

4 Working Paper

Land Use, Planning and Socio-economic

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1. Introduction

This report has been prepared for the NSW Roads and Traffic Authority (RTA) to assess the potential effects of the proposed upgrade of the Pacific Highway between Sapphire and Woolgoolga (the Proposal) in relation to statutory planning and environmental controls; strategic plans and policies; land use and socio-economic factors.

Overview description of study area

The study area consists of a corridor extending for approximately 25 km from Sapphire (approximately 8 km north of Coffs Harbour) to Arrawarra (north of Woolgoolga). The study area is located entirely within the Coffs Harbour Local Government Area on the NSW mid-north coast. The physical environment is characterised by a narrow coastal plain defined by the Coastal Range, which at the southern end near Sapphire, is immediately adjacent to the coast. The northern section becomes more undulating and hilly terrain especially west of Woolgoolga. The whole of the study area drains to the coast via a series of creeks. There is a rich biodiversity including numerous significant ecological communities and threatened species of native flora and fauna.

The area features diverse land use patterns including urban and rural residential areas, banana plantations and other agricultural properties, private forested land and State Forests. Along the study area, there are a number of coastal villages to the east of the highway. These include: Sapphire, Moonee Beach, Emerald Beach, Sandy Beach (which extends over the highway to the west), Woolgoolga (which also extends to the west of the highway), Safety Beach, Mullaway and Arrawarra. To the west of the highway there are a number of rural-residential estates including Heritage Park, Avocado Heights, Emerald Heights and the Country Club Estate.

The southern section of the highway upgrade between Sapphire and south Woolgoolga mainly involves amplification along the existing highway road reserve, while the Woolgoolga bypass section traverses mainly private land and State Forest.

The Proposal

The Proposal consists of:

- Duplication of the existing highway to dual carriageways for a distance of 14 km from Sapphire to south of Woolgoolga (Upgrade section).
- An 11km bypass to the west of Woolgoolga involving construction of dual carriageways. (Bypass section).
- Provision of a local access road network for travel along the northern beaches;
- Grade-separated interchanges at Sapphire, Moonee Beach, Emerald, south Woolgoolga and Arrawarra.
- At-grade intersections at Campbell Close (left-in / left-out northbound access) and at a proposed eastern local access road (right-in northbound access / left-out southbound access) at the southern end of the Proposal.
- A local road system generally adjacent to the upgraded highway between Sapphire and south Woolgoolga that allows local community access through the area without using the highway.
- Highway underpasses and overpasses along the bypass section so that the function of the local road network is maintained.
- A range of mitigation measures to manage the potential socio-economic and environmental impacts of the Proposal.

This report addresses three separate but interrelated topics:

Chapters 2 and 3 examine statutory and strategic plans and policies as well as consideration of relevant Commonwealth and State legislation.

Chapter 4 outlines the strategic land use planning policies that are relevant to the Coffs Harbour local government area

Chapter 5 provides a profile of the community in the study area, utilising data from Coffs Harbour City Council and the Bureau of Statistics.

Chapter 6 assesses the impacts that the Proposal would have on socio-economic issues including community cohesion, amenity impacts, access and movement patterns, property impacts and business and tourism impacts.

Chapter 7 provides proposed mitigation measures to manage impacts discussed in Chapter 5.

Chapter 8 provides a summary of the outcomes and conclusions of the working paper.

2. Statutory planning framework

2.1 NSW planning framework

2.1.1 Environmental Planning and Assessment Act 1979

Assessment and approval of major infrastructure in NSW including highway upgrade projects, is controlled primarily under the provisions of the NSW Environmental Planning and Assessment Act 1979. The Environmental Planning and Assessment Amendment [Infrastructure and other Planning Reform] Act 2005 introduced amendments that require major private and government projects to be assessed under Part 3A of the Act. It applies to:

- Major infrastructure or other development that, in the opinion of the Minister, is of State or regional environmental planning significance.
- Major infrastructure or other development that is an activity for which the proponent is also the determining authority (within the meaning of Part 5) and that, in the opinion of the proponent, would (but for Part 3A) require an environmental impact statement to be prepared under that Part.

