

Environmental Assessment Report Part 3A Concept Plan

Cobaki Lakes Estate, Tweed Heads Mixed Use Residential Development

Submitted to
NSW Department of Planning
On Behalf of LEDA Manorstead Pty Ltd

December 2008 ■ 06406

Statement of Validity


This Environmental Assessment has been prepared and submitted under Part 3A of the *Environmental Planning and Assessment Act 1979* (as amended) by:

Project Summary

Name	Andrew Wilson
Company	JBA Urban Planning Consultants Pty Ltd
Address	Level 7, 77 Berry Street North Sydney NSW 2060
In respect of	Study and Concept Plan Application
Applicant	LEDA Manorstead Pty Ltd
Address	Level 1, Cavill Park, 46 Cavill Avenue Surfers Paradise QLD 4217
Land to be Developed	Cobaki Lakes Estate, Tweed Heads. Lot 1 in DP 570076; Lot 2 in DP 566529; Lot 1 in DP 562222; Lot 1 in DP 570077; Lot 1 in DP 823679; and Lots 46, 54, 55, 199, 200, 201, 202, 205, 206, 209, 228 & 305 in DP 755740.
Proposed Development	<ul style="list-style-type: none">▪ Town centre precinct, comprising a mix of retail, commercial, community and multi-unit residential uses, with up to 9,500m² of retail space and 200 multi-unit dwellings covering 18ha of land;▪ Residential precincts with a mix of housing types including detached houses, townhouses and multi-unit housing up to 3 storeys with up to 5,300 dwellings covering approximately 283ha of developable land, excluding roads;▪ Community and education precincts including two schools over 7ha of land;▪ Open space, lakes and environmental protection areas covering 267ha of land;▪ Access network of roads, public transport routes, pedestrian / cycle paths;▪ Landscaping and vegetation management;▪ Water management; and▪ Utility services infrastructure.

Environmental Assessment

Certificate	I certify that I have prepared the content of this Environmental Assessment and to the best of my knowledge: <ul style="list-style-type: none">▪ It is in accordance with the Environmental Planning and Assessment Act and Regulation.▪ It is true in all material particulars and does not, by its presentation or omission of information, materially mislead.
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Signature	
Name	Andrew Wilson
Date	9 December 2008

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- I** Ecological Assessment and Management Plans
James Warren & Associates Pty Ltd

Volume 3

- J** Biting Midge and Mosquito Control Plan
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- Q** Report on Future Demographics
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Executive Summary

LEDA Manorstead Pty Ltd propose to develop 593.5 hectares of land to be known as the Cobaki Lakes Estate in the Tweed Shire Council area for a new residential community with a mix of urban land uses integrated with open space and environmental protection areas. The proposed development comprises:

- town centre precinct with a mix of retail, commercial, community and multi-unit residential uses, with up to 9,500m² of retail space and 200 multi-unit dwellings covering 18ha of land;
- residential precincts with a mix of housing types including detached houses, townhouses and multi-unit housing up to 3 storeys with up to 5,300 dwellings covering approximately 283ha of developable land, excluding major roads;
- community and education precincts including two schools over 7 ha. of land;
- open space, lakes and environmental protection areas covering 267 ha. of land;
- access network of roads, public transport routes, and pedestrian / cycle paths;
- landscaping and vegetation management;
- water management; and
- utility services infrastructure.

Concept Plan for Ministerial Approval under Part 3A

The Director-General of the Department of Planning, as delegate of the Minister for Planning, has formed the opinion that the proposed development is a major project that requires the Minister's approval under Part 3A of the Environmental Planning and Assessment Act 1979, and has authorised the submission of a Concept Plan for the project.

The Concept Plan seeks the Minister's approval for the following aspects of the proposed development:

- vision and design principles for Cobaki Lakes Estate;
- general layout and siting of development into precincts;
- land uses in each precinct;
- maximum site coverage, dwelling numbers and densities, building heights and retail floor space in development precincts;
- a mix of lot sizes ranging from 120m² to 1,200m² in residential and town centre precincts;
- open space and landscape management concepts;
- access network of roads, public transport routes, pedestrian/ cycle paths;
- water management concept;
- utility services strategy; and
- statement of commitments.

Design guidelines and codes for subdivision and housing are proposed to be prepared at a later stage and incorporated into the Concept Plan.

The Concept Plan also seeks that the Minister amend the Tweed LEP 2000 to refine the existing zoning boundaries, and allow a mix of housing densities on lot sizes ranging from 120m² to 1,200m².

Future Stage Applications for Development Approval

The subdivision, rehabilitation and construction of the central open space system is proposed to be the subject of a future Part 3A Project Application for the approval of the Minister for Planning.

The subdivision, detailed design, and construction of development on all other areas including the residential neighbourhoods, town centre, community and educational facilities are proposed to be the subject of future Development Applications for the consent of Tweed Shire Council under Part 4 of the EP&A Act.

The detailed design and construction of lower density forms of housing are proposed to be subject to complying development certification and exempt development provisions under Part 4 of the EP & A Act.

The Site

The Cobaki Lakes site is located approximately 6km west of the Tweed Heads/Coolangatta Town Centre, 1.5km west of the Gold Coast Airport and Gold Coast Highway, and 500m west of the Pacific Highway (Tugun Bypass) next to the border of NSW and Queensland. 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 Cobaki Lakes Estate is owned by LEDA Manorstead Pty Ltd. It has an area of 593.5 ha and currently comprises 17 allotments.

The site is situated within the eastern end of the McPherson Range at the foothills. It forms a natural amphitheatre located within the catchment of Cobaki Broadwater comprising a low lying and level central plain surrounded by steep rising hillsides on the northern, western and southern sides of the site. The geology and soils on the site vary with the topography from low lying marine clays, alluvial clays, sands, and high relief residual clay/ weathered rock.

The flora communities on the site also vary with the topography with vegetation communities ranging from dry sclerophyll forest, rainforest, woodland, heathland, mangrove forest, grassland, and rushland/sedgeland. The site has 72.8 hectares of remnant bushland. Fauna on the site includes various native species, and notably the site is a significant habitat breeding ground for mosquitoes in the district.

There are no cultural heritage or archaeological sites within the Cobaki Lakes site that are listed under relevant State Government data base. However, surveys undertaken on behalf of the proponent on the site have identified cultural material and artefacts on the site.

Existing Development, Approvals and Use Rights on the Site

The Cobaki Lakes site has been primarily used for agriculture grazing and pastoral uses, and contains farm sheds and associated infrastructure. The site enjoys existing and continuing use rights under the EP&A Act for the purposes of cattle grazing.

The site is subject to a number of existing development consents granted between 1993 and 2002 for residential subdivision and bulk earthworks on different parcels of land that cover major portions of the site. The bulk earthworks have commenced and are completed over large portions of the site.

This Concept Plan proposes to preserve the existing subdivision consents until future subdivision consents are issued, and to also preserve the existing consent for Precincts 1 and 2 in the Concept Plan in perpetuity. It also seeks to preserve the existing earthworks approvals that support the Concept Plan.

Surrounding Landuses

The land uses surrounding the site comprise the following:

- Remnant bushland forest areas adjacent to the west and north of the site zoned for environmental protection
- Cobaki Creek and Broadwater forest and wetlands to the east zoned for environmental protection
- Agricultural (grazing and pastoral) uses adjacent to the south of the site and further to the north and west comprising mainly native pastures for cattle grazing
- Driving range adjacent to the southwest of the site zoned rural.

Beyond these adjoining land uses to the north, east and south is the urban development of the Gold Coast and Tweed Coast including residential suburbs, town centres, hospitals, educational facilities, recreational facilities, tourist facilities, Coolangatta airport and associated utilities and community infrastructure.

Planning Instruments

Far North Coast Regional Strategy 2006

The Cobaki Lakes site is identified for urban development in the Strategy, and the proposed Concept Plan is consistent with the key elements and principles in the Strategy.

Planning Related Legislation

The Concept Plan is consistent with Part 3A of the Environmental Planning and Assessment Act 1979, and with the principles and practices used in the administration of the Commonwealth Environment Protection and Biodiversity Conservation Act 1999, Threatened Species Conservation Act 1995, Water Management Act 2000, Rural Fires Act 1997, National Parks and Wildlife Act 1974, and Native Vegetation Act 2003.

State Environmental Planning Policies and Regional Environmental Plan

The proposed Concept Plan will be consistent with the provisions of the SEPP (Major Projects), SEPP 71 – Coastal Protection, SEPP 14 – Wetlands, SEPP 44 – Koala Habitat, SEPP 55 – Remediation of Land, SEPP (Infrastructure), SEPP 65 – Design Quality of Residential Flat Buildings, SEPP – BASIX, and the North Coast Regional Environmental Plan.

Tweed Local Environmental Plan and Development Control Plan

The Concept Plan is generally consistent with the existing land use zonings and planning provisions applying to the Cobaki Lakes site under the Tweed LEP, with the exception of some proposed refinements to zone boundaries and a mix of lot sizes that include some lots below the current minimum of 450m² in the LEP.

The refinements to the zone boundaries are proposed to align the zonings with cadastral boundaries, existing development approvals, and the physical attributes of the land to give land use zones that are more consistent with the capacity and suitability of the land. The present zoning boundaries create a number of areas that are impractical to use as open space and environmental protection. They have low conservation value, limited potential for recreational use, are expensive to maintain, and typically become neglected and hazardous. These areas represent an inefficient and unsustainable use of the land. The proposed refinements to the zone boundaries will provide better environmental and urban outcomes consistent with State planning strategies, policies and instruments. The refinements would result in a more efficient and sustainable use of the land.

The proposed refinements to the zone boundaries result in a net gain of 1.56ha added to the total area of the 7(d) and 7(l) Environmental Protection zonings; a net reduction of 21.89ha. to the 6(b) Recreation Zone; and a net addition of 20.33 ha. to the 2(c) Urban Expansion Zone (primarily taken from the 6(b) zone).

The proposed zoning refinements result in a total of 81ha. of land zoned 6(b) Recreation in the Cobaki Lakes site to be developed, landscaped and rehabilitated for open space/ parks and a range of recreational opportunities under the Concept Plan. **The 81 hectares of land zoned for 6(b) Recreation is 2.4 times the area of open space/ parkland needed to serve the estimated future resident population of 12,000 people in the 2(c) Urban Expansion Zone on the site.** (A general standard of 2.83ha. of open space per 1,000 people is used by Department of Planning and Tweed Shire Council.) Overall, the proposed zoning refinements result in **a total of 267 hectares (45% of the Cobaki Lakes site) zoned for environmental protection and recreation** to be rehabilitated and landscaped under the Concept Plan.

The Concept Plan also seeks to depart from the minimum lot size of 450sq.m by providing a range of lots sizes from 120sq.m to 1,200sq.m. The range of lot sizes proposed in the Concept Plan is consistent with the principles of contemporary planning and the Far North Coast Regional Strategy in supplying greater housing choices to meet demographic changes and market demands, increasing densities in accessible areas with infrastructure, optimising urban form and design quality, easing urban sprawl and development pressure on environmentally sensitive land, and using natural resources efficiently.

The Concept Plan seeks that the Minister amend the Tweed LEP 2000 to refine the existing zoning boundaries, and allow a mix of housing densities on lot sizes ranging from 120m² to 1,200m².

The Concept Plan also seeks to supersede the existing part of the Tweed DCP (Section B7) that applies specifically to the Cobaki Lakes site. Design Guidelines and Codes for subdivision and housing are proposed to be prepared at a later stage and incorporated into the Concept Plan.

Environmental Assessment

This report provides an assessment of environmental planning issues associated with the proposed Concept Plan in accordance with the Environmental Assessment Requirements issued by the Director-General of the Department of Planning. A summary of the environmental assessment issues is given below.

Visual Impacts

The proposed Concept Plan retains and embellishes the key attributes of the natural landscape at the Cobaki Lakes site including the topographical amphitheatre, remnant band of eucalypt forest, Cobaki Broadwater forest and wetland vegetation, and proposed new lakes/ open space/wetland system.

Views from most areas surrounding the site will not be impacted by development proposed in the Concept Plan for Cobaki Lakes as the site is screened from view by the topography and vegetation surrounding the site.

Views of the site from surrounding areas are limited to distant views from higher elevations at Terranora Heights, south of Bilambil Heights and on the coast. The impact on views from these areas is relatively moderate given the distances and wider landscape setting of the McPherson Ranges, the retention of key landscape attributes in the Concept Plan, and residential scale of development.

The Gold Coast Airport has advised the applicant that the Cobaki Lakes site is outside the Airport Lighting Zone Map, and therefore lighting from the site will not impact upon the operational airspace for the Gold Coast Airport.

Traffic Management and Access

The Concept Plan includes an internal access network and hierarchy comprising pedestrian / bicycle paths, local roads, collector roads and sub arterial road. It proposes to connect the Cobaki Parkway subarterial through the site with:

- Boyd Street to the north giving access to the Gold Coast Highway and possible future Pacific Motorway interchange; and
- Piggabeen Road via a new bridge over Cobaki Creek to the south giving access to Kennedy Drive and the Pacific Highway.

The traffic generated by the proposed development in the Concept Plan can be accommodated with acceptable performance on the external road network subject to the construction of the following road improvements:

- new intersection between Boyd Street and Gold Coast Highway;
- widening of Boyd Street to 4 lanes when a specific threshold of traffic volumes is reached; and
- new Cobaki Creek Bridge to Pigabben Road at a time to be agreed with Tweed Shire Council.

These external road works are all subject to Deeds between the applicant and relevant roads authorities.

The internal road and traffic network includes the following measures that provide for safe and efficient traffic management:

- internal access road hierarchy;
- location of town and community centres on collector road;
- road and intersection design standards of the AUSTRROADS Guide;
- off-street parking and servicing requirements;
- pedestrian and bicycle paths; and
- bus routes.

These traffic management measures are included in the Draft Statement of Commitments.

Flora and Fauna

The site contains 18 broad vegetation communities ranging from dry sclerophyll forest, rainforest, woodland, mangrove forest, grassland, and rushland / sedgeland. It has 90.49 hectares of remnant bushland. The site includes:

- A total of 8 flora species and 12 fauna species listed as threatened under the *Threatened Species Conservation Act 1995* (TSC Act).
- 2 flora species and 1 fauna species listed as threatened under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).
- A total of 6 Endangered Ecological Communities (EECs) as listed under schedule 1 of the TSC Act have also been recorded on the site comprising:
 - Swamp sclerophyll forest on coastal floodplain;
 - Lowland rainforest on floodplain;
 - Lowland rainforest;
 - Freshwater Wetlands;
 - Swamp oak floodplain forest; and
 - Coastal saltmarsh in the NSW Coast bioregion.

- A number of regional and sub-regional habitat corridors.
- Small areas of wetlands identified under State Environmental Planning Policy 14 – Coastal Wetlands (SEPP14).
- Areas of potential Koala habitat.
- Areas of breeding habitat for mosquitoes.

The Concept Plan has been prepared with due regard to the conservation of native flora and fauna and ecological communities on the site. The proposed Concept Plan involves the retention, rehabilitation and restoration of 221.8 ha. of vegetation on the site including 68.25 ha. or 75.4% of remnant bushland. It involves the removal of 22.28 ha. of remnant bushland (of which 22.08 ha. is within areas subject to existing development consents and zonings). The Concept Plan Statement of Commitments provides a series of management plans for the conservation of native flora and fauna and rehabilitation of vegetation and habitat as follows:

- Saltmarsh Rehabilitation Plan
- Scribbly Gum Management Plan
- Site Regeneration and Revegetation Plan
- Vegetation Management Plan
- Fauna Management Plan
- Freshwater Wetland Rehabilitation Plan

These management plans will mitigate the impacts of development proposed in the Concept Plan, rehabilitate ecological communities, and contribute to the survival of threatened flora and fauna and endangered communities on the site.

Water Management

A Stormwater Concept Plan for the site includes a series of 4 different types of water 'treatment trains' that apply according to slope gradients and soil type. The stormwater management measures in the 'treatment trains' include the following:

- constructed wetlands;
- vegetated swales;
- bioretention trenches;
- gross pollutant traps;
- sedimentation basins at inlets to constructed wetlands
- infiltration systems;
- rainwater tanks;
- future compliance with BASIX;
- diffuse low-flow discharge and stormwater treatment;
- high flow bypass channels; and
- discharge of fully treated water to Cobaki Broadwater.

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 with significantly reduced suspended sediment and nutrient loads.

The Concept Plan also includes measures to monitor and manage construction impacts, and monitor and maintain the completed development. The Stormwater Concept Plan is to be implemented in future Project Application and Development Applications for the detailed design, construction and operation of the development as stated in the Draft Statement of Commitments.

A flood report is included in the environmental assessment to establish relevant flood levels including potential sea level rise due to climate change. The flood report accords with the Tweed Shire Council's DCP A3 "Development of Flood Liable Land". Council's DCP A3 is used as the basis for setting the minimum floor levels and flood protection levels at RL3.10m AHD in the detailed planning and design of development at later stages.

The stormwater reports conclude that the impact of runoff from the site on flood heights in the adjacent Cobaki Creek and Broadwater would be very small without the need for on-site detention on the Cobaki Lakes site as regional creek and river floods dominate the flood heights.

Geotechnical Conditions

The site fundamentally consists of 4 main geological zones being Low lying marine clays, Interbedded alluvial clays/sands, sand ridge, and High relief residual clay/weathered rock. Five categories of geotechnical constraints to urban development are identified on the site that warrant different levels of management. Categories 1-4 describe geotechnical constraints on low lying land, and Category 5 describes geotechnical constraints (in subcategories) on the hillside areas.

There are no geotechnical constraints that preclude development proposed in the Concept Plan subject to appropriate management as warranted by the type of geotechnical constraint. Detailed geotechnical studies, as required by the Tweed Shire Council's DCP A5 "Subdivision manual", will be carried out to support future Project Applications and Development Applications for excavation and building work.

Acid Sulphate Soils

ASS investigations have found the following:

- High potential for ASS in marine clays and sands, particularly those in the floodplain around the south and east of the site and near Cobaki Creek;
- Low potential for ASS in the sand ridge, alluvial plains and deeper residual soils.

