited buffer to a sensitive environmental reserve adjacent. ▪ Object to further removal of 10ha of Koala habitat and 22ha of bushland habitat. ▪ There is insufficient evidence for conclusion that the area no longer supports resident koalas. Spot assessments are not reliable or efficient for koala surveys. Line transects and quadrants should be used. The consultant's methodology is insufficient.
Koalas	14



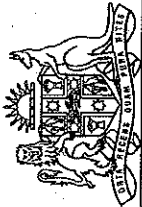
OBJECTIONS TO PROPOSAL (41 objections)		
Topic	Number of references in submissions	Details / Comment
		<ul style="list-style-type: none"> ▪ The request to remove 9.24ha of suitable habitat should not be approved. ▪ Recommendations from the TSC ecologist have been ignored. ▪ Cobaki Lakes site contains an identified primary habitat area for koalas on the southern boundary, a secondary habitat area ranging from western to the northern boundary, and an identified koala habitat areas in the central area of the development site. ▪ With the clearing of 9.24ha of known koala habitat there is a real chance and possibility that this will reduce the occupancy of a species, and will lead to a long-term decrease in the size of the koala population, as well as adversely affecting habitat critical to the survival of the species. ▪ The following actions may modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the Koala species is likely to decline: <ul style="list-style-type: none"> - Fencing of koala habitat in the centre of the site - The conversion of the southern portion of the development into public open space and fencing into two significant portions. ▪ Clearing and development of the Cobaki-terrara Regional Corridor, Piggabean Corridor and McPherson Corridor may reduce the area of habitat for species such as the Wallum froglet and Koala. ▪ Concerned about the potential destruction of koala and other threatened native species' habitat, particularly in light of the massive loss of native flora and fauna in the recent Victorian bushfires. ▪ The development poses a major threat to the future of the Tweed Shire's koala population and delete the natural koala corridor. ▪ The Concept Plan states that Koala habitat will be retained and protected throughout the site, but also states that Swamp Mahoginies, a koala feed tree, are to be removed. All koala habitat should be retained, buffered and linked. ▪ Future road and bridge works will affect koala populations.
Traffic & access	15	<ul style="list-style-type: none"> ▪ Insufficient access roads into the development and to Tweed Heads. The project needs more access roads, or should be reduced in size ▪ Kennedy Drive is unsuitable for additional traffic ▪ Safety concerns re traffic exiting onto Boyd Street due to children's sporting fields on street ▪ Object to traffic exiting onto Boyd Street and any upgrade of Boyd Street as this will result in a loss of residential amenity. Adequate access can be provided to Piggabean Road to Kennedy Drive to the south. ▪ With 180 house development already under construction in Inland Drive and constant traffic to the John Flynn Hospital the whole area has insufficient capacity to handle any more traffic. ▪ Road access to Boyd Street should be denied as a new residential development should not have adverse affect on a previous residential development. ▪ Provide access on and off the Tugun by-pass so Boyd Street can be relieved of traffic proceeding north or south. ▪ Will seek compensation for loss of property value because of this development. ▪ Some work has begun in the Cobaki Lakes area. How can this be if the plan is still open for exhibition and comment? ▪ Traffic will use side streets such as Morshead Street, Monash Street and Tugun Street as shortcuts to avoid hold-ups on Boyd Street, impacting on local residents. Morshead St is narrow and is lined both sides by parked cars so two vehicles cannot pass. ▪ Construction traffic will also use Boyd Street so side streets will be used as a short cut during construction as well. ▪ Once operational, delivery trucks will use Boyd Street, subjecting local residents to the large trucks on local streets. Cobaki Parkway will create another short cut from Tugun to Piggabean. ▪ On/off ramp interchange with Tugun Bypass will be used for access to the airport resulting in more traffic delays on Boyd Street. ▪ Boyd Street be left alone or blocked off and a new road should be built from the underpass to joining up with the temporary road built for the desalination plant. As such, all traffic from Cobaki would be isolated from Tugun residential traffic.



OBJECTIONS TO PROPOSAL (41 objections)	
Topic	Details / Comment
Number of references in submissions	
	<ul style="list-style-type: none"> • Boyd Street is doing an adequate job now for what it was built for and cannot be transformed into a sub-arterial road. • The Deed of Agreement with Gold Coast City Council has not been updated or amended since 1993. It was appropriate then but not now. • Access through Tugun is unacceptable and inappropriate when the Tugun Bypass could be made accessible with an on/off ramp. • Widening Boyd Street would be impossible with so many residents using the street. • The John Flynn Hospital has increased in size and Boyd Street is used by ambulances and patients. Boyd Street has no "peak hours" and traffic will no increase (if it is left alone) as it is only used by residents and visitors to the hospital and Pacific Beach Estate. • Traversing a major arterial road (Boyd Street) would be a nightmare. • Dust from road construction would be intolerable. • Tugun Bypass was constructed to keep traffic out of the suburbs. • Construction of Tugun Bypass created noise and dust for local residents. Do not want this situation repeated. • If residents are to travel to Tweed Heads South to use facilities, the need for a sub-arterial road through the suburbs of Tugun is unnecessary. • Boyd Street will become a 'feeder' thoroughfare for the proposed development. • Tweed Shire will receive no traffic benefit or cost recovery from the existing overpass bridge until the Cobaki Parkway is completed or until public access from Piggabean Road to Boyd Street Tugun via Sandy Lane is made trafficable. • All DOAs may need to be updated because the location of the \$40M Boyd/Sandy Lane Intechange has changed and: <ul style="list-style-type: none"> - RTA and GCCC are now additional partners in the interchange; - TSC has requested an amended DOA that reflects current negotiated position; - Qld Rail may also be involved as the extension of services from Robina to Boyd St train station is underway towards Boyd St. • Lack of consideration of a public transport terminal centre for intercity and local buses, taxi service centre, cross border shared bicycle lanes & pedestrian pathways needed to connect this remote Cobaki Lakes community. • Possible rail route through the Cobaki Lakes property to Murwillumbah should be taken into consideration. • The residential estates are too large for the infrastructure in place at present, especially the road ingress and egress, nature strips for wildlife and public transportation within the Tweed LGA. • Planned upgrades of Kennedy Drive will be insufficient. • The proposal will have a significant impact on traffic flows on Kennedy Drive. Are there any alternatives proposed and/or any upgrades proposed for this road? • There is no real information in the Concept Plan as to how access will be achieved to Piggabean Road. • The existing built environment limits opportunities for increased capacity of Kennedy Drive. • Agreements should be made with the proponent regarding access to Piggabean Road and Kennedy Drive and the bridge re section 94 contributions.
10	<ul style="list-style-type: none"> • The extent of insufficient detail in so many areas of the Concept Plan makes it extremely difficult for proper assessment / surity of proper outcomes. • Tweed Shire is currently being overwhelmed by unsuitable events and enormous projects requiring a lot more expert consideration and time than they are receiving. The social and environmental impacts will be enormous, traffic medical and policing issues are already unviable. • Tweed community is currently overwhelmed by DAs currently before the Minister. We are deeply concerned that the Minister may not be aware of the full impact of these proposals on the existing community, or in the future of the Tweed Shire. • Maintenance of biodiversity is even more essential now in the face of the huge loss of wildlife in recent national flood and fire disasters. • Satellite cities at Kings Forest and Cobaki are too large for any lay person, and most experts, to be able to make a reasonable assessment. • Strongly object to unsustainable, rapid overdevelopment which is simply designed to line individual developers pockets and overwhelm local