Prior to these amendments, this Proposal would have been assessed under Division 4, Part 5 (requiring an environmental impact statement) of the Act as a State Government infrastructure project.

On 5 December 2006, the Minister for Planning under 75B(1) of the Act ordered that 13 projects part of the Pacific Highway Upgrade Program, including the Sapphire to Woolgoolga Upgrade, be projects to which Part 3A applies. These projects were also declared as Critical Infrastructure under Section 75C of the Act, as being essential to the State for economic and social reasons.

The Part 3A planning approval process (refer Figure 2.1) is initiated by the submission of a project application to the Department of Planning. A set of environmental assessment requirements are then issued by the Director General of the Department of Planning, in consultation with other government agencies. These environmental assessment requirements outline the key issues which become the focus for the environmental assessment. After submission of the environmental assessment to the Department of Planning, it is placed on public display for a period of no less than 30 days.

At the end of the display, the Department of Planning may provide the RTA with a copy of the submissions received or a summary of the issues raised. The RTA will be asked to respond and may modify the Proposal to minimise impacts on the environment as a result of submissions received. If the RTA changes the Proposal in response to the issues raised, a preferred project report describing the revised project would be prepared and made publicly available.

The Proposal will then be assessed by the Department of Planning and considered for approval by the Minister for Planning. Upon receipt of approval, the RTA will then determine whether or not to proceed with the project.

While a number of other statutes are typically applicable to projects where the Environmental Planning and Assessment Act applies, this is not the case under Part 3A. Clause 75U states:

“The following authorisations are not required for an approved project (and accordingly the provisions of any Act that prohibit an activity without such an authority do not apply):

- (a) the concurrence under Part 3 of the Coastal Protection Act 1979 of the Minister administering that Part of the Act,
- (b) a permit under section 201, 205 or 219 of the Fisheries Management Act 1994,