The potential ASS on the site does not preclude development as proposed in the Concept Plan. The Concept Plan proposes open space with no significant soil disturbance on floodplain areas with highest potential for ASS. In areas proposed in the Concept Plan for lakes and urban development, potential impacts of ASS disturbance can be managed in accordance with a detailed ASS Management Plan that is to accompany future Project Application and Development Applications for detailed design and construction. A general ASS Management Plan is included in this EAR. This is included in the Draft Statement of Commitments.

Groundwater

Groundwater has been investigated on the site and found to be reasonably consistent over time, varying concurrently with rainfall, mounding in the sand ridge through the central eastern part of the site, drawn down in the drainage line through the central western part of the site, and flowing in a south-easterly direction towards the Cobaki Broadwater. The quality of the groundwater is heavily influenced by the soil stratum.

The potential impacts of development proposed in the Concept Plan on groundwater are readily anticipated and manageable through the integration of groundwater into the stormwater management plans to be prepared in future Project Application and Development Applications for precincts, and in the implementation of management plans. A Groundwater Management Plan is included in this EAR which proposes measures during the construction and operational phases of development to manage and preserve existing groundwater conditions on the site. These management measures are included in the Draft Statement of Commitments.

Potential Site Contamination

A Stage 1 Preliminary Site Contamination Assessment finds certain areas on a small portion of the Cobaki Lakes site have been subject to activities that have the potential for contamination of the soil including abandoned cattle dip, cattle yards, crush, spray race, sump, pumping station, farm sheds, site construction compound area, existing old dwelling houses, and previous mineral sand extraction and processing.

There is an approved Remediation Action Plan for the former cattle dip that will render it suitable for the land uses proposed in the Concept Plan.

The mineral sand processing areas have been subject to investigations that found no evidence of elevated levels of radiation associated with sand mining or mineral sand processing.

Future Project Application and Development Applications for areas subject to activities having the potential for contamination will need to be accompanied by a Stage 2 contamination assessment. Experience of the potentially contaminating activities indicates that any contamination identified during a Stage 2 detailed contamination assessment will be able to be removed or remediated to a level appropriate for the proposed land uses in this Concept Plan.

Acoustic Impacts

The site is surrounded by various types of rural land and environmental protection areas. Residential land uses are situated to the north west of the site in Queensland, however they are separated from the development site, by the hills and remnant bushland which enclose the northern sector of the site. The development will therefore not give rise to any unacceptable noise impacts on the nearby residential areas due to the natural buffering of the site and distances from the residential areas.

The site is situated outside of the Australian Noise Exposure Forecast (ANEF) contours for the Gold Coast Airport, as set out on the ANEF Map included within the Gold Coast Masterplan 2006.

Noise intrusion from the airport and from Cobaki Parkway (the main road proposed through the site) will be considered in the detailed design of precincts and buildings in Cobaki Lakes to ensure that noise impacts will not adversely impact the amenity of future residents.

Bushfire Risk

Areas of remnant forest and woodland on the Cobaki Lakes site are identified as bushfire prone land in the Tweed Shire Bushfire Prone Land Map as Bush Fire Prone Land – Vegetation Category 1; Bush Fire Prone Land – Vegetation Category 2; and Bushfire Prone Land – Buffer Zones – 100m and 30m.

The Design Guidelines and Codes to be prepared and incorporated into this Concept Plan are to include provisions to ensure that development meets bushfire protection measures and guidelines in Planning for Bushfire Protection 2006. Future Development Applications for detailed design of subdivision and buildings, and future Complying Development Certificates for houses will need to meet the provisions in Planning for Bushfire Protection 2006 including for asset protection zones (APZs), perimeter fire trails and defensible spaces, building standards, and water supply for fire fighting. An APZ plan is included in this Concept Plan. These provisions are included in the Draft Statement of Commitments.

Heritage

No places or items of potential European cultural heritage value within the Cobaki Lakes site are recorded in recognised heritage registers or have been found in a site survey in 2007.

A search of the Department of Environment and Climate Change (DECC) Aboriginal Heritage Information Management System (AHIMS) register and the Bundjalung Mapping project database found no known cultural heritage sites or archaeological located within the Cobaki Lakes site. Notwithstanding, an archaeological survey of undisturbed lands on the site which are zoned for development has identified nineteen locations with cultural material and artefacts. The pattern of artefacts indicated that the central sand ridge was a place that was used by Aboriginal people for a variety of tasks, including extracting the resources of Cobaki Lake and the wetlands.

The heritage study concludes that certain areas on the Cobaki Lakes site have potential for aboriginal cultural heritage material to be found. The study finds that these areas would most likely yield occasional isolated artefacts similar to the material already found in existing site surveys, and it is unlikely these areas will contain any major cultural site of sufficient size or quantity to significantly affect the Concept Plan layout.

A Cultural Heritage Management Plan (CHMP) is included in this EAR that sets out the principles and processes that the proponent is adopting for the identification, protection and management of Aboriginal Places and Objects. The CHMP is proposed to be refined in further consultation and agreement with the Aboriginal community, and included in Design Guidelines to be addressed in future Development Applications.

Future Demographics and Demand for Infrastructure and Services

The Concept Plan proposes the delivery of 5,500 dwellings over 15 years, comprising a mix of detached dwellings, small lot integrated housing types and multi-unit apartments. The exact dwelling mix will reflect the market demands of the incoming population however it is expected that approximately 300 to 450 dwellings per year will be developed. Based on an estimate of the dwelling mix and future occupancy, the total population for the site is expected to be 12,000 at the completion of the development.

The Cobaki Lakes site will create demand for the provision of a range of urban services and community facilities and improvements to existing services within the nearby locality.

Tweed Heads provides a range of facilities including Hospital, Two sub-regional shopping centres, Council office, Civic centre, Southern Cross University, State Government Offices, Five High schools, and Seven Primary Schools.

In addition, the site is closely located to the John Flynn Hospital, Gold Coast Airport, Gold Coast public transport system and public sports fields, beaches and parks. It is intended that the Cobaki Lakes site will be self reliant, however it is expected that there will be some cross utilisation of these community facilities. It is not expected that the Cobaki Lakes development will give rise to adverse impacts upon these existing facilities.

The Concept Plan provides for education and community facilities, including two primary schools, child care centres and recreation areas and open space. The Concept Plan also makes provision for the development of places of worship, community centres and aged car facilities, in order to respond and adapt as the community needs are ascertained. The Concept Plan facilitates these uses throughout the site, particularly in the town centre precinct and community and education precincts to create focal points and to maximise access without vehicle trips.

Tweed Shire Council Section 94 Contribution Plan No.10 – Cobaki Lakes Public Open Space and Community Facilities sets out the requirements for the provision of Open Space, Multi-use hall, Youth activity centre, Community health centre, and Aged persons centre. The proponent acknowledges the instrument and will negotiate the details of its implementation thereof with Council. These measures are included in the Draft Statement of Commitments.

A Utility Services Strategy for water, sewer, electricity, and telecommunications is included in the Concept Plan to cater for the needs of future occupants of the site.

Off-site Impacts

The site is surrounded by various types of rural land and environmental protection areas. The adjacent agricultural land is suitable only for grazing and pastoral activities which have a low impact and do not present significant land use conflict with the urban development proposed in the Concept Plan. The surrounding land is not suitable for more intensive plant and livestock agriculture that have higher impacts. Any more intensive agricultural use would require separate environmental assessment and approval from relevant authorities. The areas proposed for urban development are separated from existing pastoral uses by existing roads, roads reserves and topographical features and achieve the minimum 30m separation in accordance with Council DCP guidelines. Fencing where presently in existence or to the extent necessary, will be constructed to restrict access, particularly for cattle and dogs, between urban development and adjoining land in agricultural zones. These measures are included in the Draft Statement of Commitments.

The potential impacts on adjacent zones of environmental protection are proposed to be managed by environmental buffers together with the stormwater management concept plan, vegetation management plans, and commitment to comply with bushfire protection guidelines. These measures are included in the Draft Statement of Commitments.

Ecologically Sustainable Development

The proposed Concept Plan is consistent with ESD principles as follows:

- Pre-cautionary principle - Environmental planning studies prepared by technical experts effectively conclude that there are no environmental constraints that preclude the development of the site in accordance with the proposed Concept Plan.
- Intergenerational equity - The Concept Plan will contribute to the supply of housing choices and provision of recreational parkland and environmental protection areas to meet the needs of current and future generations.
- Biological diversity - The Concept Plan contributes to the maintenance of, and increases opportunities for, biological diversity with the proposed rehabilitation and management of the existing indigenous vegetation, fauna, ecological communities and water resources.

- Valuation and pricing of environmental resources - 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 developing the site.

Conclusion

Given the environmental planning merits described above, it is requested that the Minister:

- Approve the Concept Plan under Section 75O of the EP&A Act;
- Determine under Section 75P(1) of the EP&A Act that the subdivision and development of the central open space and lakes precincts is to be the subject of a Project Application under Part 3A of the EP&A Act;
- Determine under Section 75P(1) of the EP&A Act that the subdivision and development of the town and village centre precincts, residential precincts, community and education precincts, and rehabilitation of the environmental protection precincts are to be the subject of Part 4 of the EP&A Act;
- Determine under Section 75P2(c) of the EP&A Act that further environmental assessment of development within Cobaki Lakes under Part 4 is to be undertaken in accordance with the Concept Plan including Statement of Commitments, Design Guidelines and Development Code;
- Direct under Section 75P2(c1) of the EP&A Act that any provision of the Tweed LEP prohibiting or restricting the carrying out of development in accordance with the Concept Plan under Part 4 does not have effect;
- Declare by Order under Section 75P2(d) of the EP&A Act that development identified as such in the Development Code to be incorporated into the Concept Plan is exempt and complying development for the purposes of the EP&A Act;
- Declare by Order under Section 75P2(e) that any development carried out in accordance with the Concept Plan is not Designated Development; and
- Amend by Order under Section 75R(3A) of the EP&A Act the Tweed Local Environmental Plan to align with the refinements to zone boundaries and minimum lot sizes in the Concept Plan.

1.0 Introduction

This Environmental Assessment Report (EAR) supports a proposed Concept Plan for the development of the Cobaki Lakes Estate in the Tweed Shire Council area, and is submitted to the Minister for Planning ('the Minister') in accordance with Part 3A of the Environmental Planning and Assessment Act 1979 (EP&A Act).

This report follows the letter from the Department of Planning dated 1 February 2007 included at **Appendix A** which advises that the Minister has formed the opinion that the proposed development is a major project requiring approval under Part 3A of the EP&A Act. The letter also advises that the Minister has authorised the submission of a Concept Plan for the project.

JBA Urban Planning Consultants Pty Ltd has prepared this EAR on behalf of the proponent and landowner, LEDA Manorstead Pty Ltd. It is based on information provided by LEDA, the Concept Plan and design information provided by Design Forum Architects (Dfa), and supporting technical documents provided by the expert consultant team which are appended.

The EAR and Concept Plan has been prepared in regard to the Director-General's Environmental Assessment Requirements (DGRs) dated 21 August 2007 also included at **Appendix A**. This EAR describes the site and proposed development in the Concept Plan, and includes an environmental assessment of the proposal in accordance with the DGRs.

1.1 Overview of Proposed Development and Concept Plan

The site of the Cobaki Lakes Estate comprises approximately 593.5 hectares (ha) of land next to the NSW Queensland border, Gold Coast Airport and recently constructed Tugun Bypass.

LEDA propose to develop the Estate for a mix of urban land uses integrated with open space and environmental protection areas comprising the following:

- town centre precinct comprising a mix of retail, commercial, community and multi-unit residential uses, with up to 9,500m² of retail space and 200 multi-unit dwellings over 18ha of land;
- residential precincts with a mix of dwelling types including detached houses, townhouses and multi-unit housing with up to 5,300 dwellings over 283 ha of land excluding major roads;
- community and education precincts including two schools over 7ha of land;
- open space, lakes and environmental protection areas covering 267 ha of land;
- access network of roads, public transport routes, pedestrian/ cycle paths;
- landscaping and vegetation management;
- water management; and
- utility services infrastructure.

The Concept Plan in this report seeks the Minister's approval for the following aspects of the proposed development:

- vision and design principles for Cobaki Lakes Estate;
- general layout and siting of development into precincts;
- land uses in each precinct;
- maximum site coverage, dwelling numbers and densities, building heights and retail floor space in development precincts;
- a mix of lot sizes ranging from 120m² to 1,200m² in residential and town centre precincts;
- open space and landscape management concepts;
- access network of roads, public transport routes, pedestrian/ cycle paths;
- water management concept;
- utility services strategy; and
- statement of commitments.

Design guidelines and codes for subdivision and housing are proposed to be prepared and incorporated into the Concept Plan at a later stage.

The Concept Plan also seeks that the Minister amend the Tweed LEP 2000 to refine the existing zoning boundaries, and allow a mix of housing densities on lot sizes ranging from 120m² to 1,200m².

1.2 Background to the Project

Initial investigations into the Cobaki Lakes Estate site were first conducted in 1983 at which time the site was owned by the Japanese company, Calconic. In 1994, LEDA purchased the site.

The site is currently subject to a number of existing development consents granted by Tweed Shire Council for residential subdivision and bulk earthworks for different parts of the site as described in Section 2.7 of this report.

The existing development consents are in accordance with the current zoning of the site which comprises a mix of residential, open space and environmental protection zones under the Tweed Local Environmental Plan 2000 as described further in Section 4.2 of this report.

LEDA's proposed Concept Plan for the Cobaki Lakes Estate seeks to provide a co-ordinated planning framework for the development of the site over the long term in a way that incorporates and refines the broad development parameters in the existing land use zonings and development consents in line with contemporary market conditions and principles of environmental planning and urban design.

1.3 Statutory Context

State Environmental Planning Policy (Major Projects) 2005 identifies development to which Part 3A of the EP&A Act applies and requires approval from the Minister.

Clause 6 of the Major Projects SEPP states that development, which in the opinion of the Minister is development of a kind referred to in Schedule 2 (Specified Sites) is declared to be a project to which Part 3A applies.

The project falls into the class of development described in Item 1 (1)(j) of Schedule 2 of the SEPP, namely, development within the coastal zone for the purpose of subdivision of land in a residential zone into more than 25 lots.

In accordance with the EP&A Act and the Major Projects SEPP, LEDA requested that the Minister:

- declare the Cobaki Lakes project to be a Major Project subject to Part 3A of the EP&A Act;
- authorise the preparation and lodgement of a Concept Plan for the site; and
- issue environmental assessment requirements for the Concept Plan.

On 1 February 2007, the Director General as delegate of the Minister advised that the proposal is a Major Project and that Part 3A of the EP&A Act applies. (Refer to letter at **Appendix A**). Subsequently, the Director General issued the Environmental Assessment Requirements (DGRs) for the project (which are also included at **Appendix A**). A table showing the location of the DGRs addressed in this report is located in Section 6 of this report.

1.4 Project Team

An expert project team has been formed to deliver the project and includes:

Proponent	LEDA Manorstead Pty Ltd
Urban Planning	JBA Urban Planning Consultants
Urban Design	Design Forum Architects
Landscape	Place Planning & Design
Geotechnical	Gilbert + Sutherland / Bowler Geotechnical
Water	Gilbert + Sutherland
Flooding	BMT WBM Pty Ltd
Ecology – Flora and Fauna	James Warren & Associates
Infrastructure	Brad Lees Consulting
Traffic	Cardno Eppell Olsen
Heritage	Everick Heritage Consultants
Bushfire	Land Parrtneers
Demographics	Darryl Anderson Consulting
Centre (Retail)	Conics
Mosquito Management	Mosquito Consulting Services Pty Ltd

2.0 Site Description

2.1 Location and Context

The site is located on the Far North Coast Region of NSW within the Tweed Shire Council area approximately 100m from the NSW / Queensland border. It is approximately 6km west of Tweed Heads/Coolangatta Town Centre, 1.5km west of Gold Coast Airport and Gold Coast Highway, and 500m west of the Pacific Highway (Tugun Bypass).

Access to the site is currently off Boyd Street which provides indirect access off the Gold Coast Highway.

The location of the site is shown in **Figures 1 and 2**.



Figure 1 – Location Plan



 The Site

Figure 2 – Locality Plan

2.2 Land Description and Title

The Cobaki Lakes Estate is owned by LEDA Manorstead Pty Ltd. It has an area of 593.5 ha. The legal description of the site is as follows:

- Lot 1 in DP 570076;
- Lot 2 in DP 566529;
- Lot 1 in DP 562222;
- Lot 1 in DP 570077;
- Lot 1 in DP 823679;
- Lots 46, 54, 55, 199, 200, 201, 202, 205, 206, 209, 228 & 305 in DP 755740.

A cadastral plan is provided in **Figure 3** and an aerial photo of the site is included at **Figure 4**.