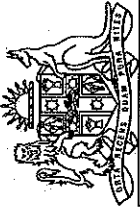
OBJECTIONS TO PROPOSAL (41 objections)		
Topic	Number of references in submissions	Details / Comment
		<p>communities.</p> <ul style="list-style-type: none"> ▪ Concerned about the social and psychological impact on the Tweed community. These developments are simply too large, extensive and intrusive for the existing community to be able to adapt without huge and high detrimental impact. ▪ With such a large development under the control of a single developer, concerns must be raised as to what happens if the development were to collapse financially. ▪ The process of increasing residential development needs to be an ongoing step and not a huge chunk, like Kings Forest and Cobaki because: <ul style="list-style-type: none"> - At present the Tweed Shire population is more than 50% retirees, ultimately resulting in an increase in property sales due to morbidity. - if the properties are sold, then why is there a need for 10,000 new homes? ▪ Support issues raised in Tweed Shire Council's submission. ▪ Due to apparent shortcomings in the Concept Plan the proposal should be refused until all the issues have been addressed.
Utilities infrastructure	4	<ul style="list-style-type: none"> ▪ Any new West Tweed Heads sewage treatment plant should be built in the Piggabeen/Cobaki Valley to service the 14,000 person Cobaki Lakes subdivision, the proposed Terranora Golf Club subdivision and other new West Tweed residential developments. ▪ The second STP now being planned for the Terranora Inlet should be built in the Cobaki Lakes Concept Plan to enable economic reuse of reclaimed treated water and to improve the ecosystem health of the Terranora/Cobaki Inlet. ▪ Taking the ecosystem health of the Terranora Inlet into consideration, Council's claim that reclaimable wastewater to be uneconomical is a biased point of view favouring Council when it stands to make a profit from a readily available source of drinking water, even though the water supply from the Upper Tweed and Oxley Rivers might be unsustainable in future years because of warming climate change. ▪ Council staff have raised concerns about the future water supply and sewage treatment capabilities. These issues need to be addressed. ▪ The Tweed already suffers an acute lack of infrastructure as a result of the influx of ill-considered development approved by Council. ▪ Our water catchment is simply not capable of providing water for the proposed population increase inherent as a result of the development. ▪ Concerned about impact of increased population on infrastructure and services, including emergency services, telecommunications, sporting facilities, roads and traffic.
Rezoning	4	<ul style="list-style-type: none"> ▪ Proposed rezonings do not adequately protect the ecological values of the site. ▪ Scribbly Gum area should be retained as a reserve. Rehabilitation, restoration and maintenance of this reserve should be paid for by the developer for a minimum of 10 years. ▪ Saltmarsh area should be rezoned to 7(a) Environmental Protection and dedicated to Council after a developer funded rehabilitation and maintenance program of 10 years. ▪ Object to any rezoning of Environmental Protection Zones given the little remaining habitat of value to threatened and other fauna species on site. ▪ Do not agree with applicant's claim that the proposed refinements to the zone boundaries will provide better environmental and urban outcomes consistent with State planning strategies, policies and instruments. ▪ While many of the areas proposed to be rezoned are justified on the basis of previous consents, the applicant should submit their rezoning request in the upcoming review of the TSC LEP 2000, soon to be exhibited. ▪ The report from Council's ecologist has been ignored by the Applicant. ▪ Rezoning should not result in clearing or reduction of EECs or threatened species and their habitats, particularly when all EECs proposed to be cleared will not be adequately compensated for. ▪ Areas of most concern are Areas 2, 3, 4, 6 and 16. Boundary adjustments should be made only when they increase the ecological value of the most environmentally sensitive or restrictive zones as per Clause 52 of the Tweed LEP 2000.



OBJECTIONS TO PROPOSAL (41 objections)	
Topic	Number of references in submissions
Details / Comment	
	<ul style="list-style-type: none"> ▪ Concept Plan identifies numerous areas to be managed primarily for nature conservation. Many areas are zoned for recreation or urban expansion. These should be rezoned to an Environmental Protection zoning. ▪ Areas that should be rezoned for Environmental Protection include, the Scribbly Gum Reserve, all EECs, all remnant bushland, habitat rehabilitation and management precincts, all areas east of the Cobaki Parkway, saltmarsh area, all riparian areas along Cobaki Creek and other drainage lines, koala habitat and EEC offset areas. ▪ Asset protection zones should be on private land and not impact on environment protection zones. ▪ Endorse Council's submission that the Bushfire Assessment provides no detail on how the requirements of PBP 2006 will be achieved. With no detailed road layout available or a clear indication of APZ locations, discussion of necessity is limited. In addition, none of the measures listed in the assessment and recommended by PBP are identified for adoption. ▪ Attention needs to be paid to bush fire planning. ▪ Buffers between the development site and adjoining lands must be of maximum adequacy. The priority in this regard is bushfire risk.
Bushfire	4
	<ul style="list-style-type: none"> ▪ As a result of past experience of bad practice of stormwater drainage of disturbed soils from the Cobaki Lakes site, it is recommended that monitoring tests be undertaken every three months and after heavy rain by an independent consultant. Points along Dunn's Drain and at the discharge point should be considered as monitoring points. ▪ Further consideration should be given to the feasibility of excavating lakes in areas of ASS, given the acidification that has occurred as a result of the construction of the Tugun Bypass. ▪ Information for the proposed construction of the central lake system and management of ASS and dewatering is inadequate.
Acid sulfate soils	4
	<ul style="list-style-type: none"> ▪ There will be delayed access to residential lots in times of heavy rain events. Erosion from fill sites may cause sedimentation of the Cobaki Broadwater. ▪ Climate change allowing for a 0.91m local sea level rise by 2100 has not been adequately taken into account, particularly in relation to access to Cobaki Lakes and access on flood prone roads within the Concept Plan. ▪ Filling of such large area combined with sea level rise could have a devastating affect on both the environment and people. ▪ The proposal will involve considerable filling of the floodplain. Assessment must consider the most recent data with more accurate information accounting for increased sea levels and intense rainfall events.
Climate change	4
	<ul style="list-style-type: none"> ▪ The Stormwater Concept Plan proposes a series of treatment train options in accordance with the principles of WSUD to manage the impacts of the development and improve the quality of stormwater runoff into Cobaki Broadwater with significantly reduced suspended sediment and nutrient loads, but detailed plans have not been provided. ▪ There is insufficient information to comment on the third lake proposal said to have salt water storage. The environmental impact of salt water discharging 2km downstream from this source in Dunn's Drain to the proposed manual sluice gate discharge point on Cobaki Creek is unknown. ▪ The Concept Plan does not adequately explain how the proposed stormwater drainage system will drain approximately 593.5ha of land and manage the impacts of development and improve the quality of stormwater runoff discharges from the site into Cobaki Creek/Broadwater with significantly reduced suspended sediment and nutrient loads. ▪ Swales discharging into sensitive environmental protection areas are of real concern and require a thorough scientific assessment.
Stormwater management	3
	<ul style="list-style-type: none"> ▪ Why are allotment sizes so small? ▪ Concerned about lots less than 450sqm. ▪ Do not support reduced lot sizes to 125sqm or an increase in heights above 3 storeys as this will have a visual impact on the surrounding rural / high conservation area. ▪ Design codes should be developed as part of the Concept Plan.
Urban design	3