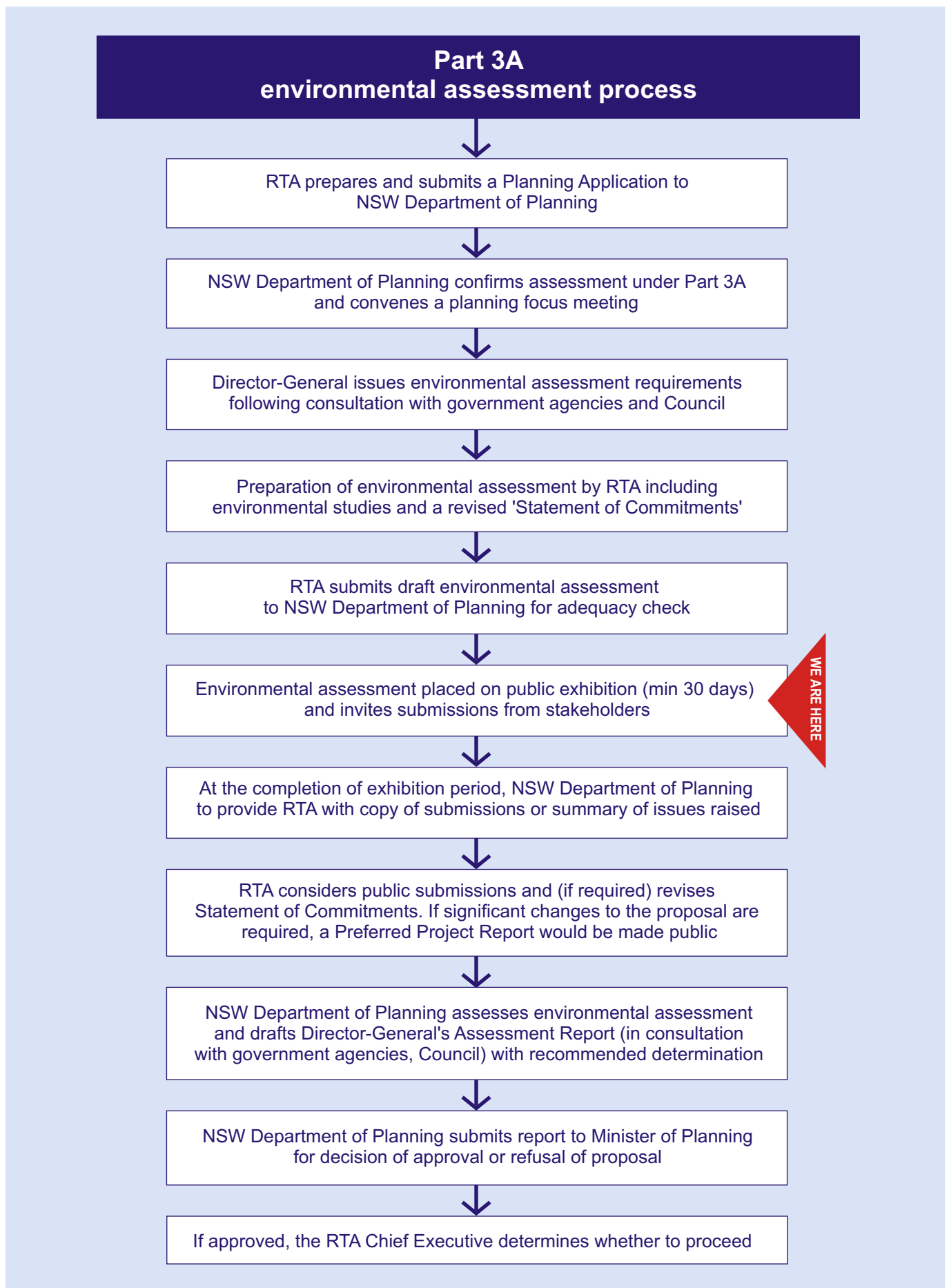


Figure 2.1

Part 3A environmental assessment process

- (c) an approval under Part 4, or an excavation permit under section 139, of the Heritage Act 1977,
- (d) a permit under section 87 or a consent under section 90 of the National Parks and Wildlife Act 1974,
- (e) an authorisation referred to in section 12 of the Native Vegetation Act 2003 (or under any Act to be repealed by that Act) to clear native vegetation,
- (f) a permit under Part 3A of the Rivers and Foreshores Improvement Act 1948,
- (g) a bush fire safety authority under section 100B of the Rural Fires Act 1997,
- (h) a water use approval under section 89, a water management work approval under section 90 or an activity approval under section 91 of the Water Management Act 2000.”

Critical infrastructure

The 2005 amendments to the Environmental Planning and Assessment Act include the provision that, if Part 3A applies to a project, that project could also be declared critical infrastructure. A “critical infrastructure” project is a project considered to be essential to the economic, social or environmental welfare of NSW. As mentioned in section 2.1.1, the Sapphire to Woolgoolga project was declared to be critical infrastructure by the Minister of Planning in 2006

The assessment and approval process for critical infrastructure is similar to a Part 3A project, however some notable changes under section 75C:

- Excludes compliance with all environmental planning instruments (except State Environmental Planning Policies specifically relating to the project).
- Excludes third-party appeals under the Act or other environmental protection legislation.
- The following orders cannot be made or given to prevent or interfere with the carrying out of an approved project:
 - Interim protection orders under the National Parks and Wildlife Act 1974 or Threatened Species Conservation Act 1995.
 - Stop Work orders under the National Parks and Wildlife Act 1974, Threatened Species Conservation Act 1995, Fisheries Management Act 1994.
 - An environmental protection notice under the Protection of the Environment Operations Act 1997.
 - An order under the Local Government Act 1993.

2.1.2 Protection of the Environment Operations Act 1997

The Protection of the Environment Operations Act, which is administered by the NSW Department of Environment and Climate Change, is the overriding environmental protection legislation in NSW. The Act defines a number of activities which require an Environment Protection Licence. Scheduled activities include freeway or tollway construction that has:

- physically separated carriageways for traffic moving in different directions.
- at least four lanes; and
- no access between interchanges for at least five kilometres of their length.