Figure 4 – Aerial Photo of the Site

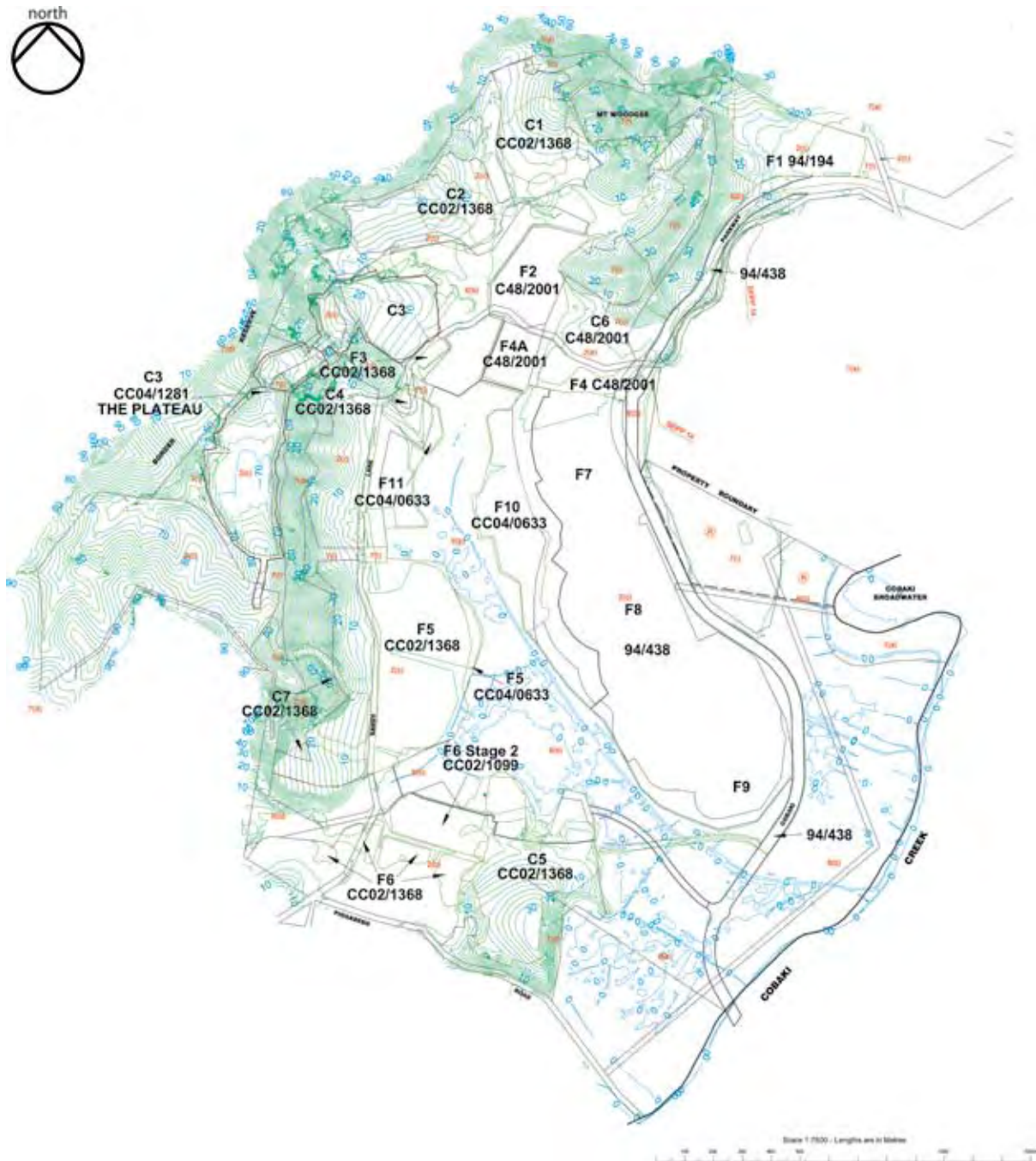


Figure 5 – Topography of the Site (after completion of approved earthworks)

2.3 Topography

The Cobaki lakes site is situated within the McPherson Range foothills. Mount Woodgee is situated in the northern portion of the site and is the easternmost end of the Range.

The site forms a natural amphitheatre located within the catchment of Cobaki Broadwater. It comprises a low lying and level central plain surrounded by steep rising hillsides on the northern, western and southern sides of the site. **Figure 5** shows the topographical contours of the site following completion of the approved earthworks described in Section 2.7 below.

The topography of the site is considered in more detail in the relevant parts of Section 6 - Environmental Assessment in this report. In particular, this includes the assessment of visual landscape in Section 6.2, flora and fauna in Section 6.4, water management in Section 6.5, geotechnical issues in Section 6.6.

2.4 Geology and Soils

The site fundamentally consists of 4 main geological zones:

- Low lying marine clays;
- Interbedded alluvial clays/ sands;
- Sandridge;
- High relief residual clay/ weathered rock area.

The geotechnical constraints relating to the site, have been used to advise the layout of the Concept Plan. A detailed assessment if the geotechnical issues are included at Section 6.6 of this report.

2.5 Flora and Fauna

The site contains a range of vegetation communities including the following types:

- dry sclerophyll eucalypt forest and woodland;
- rainforest communities of tall open and closed forests of mixed species;
- woodland communities of mixed species and eucalypt;
- heathland;
- mangrove forest;
- grassland of mixed species;
- rushland/sedgeland/grassland of mixed aquatic species;
- dams and drainage line communities of mixed aquatic species.

The site includes:

- A total of 8 flora species and 12 fauna species listed as threatened under the *Threatened Species Conservation Act 1995* (TSC Act).
- 2 flora species and 1 fauna species listed as threatened under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).
- A total of 6 Endangered Ecological Communities (EECs) as listed under schedule 1 of the TSC Act have also been recorded on the site comprising:
 - Swamp sclerophyll forest on coastal floodplain;
 - Lowland rainforest on floodplain;

- Lowland rainforest;
 - Freshwater wetlands;
 - Swamp oak floodplain forest; and
 - Coastal saltmarsh in the NSW Coast bioregion.
- A number of regional and sub-regional habitat corridors.
 - Small areas of wetlands identified under State Environmental Planning Policy 14 – Coastal Wetlands (SEPP14).
 - Areas of potential Koala habitat.
 - Area of breeding habitat for mosquitoes.

A detailed description and assessment of flora and fauna on the site is included at Section 6.4.

2.6 Indigenous Heritage

There are no cultural heritage or archaeological sites within the Cobaki Lakes site that are listed under relevant State Government data base. However, surveys undertaken on behalf of the proponent on the site have identified cultural material and artefacts on the site. A detailed heritage and archaeological assessment is included in Section 6.9 of this report.

2.7 Existing Development Approvals and Use Rights

The site is subject to a number of existing development consents for residential subdivision and bulk earthworks, and existing use rights for cattle grazing. A description of the existing use rights, consents, certifications and associated works is provided below.

2.7.1 Existing Use Rights

The Cobaki Lakes site has been primarily used for agriculture grazing and pastoral uses and contains a number of dwelling houses, farm sheds and associated infrastructure.

Darryl Anderson Consulting Pty Ltd has undertaken an investigation into the existing and continuing use rights of the Cobaki Lakes site (**Appendix B**). Based on their investigations, the whole of Cobaki Lakes is considered to enjoy existing and continuing use rights under Sections 107 and 109 of the EP&A Act for the purposes of grazing up to 400 head of cattle.

2.7.2 Existing Development Consents

Between 1993 and 2002 seven development consents were obtained. These comprised consents for bulk earthworks and residential subdivision on different parcels of land covering major portions of the site. A description of the existing consents are shown in **Table 1** and in **Figures 6** and **7**.

Table 1 – Existing Consents and Works

Consent Reference	Description	Date of Consent	Commencement
92/315	Boyd Street Extension	5 January 1993	The development was commenced before the Consent lapsed and the Development Consent is preserved
94/438	Bulk Earthworks	27 January 1995	The development was commenced before the Consent lapsed and the Development Consent is preserved
S94/194	730 Lot Urban Subdivision – Parcels 1 to 5 + 13 Englobo Parcels (The Entrance, The Sand Ridge)	19 September 1995	The development was commenced before the Consent lapsed and the Development Consent is preserved
96/271	Bridge over Cobaki Creek	8 April 1997	The development has commenced and the Consent remains in force
S97/54	430 lot Residential Subdivision – Parcel 7 to 10 (The Knoll, Piggabeen)	21 October 1997	The development has commenced and the Consent remains in force
K99/1124	560 Lot Urban Subdivision (The Foothills, The Plateau, Valley East, Valley West, East Ridge)	21 July 2000	The development has commenced and the Consent remains in force
1162/2001 DA	8 Management Lots and Bulk Earthworks (Town Centre)	8 October 2002	The development has commenced and the Consent remains in force

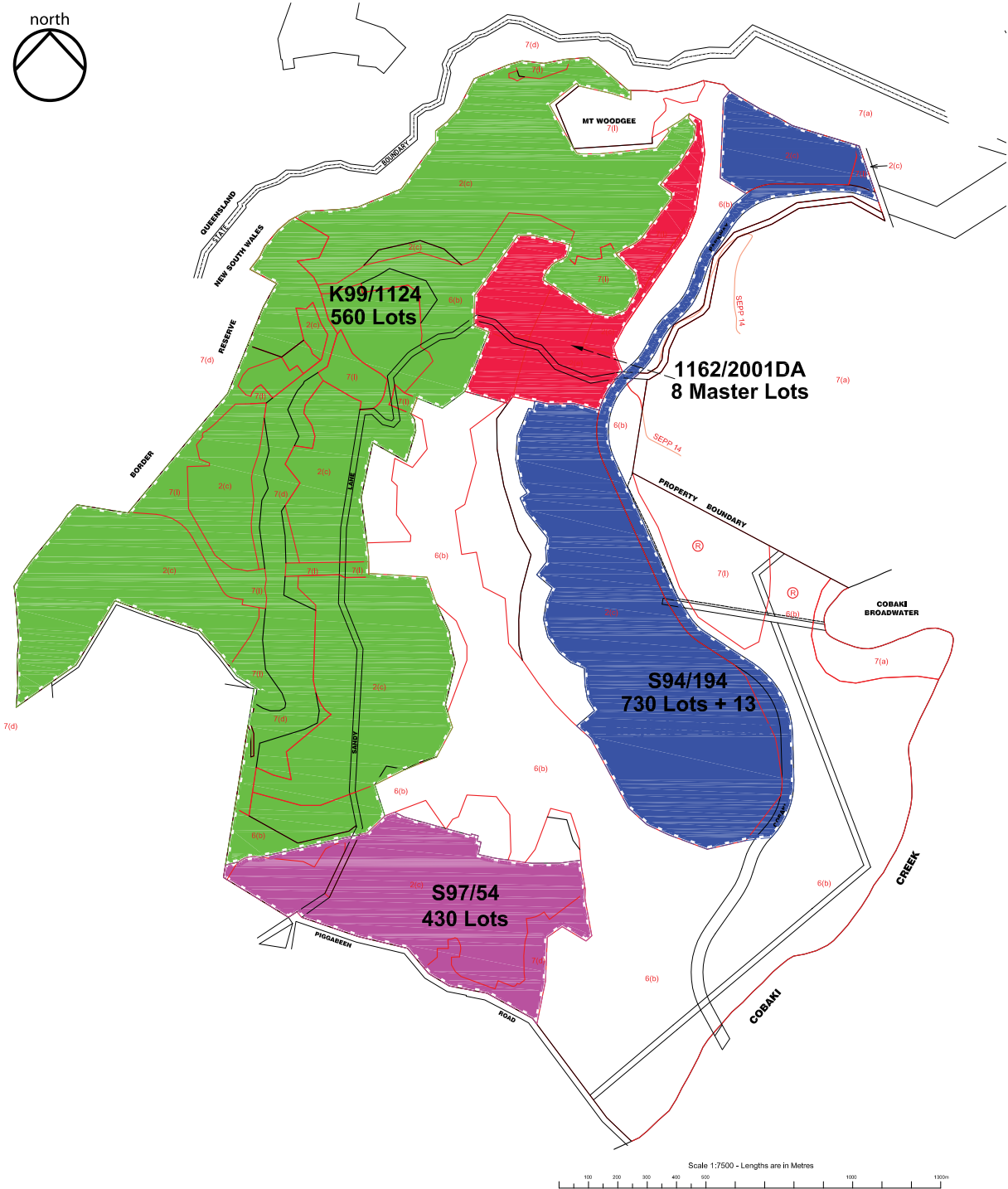


Figure 6 – Existing Subdivision and Development Consents

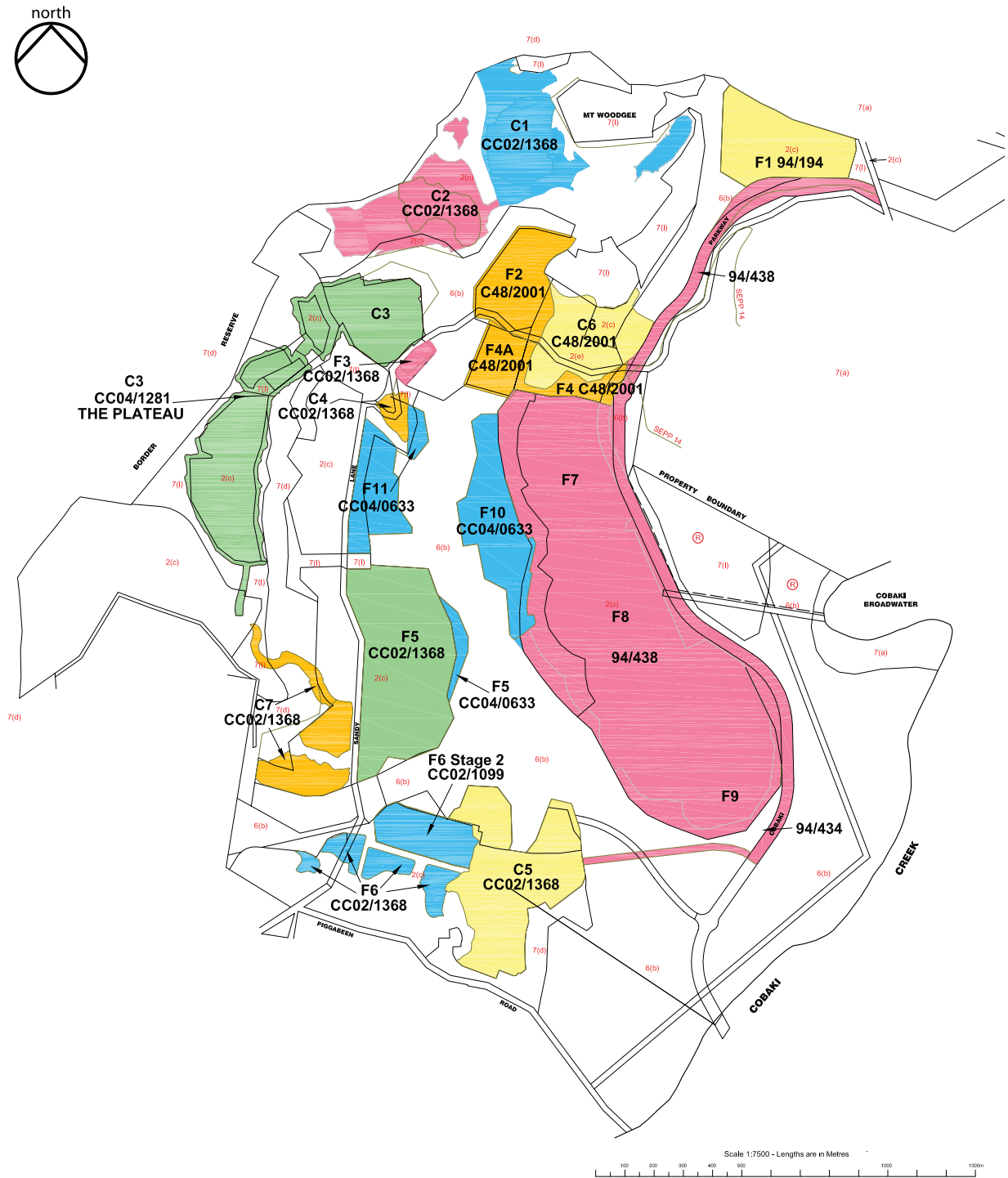


Figure 7 –Existing Earthworks Approvals¹

1 C1-C7 = Cut phasing; F1-F9 = Fill phasing

2.7.3 Existing Earthworks Certification and Completions

Figure 7 shows the certifications obtained to date for bulk earthworks and other civil engineering and state of progress of these works at June 2008.

LEDA has carried out substantial earthworks to date in accordance with approvals obtained from Tweed Shire Council, as referred to above. The majority of these works has involved the filling of flood prone urban-zoned areas. All approved earthworks in cut areas (C) and fill areas (F) are within the 2(c) Urban Expansion Zone. The road reserve for the Cobaki Parkway within the Cobaki Lakes site is throughout its length within the 6(b) Recreation Zone.

Table 2 and **Figures 8** and **9** show the areas of approved works that have been completed to date and the areas of approved works in progress. The proponent intends to continue with and complete these works. These works are not in conflict in any way with the proposed Concept Plan.