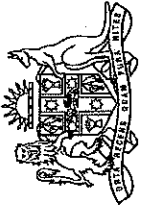


OBJECTIONS TO PROPOSAL (41 objections)		Details / Comment
Topic	Number of references in submissions	
Strategic Context	2	<ul style="list-style-type: none"> ▪ Without a population plan for Tweed the proposal fails to meet sustainability requirements. ▪ Object on the grounds of increased population growth and its affects on the wider community and environment. ▪ The region has existing issues regarding loss of rail service, stressed hospital system, known traffic black spots, tenuous water supply and the effects of climate change. ▪ The population is increasing because of these large scale developments. The developer is the driver of population growth. ▪ Concerned that the new houses will give little consideration for energy conservation. ▪ The policy of growth is making a mockery of any talk of reducing carbon emissions and threats of climate change.
Off-Site Impacts	2	<ul style="list-style-type: none"> ▪ Buffers adjoining agricultural land should be established at 250m. ▪ Concerned with section of development near Sandy Lane and the boundary facing Piggabeen Road. ▪ If houses are backed up to the boundary with no screening, future owners may put in gates to allow access to Piggabeen Road. ▪ Existing issues with maintenance of Piggabeen Road. ▪ Propose a wildlife corridor running along boundary facing Piggabeen Road. This would mean moving the section of residential development 50 to 100m north, providing some screening for existing residents on Piggabeen Road from the development and will assist in retaining wildlife.
Consultation	2	<ul style="list-style-type: none"> ▪ The development may take unintended advantage of the cross-border/jurisdictional geographic position. ▪ The NSW community consultation process for major projects does not appear to have adequately included adjacent communities and interest groups in Queensland.
S94 Contributions	2	<ul style="list-style-type: none"> ▪ The Cobaki Lakes development will impact adversely on Tweed Shire's s94 fund and future expenditure on infrastructure and cause hardship to a ratepayer community that is not affluent. ▪ Tweed Shire's contribution funds for sewage treatment remain inadequate to meet the environmental requirements for water quality. ▪ There is likely to be additional adverse impact upon the water quality of the reported "stressed" Cobaki Broadwater and "sick" Terranora Inlet of the Tweed River. ▪ The future of the current main public road (Sandy Lane) connecting Piggabeen Valley to Qld needs to be taken into consideration for future traffic and other Tweed Shire development requirements. ▪ Concerned about State government policy to reduce s94 contributions across NSW. Tweed already has a significant lack of amenities and needed infrastructure. ▪ This approval will reduce the local government income by as much as \$200M plus over the next 15 years. ▪ Developers will not reduce their land price because they have paid fewer contributions. It is more likely that it will result in rate increases. ▪ As both sites (Cobaki & Kings Forest) are owned by LEDA, they will be able to maintain high land prices by never meeting demand.
Mosquito Management	2	<ul style="list-style-type: none"> ▪ Fencing should be constructed immediately to restrict cattle from entering wetland areas in the proposed environmental area between Cobaki Parkway and the SEPP14 wetland to remove mosquito breeding habitat. ▪ The development is placing residents in dangerously close proximity of mosquitos, yet the success of the management program cannot be guaranteed due to is extensive area and unresolved resource issues. ▪ Concerned about accumulation of poisons (from spraying) on the environment. Mosquito is an integral part of the ecosystem and human interference may be devastating.
ESD	2	<ul style="list-style-type: none"> ▪ The proposal is unsustainable and unacceptable. ▪ There is an opportunity to adopt the true principles of ESD through the conservation and ecologically sustainable use of our natural resources. Decision making processes should effectively integrate both long/short term economic/environmental/social and equitable considerations.



NSW GOVERNMENT
Department of Planning

OBJECTIONS TO PROPOSAL (41 objections)		Details / Comment
Topic	Number of references in submissions	
Public Transport	1	<ul style="list-style-type: none"> ▪ A public transport plan and planning for walkable neighbourhoods is needed.
Aboriginal Heritage	1	<ul style="list-style-type: none"> ▪ The Executive Summary of the EA understates the considerable significance of past Aboriginal Cultural Heritage of land that surrounds the Cobaki Broadwater. ▪ When the Concept Plan was being developed, local Aboriginal community groups were not adequately engaged. ▪ Massive earthworks have already been wiped out unknown history of ancient Aboriginal occupation. ▪ Areas within the Concept Plan have not been subject to adequate geomorphic and geological assessment. ▪ Undisturbed areas in the environmental areas of the Concept Plan have not been surveyed for Aboriginal Cultural Heritage and therefore the Aboriginal history of the subject area has not been adequately documented. ▪ Without an adequate Aboriginal Cultural Heritage survey and study of all land neighbouring this Concept Plan, it is unlikely that the indications or understanding of the connectivity of Aboriginal landscape of sites will be fully recognised. ▪ Provisions for a library should be reconsidered as the distance for disadvantaged students to make use of a modern electronic library is too far away. ▪ The development intends to be self-sufficient. What employment opportunities exist?
Community services	1	
Employment lands	1	



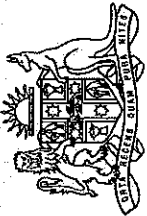
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Letters of Support

SUPPORT OF PROPOSAL (1 letter of support)		Details / Comment
Topic	Number of references in submissions	
General	1	<ul style="list-style-type: none"> ▪ Strongly support