Based on the current concept design, it is considered that the Proposal would not require an Environment Protection Licence as the distance between access points to the Proposal does not exceed 5 kilometres.

The Protection of the Environment Operations Act also imposes an obligation to notify the Department of Environment and Climate Change when a ‘pollution incident’ occurs that causes or threatens

'material harm' to the environment. Under the provisions of the Act, a licence can be sought for activities which may result in water pollution. The Department would be the appropriate regulatory authority for the Proposal and would have the power to issue stop-work notices.

2.1.3 Threatened Species Conservation Act 1995

The Threatened Species Conservation Act includes schedules identifying threatened species, populations and ecological communities and areas of critical habitat which require consideration when undertaking the environmental assessment for a proposed project. The Act also lists 'key threatening processes' to be considered in the assessment of a Proposal.

As the Proposal is to be considered under Part 3A of the Environmental Planning and Assessment Act, a Species Impact Statement is not required. However, flora and fauna studies have been conducted to determine if there are any threatened species / populations or ecological communities in the area, and if there are any potential impacts as a result of the Proposal.

2.1.4 Fisheries Management Act 1994

The Fisheries Management Act contains similar provisions to the Threatened Species Conservation Act in relation to threatened fish species. Although there is no requirement to prepare a Species Impact Statement for the Proposal in accordance with Division 6, Part 7 of the Act, flora and fauna studies (including marine species) have been conducted to determine the potential impact, if any, that could occur to threatened fish species.

Permits under section 201, 205 or 219 of the Fisheries Management Act are not required under the Part 3A approval process.

2.1.5 Native Vegetation Act 2003

The Native Vegetation Act requires that the consent of the Minister for Natural Resources is required for the clearing of native vegetation. Clearing must be undertaken in accordance with a development consent granted in accordance of this Act or a Property Vegetation Plan. However, because of the application of Part 3A of the Environmental Planning and Assessment Act, such consent is not required for any clearing of native vegetation required as part of the Proposal. However, the objectives of the Act were a consideration in the design of the Proposal, and removal of vegetation has been minimised, particularly through the use of the existing highway road reserve.

2.1.6 Heritage Act 1977

Approval may be required under the Heritage Act for works affecting an item listed on the State Heritage Register or for works affecting a relic, the latter being defined as:

'...any deposit, object or material evidence relating to the settlement of the area that comprises NSW, not being an aboriginal settlement and which is 50 or more years old.'

Sections 139 to 145 of the Heritage Act prevent the excavation or disturbance of land for the purpose of discovering, exposing or moving a relic, except by a qualified archaeologist to whom an excavation permit has been issued by the Heritage Council of NSW.

However, as the Proposal is being assessed under Part 3A of the Environmental Planning and Assessment Act, approval under Part 4 or section 139 of the Heritage Act 1977 is not required.

2.1.7 National Parks and Wildlife Act 1974

Under Section 90 of the National Parks and Wildlife Act, approval is required from the Department of Environment and Climate Change (National Parks & Wildlife Service) to destroy, deface or damage an Aboriginal relic or an Aboriginal place. Section 87 of the Act requires a permit (a Preliminary Research Permit) for the disturbance or excavation of any land for the purpose of discovering an Aboriginal object. As the Proposal is being assessed under Part 3A of the Environmental Planning and Assessment Act, permits and consents under sections 87 and 90 of the National Parks and Wildlife Act are not required. Nevertheless, an Aboriginal heritage investigation has been undertaken and potential archaeological deposits identified. Excavations of the potential archaeological deposits would occur prior to construction in consultation with the relevant local aboriginal land council and the Department.

2.1.8 Marine Parks Act 1997

Under the Marine Parks Act, a determining authority must not carry out or grant approval to carry out, an activity unless they have taken into account the objects of the Act, the zoning plan of any proximal marine park and the permissible uses of the land (under the relevant Local Environmental Plan, in this case being the Coffs Harbour LEP 2000).