Table 2 – Certification obtained for Bulk Earthworks and Civil Engineering Works

Year of Issue	Certificate Reference	Completed (June 2008)	In progress (June 2008)
1995	PF3880/90	Fill areas F1, F&, F8, F9 Earthworks to Cobaki Parkway	
2000	CC29/2000	Earthworks Boyd Street extension	Civil design Boyd Street extension
2000	PF3880/90		Civil design Cobaki Parkway
2002	CC02/1099	Fill Area F6 Stage 2	
2003	CC048/2001	Cut Area C6 Fill Areas F2, F4, F4A	
2004	CC04/1281		Cut Area C3
2005	CC02/1368-01		Cut Area C7
2008	Amendment to CC02/1368		Extension to Fill Area F3 Amendment to Cut Areas C1, C2
2008	Amendment to PF3880/90		Extensions to Fill Areas F7, F8, F9 Amendments to civil design Cobaki Parkway

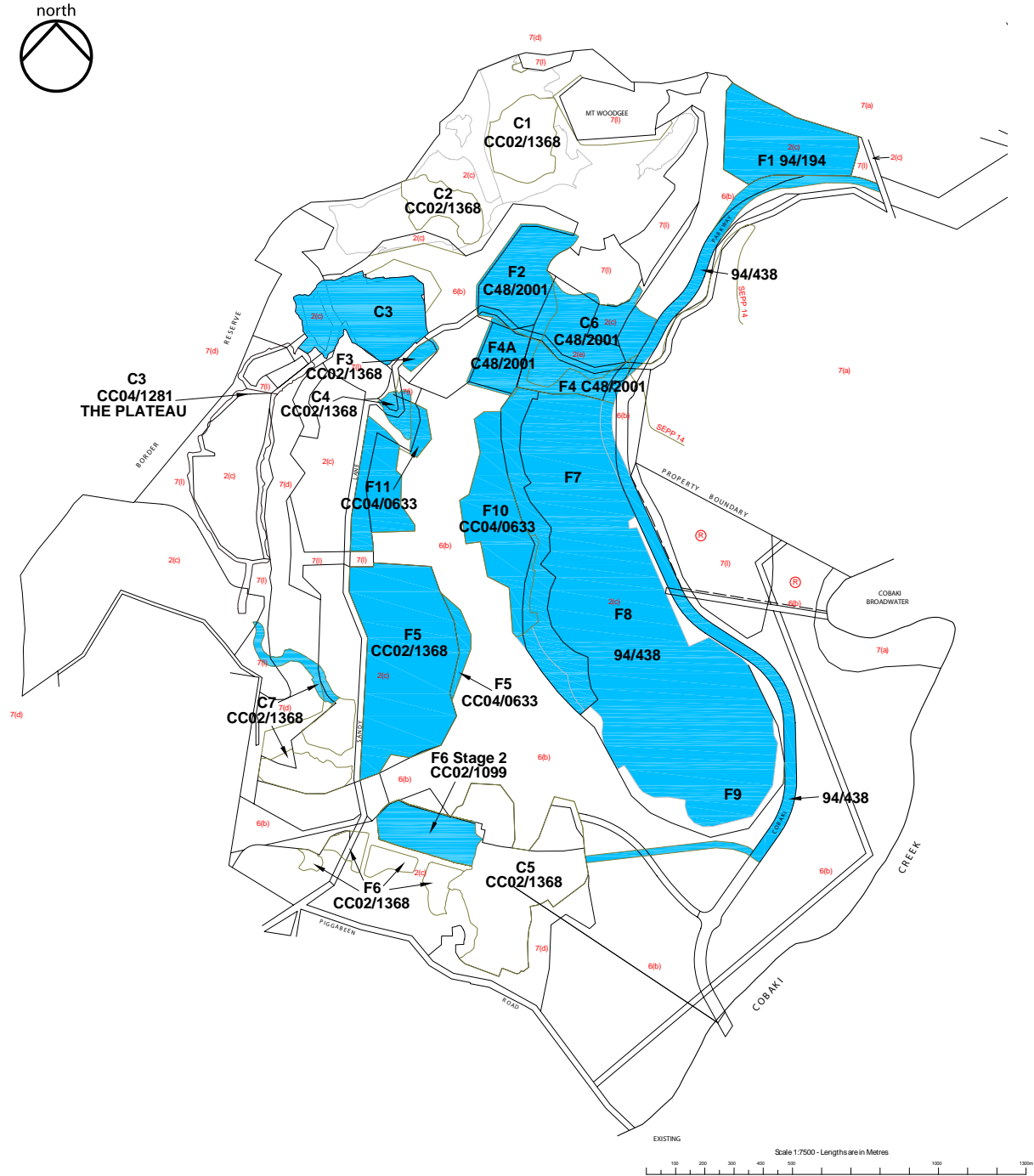


Figure 8 – Completed Earthworks as at June 2008

Table 3 – Approved Earthworks to be Completed

Certificate Reference	In progress as at June 2008	Extent of approved further works
CC29/2000	Civil design Boyd Street extension	Full civil construction from western ramp of Boyd Street overpass to Cobaki Lakes boundary
PF3880/90 and amendment	Civil design Cobaki Parkway	Full civil construction from Cobaki Lakes boundary to Town Centre roundabout
CC02/1368 and amendment	Cut Area C1	Earthworks and filling to accommodate residential development
	Cut Area C2	Earthworks and filling to accommodate residential development
	Cut Area C5	Earthworks and filling to accommodate residential development
	Fill Area F6	Filling to balance urban area to same level as adjacent completed fill to mitigate flooding
CC04/1281	Cut Area C3	Earthworks for road up plateau and adjacent urban areas complete. Balance earthworks to plateau east cut and filling to accommodate residential development
CC02/1368-01	Cut Area C7	Earthworks for road up to plateau complete. Balance earthworks to accommodate residential development
Amendment to CC02/1368	Extension to Fill Area F3	Filling to balance urban area to same level as adjacent completed fill to mitigate flooding
Amendment to PF3880/90	Extension to Fill Areas F7, F8 F9	Filling to balance urban area to same level as adjacent completed fill to mitigate flooding

2.7.4 Existing Approvals to be Preserved

Existing Subdivision Consents to be Preserved

The Concept Plan proposes to preserve the existing subdivision consents applying to Cobaki Lakes as shown in Figure 6 until such time as a new consent is granted to a future development application for subdivision of the land in accordance with the Concept Plan.

The Concept Plan proposes to preserve part of the existing subdivision consent (K99/1124) in perpetuity insofar as it applies to Precincts 1 and 2 in the Concept Plan shown in Section 4 below.

Existing Approvals of Earthworks to be Preserved

The Concept Plan proposes to preserve all the existing consents, approvals and certifications of earthworks shown in figure 7 to allow their completion. The approved earthworks support and complement the proposed Concept Plan.

2.8 Surrounding Land Uses and Development

The entire site is immediately surrounded by Crown reserves adjacent to the State border, rural zones and environmental protection zones.

The land uses and zones immediately surrounding the site comprise the following:

- Remnant bushland forest areas adjacent to the west and north of the site zoned for environmental protection;
- Cobaki Creek and Broadwater forest and wetlands to the east zoned for environmental protection.
- Agricultural (grazing and pastoral) uses adjacent to the south of the site and further to the north and west comprising mainly native pastures for cattle grazing; and
- Golf course and driving range adjacent to the southwest of the site zoned rural.

Beyond these adjoining land uses to the north, east and south is the urban development of the Gold Coast and Tweed Coast including residential suburbs, town centres, hospitals, educational facilities, recreational facilities, tourist facilities, Coolangatta airport and associated utilities and community infrastructure.

The Cobaki Lakes Estate has road access to the northeast and southeast as follows:

- Boyd Street to the northeast which links indirectly with the Gold Coast Highway in QLD (via Coolangatta Road – a service road running parallel to the Highway); and
- Piggabeen Road to the southeast which links with Kennedy Drive and then the Pacific Highway (Tugun Bypass) in NSW.

3.0 Planning Framework and Context

3.1 Far North Coast Regional Strategy

The Far North Coast Regional Strategy is the key strategic planning document for the North Coast Region. Released in December 2006 by the NSW Government, it set the framework for:

- the management of the expected high population growth in the Far North Coast Region in a sustainable manner;
- protection of the Far North Coast region's unique environmental assets, cultural values and natural resources while ensuring that future planning maintains the character of the region; and
- the provision of economic opportunities.

The Cobaki site is identified in the Strategy as part of the existing urban footprint (which reflects the current residential zoning under Tweed Local Environmental Plan as described further in Section 3.4.1 below).

The other key elements of the Far North Coast Regional Strategy which apply to the Cobaki Lakes proposal are summarised below.

Environment and Natural Resources

A key aim of the Strategy is to identify and protect important environmental assets, landscape and cultural values and natural resources. It requires new development adjoining or adjacent to farmland, extractive resources, waterways, wetlands and areas of high biodiversity value to incorporate buffers to avoid land use conflict. These matters are assessed under the relevant parts in Section 6 of this report.

Cultural Heritage

The Strategy seeks to protect all places, precincts, landscapes and buildings of historic, scientific, cultural, archaeological, architectural and aesthetic significance by requiring them to be identified in planning instruments and ensuring that development proposals are sympathetic and compatible with the underlying heritage values. The Cobaki Lakes proposal, seeks to conserve and protect items of indigenous heritage in accordance with the aims of the Far North Coast Regional Strategy. Heritage is addressed further in Section 6.9.

Natural Hazards

The Strategy seeks to ensure that future urban development is not located in areas of high risk from natural hazards, including sea level rise, coastal recession, rising water tables and flooding. Water management and flooding issues are addressed in Section 6.5. Geotechnical issues are addressed in Section 6.6.

Settlement and Housing

The Strategy directs urban development towards an identified hierarchy of towns and villages. The Strategy identifies the following key demographic projections:

- smaller household sizes – i.e. increase in one-two person households;
- ageing population; and
- increased population - 60,400 people over next 25 years.

Taking these projections into account, the Strategy estimates that approximately 51,000 new dwellings will be required across the Region to 2031. This equates to 19,100 new dwellings within Tweed LGA.

In order to meet these housing (and employment) needs, Town and Village Growth Boundaries have been identified. These will accommodate the additional housing, industry, business, infrastructure, tourism and community facilities and urban open spaces. Within the Coastal Area, only land within a Town and Village Growth Boundary may be released for urban purposes. The Cobaki Lakes Estate falls within the Town and Village Growth Boundary of Tweed.

Settlement Character and Design

New development is to include a range of well designed housing, within easy access (preferably within walking distance) to services and facilities.

The Strategy seeks that new development is based upon 'neighbourhood planning principles'. These principles comprise:

- a range of land uses to provide the right mix of houses, jobs, open space, recreational space and green space.
- easy access (including public transport where viable) to major town centres with a full range of shops, recreational facilities, and services along with smaller village centres and neighbourhood shops.
- jobs available locally and regionally, reducing the demand, for transport services.
- streets and suburbs planned so that residents can walk to shops for their daily needs.
- a wide range of housing choices to provide for different needs and different incomes. Traditional houses on their own block will be available along with smaller, lower maintenance homes, units and terraces for older people and young singles or couples.
- conservation lands in and around the development sites to help protect biodiversity and provide open space for recreation.

These principles are adopted for the Concept Plan as described in Section 4.

In addition, Councils are required to set building heights that reflect the landscape character, function and hierarchy of the future settlement and visual and cultural amenity of its location. The Strategy identifies the following key advantages of 'taller building precincts':

- residential accommodation above commercial space can bring a higher level of vibrancy to a centre;
- a greater number of people and business in most active parts of a centre can be accommodated without consuming additional land;
- significant economies of scale can be achieved in the provision of basic services, such as roads, drainage, water supply and sewerage.

In accordance with the thrust of the Far North Coast Regional Strategy, the proponent will be seeking to increase the current 3 storey height limit in appropriate and suitable parts of the residential zones as part of the Tweed Shire Council's review of LEP height limits.

Economic Development and Employment Growth

The planned consolidation of employment centres within the South East Queensland Regional Strategy will have implications for economic growth within the Far North Coast Region. In addition, population growth in the region has resulted in a service sector dominated economy and a need for 32,500 new jobs by 2031.

In order to strengthen the economic activity of the Region and widen the tourist sector, inter alia, the Strategy seeks future urban settlement patterns to be designed to retain their existing tourism appeal and reinforce regional character and LEPs to provide a range of tourism experiences and forms of tourist accommodation.

The Concept Plan for Cobaki includes a Town centre, neighbourhood centre and open space to cater for the daily economic needs of the future community and contribute to economic and employment growth.

Water and Energy Resources

The Regional Strategy seeks to maintain and improve existing ground and surface water quality levels and encourage best practice initiatives relating to efficient use, demand management and recycling of water.

All future development is required to apply water sensitive urban design principles and meet storm water targets. Water management is addressed in Section 6.5 of this report.

Regional Transport

The Pacific Highway to dual carriageway standard will continue to be the main inter/intra region road corridor. In terms of local transport, the Strategy seeks improved connectivity and accessibility within integrated urban areas to minimise the need to travel and encourage energy and resource efficiency. This is incorporated in the Concept Plan.

The Cobaki Lakes proposal will provide direct access to the Gold Coast Highway and in the future, to the Pacific Highway.

3.2 Planning Related Legislation

Environmental Planning and Assessment Act 1979

Part 3A of the EP&A Act establishes the process for the preparation of applications, environmental assessments and granting of approvals by the Minister for Planning for certain classes of major project developments identified in the State Environmental Planning Policy (Major Projects) 2005.

On 1 February 2007, the Director General, as delegate of the Minister for Planning, advised the applicant that the proposal for Cobaki Lakes Estate is a major project to which Part 3A of the EP&A Act applies and requires the Minister's approval, and authorised the submission of this Concept Plan.

Environmental Protection and Biodiversity Conservation Act 1999

The *Commonwealth Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) applies to any activity that is likely to have a significant impact on matters of national environmental significance including threatened species and ecological communities listed under the EPBC Act, and is declared by the Commonwealth to be a controlled action that requires its approval under the EPBC Act.

The proposed Concept Plan involves the removal of two trees of species that are listed as threatened in the EPBC Act. The removal of these two trees is not considered to represent a significant impact on these species, and therefore it is unlikely to be declared by the Commonwealth to be a controlled action that needs its approval. The Commonwealth will be consulted by the applicant in due course. The impacts, rehabilitation and management of flora and fauna on the site are addressed in Section 6.4 of this report.

Threatened Species Conservation Act 1995

The *Threatened Species Conservation Act 1995* (TSC Act) identifies and protects threatened and endangered species, populations and ecological communities.

The proposed Concept Plan involves the disturbance, rehabilitation and management of some threatened species and endangered ecological communities listed under the TSC Act. This is addressed in Section 6.4 of this report in accordance with the principles embodied in the TSC Act.

Water Management Act 2000

The *Water Management Act 2000* (WM Act) provides for the sustainable and integrated management of water resources of the State.

Approval is required under Section 90 of the WM Act for stormwater and flood management works. Similarly an activity approval under section 91 of the WM Act is required to carry out a controlled activity in, or under waterfront land which is defined as land within 40m of a river, lake or estuary.

Section 75U of the EP&A Act removes the requirement for approval under the WM Act for a project approved under Part 3 A of the EP&A Act.

Water management is addressed under Sections 4.7 and 6.5 of this report in line with the practices used in the administration of the WM Act.

Rural Fires Act 1997

The *Rural Fires Act 1997* (RF Act) seeks to prevent, mitigate and suppress bush and other fires to protect persons, property and the environment from bushfire danger. Under Section 100B of the RF Act, a bushfire safety authority is required from the NSW Rural Fire Service for certain development including residential development and school on bushfire prone land. The issue of an authority is dependent upon consistency with the Planning for Bushfire Protection guidelines.

Section 75U of the EP& A Act removes the requirement for an authority under the RF Act for a Part 3A project.

Bushfire protection is addressed under Section 6.8 of this report consistent with the Planning for Bushfire Protection guidelines.

National Parks and Wildlife Act 1974

Sections 84 and 90 of the *National Parks and Wildlife Act 1974* (NPW Act) provides the primary basis for the legal protection and management of Aboriginal sites and relics within NSW. The Act requires amongst other things:

- consultation with the Department of Environment and Conservation prior to development to determine to the existence of items of Aboriginal heritage;
- consultation with local Aboriginal groups; and
- consent to disturb Aboriginal heritage sites/items.

In the case of a Part 3A Concept Plan, approval under the NPW Act is not required.

The management of heritage values at Cobaki Lakes is addressed under Section 6.9 of this report consistent with the practices used in the administration of the NPW Act.

Native Vegetation Act 2003

The *Native Vegetation Act 2003* relates to the sustainable management and conservation of native vegetation. The objectives of this Act seek to:

- encourage and promote the management of native vegetation;
- prevent broadscale clearing;
- protect native vegetation of high conservation value;
- improve the condition of existing native vegetation; and
- encourage the revegetation of land and rehabilitation of land.

Clause 5 of the Act however specifies that the Act does not apply to 'residential' zoned land under an environmental planning instrument.

Under section 75U of the EP&A Act, approval for the clearing of native vegetation or State protected land is not required for a Part 3A project.

The clearing, rehabilitation and management of vegetation on the Cobaki Lake site in the Concept Plan is addressed in Section 6.4 of this report.

3.3 State Environmental Planning Policies

State Environmental Planning Policy (Major Projects) 2005

State Environmental Planning Policy (Major Projects) 2005 identifies development to which Part 3A of the EP&A Act applies and requires approval from the Minister for Planning. The proposed Concept Plan falls into a class of development described in Item 1 (1)(j) of Schedule 2 of the SEPP, namely, development within the coastal zone for the purpose of subdivision of land in a residential zone into more than 25 lots.

On 1 February 2007, the Director General, as delegate of the Minister for Planning, advised that the proposal for Cobaki Lakes Estate is a major project requiring the approval of the Minister under Part 3A of the EP&A Act, and authorised the submission of this Concept Plan.

State Environmental Planning Policy (Infrastructure) 2007

The Infrastructure SEPP, amongst a broad range of functions, requires application for specific types of development to be referred to the Roads and Traffic Authority (RTA) for its comment prior to determination. Under the provisions of Schedule 3 of the SEPP, the following forms of development are required to be referred to the RTA for comment:

- development comprising 300 or more apartment dwellings;
- shops and commercial premises with 4000m² of floorspace ; or
- subdivision of land into 200 or more allotments where the subdivision includes the opening of public roads.

The development proposed in this Concept Plan application is of a type and scale that is referred to the RTA in accordance with the Infrastructure SEPP. Consultation has been carried out with the RTA as described in Section 5 of this report.

State Environmental Planning Policy 14 – Coastal Wetlands

SEPP 14 aims to ensure that the coastal wetlands are preserved and protected. Under Clause 7(1), land clearing, levee construction, land draining or land fill may only be carried out within the wetlands with development consent and with the concurrence of the Director-General of Planning. However, if under Clause 6(2) the development is a Part 3A project, then the concurrence of the Director-General is not required.

The Cobaki Lakes site is located adjacent to SEPP 14 coastal wetlands to the east that are part of the Cobaki Broadwater, and some SEPP 14 wetland areas encroach slightly into the eastern side of the site. The potential impacts and management of the SEPP 14 wetlands are addressed in Section 6.4.5 of this report.

State Environmental Planning Policy 44 – Koala Habitat Protection

SEPP 44 seeks to encourage the proper conservation and management of areas of natural vegetation that provide habitat for koalas to ensure a permanent free-living population over their present range.

SEPP 44 applies to development in the Tweed Shire on land parcels of more than 1 hectare.

Before a consent authority can approve development on land to which SEPP 44 applies, it must satisfy itself whether or not the land is Core Koala Habitat.

If Core Koala Habitat is identified on the site, a plan of management must be prepared in accordance with Part 3 of SEPP 44 before the consent authority can grant consent to development.