Other

OTHER COMMENTS ON PROPOSAL (7 other letters)		Details / Comment
Topic	Number of references in submissions	
Traffic & access	2	<ul style="list-style-type: none"> ▪ The proposal does not recognise the location of the desalination plant. ▪ In order to maintain plant operations, the GCD Alliance requires continuous inbound and outbound plant site access at Boyd Street. The plant site access must be to a standard accommodating B-double vehicle access. ▪ LEDA should consult with GCD Alliance prior to developing or undertaking any proposed road upgrade works on Boyd Street at Tugun. ▪ LEDA should give recognition to the location and access requirements of the Plant in its Response to Submissions. ▪ Town houses on corner of Boyd Street and Inland Drive will be most affected in terms of traffic and noise. ▪ Consideration should be given to install an interchange with the Tugun Bypass at Boyd Street. If there is no interchange, consideration should be given to sound proofing the townhouses on the corner of Inland Drive and Boyd Street.
Utilities infrastructure	2	<ul style="list-style-type: none"> ▪ TEDC research confirms it is no longer acceptable to provide ADSL or ADSL2 copper access to new subdivisions ▪ There is an urgent and critical requirement to provide the infrastructure necessary to deliver optic fibre as part of the basic upfront infrastructure for all new developments ▪ It is recommended that a condition be attached to any consent for Cobaki Lakes requiring the proponent to provide optic fibre cabling for communication purposes throughout the proposed subdivision, to service each of the lots in the proposed subdivision. ▪ Proposal should elaborate on Tugun Desal negotiations given that Energex and the QLD Minister for Mines and Energy has assured the Energex Community Reference Group that the Mudgeeraba to Tugun 100kv upgrade will not feed the Cobaki Lakes development in any substantial way. This position is at odds with the description - "negotiating a major linkage"
Public transport	1	<ul style="list-style-type: none"> ▪ The proposal does not address public transport or anything to do with school bus routes into, through and out of the development.
Off-site impacts	1	<ul style="list-style-type: none"> ▪ The project does not impact adversely on housing issues in Queensland
Emergency Services Infrastructure	1	<ul style="list-style-type: none"> ▪ The EA does not identify that the development would be likely to increase the demands for emergency services. ▪ Should the Cobaki Lakes project be approved in the form proposed it will have a significant impact on the ability to deliver appropriate urban fire services to that area. ▪ Development of the scale proposed would require a change to the delivery of urban fire services in the area to ensure an appropriate and equitable standard of fire cover. This may require the construction of a new Fire Station in the area. ▪ As the development would primarily trigger the need for this upgrade of services, the proponents should identify and dedicate an appropriate site for a new Fire Station as part of their infrastructure contributions. The exact location of any new fire station would be the subject of further service delivery assessments and negotiations as and when required.

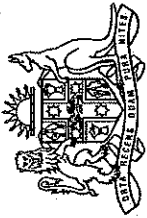


COBAKI DEVELOPMENT CODE (06_0316)

Summary of Public Submissions – February 2010

The following table summarises the concerns raised by the general public during the public exhibition period relating to the proposed development code. The concerns raised have been grouped according to common issues and detail has been provided to collectively summarise the points made by individual submitters. Overall, a total of 174 submissions were received from the general public (173 letters of objection and one 1 letter of support). Key issues in relation to the proposed development code have been summarised below.

KEY ISSUE	DETAILS / COMMENTS
DEVELOPER'S OWN CODE	<ul style="list-style-type: none"> - There is strong objection to the developer not following the Tweed Shire development control standards. - There is concern that the developer's proposed development code will be damaging to the surrounding natural environment and to the existing villages along the coastal strip. - The development code proposed by the developer will create 'bulky' and 'oversized' development. - There is concern that allowing the developer to utilise their own development code will create a precedent for other developers to create their own codes.
LOT SIZE	<ul style="list-style-type: none"> - There is strong objection to allowing the developer to carry out development on blocks which are smaller than 450 sq metres. - The current Tweed Shire Council planning requirements regarding lot size are being ignored. - There is concern in relation to the proposed block size of 120 sq metres, it is suggested that the minimum standards in the current Tweed Shire DCP should be upheld. - Concern that the density created by small lot sizes will create "slum" like living conditions.
INFRASTRUCTURE	<ul style="list-style-type: none"> - There is overall concern that the Tweed Shire LGA does not have the infrastructure to absorb an additional 5500 homes. - There is overall concern that rate payers will have to pay fees in order to maintain the proposed development, consequently there is strong agreement that the development standards applied are consistent with those of Tweed Shire Council. - It is suggested that the current infrastructure will not withstand such a significant increase in population (which the proposed development will cause). - It is suggested that there is currently a lack of health infrastructure within the Tweed Shire LGA and hospitals are at capacity. Therefore, it is put forward that the hospitals will not be able to cater for an increase in population growth. - There is concern that parking is at a premium low and this has not been addressed by the developer. - The Tweed Water Catchment area will not be able to sustain an increase in population. - Current sewerage infrastructure will not be able to cope with an increase in population. - Local roads not sufficient to cope with traffic generated by an extra 10,000 people.
ENVIRONMENTAL STANDARDS	<ul style="list-style-type: none"> - The proposed development should comply with BASIX. - The Tweed Shire Council standards should be adhered to in order to protect and sustain flora and fauna. - The subject site is flood prone and therefore high density residential development should not be allowed.
POPULATION INCREASE	<ul style="list-style-type: none"> - There is concern in relation to the population increase which will create a density which is inappropriate for the area. - The increase in population caused by the proposed development is not sustainably viable in terms of the current infrastructure which is in place.