If not for Part 3A of the Environmental Planning and Assessment Act, an environmental impact statement would have been prepared for the Proposal under Part 5 of the Act and that process would have required concurrence from the relevant Ministers (Minister for the Environment and Minister for Primary Industries) to carry out the activity.

The requirement of obtaining concurrence under the Marine Parks Act 1997 has not been absolved under the Part 3A process. Therefore, as the Proposal would directly impact on the Solitary Islands Marine Park (new bridge over Double Crossing Creek and the demolition of existing bridges over Double Crossing and Cunninghams Creeks), concurrence would have to be sought under this Act prior to construction.

2.1.9 Water Management Act 2000

The Water Management Act is based on the concept of ecologically sustainable development and provides for:

- The protection of the health of rivers and groundwater systems and associated wetlands, floodplains and estuaries.
- The integrated management of water with other natural resources such as vegetation, soils and land.
- A sharing of responsibility for water management between the government and the community.
- Consideration of environmental, social, economic, cultural and heritage issues in the water management decision-making process.

Under the Act, a licence may be required from the Department of Natural Resources for any culvert installation. However, certain public agencies including the RTA are exempt from this requirement.

2.1.10 Rivers and Foreshores Improvement Act 1948

Under the Rivers and Foreshores Improvement Act, a person must not make any excavation or remove material from the bank, shore or a protected waterbed, or within 40m of a river or stream bed.

Public authorities such as the RTA are exempt from obtaining approvals under the Act. However, minimisation of disturbance to existing watercourses has been an important consideration through the development of the design for the Proposal.

2.1.11 Forestry Act 1916

The process of approvals and land acquisition to utilise State Forest land is legislated under the Forestry Act.

Where the area of land to be acquired for a project is less than 20 hectares, the Minister has the authority to revoke the dedication of the land as State Forest under Section 19B of the Act. However, prior to revoking the dedication, the Minister must consider a report and recommendation by State Forests. Should the land be more than 20 hectares in area, compliance with the conditions of s16A(3) of the Forestry Act would be required.

Under Section 16A of the Forestry Act, the Minister may enter into an agreement for the sale or other disposal of land dedicated as State Forest in exchange for other land either for the purpose of a State Forest or for access to an existing State Forest (subject to compliance with the conditions of s16A(3) of the Forestry Act).

As the area of State Forest required for the Proposal exceeds 20 hectares, the Act outlines a process for acquisition. However, this action is not required prior to or during the Environmental Assessment period. The RTA will begin the land acquisition phase after project approval and prior to commencement of construction.

2.2 State environmental planning instruments

State environmental planning policies (SEPPs) that may have potential application to the Project are identified below:

2.2.1 State Environmental Planning Policy 14 – Coastal Wetlands

The aim of SEPP 14 is to protect areas of coastal wetlands identified under the SEPP. Works within wetlands identified under SEPP 14 are defined as designated development and therefore require an environmental impact statement be prepared and consent obtained under Part 4 of the Act. Since the Proposal would not directly affect any wetlands, SEPP 14 would not expressly apply to the Proposal.

2.2.2 State Environmental Planning Policy 26 – Littoral Rainforests

The aim of SEPP 26 is to protect littoral rainforest within the State by establishing a mechanism for the consideration of development applications that are likely to affect areas of littoral rainforest. There are minor pockets of littoral rainforest present in the south of the study area. Detailed flora investigations undertaken as part of the environmental assessment have indicated that the Proposal would not impact on any littoral rainforests in the area, and accordingly would not expressly apply to the Proposal.

2.2.3 State Environmental Planning Policy 44 – Koala Habitat Protection

The aim of SEPP 44 is to encourage the proper conservation and management of areas of natural vegetation that provide habitat for koalas. SEPP 44 does not apply to the Coffs Harbour LGA because a Koala Plan of Management has been prepared for the local government area by the Coffs Harbour City Council and as such, SEPP 44 would not expressly apply to the Proposal.