The Cobaki Lakes site includes areas of koala habitat. The potential impacts on koala habitat and a management plan for fauna including koalas are addressed in Section 6.4.7 of this report and **Appendix I**. This is consistent with the provisions of SEPP 44.

State Environmental Planning Policy 55 – Remediation of Land

SEPP 55 provides controls and guidelines for the remediation of contaminated land. In particular, this policy aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment.

Before determining a development application or preparing an LEP amendment that changes the use of land, a planning authority must consider whether the land is contaminated and be satisfied that it is suitable in its current state or will be suitable, after remediation for the proposed development.

The Cobaki Lakes site includes relatively small areas that have been subject to land use activities in the past that have the potential to have lead to contamination of the soil in those areas. The potential areas of contamination and the management of those areas is addressed in Section 6.6.4 of this report in line with SEPP 55.

State Environmental Planning Policy 65 – Design Quality of Residential Flat Development (and Residential Flat Design Code)

SEPP 65 aims to improve the design quality of residential flat development (which is essentially defined as a building with 3 or more storeys and 4 or more dwellings).

SEPP 65 sets out ten planning principles which are required to be considered during the preparation of any development application or development control plan for residential flat development. The ten principles are Context; Scale; Built form; Density; Resource, energy and water efficiency; Landscape; Amenity; Safety and security; Social dimensions and housing affordability; and Aesthetics.

SEPP 65 also requires that consideration be given to the Residential Flat Design Code (RFDC) in the preparation of any development application or development control plan for residential flat development. The RFDC provides additional guidelines for the detailed design of residential flat development.

The ten principles in SEPP 65 have been considered in the preparation of this Concept Plan particularly in relation to the context, scale and density of development, efficiency and sustainability in the use of water resources and natural resources, landscape, social aspects and infrastructure, which are all addressed in the relevant sections of this report below.

The principles of SEPP 65 and the RFDC are more applicable to the detailed design of individual precincts and residential flat development in future stage Development Applications for subdivision of precincts and detailed design of residential buildings.

State Environmental Planning Policy 71 – Coastal Protection

SEPP 71 applies to development within the 'coastal zone' along the eastern seaboard of NSW. The Cobaki Lakes site is situated within the Coastal Zone (as defined under the *Coastal Protection Act 1979*) and partly falls within a 'sensitive coastal location'.

This SEPP seeks to ensure that within the Coastal Zone, development is appropriate and suitably located; there is consistent and strategic approach to coastal planning and management; and there is a clear development assessment framework.

The aims of SEPP 71 are:

- “(a) to protect and manage the natural, cultural, recreational and economic attributes of the New South Wales coast, and*
- (b) to protect and improve existing public access to and along coastal foreshores to the extent that this is compatible with the natural attributes of the coastal foreshore, and*
- (c) to ensure that new opportunities for public access to and along coastal foreshores are identified and realised to the extent that this is compatible with the natural attributes of the coastal foreshore, and*
- (d) to protect and preserve Aboriginal cultural heritage, and Aboriginal places, values, customs, beliefs and traditional knowledge, and*
- (e) to ensure that the visual amenity of the coast is protected, and*
- (f) to protect and preserve beach environments and beach amenity, and*
- (g) to protect and preserve native coastal vegetation, and*
- (h) to protect and preserve the marine environment of New South Wales, and*
- (i) to protect and preserve rock platforms, and*
- (j) to manage the coastal zone in accordance with the principles of ecologically sustainable development (within the meaning of Section 6(2) of the Protection of the Environment Administration Act 1991, and*
- (k) to ensure that the type, bulk, scale and size of development is appropriate for the location and protects and improves the natural scenic quality of the surrounding area, and*
- (l) to encourage a strategic approach to coastal management.”*

The proposed development is consistent with the aims of the policy in the following respects:

- it retains, rehabilitates and manages the natural bushland and water course attributes on the site, manages the cultural heritage values, provides recreational opportunities, and utilises the economic attributes of the site as described in the relevant parts of Sections 4 and 6 of this report;
- it provides public access to and along the adjacent Cobaki Creek and Broadwater foreshore consistent with the natural attributes of the foreshore as shown in Section 4 of this report ;
- it includes management measures for the protection of Aboriginal cultural heritage as described in Section 6.9 of this report;
- it will have minimal impact on the visual amenity of the coast as described in Section 6.2 of this report;
- it protects and preserves native coastal vegetation as described in Section 6.4 of this report;
- it protects and preserve the marine environment with the water management concept described in Section 6.5 of this report;
- it manages the coastal zone in accordance with the principles of ecologically sustainable development as described in Section 6 of this report;
- it provides for a type, bulk, scale and size of development that is appropriate for the location and which has minor impact on the natural scenic quality of the area as described in Section 6.2.

SEPP 71 specifies a list of matters to be taken into account when determining consent for development within the coastal zone. The table below shows where these considerations are addressed in this report.

Table 4 – SEPP71 Considerations

Clause	Subject	Concept Plan
8 (a)	Aims of the policy	See above
8 (b)(c)	Access to foreshore	Sections 4.9 & 4.10
8 (d)	Suitability of development	Section 8
8 (e)(f)	Impact on amenity/ views/ scenic quality	Section 6.2
8 (g)(h)(i)	Conservation of animals/ fish, impact on wildlife corridors	Section 6.4
8 (j)(k)	Coastal processes, hazards and conflicts	Sections 6.5 & 6.6
8 (l)(n)	Heritage and aboriginal culture	Section 6.9
8 (m)	Water quality	Section 6.5
8 (o)	LEPs for compact towns	N/A
8 (p)(i)	Cumulative impact on the environment	Sections 6 and 8
8 (p)(ii)	Water and energy use	Sections 6.5 and 8
14	Public access to foreshore	Sections 4.9 & 4.10
15	Effluent disposal	Section 4.12
16	Stormwater discharge	Sections 4.11 and 6.5

Clause 18 of SEPP 71 requires the adoption of a Masterplan DCP prior to development consent being granted for certain types of development (i.e. subdivision of land within a residential zone, if part or all of the land is in a sensitive coastal location). However, the EP&A Act effectively allows a Part 3A Concept Plan as proposed to be submitted instead of a Masterplan DCP.

Coastal Design Guidelines for NSW

The Coastal Design Guidelines for NSW (the Guidelines) aim to provide environmentally sustainable design along the NSW coastline. The Guidelines identifies new settlements with 25 lots or over as 'New Coastal Settlements'.

A desired future character for such an area includes elements such as relationship to the environment, visual sensitivity, edges to the water and natural areas, streets, buildings and height which are addressed in Section 6 of this report.

Part 2 of the Guidelines establish a set of design principles for coastal settlements that are relevant to master plans, such as this Concept Plan. The Guidelines of Part 2 sets out design principles for coastal settlements which are addressed in the table below.

Table 5 – Design Principles for Coastal Settlements

Design Principles	Concept Plan
Defining the footprint and boundary	The footprint and development boundary coincides with the existing zoning boundaries with the exception of minor refinements as described below in Section 3.5.
Connecting open spaces	Open space is proposed to be connected in the Concept Plan as described in Section 4.9 of this report.
Protecting the natural edges	Natural edges are protected in the Concept Plan as described in Sections 4.9, 6.4, 6.5 and 6.11 of this report.
Reinforcing the street pattern	The street patterns will be the subject of future Design Guidelines and Development Applications for subdivision of the site.
Appropriate buildings for a coastal context	The mix of buildings proposed in this Concept Plan for the residential precincts, town centre precinct, and community/education precincts are appropriate for the coastal context for all the reasons outlined in the conclusion of this report. Building design will be the subject of future Design Guidelines, Development Applications and Complying Development Certificates.

State Environmental Planning Policy (BASIX)

The detailed design of residential buildings in future Development Applications and Complying Development Certificates will be required to meet the provisions for energy efficiency and water conservation in accordance with the SEPP – BASIX.

3.4 North Coast Regional Environmental Plan

The North Coast Regional Environmental Plan (REP) (made in 1988) sets objectives and provisions for local councils in preparing local environmental plans and in determining development applications. The objectives in the REP are addressed in the table below.

Table 6 – Objectives of North Coast REP

Objectives in the North Coast REP	Concept Plan
Agricultural Resources	
<p>The objectives of this plan in relation to agricultural resources are:</p> <ul style="list-style-type: none"> (a) to conserve the productive potential of agricultural land, (b) to provide for new forms of agricultural development and changing patterns of existing agricultural development, (c) to ensure that commercial agriculture is not affected adversely by incompatible uses which impair its long term sustainability, and (d) to ensure that industries and services that support agriculture are not disrupted. 	<p>The Concept Plan for Cobaki is compatible with surrounding agricultural resources as described in Section 6.11 of this report.</p>
Catchment Management	
<p>The objectives of this plan in relation to fisheries and catchment management are to preserve and enhance fishery habitats and associated catchments, and to promote the sustainable use of natural resources.</p>	<p>The Concept Plan includes a large open space zone that acts as an environmental buffer to most of the adjacent creek and wetlands. The management of water resources on the site to protect the catchment is addressed in Sections 4.7 and 6.5 of this report.</p>
Geological Resources	
<p>The objective of this plan in relation to geological resources is to prevent sterilisation of known resources by inappropriate development on or near to potential extraction sites.</p>	<p>There are no geological resources of extraction value on the site.</p>

Objectives in the North Coast REP	Concept Plan
Rural Housing	
The objective of this plan in relation to rural housing is to ensure that any opportunities for rural housing area are available only as part of a planned strategy for rural living areas.	There is no rural housing proposed in the Concept Plan.
Forestry	
The objectives of this plan in relation to forestry are: (a) to facilitate the continued multiple use of State Forests, and (b) to facilitate employment opportunities in forestry and the timber industry.	There are no significant forestry resources on or adjacent to the site for forestry.
Natural Environment	
The objectives of this plan in relation to the natural environment are: (a) to protect areas of natural vegetation and wildlife from destruction and to provide corridors between significant areas, (b) to protect the scenic quality of the region, including natural areas, attractive rural areas and areas adjacent to waterbodies, headlands, skylines and escarpments, and (c) to protect water quality, particularly within water catchment areas.	The Concept Plan: - protects vegetation and wildlife as described in Section 6.4 of this report; - has minimal visual impact as described in Section 6.2 of this report; and - manages water quality as described in Sections 4.7 and 6.5 of this report.
Coastal Development	
The objectives of this plan in relation to coastal planning are: (a) to enhance the visual quality of the coastal environment, (b) to provide for the appropriate recreational use of beaches, (c) to protect the water quality of the coastal environment, (d) to minimise risks to people and property resulting from coastal processes, (e) to minimise changes to coastal processes resulting from development, and (f) to encourage retention of natural areas and regeneration of those natural areas which are already degraded.	The Concept Plan: - has minimal visual impact as described in Section 6.2 of this report; - provides areas for recreation as described in Section 4.5 of this report; - manages water quality as described in Sections 4.7 and 6.5 of this report; - retains and regenerates natural vegetation as described in Section 6.4 of this report.
Heritage	
The objectives of this plan, in relation to heritage items and conservation areas, are: (a) to conserve the environmental heritage (including the historic, scientific, cultural, social, archaeological, architectural and aesthetic heritage) of the North Coast Region, (b) to promote the appreciation and understanding of the North Coast Region's distinctive variety of cultural heritage items and conservation areas including significant buildings, structures, works, relics, towns and precincts, and (c) to encourage the conservation of the Region's historic townscapes which contain one or more buildings or places of heritage significance or which have a character and appearance that is desirable to conserve.	The Concept Plan manages the potential heritage values on the site as described in Section 6.9 of this report.

Objectives in the North Coast REP	Concept Plan
Strategic Planning	
<p>The objectives of this plan in relation to urban development are to:</p> <p>(a) provide for the orderly and economic release of urban land and identify growth centres, and</p> <p>(b) promote the efficient commercial functioning of subregional and district centres.</p>	<p>The Concept Plan provides for the orderly and economic development of land and is consistent with the regional planning strategy as described in Section 3.1 of this report.</p>
Urban Housing	
<p>The objectives of this plan in relation to housing are to promote the provision of a range of adequate, affordable and suitable housing to meet the needs of the region's population.</p>	<p>The Concept Plan provides for a range of housing as described in Section 4 of this report.</p>
Environmental Hazards	
<p>The objective of this plan in relation to environmental hazards is to locate urban and tourism development on land that is free from flooding, land instability, coastal erosion, bush fire risks, aircraft noise pollution and other environmental hazards.</p>	<p>This report addresses the following hazards:</p> <ul style="list-style-type: none"> - flooding and water management in Section 6.5; - geotechnical conditions in Section 6.6; - bushfire risk in Section 6.8; and - aircraft noise in Section 6.7.
Commercial and Industrial Development	
<p>The objective of this plan in relation to commercial and industrial development is to encourage an adequate supply of zoned land located where there are planned growth areas foreshadowed and where essential services can be provided with minimal environmental damage.</p>	<p>The Concept Plan provides for commercial development in a new town centre precinct to serve the new residential growth precincts as described in Section 4 of this report.</p>
Tall Buildings	
<p>The objectives of this plan in relation to the erection of tall buildings are to ensure that proposals for buildings over 14 metres are:</p> <p>(a) subject to the opportunity for public comment, and</p> <p>(b) assessed for their local impact and regional significance.</p>	<p>Building designs are not included in this Concept Plan, and will be subject to future Design Guidelines and Development Applications.</p>
Transport	
<p>The objectives of this plan in relation to transport are:</p> <p>(a) to safeguard the role and efficiency of the main road system of the region, particularly by recognising the importance of primary arterial roads, and</p> <p>(b) to facilitate maintenance and improvement of transport in the region.</p>	<p>The Concept Plan safeguards and contributes to improving the efficiency of the main road system as described in Section 6.3 of this report.</p>
Utility Services	
<p>The objective of this plan in relation to utility services is to provide the economic and timely provision of utility services to new urban and residential areas.</p>	<p>The Concept Plan includes a utility services strategy in Section 4.8 that is timely and economic.</p>

Objectives in the North Coast REP	Concept Plan
Health and Education	
The objective of this plan in relation to health and education services is to provide a high level of health and education facilities in the region.	The Concept Plan includes precincts for educational and community facilities as described in Sections 4 and 6.10.2 of this report.
Community Services	
The objective of this plan in relation to community services is to ensure that full account is taken of the need for community services in the planning process.	
Tourism	
<p>The objectives of this plan in relation to tourism development are:</p> <ul style="list-style-type: none"> (a) to encourage tourism activity that will complement the existing natural and man-made features of the region and be of positive benefit to the region's economy, and (b) to encourage a range of tourism facilities in the region without degrading important environmental or agricultural features of the region, and (c) to encourage the location of tourism facilities so that they may benefit from existing air, road and rail services, physical service infrastructure, other tourist attractions, natural features and urban facilities, and (d) to encourage large scale resort development in places that are easily accessible to tourists by roads, railways or water transport (or any combination of them) of a high standard and that are in proximity to urban services. 	<p>The Concept Plan is for a residential community, and includes provision for some small scale tourist accommodation.</p> <p>It does not include provision for large scale tourist facilities which would be inappropriate in the residential community.</p>
Recreation	
<p>The objectives of this plan in relation to recreation issues are:</p> <ul style="list-style-type: none"> (a) to allow provisions for the diverse recreational needs of the community, taking into account expected population growth and visitor use, and (b) to prevent environmental degradation caused by excessive or inappropriate recreational use. 	The Concept Plan includes precincts for open space and diverse recreation opportunities as described in Section 4.5 of this report.

3.5 Tweed Local Environmental Plan 2000

Tweed Local Environmental Plan (LEP) 2000 is the principal planning instrument applying to the Tweed Shire local government area (LGA) and the Cobaki Lakes site. It aims to encourage sustainable economic development compatible with the area's environmental and residential amenity qualities.

The Tweed LEP zones the Cobaki Lakes site with a mix of the following zones:

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

The current zoning map for the Cobaki Lakes site under Tweed LEP is provided in **Figure 10**. The land use zone objectives applying to the Cobaki site under the Tweed LEP area are described below.

Clause 52 of the Tweed LEP and the areas shown dotted on the zoning map apply to areas where zone boundaries do not align with cadastral lot boundaries. Clause 52 of the Tweed LEP effectively states that the zoning boundary in these areas needs to be surveyed when necessary as part of any Development Application. Clause 52 also states that any Development Application for the area shown with horizontal hatching must be referred to the Director-General of National Parks and Wildlife for comment.

The Tweed LEP also specifies the following provisions applying to the Cobaki Lakes site:

- a building height limit of 3 storeys; and
- a minimum lot size of 450m² for dwelling houses in the 2(c) and 2(e) Zones.

The Concept Plan is largely consistent with the zoning in Tweed LEP with some refinements to zone boundaries. It complies with the 3 storey building height limit, and seeks a mix of lot sizes that includes lots smaller than the minimum 450m² for dwelling houses in the Tweed LEP.

This Concept Plan seeks that the Minister amend the Tweed LEP to refine some of the zone boundaries and accommodate the proposed mix of lot sizes on the Cobaki Lakes site. Section 3.6 of this report below explains and justifies these proposed amendments to the Tweed LEP.