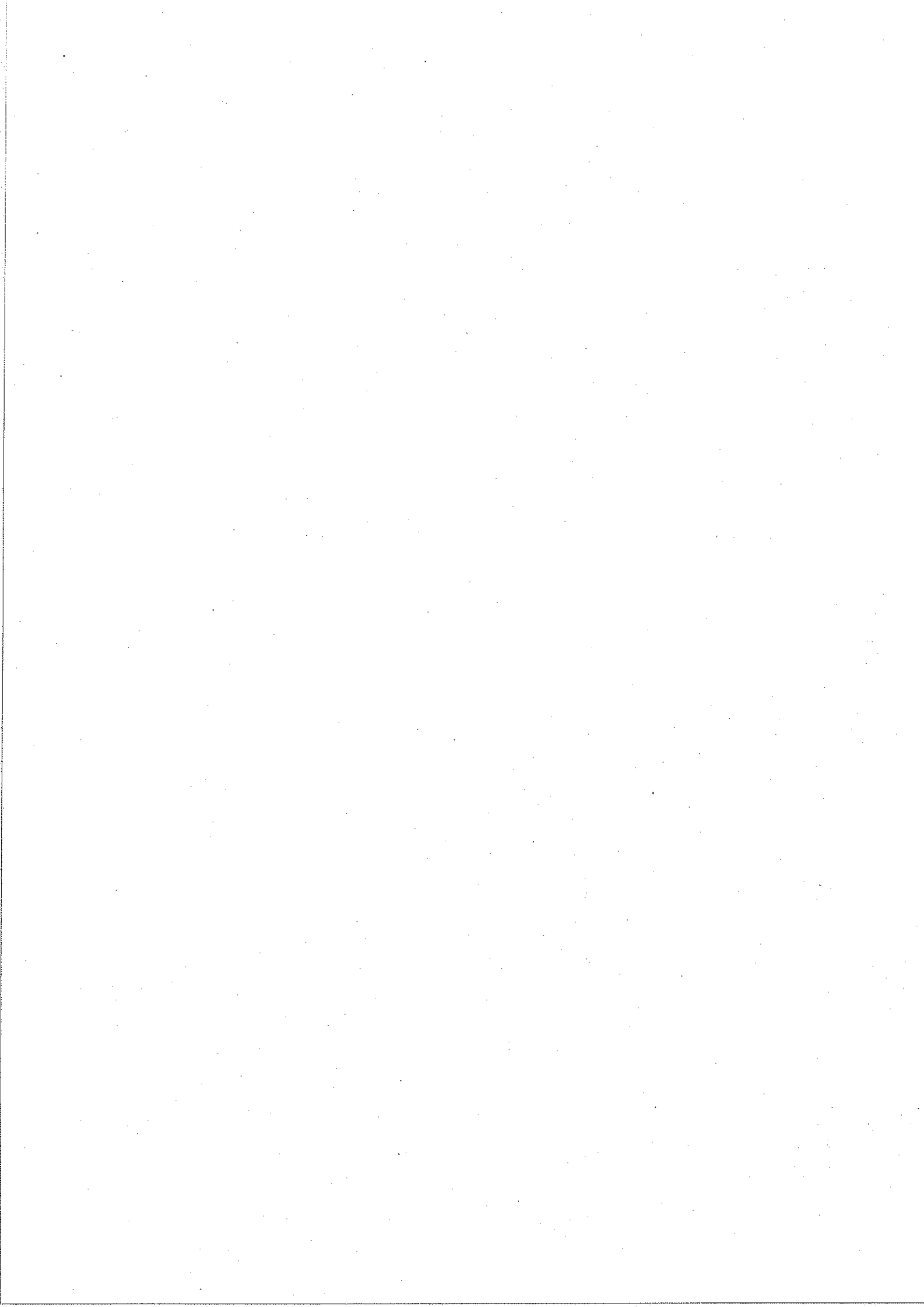


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KEY ISSUE	DETAILS / COMMENTS
RATE PAYERS	- There is concern that the infrastructure which is required for the subject site will cause an increase in rate payer's fees.
COMMUNITY CONSULTATION	- Community consultation has been minimal.

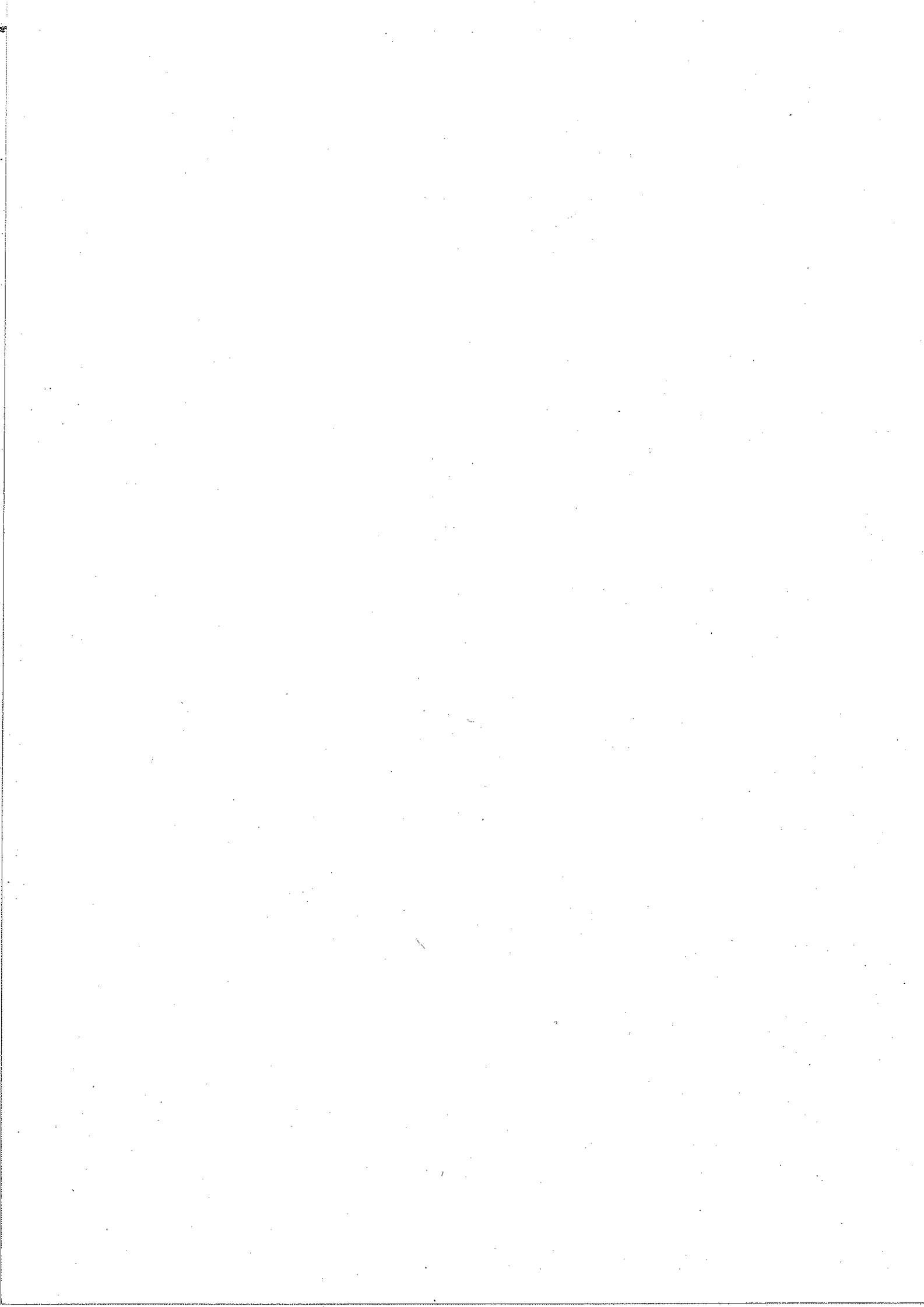
APPENDIX F. PREFERRED PROJECT REPORT

Provided on the Department's website.