Section 2.4.1 of this report, the flora and fauna assessment and relevant sections of the Sapphire to Woolgoolga environmental assessment provide due consideration of the objectives of the Koala Plan of Management in assessing the potential impact of the Proposal on koalas and their habitat.

2.2.4 State Environmental Planning Policy 71 – Coastal Protection

The aim of SEPP 71 is to ensure that the coastal zone is protected in accordance with the principles of ecologically sustainable development. SEPP 71 ensures that development in the coastal zone is appropriate and suitably located and that there is a clear and consistent development framework for the coastal zone.

Whilst SEPP 71 would not expressly apply to the Proposal, the principles of the SEPP have been incorporated into the progressive development of design and mitigation measures for the Proposal in order to limit any impacts to estuaries that would be crossed.

It is noted that section 75J (3) provides that the Minister may (but is not required to take into account State environmental planning policies even though section 75R (3A) enables the Minister to remove its application to an approved project.

2.3 Regional Environmental Planning instruments

The North Coast Regional Environmental Plan was prepared in 1988 and it establishes the regional planning framework for the North Coast region of NSW and as such, it applies to the study area. The focus of the plan is on identifying issues for consideration in the making of local environmental planning instruments and, in particular, the need to maintain and enhance the environmental qualities of the region, while at the same time providing for efficient and important economic growth and development.

Objectives of the plan in relation to transport are:

- 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
- b) to facilitate maintenance and improvement of transport in the region.

The Proposal for the Sapphire to Woolgoolga project is consistent with these objectives. The upgrade would enable continuance of the role and efficiency of the Pacific Highway as well as the improvement of transport and traffic movement through the region.

The plan contains a number of provisions that relate to development control at a project specific level. These provisions include matters to be considered by Council in the determination of whether or not to grant development consent to the following activities:

- Agricultural activities (Clause 12).
- Activities within, adjoining or upstream of wetlands or fishery habitat areas (Clause 15).
- Clearing of natural vegetation in environmental protection, scenic protection or escarpment preservation zones (Clause 29A).
- Development of Coastal Lands (Clause 32B and 33).
- Development adjacent to the ocean or a waterway (Clause 81).

Because the Proposal is deemed to be critical infrastructure under section 75R of the Environmental Planning and Assessment Act, the North Coast Regional Environmental Plan has no direct relevance to the approval process for the Proposal. Notwithstanding this situation, the relevant provisions outlined above were considered during the design of the Proposal and during investigations undertaken as part of the environmental assessment.

2.4 Local Planning Framework

Although the Proposal is wholly within the Coffs Harbour Local Government Area, it is affected by two Local Environmental Plans. Most of the study area is covered by the Coffs Harbour Local Environmental Plan 2000 but the Ulmarra Local Environmental Plan 1992 covers land at the northern end near Arrawarra, which was formerly part of the Ulmarra Shire. The Proposal would impact approximately 200 metres within the boundary of the Ulmarra LEP. Coffs Harbour City Council has indicated it will combine this into the Coffs Harbour Local Environmental Plan now that the NSW Government has released a standard template.

Under the Coffs Harbour Local Environmental Plan 2000, the Proposal traverses a number of land use zones including residential, forestry and rural areas as well as road reservations.

In Clause 7 of the Coffs Harbour LEP, activities are identified that are neither prohibited or require development consent. Activities referred to in Clause 7 (ie. listed in Schedule 1) include:

“The carrying out by a public authority of any development required in connection with the construction, reconstruction, improvement, maintenance or repair of any road.”

The Proposal is therefore, permissible without consent in all zones within the Coffs Harbour Local Environmental Plan.

Within the Ulmarra Local Environmental Plan, the land zoning that would be impacted is 1 (f) Rural (Forests) zones. Discussions between Coffs Harbour City Council and the NSW Roads and Traffic Authority have resulted in the Coffs Harbour City Council determining that the Proposal is not prohibited within the forestry zone (see the Sapphire to Woolgoolga Project Application Report).

As such, the Proposal is not prohibited within any land use zoning under both the Coffs Harbour LEP and the Ulmarra Local Environmental Plan.