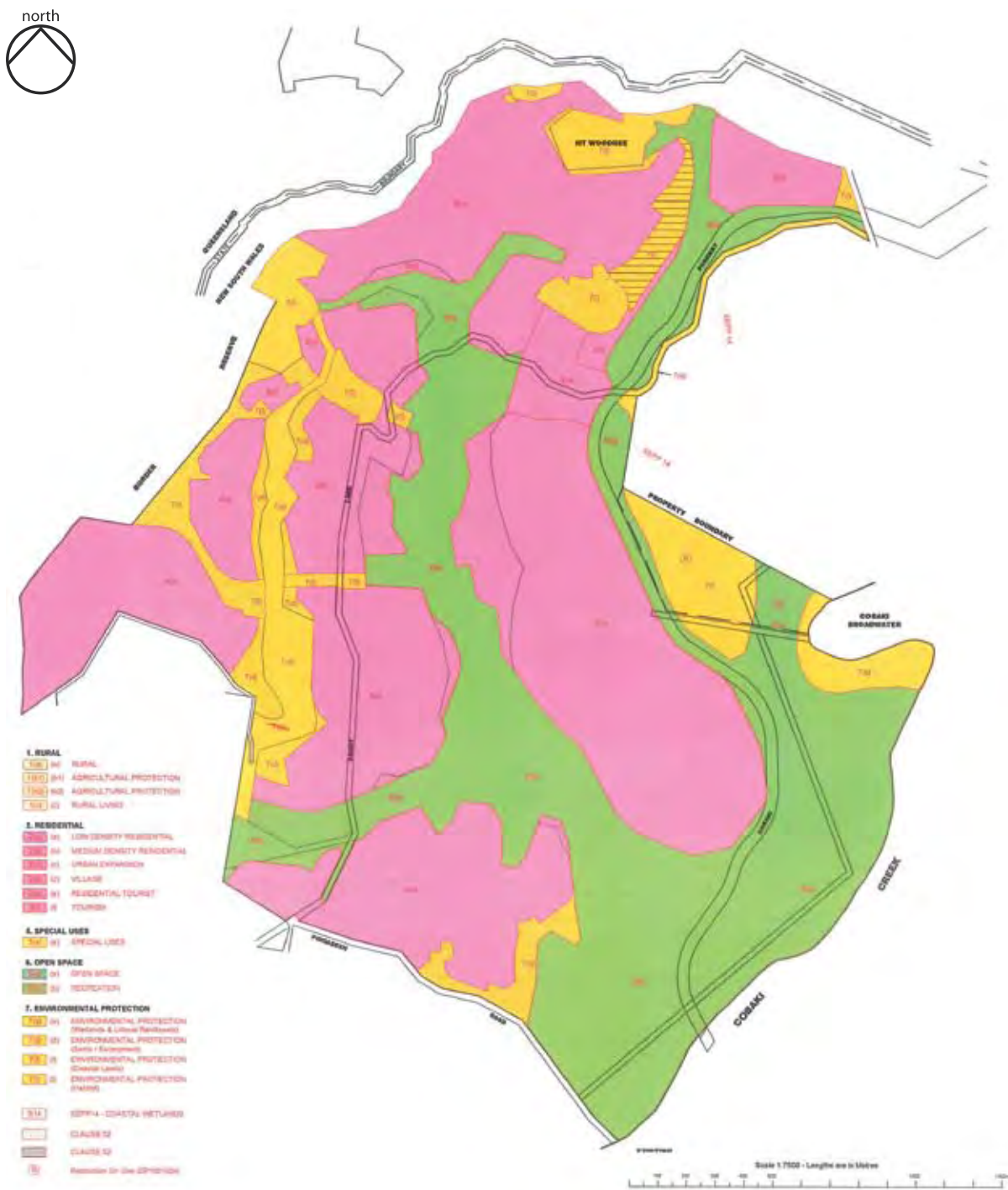


Figure 10 – Current Zoning Map

Land Use Zone Objectives for Cobaki Lakes

Zone 2(c) Urban Expansion

The primary objective of the 2(c) zone is to identify land for mainly residential development and to ensure optimum utilisation consistent with environmental constraints and the need to minimise residential land take. The specific objectives of the 2(c) zone are:

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

Dwelling houses are permissible in the 2(c) zone only on lots of at least 450m².

The Concept Plan is consistent with the zone objectives in optimising the use of the land for residential purposes, providing for associated non-residential uses to meet the needs of future residents, and protecting sensitive environmental areas on the site.

The proposed mix of lot sizes that includes smaller lots to a minimum of 120m² optimises the use of the land and minimises residential land take in accordance with the primary objective of the 2(c) Zone. This Concept Plan seeks that the Minister amend the Tweed LEP to accommodate the proposed mix of lot sizes to a minimum of 120m² on the Cobaki Lakes site as described further below in Section 3.6 of this report.

Zone 2(e) Residential Tourist

The primary objective of the 2(e) zone is to encourage the provision of family-oriented tourist accommodation and related facilities and services in association with residential development including a variety of forms of low and medium density housing and associated tourist facilities such as hotels, motels, refreshment rooms, holiday cabins, camping grounds, caravan parks and compatible commercial services which will provide short-term accommodation and day tourist facilities.

The secondary objective of the 2(e) zone is to permit other development which has an association with a residential/tourist environment and is unlikely to adversely affect the residential amenity or place demands on services beyond the level reasonably required for residential use.

The Concept Plan proposes a new town centre for Cobaki on the area zoned 2(e). It allows for the development of small scale tourist accommodation that is compatible with residential and town centre uses.

Dwelling houses are permissible in the 2(e) zone only on lots of at least 450m².

This Concept Plan seeks that the Minister amend the Tweed LEP to accommodate the proposed mix of lot sizes to a minimum of 120m² on the Cobaki Lakes site as described further below in Section 3.6 of this report.

Zone 6(b) Recreation

The primary objective of Zone 6(b) is to designate land, whether in public or private ownership, which is or may be used primarily for recreational purposes. The secondary objective is to allow for other development that is compatible with the primary function of the zone.

The Concept Plan is consistent in providing open space for recreational purposes in the 6(b) zone. Some refinements to the zone boundaries are proposed in the Concept Plan as described in Section 3.6 below.

Zone 7(d) Environmental protection (Scenic/ Escarpments)

The primary objective of Zone 7(d) is to protect and enhance those areas of particular scenic value to the area of Tweed, minimise soil erosion from escarpment areas, prevent development in geologically hazardous areas, and maintain the visual amenity of prominent ridgelines and areas.

The secondary objective of the 7(d) zone is to allow other development that is compatible with the primary function of the zone.

The Concept Plan is consistent in providing environmental protection and open space areas in the 7(d) zone. Some refinements to the zone boundaries are proposed in the Concept Plan as described in Section 3.6 below.

Zone 7(l) Environmental Protection (Habitat)

The primary objectives of the 7(l) zone are:

- to protect areas or features which have been identified as being of particular habitat significance;
- to preserve the diversity of habitats for flora and fauna; and
- to protect and enhance land that acts as a wildlife corridor.

The secondary objectives of the 7(l) zone are:

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

The Concept Plan is consistent in providing environmental protection and open space areas in the 7(l) zone. Some refinements to the zone boundaries are proposed in the Concept Plan as described in Section 3.6 below.

Other Provisions in Tweed LEP applying to Cobaki Lakes

The following provisions in Tweed LEP also apply to the site. These provisions are effectively addressed in the relevant parts of this EAR as shown in the table below.

Table 7 – Tweed LEP Provisions

Clause	Subject	Section addressed in this EAR
5	ESD Principles	Section 8
8	Consideration of objectives and impacts	All
11	Land use zones	Sections 3.5 and 3.6
15	Essential services	Sections 4.12 & 4.13
16	Building height limit of 3 storeys	Sections 3.5 and 6.2
17	Social impact	Section 6.10
26	Development in 7(d) zone	Sections 6.2 & 6.6
28	Development in 7(l) zone	Section 6.4
32	Aircraft noise	Section 6.7
34	Flooding	Section 6.5
35	Acid sulphate soils	Section 6.6
39	Contaminated land	Section 6.6
39A	Bushfire protection	Section 6.8
44	Potential archaeological sites	Section 6.9
52	Zone boundaries	Section 3.6

3.6 Proposed Amendments to Tweed Local Environmental Plan 2000

The Concept Plan seeks that the Minister amend the Tweed LEP via an Order to refine the following provisions:

- zone boundaries; and
- minimum lot size in the 2(c) and 2(e) zones.

3.6.1 Zone Boundary Refinements

The Concept Plan proposes to refine the land use zone boundaries in Tweed LEP as described below and shown in **Figures 11, 12 and 13**. The refinements to the zone boundaries are proposed to align with cadastral boundaries, existing development approvals, and the physical attributes of the land to give land use zones that are more consistent with the capacity and suitability of the land, and provide better environmental and urban outcomes. An analysis of the ecological value of the areas proposed for zoning refinements is provided in the 'Flora Assessment of Proposed Rezone Amendment Areas' prepared by James Warren at **Appendix I**. The proposed zone boundary refinements are consistent with State planning strategies, policies and instruments described above in Section 3 of this report. It will result in a net gain of 1.56ha. zoned for environmental protection.

The proposed refinements to the zone boundaries fall into five categories as described below.

Clause 52 of Tweed LEP 2000 – Determination of Zone Boundaries

Clause 52 of Tweed LEP 2000 applies to parts of the Cobaki Lakes site (shown dotted in the current zoning map in Figure 10) and requires the determination of the exact location of zone boundaries by survey where necessary in the determination of development applications. It is necessary to determine precise zone boundaries in some parts of the Cobaki Lakes site in this Concept Plan due to the uncertainties of these current zone boundaries under the Tweed LEP.

The applicant has carried out an analysis of land use practicality and efficiency of existing zone boundaries, prepared relevant ecological investigations and surveys, and consulted with Tweed Shire Council on the zone boundaries to which clause 52 applies. As a result, the Concept Plan proposes refinements to zone boundaries around Areas 1-7 in **Figure 12** which are proposed to be added to the 2(c) Urban Expansion zone. In all the other areas to which clause 52 applies, it is proposed that current zone boundaries remain. It is also proposed in this Concept Plan that the application of clause 52 to the Cobaki Lakes Estate be removed when the Minister amends the LEP.

Alignment of Zone Boundaries with Existing Development Consents and Completed Earthworks

It is proposed in this Concept Plan to refine the zone boundaries to align with the Cobaki Parkway. Development Consent S94/194 of 29th August 2003 (as modified) establishes the alignment of the Cobaki Parkway through the site. Earthworks for the alignment of Cobaki Parkway have been completed in accordance with the consent. The proposed realignment of the zone boundaries gives rise to the addition of Areas 8 and 9 in **Figure 13** to the 2(c) Urban Expansion zone.

It is also proposed in this Concept Plan to refine the zone boundaries to align with the development site previously prepared for a school in the town centre. Development Consent 1162/2001 DA dated 8th October 2002 was granted for management lots and earthworks for a future town centre. The Consent facilitates the development of a future school on the land shown as Area 10 in **Figure 13**.

Area 10 was subsequently filled for a school development site in accordance with the Consent and the construction certificate issued by Council for bulk earthworks. Area 10 was then, and is presently, zoned 6(b) Recreation which allows the school development. The Concept Plan now proposes that the school facilities be located on other more appropriate sites in the Cobaki Lakes Estate (see Section 4), and that Area 10 which has already been prepared as a development site be rezoned to the 2(c) Urban Expansion zone for other town centre development.

General Rationalisation of Zone Boundaries

The Concept Plan proposes to rationalise some zone boundaries to provide more logical and practical precinct zonings that are more commensurate with the natural attributes of the land, and provide for better environmental and urban outcomes. The rationalisation has been prepared in consultation with Tweed Shire Council and is based on an analysis of the existing earthworks together with the landuse attributes described in Section 6 of this report, and in particular the 'Flora Assessment of Proposed Rezone Amendment Areas' prepared by James Warren at **Appendix I**. The general rationalisation of zone boundaries proposed in this Concept Plan results in the rezoning of Areas 11-27 in **Figure 13**.

Areas 11-22 are proposed additions to the 2(c) Urban Expansion zone. The existing zone boundaries around these areas create impractical open space and environmental protection areas that would be inefficient, expensive to manage and likely become neglected and hazardous. The attributes of these areas generally have a low conservation value and are more suited to a 2(c) zone. The proposed refinements to these zone boundaries give a more efficient and orderly use of this land, and provide better planning and urban design outcomes.

Areas 23 to 26 are proposed additions to the 7(l) Environmental Protection (Habitat) zone. These areas are more suited to the 7(l) zone given the moderate to high value of the vegetation and/or regeneration potential, and their location adjoining bushland zoned 7(l) to improve the environmental protection corridors.

Area 27 is a proposed addition to the 6(b) Recreation zone. It contains a large dam that is proposed to be retained in the open space network in the Concept Plan. The rezoning of this area to the 6(b) zone is more suited to its attributes and will improve the open space and environmental protection corridors.

The tables below provide further explanation of the proposed zoning refinements and the areas affected.

Table 8 – Proposed Refinements to Zoning Boundaries

Map Ref	Area (m ²)	Current Zone	Proposed Zone	Explanation for each Area
1	1,717	7(l)	2(c)	Resolves zone boundary under clause 52 of Tweed LEP. Area 1 is grassland with scattered trees and earthworks having low value for environmental protection. It is more suited to residential zoning.
2	189	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.
3	8,796	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.
4	6,813	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.
5	10,708	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.
6	3,616	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.
7	5,411	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.
8	7,277	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.
9	15,160	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.
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.
11	2,892	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.
12	515	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.
13	12,170	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. The adjustment to Area 13 makes residential development possible in this area, and give 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.
14	10,970	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.
15	16,430	6(b)	2(c)	Adjusts zone boundary to conform with Cobaki Parkway as the logical zone boundary, and give more practical precincts with better planning outcomes and more efficient use of land. Area 15 is unvegetated land with low conservation value.

Map Ref	Area (m ²)	Current Zone	Proposed Zone	Explanation for each Area
16	75,660	6(b)	2(c)	Adjusts zone boundary to conform with Cobaki Parkway as the logical zone boundary, and give more practical precincts with better planning outcomes and more efficient use of land. Area 16 has unvegetated parts of low conservation value, and some wetlands and saltmarsh that are only of moderate conservation value due to the small areas and separation from the main areas protected on the opposite side of Cobaki Parkway.
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.
18	4,703	6(b)	2(c)	Adjusts zone boundary to conform with Cobaki Parkway as the logical zone boundary, to give more practical town centre and community precincts with better planning and urban design outcomes on a prominent corner, and more efficient use of land. Area 18 has grassland with low conservation value. It also has some wetland species in wet periods that are of only low-moderate conservation value due to the small area and the separation from the larger wetland areas being protected on the opposite side of Cobaki Parkway.
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.
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.
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.
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.
23	748	2(c)	7(l)	Area 23 is more suited to 7(l) zone as it has forest and adjoins the existing 7(l) zoned bushland to improve the bushland corridor.
24	21,560	2(c)	7(l)	Area 24 is more suited to 7(l) zone as it has forest of moderate to high conservation value, and adjoins the existing 7(l) zoned bushland to improve the bushland corridor.
25	9,912	6(b)	7(l)	Area 25 is more suited to 7(l) zone as it has forest of moderate conservation value, and adjoins the existing 7(l) zoned bushland to improve the bushland corridor.
26	3,716	2(c)	7(l)	Area 26 is more suited to 7(l) zone as it has forest of moderate conservation value, and adjoins the existing 7(l) zoned bushland to improve the bushland corridor.
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.

Table 9 – Areas Affected by the Proposed Zoning Boundary Refinements

	2(c)	6(b)	7(d)	7(l)
Clause 52 determination of zone boundaries (Areas 1-7)	+3.725ha	-1.752ha	-1.7823ha	-0.1906ha
Alignment of zone boundaries with existing development consents (Areas 8, 9, 10)	+5.763ha	-5.763ha	-	-
General rationalisation additions to 2(c) Urban Expansion zone (Areas 11-22)	+14.495ha	-14.435ha	-	-0.060ha
General rationalisation additions to 7(l) Environmental Protection (Habitat) zone (Areas 23-26)	-2.602ha	-0.991ha	-	+3.593ha
General rationalisation addition to 6(b) Recreation zone (Area 27)	-1.051ha	+1.051ha	-	-
Net Changes Proposed	+20.33ha	-21.89ha	-1.7823ha	+3.342ha

Conclusion and Justification for Refinements to Zone Boundaries

The refinements to the zone boundaries are proposed to align the zonings with cadastral boundaries, existing development approvals, and the physical attributes of the land to give land use zones that are more consistent with the capacity and suitability of the land.

The present zoning boundaries create a number of areas that are impractical to use as open space and environmental protection. They have low conservation value, limited potential for recreational use, are expensive to maintain, and typically become neglected and hazardous. These areas represent an inefficient and unsustainable use of the land.

The proposed refinements to the zone boundaries will provide better environmental and urban outcomes consistent with State planning strategies, policies and instruments. The refinements would result in a more efficient and sustainable use of the land.

The proposed refinements to the zone boundaries result in:

- a net gain of 1.56ha added to the total area of the 7(d) and 7(l) Environmental Protection zonings;
- a net reduction of 21.89ha to the 6(b) Recreation Zone; and
- a net addition of 20.33 ha to the 2(c) Urban Expansion Zone (primarily taken from the 6(b) zone).

The zoning refinements result in a total of 81ha. of land zoned 6(b) Recreation in the Cobaki Lakes site. The Concept Plan proposes this 6(b) land be developed, landscaped and rehabilitated for parks and recreation comprising 60% structured open space for formal active recreation and sports, and 40% unstructured open space for more casual or passive recreation. **The 81 ha of land zoned for 6(b) Recreation is 2.4 times the area of open space/ parkland needed to serve the estimated future resident population of 12,000 people in the 2(c) Urban Expansion Zone on the site.** (A general standard of 2.83ha of open space per 1,000 people is used by Department of Planning and Tweed Shire Council.) Further, the proposal in the Concept Plan for the development and rehabilitation of both structured and unstructured open space provides a range of recreational opportunities to meet the spectrum of recreational needs of the future resident population.

Overall, the proposed zoning refinements result in **a total of 267ha of land (45% of the Cobaki Lakes site) zoned for environmental protection and recreation** which the Concept Plan proposes to be rehabilitated and landscaped.