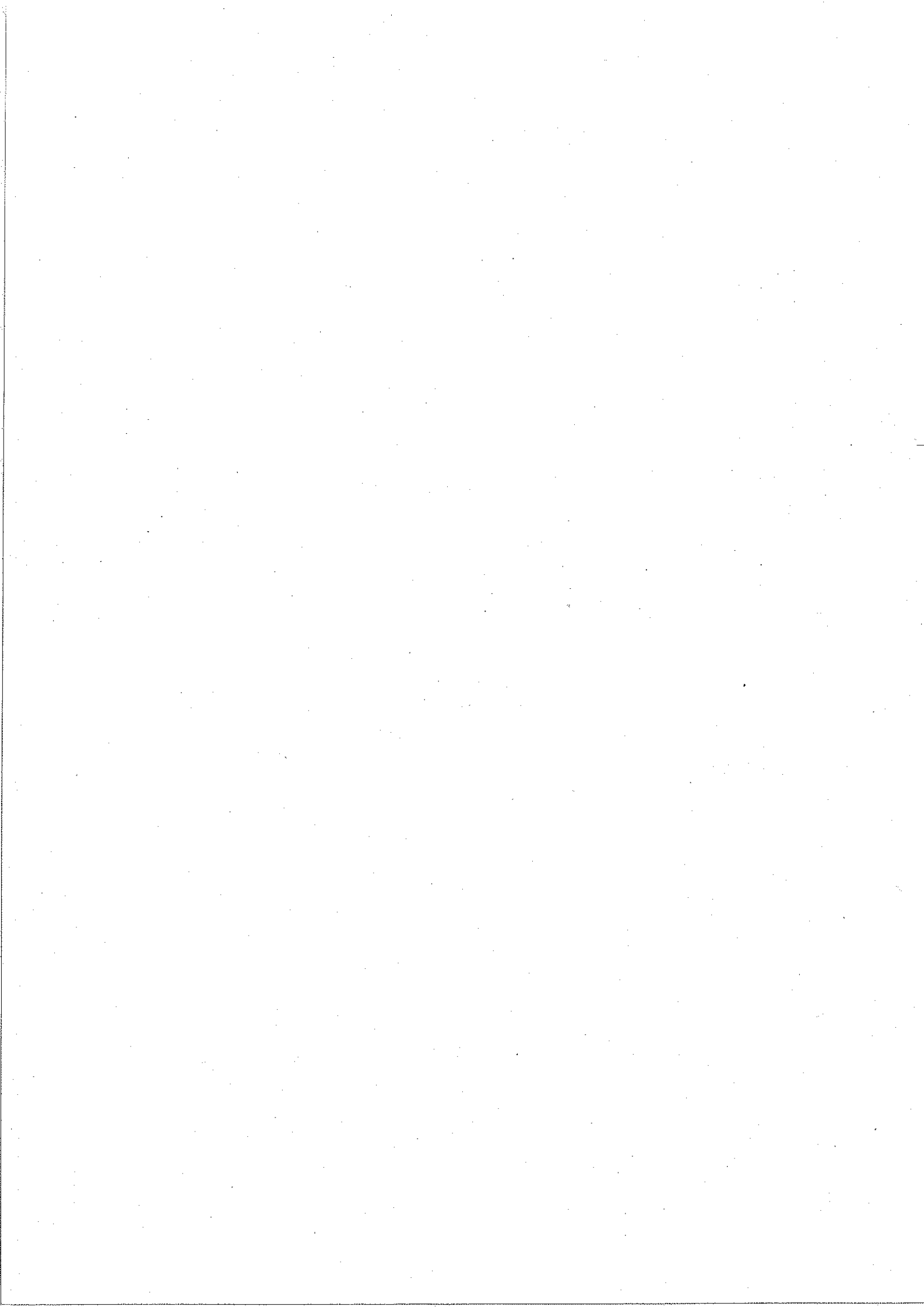


APPENDIX G. ENVIRONMENTAL ASSESSMENT

Provided on the Department's website.



APPENDIX H. ASSESSMENT OF PROPOSED AMENDMENTS TO TWEED LEP ZONING BOUNDARIES



APPENDIX H – Proposed Amendments to Tweed LEP Zoning Boundaries

Map Area Ref (m2)	Current Zone	Proposed Zone	Proponent's explanation for each proposal	Assessment
2	7(l)	2(c)	Resolves zone boundary under clause 52 of Tweed LEP. Area 2 is unvegetated land having low value for environmental protection. It is more suited to residential zoning.	The exhibited proposal proposed a 189 m2 reduction in 7(l) zoning in this location. In response to concerns raised during exhibition the change in zoning has been reduced. The Department supports this rezoning.
3	7(d)	2(c)	Resolves zone boundary under clause 52 of Tweed LEP. Adjustment to zone boundary gives more practical residential precinct with better planning and future urban design outcomes. Area 3 has unvegetated parts with low value for environmental protection. It is more suited to residential zoning.	Parts of this area are vegetated, however this area does not contain an EEC or form part of a wildlife corridor. Level areas of the site suit a residential purpose. Present configuration of this part of the site does not allow an efficient use of the land. The Department supports this rezoning.
4	6(b)	2(c)	Resolves zone boundary under clause 52 of Tweed LEP. Adjustment to zone boundary gives more practical residential precinct with better planning and future urban design outcomes. Area 4 has unvegetated parts with low conservation value. It is more suited to residential zoning.	The area of the rezoning in this location has been reduced in line with the Departments concerns. The Department supports this rezoning.
5	6(b)	2(c)	Resolves zone boundary under clause 52 of Tweed LEP. Area 5 is grassland and isolated trees of low conservation value. It is more suited to residential zoning.	Due to the low ecological value of this area the Department has no concerns over this rezoning. Corridor values of this part of the site are maintained and protection is enhanced by the rezoning of the bulk of the corridor from Open Space to Environmental Protection, see Area 29. This amendment results in a more efficient use of the land.
6	7(d)	2(c)	Resolves zone boundary under clause 52 of Tweed LEP. Area 6 is more suited to residential zoning. Adjustment to zone boundary gives more practical precincts with better planning outcomes and more efficient use of land.	Concerns were raised over this rezoning due to the presence of a stand of mature trees in this location. These concerns have been resolved by the Proponent committing to protecting the trees through covenants over future lots within this area. The Department supports this rezoning.
7	7(d)	2(c)	Resolves zone boundary under clause 52 of Tweed LEP. Area 7 is unvegetated land and grassland having low value for environmental protection. It is more suited to residential zoning.	The area has low ecological value. The Department supports this rezoning.
8	6(b)	2(c)	Aligns zone boundaries with the existing development consent and completed earthworks for Cobaki Parkway (S94/194 29 August 2003). Area 8 is unvegetated land and grassland with low conservation value.	Logical realignment of boundary. The Department supports this rezoning.

9	16,024	6(b)	2(c)	Aligns zone boundaries with the existing development consent and completed earthworks for Cobaki Parkway (S94/194 29 August 2003). Area 9 is unvegetated and disturbed land with limited conservation value.	Logical realignment of boundary. Council approved a realignment of the Cobaki Parkway to the east resulting in an isolated and unusable area of Open Space. An Urban Expansion zoning in this area will result in a more efficient use of the land. The Department supports this rezoning.
10	35,190	6(b)	2(c)	Aligns zoning with the existing development consent and completed earthworks for development in the town centre precinct (1162/2001DA 8 October 2002). Area 10 is unvegetated land with low conservation value.	This amendment aligns the zoning with completed Council-approved earthworks in the proposed Town Centre Precinct. Adequate Open Space zoned land remains within the site. The Department supports this rezoning.
11	2,876	6(b)	2(c)	Area 11 is grassland having low conservation value, and is more suited to residential zoning. Adjustment to zone boundary gives better planning outcomes and more efficient use of land.	The area has low ecological value. The remaining 6(b) in this area is to be rezoned to 7(l) to increase the width of the adjacent fauna corridor.
12	513	7(l)	2(c)	Area 12 is grassland having low value for environmental protection, and is more suited to residential zoning. Adjustment to zone boundary gives better planning outcomes and more efficient use of land.	The area has low ecological value. The Department supports this rezoning.
13	14,350	6(b)	2(c)	The current zoning plan is based on the Digital Cadastral Data Base supplied by NSW Department of Lands which contains the anomaly of a residential zone having a length of some 750 metres, but a width typically of only 10 metres which precludes residential development. Tweed Council has recently adopted a ground-truthed Cadastral Boundary Plan as shown in Figure 3 of the EA. The adjustment to Area 13 makes residential development possible in this area, and gives a zone boundary that is more practical with better planning outcomes and more efficient use of land. Area 13 is grassland having low conservation value, and is more suited to residential use.	This rezoning proposal corrects a cadastral anomaly and will result in a more practical and efficient use of land. The Department supports this rezoning.
14	10,910	6(b)	2(c)	Area 14 is unvegetated land with low conservation value, and is more suitable for the proposed town centre uses. Adjustment to zone boundary gives more practical town centre precinct with better planning outcomes and more efficient use of land.	The Department supports this rezoning. It is necessary for the concept plan design. Adequate 6(b) zoned land remains within the site.
15	16,570	6(b)	2(c)	Area 15 is unvegetated land with low conservation value. The proposed zone boundary will conform with Cobaki Parkway resulting in better planning outcomes and more efficient use of land.	This land is highly disturbed and is not in a practical location or configuration for Open Space. This rezoning proposal will result in a more practical use of land. The Department supports this rezoning.