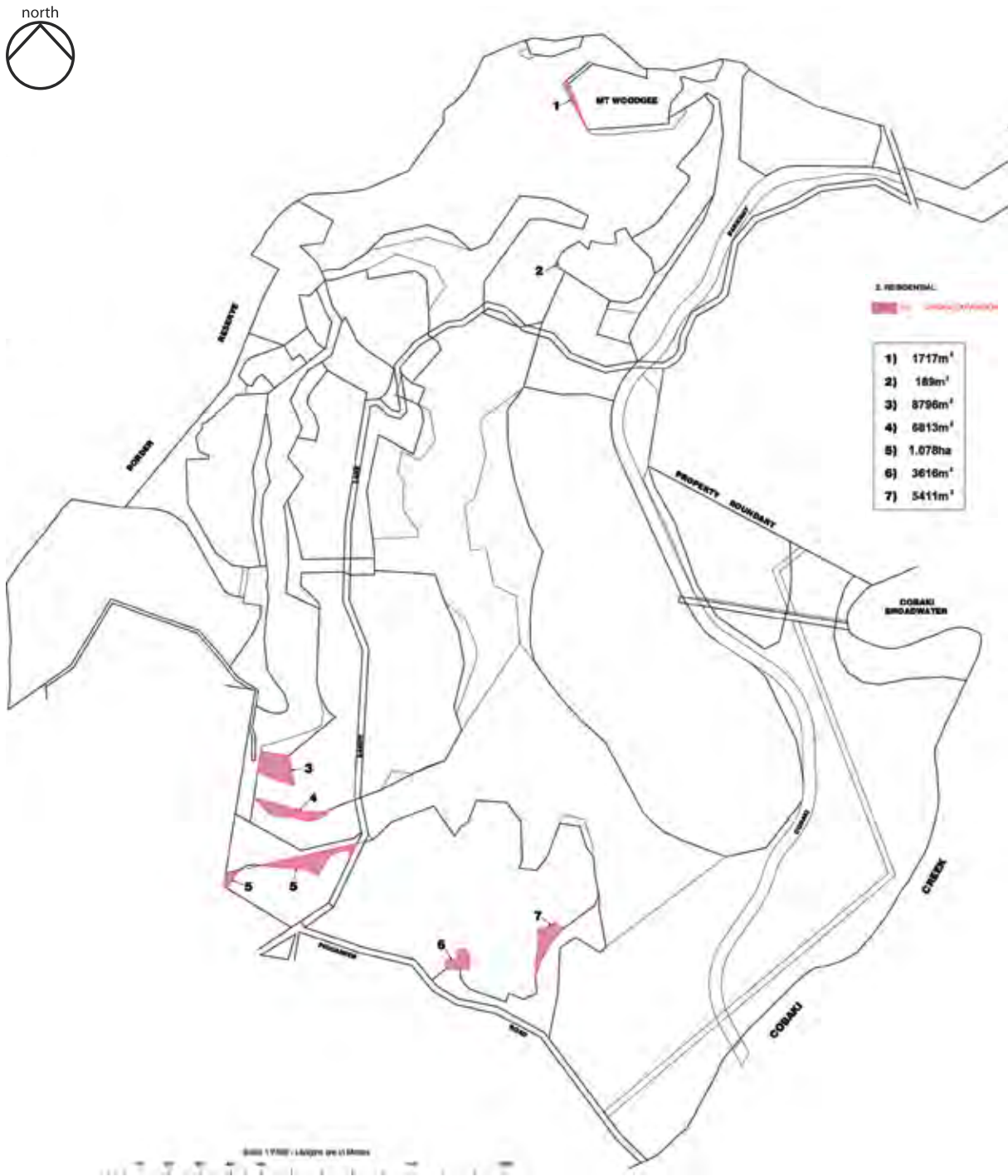


Figure 11 – Proposed Amendments to Zoning Map under Clause 52



Figure 12 – Proposed Amendments to Zoning Map additional to Clause 52



Figure 13 – Proposed amendments to Zoning Map areas on Aerial Photo

3.6.2 Minimum Lot Size for Housing

The Tweed LEP currently specifies a minimum lot size of 450m² in the 2(c) and 2(e) Zones across the Cobaki Lakes Estate.

The Concept Plan proposes a mix of housing types and choices including dwellings on lots ranging from 120m² to 1,200m². The applicant requests that the Minister amend the Tweed LEP via an Order to allow a minimum lot size of 120m² on the Cobaki site.

The rationale for a mix of lot sizes/ densities in suitable parts of Cobaki Lakes is founded on the intent and philosophy of the Far North Coast Regional Strategy 2006 – 2031, contemporary planning principles for ecologically sustainable development, and on the public open space benefits that will be delivered as part of the development. The following planning principles underpin the rationale for a mix of lot sizes:

- supplying housing choices to meet demographic changes and demands;
- increasing densities around centres and accessible locations well served with infrastructure;
- maintaining visual landscape values;
- optimising urban form and design quality;
- easing urban sprawl and development pressure on environmentally sensitive land; and
- making efficient use of natural resources.

Supplying housing choices to meet demographic changes and demands

The Far North Coast Regional Strategy 2006 – 2031 (the Strategy) projects the Far North Coast (FNC) population to grow by an additional 60,000 people over the next 25 years, giving rise to the need for an additional 51,000 dwellings which includes 19,100 new dwellings for the Tweed Local Government Area (LGA). The Strategy also identifies the main changes in demographic and household characteristics in the region as an ageing population and a reduction in the size of households. In order to provide a supply of housing to meet forecast demand, the Strategy seeks to provide more housing choice and to encourage more medium density living.

A mix of lot sizes and densities at Cobaki Lakes provides the opportunity to offer greater housing choice consistent with regional demographic changes and the Far North Coast Strategy.

Increasing densities around town centres and accessible locations well served with infrastructure

The Strategy, in line with contemporary planning principles, suggests the following as suitable for higher densities of development:

- town centres;
- areas accessible to transport infrastructure;
- areas close to employment opportunities;
- areas close to community and recreational facilities;
- areas capable of being easily serviced with utilities.

The Cobaki site has all the above attributes making it suitable for higher densities and taller buildings.

Higher density in centres: The Concept Plan application proposes a town centre at Cobaki that incorporates a mix of retail, commercial, community and residential uses. The size of the centre, its role and position within the hierarchy of centres in the district suggests it is suitable for higher densities.

Higher density in areas accessible to transport infrastructure: Cobaki Lakes is in close proximity to existing and planned transport infrastructure, making it suitable for higher densities, including the following:

- The Pacific Highway, with the Tugun Bypass now completed some 600 metres from Cobaki's eastern boundary.
- The Cobaki Parkway. To be constructed as part of the Cobaki Lakes development, this road will connect the Bilambil area of the Tweed to the Pacific Highway, is planned to carry some 30,000 vehicles per day and is considered by Tweed Council as a critically important element of its traffic management plan. Whilst the road is connected to the Gold Coast Highway via an overpass out the Pacific Highway, it is anticipated that an interchange, strongly advocated by the Gold Coast City Council, Tweed Shire Council, John Flynn Hospital, Gold Coast Airport and the Gold Coast Desalination Project and others, will ultimately be provided.
- Rail station at Boyd Street on the planned extension of the Brisbane/Gold Coast commuter rail line. The line is to be extended from its present terminus at Robina to Coolangatta Airport. Provision for this is made in the Tugun Bypass works, with a station planned at Boyd Street adjacent to the likely interchange itself. The station will be less than 1 km from Cobaki's boundary.
- Local bus service routes are planned for the Cobaki Lakes estate.
- Coolangatta Airport is located 3 kilometres to the east of the site.

With respect to reliance on the *future* provision of transport infrastructure, it is important to note that buildings proposed above 3 storeys are not expected to be built for at least 7 years.

Higher density in areas close to employment opportunities: The Cobaki Lakes site is located close to a range of employment opportunities in tourism, retail, industrial and business zones on the southern Gold Coast and Tweed coast. The transport infrastructure also makes employment opportunities in the northern Gold Coast and Brisbane accessible.

The Concept Plan Application is expected to propose employment nodes within Cobaki itself at its Town Centre and also at its eastern entrance, conveniently located to the transport infrastructure described above. Business may respond in particular to the opportunities presented by existing and anticipated future medical and aviation investment in the locality.

Higher density in areas close to community and recreational facilities: The Cobaki Lakes Estate will include community and recreational facilities including two schools, a community centre and substantial active and passive open space (described further below). Further, the site is located in close proximity to a range of community and recreational facilities located on the Gold Coast and around the Tweed, not the least their beaches.

Higher densities will be well supported by these facilities as well as the aforementioned employment opportunities.

Higher density in areas capable of being easily serviced with utilities: All utility services – water, sewer, gas, electricity and telecommunications – are readily available and will be extended to service the Cobaki Lakes Estate.

Maintaining visual landscape values

The topography of the Cobaki Lakes landscape forms an amphitheatre comprising a low and level central plain surrounded by the steep hillsides on the northern, western and southern sides of the site. To the east of the site are the Cobaki Broadwater and its surrounding natural vegetation. The topography largely shields the site from surrounding residential areas.

At present there are no residential buildings within the estate and the view corridors into the estate from existing and planned surrounding developments - themselves at substantial distances - are very limited.

Optimising urban form and design quality

The Concept Plan has an interesting, varied and legible urban structure and form. The provision of various lot sizes and housing types would contribute to the urban form by modulating building heights, highlighting the centre and places of community focus, and emphasising gateways, prominent places, corridors and edges.

Design guidelines will fix the location, mass and height of buildings, and specify roof treatments, material types, colours and the like. The guidelines will establish the character of the estate and buildings in it, and establish a rigorous design quality process.

These contemporary planning practices to optimise urban form and design quality are embodied in the Far North Coast Regional Strategy 2006 – 2031.

Easing development pressure and urban sprawl on environmentally sensitive areas

Increasing, where appropriate, development density and concentrating populations in established urban areas reduces urban sprawl and growth pressure on the more environmentally sensitive land in the region.

The provision of smaller lot sizes at Cobaki will contribute to this objective, one that has particular significance given the very limited area of land zoned for future urban development in the Tweed Shire generally and in its coastal zone particularly.

Using natural resources efficiently

The efficient use of natural resources is an objective of the *Environmental Planning and Assessment Act 1979* and a significant component of the Far North Coast Regional Strategy 2006 – 2031. An increase in housing densities at Cobaki Lakes will provide for more efficient use of infrastructure and natural resources in the estate.

In particular, a benefit of medium rise residential development is that the per-occupant use of water in such premises is typically 30% to 40% less than that of free-standing homes, the major reason for which is the reduction in water use for gardens.

3.7 Tweed Development Control Plan

The Tweed Shire Development Control Plan (Tweed DCP) came into effect on 12 April 2007 and consolidates Council's previous suite of plans into one document. The Tweed DCP includes shire wide development and site specific development controls.

A number of shire wide development controls under the Tweed DCP apply to the site, and are summarised below.

Section A3 of the DCP – Flood Liable land – sets detailed controls for development on flood liable land aimed at the adverse effect of flooding on the community. Flooding is addressed in Section 6.5 of this report.

Section A5 of the DCP – Subdivision – sets out development controls, specifications and guidelines for subdivisions. Specifically it provides guidelines for urban master planning and subdivision design, in relation to the following elements:

- environmental constraints;
- landform;
- stormwater runoff, drainage, waterways and flooding;
- buffers;
- neighbourhood and town structure;
- movement networks;
- open space networks;
- lot layout; and
- infrastructure.

The design of subdivision and development in each precinct of the Concept Plan will be subject of future Design Guidelines and Development Applications to be prepared for the Cobaki Lakes Estate.

Section A6 of the DCP – Biting Midge & Mosquito Control – provides desired guidelines for proposed and existing residential and tourist developments in coastal areas to minimise and control the problem of biting midge and mosquitoes. This issue is addressed in Section 6.4.

Section A14 of the DCP – Cut and Fill on Residential Land – seeks to ensure earthworks associated with residential development are sympathetic to the topography of the site. It specifically provides controls for:

- dwellings on steeper sites;
- cut and fill earthworks on residential allotments and associated with residential development; and
- creating impervious surfaces.

Most of the bulk earthworks needed to accommodate the proposed Concept Plan have already been granted consent by Council and are largely completed.

Excavation and fill associated with the detailed design and construction of individual buildings and landscape works will be the subject of future Development Applications.

Section B7 - Cobaki Lakes - relates to the Cobaki Lakes site. It contains four specific clauses:

- overall aims, which indicate the brief for the preparation of the DCP and its intent;
- a list of 'management statements' which the DCP requires to be prepared prior to the lodgement of development applications and are sought to provide the parameters to establish, maintain and monitor the physical attributes of the site;
- precinct objectives for each of the 17 precincts, which the site is split into in this DCP; and
- design element parameters.

The proposed Concept Plan seeks to supersede and replace this part of the DCP. Design Guidelines and Codes will be prepared and incorporated into this Concept Plan at a future stage for subdivision and building design in the Cobaki Lakes Estate.

4.0 Concept Plan

The proposed Concept Plan establishes the vision and planning framework for the sustainable development of the Cobaki Lakes Estate. It establishes the planning structures and broad parameters for the site to be used in the preparation and assessment of future applications for the detailed design, construction and management of development on the site. Refer to **Appendices C and T**.

4.1 Overview

LEDA propose to develop the Cobaki Lakes Estate for a mix of urban land uses integrated with open space and environmental protection areas comprising the following:

- town centre precinct comprising a mix of retail, commercial, community and multi-unit residential uses, with up to 9,500m² of retail space and 200 multi-unit dwellings over 18ha of land;
- residential precincts with a mix of dwelling types including detached houses, townhouses and multi-unit housing with up to 5,300 dwellings over 283 ha of developable land and excluding major roads;
- community and education precincts including two schools over 7ha of land;
- open space, lakes and environmental protection areas covering 267ha of land;
- access network of roads, public transport routes, pedestrian/ cycle paths;
- landscaping and vegetation management;
- water management; and
- utility services infrastructure.

Concept Plan

The Concept Plan in this EAR seeks the Minister's approval for the following aspects of the proposed development:

- vision and design principles for Cobaki Lakes Estate;
- general layout and siting of development into precincts;
- land uses in each precinct;
- maximum site coverage, dwelling numbers and densities, building heights and retail floor space in development precincts;
- a mix of lot sizes ranging from 120m² to 1,200m² in residential and town centre precincts;
- open space and landscape management concepts;
- access network of roads, public transport routes, pedestrian/ cycle paths;
- water management concept;
- utility services strategy; and
- statement of commitments.

Design guidelines and codes for subdivision and housing are proposed to be prepared at a later stage and incorporated into the Concept Plan.

The Concept Plan also seeks that the Minister amend the Tweed LEP 2000 to refine the existing zone boundaries, and allow a mix of housing densities on lot sizes ranging from 120m² to 1,200m² as described above in Section 3.5.

4.2 Planning Vision and Urban Design Principles

Vision

Cobaki Lakes is to be a self-contained, conveniently connected residential community extending the established developed areas of the southern Gold Coast and Tweed Heads. Residential development is to be contained in a number of release areas and will reflect their particular location with respect to amenities, topography, aspect, views and immediate natural surroundings. The Town Centre, neighbourhood in scale, will comprise retail, limited commercial uses and some medium density housing, and will be located along the presently-named Sandy Lane, with convenient access to the whole Cobaki Lakes community and to through traffic using Cobaki Parkway.

Residential neighbourhoods will consist of a range of dwelling types to attract and suit all family types and age groups. Areas of higher density will be located close to areas of greater amenity such as the Town Centre and the central open space area with its lakes and parklands.

A network of pedestrian and cycle paths will provide connections within and between neighbourhoods, through open space areas and to sports fields and other amenities. The main access roads will be able to accommodate public transport services.

The Town Centre, two schools, childcare facilities and a community centre will provide focal points for residents, whilst the central parklands will be of particular value to them and will be a major amenity to the wider district community.

Planning and Design Objectives

The proponent has set the following objectives for the design and planning of Cobaki Lakes:

- Provide well-defined, liveable and inter-connected neighbourhoods that foster social interaction, and support the town and neighbourhood centres.
- Provide a broad range of lot sizes, housing types and lifestyle opportunities that respond to the market.
- Demonstrate in the development of the first neighbourhood the attractive and functional living environment that is envisaged.
- Balance environmental, social and economic outcomes in the utilisation of land and the location of land uses and activities.
- Respond sensitively and responsively to the areas of high conservation value within and adjacent to the site.
- Recognise and optimise the natural divisions of the site established by distinctive topography, aspect, views and protected open space.
- Co-ordinate and deliver infrastructure, facilities and services so that they are provided at the time they are needed.
- Encourage walking and cycling by providing safe, walkable, connected, neighbourhoods, with easy access to the amenities and services within Cobaki Lakes and beyond.
- Locate areas of higher residential density in places of greater amenity.
- Encourage the use of public transport by ensuring bus stops and bus routes are within easy walkable distance to most of the site.

4.3 Precincts and Land Uses

The Concept Plan comprises the following elements as shown in **Figures 14** and **16**, and also in **Appendix C**.

Town Centre

The town centre is located adjacent to the intended first stage of development, and to be commenced as part of first stage works, the Town Centre is intended to provide a community focal point and will include shops, a supermarket, services, food outlets, some commercial floor space (for small offices) and some medium density residential. The town centre will provide a maximum of 9500m² of retail space and up to 200 multi-units. The retail space will provide for daily and weekly shopping needs of the future Cobaki Lakes population. A town square is proposed with active street frontages.

Community and Education Centres

The community centre is located towards the southern area of the site, the centre will provide for the convenience needs of its surrounding neighbourhood, with an adjacent State primary school and medium density development surrounding it.

The concept plan makes provision for two public primary schools in accordance with Department of Education requirements, as well as a site for a community facility in accordance with Tweed Shire Council requirements.

Residential Neighbourhoods

There are to be 17 residential neighbourhoods each containing a diverse range of housing types and densities. Residential housing choices will include:

- traditional detached dwellings on average on 550m² lots;
- zero lot housing on 350-450m² lots;
- terrace housing on 120-250m² lots;
- attached dwellings on corner allotments (400-1200m²); and
- unit development in strategic locations throughout the site.

Open Space Areas

A range of open space will be provided including environmental protection areas, the central open space area, sports fields, and neighbourhood and local parks. A town square is to be provided in the new town centre. Passive access to wetland areas and other environmental protection areas may also be provided.

Environmental Protection Areas

84.3 hectares of the site is proposed to be set aside for environmental protection and management.