16	75,570	6(b)	2(c)	Area 16 has unvegetated parts of low conservation value, and some Freshwater wetland and Coastal saltmarsh EECs, the conservation value of which is moderate due to the small areas and the separation of Area 16 as a whole from the main saltmarsh area on the opposite side of Cobaki Parkway.	The Proponent has stated that the rezoning is to be offset by the protection, through the rezoning to 7(l), of area 28 and a commitment to rehabilitating the ecological values of this area. The long-term viability of the EEC's in this area, with the isolation caused by the Cobaki Parkway and Sandy Lane alignments to the south and residential development to the north, would require high levels of management. The Department support the proposed offset arrangement and this rezoning.
17	8,310	6(b)	2(c)	Area 17 is grassland with scattered trees and low conservation value. It is more suited to residential zoning. Adjustment to zone boundary gives more practical precincts with better planning outcomes and more efficient use of land.	Concerns were raised over this rezoning due to the presence of a stand of mature trees in this location. These concerns have been resolved by the Proponent committing to protecting the trees through covenants over future lots within this area. The Department supports this rezoning.
18	4,703	6(b)	2(c)	Area 18 has grassland of low conservation value, and some wetland species in wet periods that are of only moderate conservation value. It is more suited to residential zoning. Adjustment to zone boundary gives more practical precincts with better planning outcomes and more efficient use of land.	This rezoning proposal will result in a more practical use of land. The Department supports this rezoning.
19	3,480	6(b)	2(c)	Area 19 has grassland of low conservation value, and some wetland species in wet periods that are of only moderate conservation value. It is more suited to residential zoning. Adjustment to zone boundary gives more practical precincts with better planning outcomes and more efficient use of land.	This rezoning proposal will result in a more practical use of land. The Department supports this rezoning.
20	9,328	6(b)	2(c)	Area 20 is unvegetated land that has low conservation value and is more suited to residential zoning. Adjustment to zone boundary gives more practical precincts with better planning outcomes and more efficient use of land.	This rezoning proposal will result in a more practical use of land. The Department supports this rezoning.
21	408	6(b)	2(c)	Aligns the zone boundary with the existing consent and completed earthworks for Sandy Lane. Area 21 is unvegetated land that has low conservation value.	The Department supports this rezoning.
22	85	7(l)	2(c)	Adjusts zone boundary to align with the part of the existing subdivision consent (K99/1124) that is being preserved for Precincts 1 and 2. Area 22 is of low conservation value and more suited to residential use.	The Department supports this rezoning.

23	748	2(c)	7(i)	Area 23 is more suited to 7(i) zone as it has forest and adjoins the existing 7(i) zoned bushland.	The Department supports this rezoning. Consolidation of forested areas will result in a better ecological outcome. The Proponent has committed to rehabilitation of this area.
24	20,770	2(c)	7(i)	Area 24 is more suited to 7(i) zone as it has forest of moderate to high conservation value, and adjoins the existing 7(i) zoned bushland.	The Department supports this rezoning. Consolidation of forested areas will result in a better ecological outcome. The Proponent has committed to rehabilitation of this area.
25	9,755	6(b)	7(i)	Area 25 is more suited to 7(i) zone as it has forest of moderate conservation value, and adjoins the existing 7(i) zoned bushland.	The Department supports this rezoning. Consolidation of forested areas will result in a better ecological outcome. The Proponent has committed to rehabilitation of this area.
26	3,716	2(c)	7(i)	Area 26 is more suited to 7(i) zone as it has forest of moderate conservation value, and adjoins the existing 7(i) zoned bushland.	The Department supports this rezoning. Consolidation of forested areas will result in a better ecological outcome. The Proponent has committed to rehabilitation of this area.
27	10,510	2(c)	6(b)	Area 27 contains an existing dam that is proposed to be retained as part of the open space network with links to environmental protection areas.	Appropriate zoning for an asset to be dedicated to the community. The Department supports this rezoning.
28A	349,740	6(b)	7(i)	Areas 28A and 28B are more suited to 7(i) zone as they are predominantly Coastal saltmarsh EEC areas to be remediated.	The Department supports this rezoning and commitment to rehabilitation as offsetting the rezoning of Area 16.
28B	490,360	6(b)	7(i)	It is intended that this remediation will include the extension of the area of saltmarsh to an extent equal to the area of saltmarsh presently within Area 16 and, additionally, an area equal to the net area lost, after remediation, as a result of the construction of the road and services within the road reserve area separating Areas 28A and 28B. This area of road reserve is required to accommodate the construction of the road together with sewer and water services, and to provide in the long term for servicing requirements.	
29	59,760	6(b)	7(i)	Area 29 is more suited to 7(i) zone as it is predominantly low lying land which, together with land to be protected by covenant to its east, will form a fauna corridor. It also contains a Blackbutt community on its sloping parts.	The Department supports this rezoning to enhance and protect a fauna corridor in this part of the site.
31	4,704	6(b)	7(i)	Area 31 is more suited to 7(i) zone as it extends a corridor to its west.	The Department supports this rezoning to provide a fauna corridor in this part of the site.

34	3,995	7(d)	2(c)	Area 34 is more suited to 2(c) zone as it rationalises a gap which performs no useful function between adjacent urban-zoned land.	The Department supports this rezoning; a larger fauna corridor lies immediately to the south and to the north is an Open Space Corridor which may also provide some similar functions.
35	8,840	6(b)	7(l)	Area 35 is more suited to 7(l) zone as it contains isolated vegetation requiring protection.	The Department supports this rezoning.
36	4,854	2(c)	7(l)	Area 36 is more suited to 7(l) zone as it contains isolated vegetation requiring protection.	The Department supports this rezoning.
37	12,030	2(c)	7(l)	Area 37 is more suited to 7(l) zone as it contains isolated vegetation requiring protection and forms an addition to existing adjacent 7(l)-zoned land.	The Department supports this rezoning. Consolidation of forested areas will result in a better ecological outcome. The Proponent has committed to rehabilitation of this area.
38	34,540	6(b)	7(l)	Area 38 is more suited to 7(l) zone to form a corridor connecting the existing 7(l)-zoned land adjacent to it to the vegetation to the east of Cobaki Parkway.	The Department supports this rezoning to provide a fauna corridor in this part of the site. Consolidation of forested areas will result in a better ecological outcome. The Proponent has committed to rehabilitation of this area.
39	4,115	2(c)	7(l)	Area 39 provides required additional area for fauna habitat.	The Department supports this rezoning. The Proponent has committed to rehabilitation of this area.
40	3,451	2(c)	7(l)	Area 40 is too narrow for residential development (see Area 13) and is more suited to 7(l) zone. Together with adjacent Area 38 it forms a fauna corridor.	The Department supports this rezoning to consolidate a forested area and enhance a fauna corridor.
41	3,036	7(l)	2(c)	Resolves zone boundary under clause 52 of Tweed LEP. Adjustment of zone boundary gives more practical residential precinct (along with Areas 12 & 13) with better planning and future urban design outcomes. Area 41 is unvegetated land.	This rezoning proposal will result in a more practical use of land. The Department supports this rezoning.
42	1	7(a)	2(c)	Aligns zone boundary with the existing development consent and completed earthworks for Cobaki Parkway (S94/194 29/08/2003). Area 42 is unvegetated and of no conservation value.	This amendment is of a minor nature and assists in ensuring an appropriate zone applies to the land. The Department supports this rezoning.
43	436	2(c)	7(l)	Area 43 is more suited to 7(l) zone.	This amendment provides enhanced protection to this part of the site, which forms part of an ecological corridor. The Department supports this rezoning.
44	112	2(c)	6(b)	Area 44 is more suited to 6(b) zone as it aligns with the adjoining 6(b) land.	This amendment is of a minor nature and assists in ensuring an appropriate zone applies to the land. The Department supports this rezoning.