Dwelling Yield and Type

The indicative dwelling yield and type for the site is detailed in **Table 10** below. Detailed precinct dwelling yields will be provided in subsequent project / development applications.

Table 10 – Indicative Dwelling Yield

Land Use	Indicative residential developable Area (ha)	Indicative Dwelling Yield (Gross)
Medium Density	104	2500 (23 per ha)
Low Density	179	2500 (14 per ha)
Total Dwellings	283	5500 (18 per hectare)

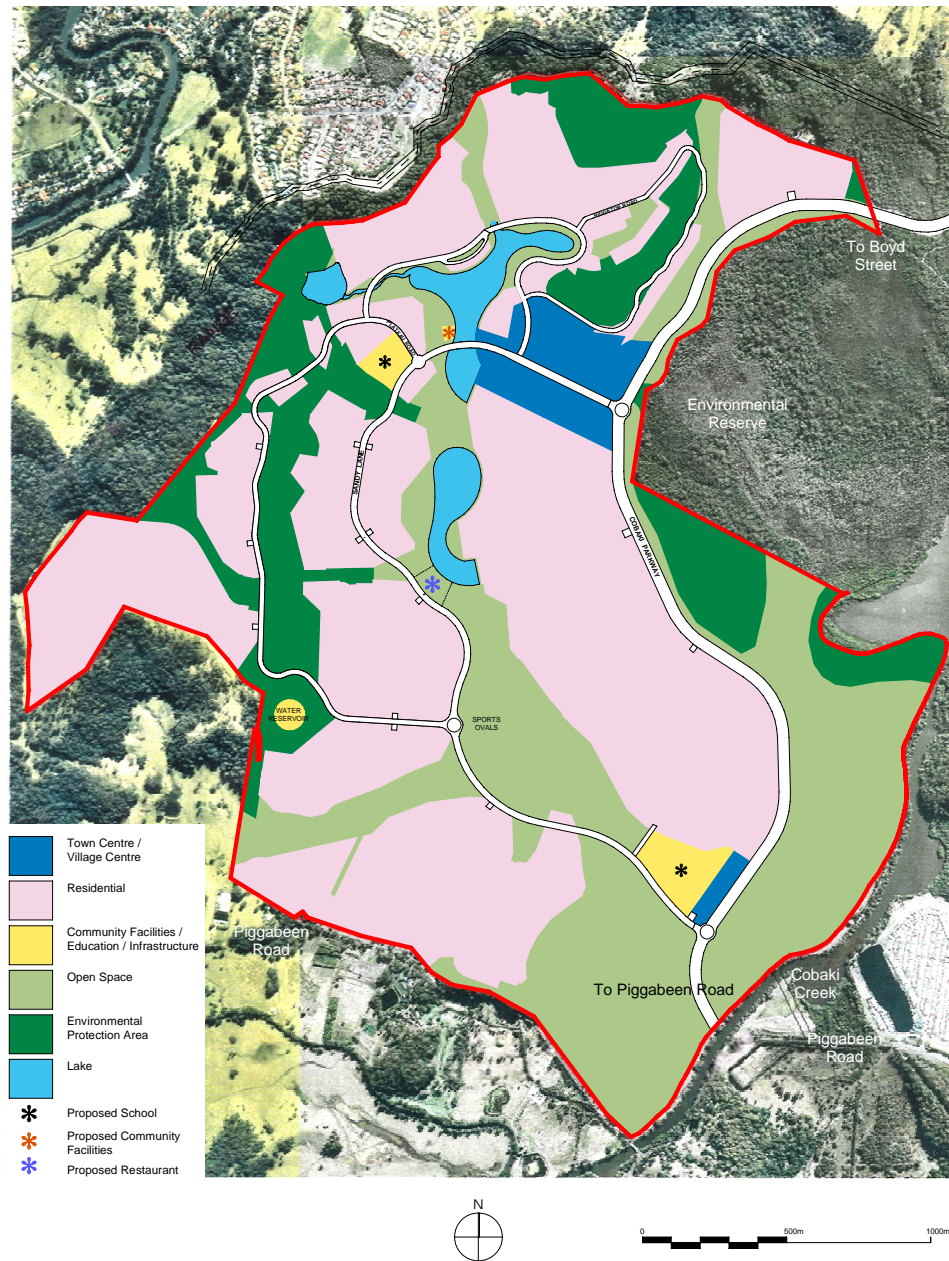


Figure 14 – Concept Plan

Concept Plan Domain	Preferred Development	Residential Density	Non-Residential Density	Urban Design Principles
Town Centre/ Neighbourhood Centre	<ul style="list-style-type: none"> ▪ Shop ▪ Retail premises ▪ Business premises ▪ Office premises ▪ Medical Centre ▪ Community facility ▪ Restaurant ▪ Takeaway food and drink premises ▪ Entertainment facility ▪ Recreational facility(indoor) ▪ Car Park ▪ Child Care Centre ▪ Pub ▪ Information and education facility ▪ Residential types in Development Code ▪ Telecommunications facility ▪ Service station 	200 multi-units Approx area: 17.4 Ha	Shop, pub, takeaway food, restaurant Max 5000 sq m GFA Office, commercial & medical Max 2500 sq m GFA Supermarket Max 4000 sq m GFA Community use Max 1000 sq m GFA	<ul style="list-style-type: none"> ▪ Retail and commercial resident friendly ▪ Urban form controlled by Development Code ▪ Building height controlled by Development Code ▪ Incorporate urban art and public amenity ▪ Public transport interchange ▪ Town square focus ▪ Public car parking concealed from view ▪ Non-residential use at street level ▪ Reduced setbacks ▪ Pedestrian friendly streetscape with awnings ▪ Designs must optimise residential amenity, privacy and solar access ▪ Must demonstrate sensitive interface with surrounding development ▪ Screen or conceal passive facades and service areas ▪ Incorporate passive surveillance and public safety principles
Residential	<ul style="list-style-type: none"> ▪ Residential types in Development Code ▪ Exhibition village ▪ Community facility ▪ Child care centre ▪ Residential care facility ▪ Seniors housing ▪ Recreation area ▪ Environmental facility ▪ Recreation facility(indoor) 	10 - 40 dw/Ha Approx area: 282.7 Ha 5300 dw (2500 detached 2400 small lot integrated housing, 400 multi-units)		<ul style="list-style-type: none"> ▪ Urban form controlled by lot layout and Development Code ▪ Create diversity of housing choice ▪ Designs must optimise residential amenity, privacy and solar access ▪ Strong streetscape character with articulated setbacks ▪ Garage doors must not dominate streetscape ▪ Incorporate passive surveillance and public safety principles ▪ Incorporate public open space within walkable radius of each dwelling
Education/Community Facilities/Utilities	<ul style="list-style-type: none"> ▪ School ▪ Community facility ▪ Place of worship ▪ Child Care centre ▪ Public utility undertaking ▪ Recreation area ▪ Recreation facility (outdoor) ▪ Recreation facility (indoor) ▪ Environmental facility ▪ Carpark 	Approx area: 7.2 Ha	N/A	<ul style="list-style-type: none"> ▪ Locate school buildings with integrated parking and shared facilities ▪ Provide adequate safe setdown areas ▪ Sporting facilities may be shared between schools and community ▪ Must demonstrate sensitive interface with surrounding development ▪ Enhance community education on surrounding environment ▪ Neighbourhood scale ▪ Utilities landscaped to minimise visual impact
Open Space	<ul style="list-style-type: none"> ▪ Community facility ▪ Environmental facility ▪ Recreation area ▪ Recreation facility (outdoor) ▪ Recreation facility (indoor) ▪ Restaurant(max 300 sqm) ▪ Carpark 	Approx area: 166.7 Ha	N/A	<ul style="list-style-type: none"> ▪ Include range of active and passive uses ▪ Incorporate community facilities appropriate to uses ovals / buildings / carparking ▪ Sporting facilities to be shared between schools and community ▪ Incorporate community facilities appropriate to uses ▪ Located on community spine ▪ Incorporate stormwater paths and treatment areas
Environmental Protection Areas	<ul style="list-style-type: none"> • Environmental facility 	Approx area: 84.3 Ha	N/A	<ul style="list-style-type: none"> ▪ Incorporate low impact community trails ▪ Provide linkages to open space areas for wildlife corridors ▪ Managed by Council or the State government
Lake	<ul style="list-style-type: none"> • Recreation area • Recreation facility(outdoor) • Water recreation structure • Jetty • Environmental facility 	Approx area: 15.6 Ha	N/A	<ul style="list-style-type: none"> ▪ Provide low impact public access ▪ Provide linkages around the lake to pedestrian walkway
Residential Density Totals	N/A	5500 dwellings	N/A	

Figure 15 – Precinct Development Matrix

4.3.1 Precincts

The Concept Plan seeks approval for the general layout and siting of 17 urban precincts together with open space and environmental protection areas as shown in Figure 16.

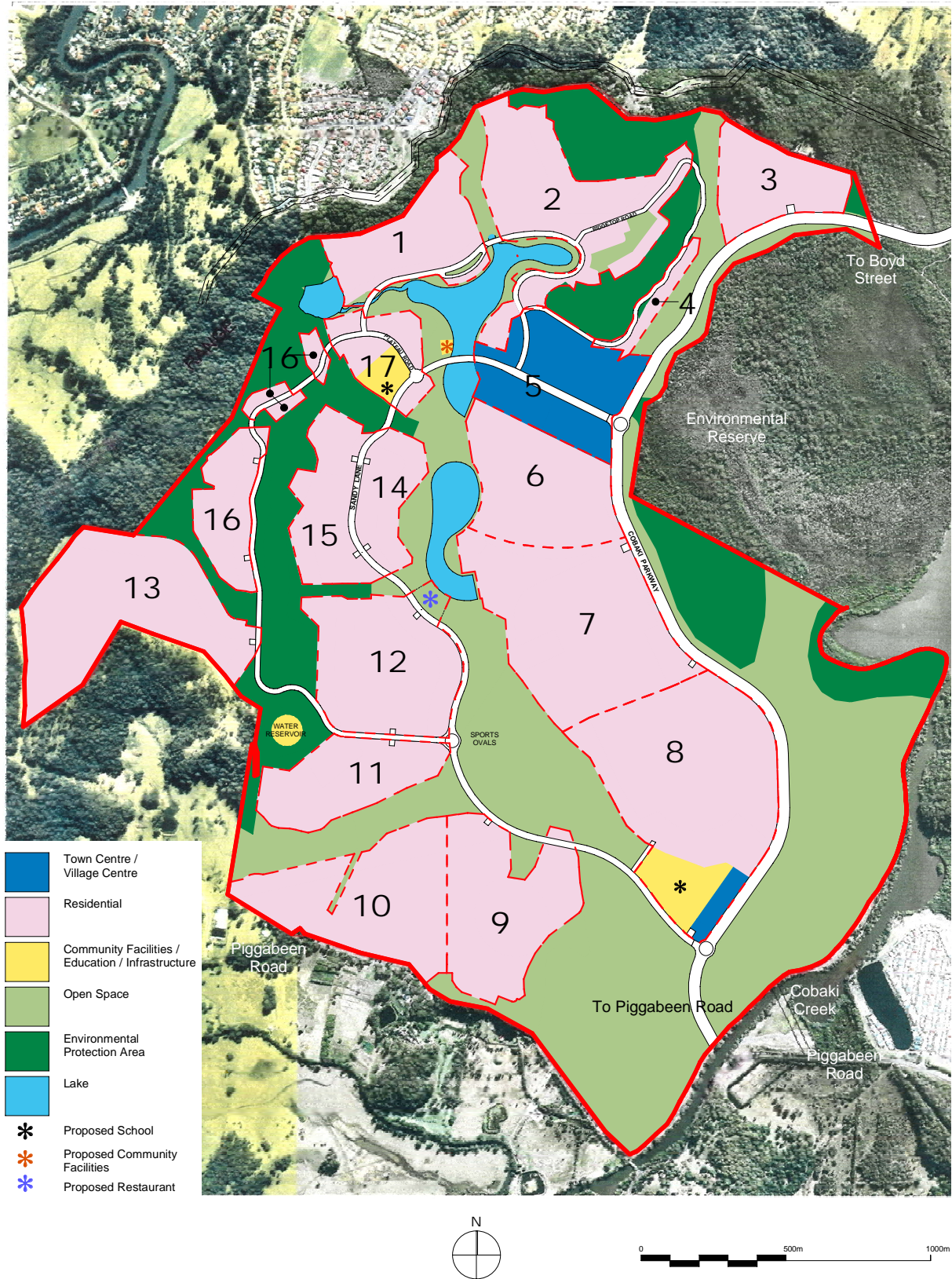


Figure 16 – Precinct Plan

4.3.2 Design Principles for Precincts

The design principles and outcomes for the precincts in the Concept Plan are set out below. These will form the basis for the preparation of Design Guidelines which will shape and guide future development of the site.

Town Centre and Community & Education Centres

- Encourage mixed uses.
- Create focus around a town square and/or main street.
- Incorporate public transport interchange.
- Activate main streets and access ways with buildings addressing the street and active uses at ground floor.
- Provide pedestrian friendly streetscape.
- Incorporate urban art.
- Articulate facades to create interesting buildings.
- Use landscaping to soften visual impact of car parking and screen passive facades and service areas.
- Maintain the visibility of retail uses.
- Demonstrate sensitive interface with surrounding development.
- Incorporate passive surveillance and public safety principles in design

Residential Areas

- Create identifiable neighbourhoods.
- Provide dwelling diversity and choice through a range of lot sizes and dwelling types.
- Optimise residential amenity, privacy and solar access through subdivision and building designs.
- Provide strong streetscape character with articulated building setbacks.
- Provide public open space within walkable distance of each dwelling.
- Incorporate passive surveillance and public safety principles into design.
- Avoid repetitive designs and long buildings.

Open Space and Environmental Protection Areas

- Provide a mix of open space landscape types and experiences.
- Provide a range of active (informal and formal) and passive recreational opportunities.
- Integrate open space with areas of environmental protection.
- Integrate open space with water sensitive urban design and management.
- Integrate open space with pedestrian and bicycle paths.

4.4 Building Heights

The maximum height of the buildings proposed in the Concept Plan is 3 storeys, and on the ridgeline a maximum of 8m above finished ground level, as shown in **Figure 17**.

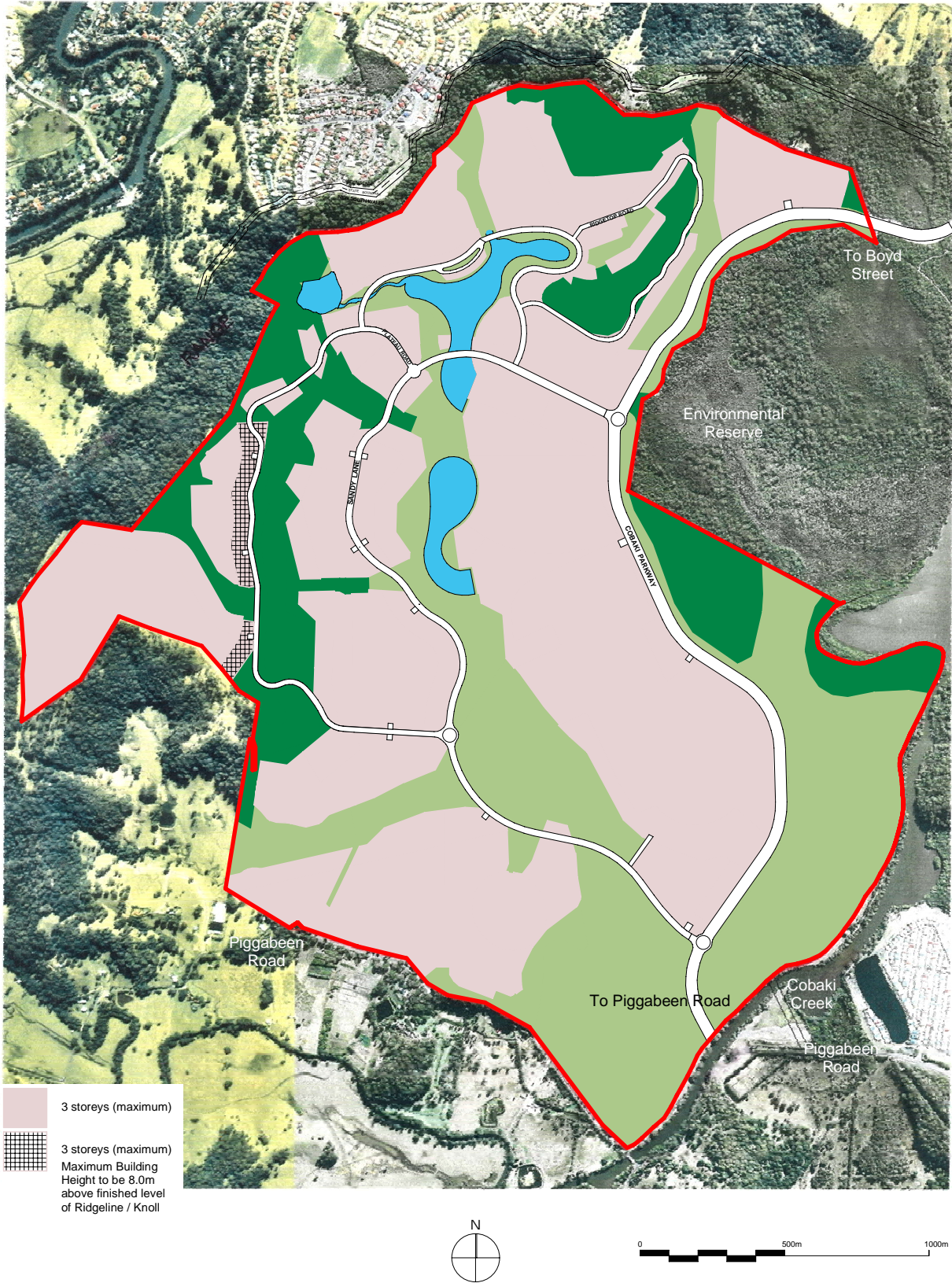


Figure 17 – Proposed Height of Buildings