45	873	2(c)	7(l)	Area 45 is an addition to the adjacent 7(l) zone to give effect to a fauna corridor of minimum 50m width.	The Department supports this rezoning to enhance a fauna corridor in this area.
46	578	2(c)	7(l)	Area 46 is more suited to the 7(l) zone and adds to the adjacent 7(l) zone in Area 29.	The Department supports this rezoning. Consolidation of forested areas will result in a better ecological outcome. The Proponent has committed to rehabilitation of this area.
47	741	7(l)	6(b)	Resolves zone boundary under clause 52 of Tweed LEP. Aligns zone boundary with the existing development consent and completed earthworks for Cobaki Parkway (S94/194 29/08/2003). Area 47 is unvegetated with no conservation value.	This amendment is of a minor nature and ensures that an appropriate zone applies to the land. The Department supports this rezoning.
48	2,273	7(a)	6(b)	Aligns zone boundary with the existing development consent and completed earthworks for Cobaki Parkway (S92/194 29/08/2003). Area 48 is unvegetated and disturbed with no conservation value.	This land is within the alignment of the Cobaki Parkway. The amendment provides for a more appropriate zoning for the land. The Department supports this rezoning.
49	1,034	2(c)	7(l)	Area 49 is part of a road reserve that is to be closed. Its zoning to 7(l) effects the continuity of a fauna corridor.	The Department supports this rezoning to enhance a fauna corridor in this area. The Proponent has committed to rehabilitation of this area.
50	93	2(c)	7(l)	Area 50 is an addition to the adjacent 7(l) zone to give effect to a fauna corridor of minimum 50m width.	The Department supports this rezoning to enhance a fauna corridor in this area. The Proponent has committed to rehabilitation of this area.
51	22,753	6(b)	7(l)	The zoning of this area to 7(l) gives effect to a fauna corridor.	The Department supports this rezoning to enhance a fauna corridor in this area. The Proponent has committed to rehabilitation of this area.
52	27,568	2(c)	7(l)	The zoning of this area to 7(l) gives effect to a fauna corridor of minimum 50m width. Appropriate fauna culverts under Cobaki Parkway will extend this fauna corridor to the vegetated lands to the east.	The Department supports this rezoning to enhance a fauna corridor in this area. The Proponent has committed to rehabilitation of this area.
54	1,846	2(c)	7(l)	Area 54 was the alignment of a previously-intended road that is to be relocated, and should revert to the 7(l) zone.	The Department supports this rezoning to enhance a fauna corridor in this area. The Proponent has committed to rehabilitation of this area.
55	1,194	2(c)	7(l)	The addition of Area 55 to the 7(l) zone improves the fauna corridor value of this area.	The Department supports this rezoning to enhance a fauna corridor in this area. The Proponent has committed to rehabilitation of this area.
56	511	2(c)	7(l)	Area 56 was the alignment of a previously-intended road that is to be relocated, and should revert to the 7(l) zone.	The Department supports this rezoning to enhance a fauna corridor in this area. The Proponent has committed to rehabilitation of this area.

57	1,039	2(c)	6(b)	This otherwise remnant area of 2(c)-zoned land is more appropriately consolidated with the adjacent 6(b) zone.	This amendment is of a minor nature and ensures that an appropriate zone applies to the land. The Department supports this rezoning.
58	783	2(c)	6(b)	This otherwise remnant area of 2(c)-zoned land is more appropriately consolidated with the adjacent 6(b) zone.	This amendment is of a minor nature and ensures that an appropriate zone applies to the land. The Department supports this rezoning.
59	318	2(c)	6(b)	This otherwise remnant area of 2(c)-zoned land is more appropriately consolidated with the adjacent 6(b) zone.	This amendment is of a minor nature and ensures that an appropriate zone applies to the land. The Department supports this rezoning.
60	4,462	7(l)	2(c)	Rationalises the western boundary of Precinct 4 to make more practical both access and bushfire hazard management.	The Department supports this rezoning to ensure that the existing 2(c) zoned land in this location is usable and that required asset protection zones are located outside 7(l) zoned land.
61	3,654	2(c)	6(b)	Creates connection with the adjacent Crown Reserve.	The Department supports this rezoning as it provides a buffer and creates a connection for the adjacent isolated 7(l) zoned land with the Crown Border Reserve as well as provision of visual, ecological and recreational connectivity in this part of the site.
62	24,279	2(c)	6(b)	Continues connection with the adjacent Crown Reserve.	The Department supports this rezoning as it provides a buffer and creates a connection for the adjacent isolated 7(l) zoned land with the Crown Border Reserve as well as provision of visual, ecological and recreational connectivity in this part of the site.
63	555	2(c)	6(b)	This otherwise remnant area of 2(c)-zoned land is more appropriately consolidated with the adjacent 6(b) zone.	This amendment is of a minor nature and ensures that an appropriate zone applies to the land. The Department supports this rezoning.
64	1,425	2(c)	6(b)	Continues connection with areas 61 and 62.	The Department supports this rezoning as it provides visual, ecological and recreational connectivity in this part of the site.
65	1,262	2(c)	7(l)	Continues connection with areas 64, 62 and 61.	The Department supports this rezoning as it provides visual, ecological and recreational connectivity in this part of the site.
66	934	6(b)	2(c)	This area of 6(b)-zoned land made remnant by proposed subdivision road layout is more appropriately consolidated with the adjacent 2(c) zone.	This amendment is of a minor nature and ensures that an appropriate zone applies to the land. The Department supports this rezoning.

68	2,299	2(c)	6(b)	This area of 2(c)-zoned land compromises the corridor values in that area and should be consolidated with the adjacent area zoned 6(b).	This zoning amendment enhances the corridor value of this area and ensures that an appropriate zone applies to the land. The Department supports this rezoning.
69	96,732	2(e)	2(c)	Tourist-oriented development not intended. Town Centre zone more appropriately zoned 2(c).	This is a logical amendment to the LEP and ensures consistency with other amendments to minimum lot sizes for the site. The zonings for the site are simplified with this rationalisation. The Department supports this rezoning.