2.4.1 Coffs Harbour Koala Plan of Management

The Coffs Harbour Koala Plan of Management (1999) was a joint initiative of the National Parks and Wildlife Service (now part of the Department of Environment and Climate Change) and Coffs Harbour City Council. The plan was prepared to fulfil the statutory requirements of SEPP 44 and to facilitate koala conservation in Coffs Harbour. It identified and mapped koala habitat throughout the local government area, categorising primary, secondary and tertiary koala habitat as a basis for protection of the habitat within. The plan also established ongoing management actions for public education, research and implementation as well as making recommendations for protecting koala habitat by means of planning controls on development, clearing, disturbance, habitat fragmentation or isolation.

The Koala Plan of Management and SEPP 44 objectives have been considered during preparation of the specialist flora and fauna study undertaken as part of the environmental assessment. The flora and fauna assessment identifies management measures that would be implemented as part of the Proposal and includes specific measures relevant to koala conservation such as provision of fauna underpasses and fauna fencing to accommodate wildlife linkages.

2.4.2 Commonwealth environmental legislation

The Commonwealth Environment Protection and Biodiversity Conservation Act 1999 requires that approval from the Commonwealth Minister for the Environment and Water Resources is required if the Proposal is likely to have or would have a significant effect on a matter of “National Environmental Significance” which includes:

- World Heritage properties – no such properties would be affected.
- Ramsar wetlands – no such wetlands would be affected.
- Commonwealth marine areas – no such areas would be affected.
- Nuclear actions – no such actions are proposed.
- Listed threatened species and ecological communities – effects on such features are examined in working paper 7: Flora and Fauna Assessment.
- Listed migratory species – effects on such features are examined in working paper 7: Flora and Fauna Assessment.
- National Heritage Items – no such properties would be affected.

If a significant effect is likely to occur (or if the proponent is unsure whether a significant effect would occur), the proponent is required to refer the project to the Department for a decision on whether the project constitutes a “controlled action”. If the Proposal were deemed a “controlled action” approval of the project would be required from the Minister for the Environment and Water Resources.

Through various assessments done as part of the environmental assessment, it has been concluded that it is highly unlikely that the Proposal would result in a significant effect on any matter of National Environmental Significance.

The Act also provides that approval from the Commonwealth Environment Minister is required where:

- an action on Commonwealth land that has, will have, or is likely to have a significant impact on the environment.
- an action outside Commonwealth land that has, will have or is likely to have a significant impact on the environment on Commonwealth land.
- an action undertaken by the Commonwealth which has, will have or is likely to have a significant impact on the environment anywhere in the world.

The Proposal would be jointly funded by the Commonwealth and NSW governments but it would not be undertaken on, or in proximity to, any Commonwealth owned land nor would it be undertaken by a Commonwealth agency.

Notwithstanding the conclusion about no significant impact on matters of National Environmental Significance, the Proposal has been referred to the Department for a decision on whether the project constitutes a “controlled action” due to the potential impacts on threatened and migratory species.

3. Strategic plans and policies

This section examines a range of strategic planning documents and policies that are of potential relevance to the Proposal. The documents identified address diverse issues such as transportation planning, land use, economic development, natural resources and environmental management and various social planning and community matters. The strategic importance of these plans and policies may be relevant at a broad national level through to very local scale.,

3.1 NSW government strategies

3.1.1 NSW State Plan (2006)

The NSW State Plan was launched on 14 November 2006 and outlines goals and priorities for the next 10 years in the following areas:

- Rights, respect and responsibility.
- Delivering better services.
- Fairness and opportunity
- Growing prosperity across NSW.
- Environment for living.

Goals for road infrastructure include:

- High quality transport system.
- NSW: Open for business, and
- Improved urban environment.

The upgrade of the Pacific Highway between Sapphire and Woolgoolga is identified as an important transport infrastructure priority. Development, approval and ultimately construction of this Proposal are consistent with the goals outlined in the NSW State Plan.

3.1.2 State Infrastructure Strategy (2006)

The State Infrastructure Strategy covers the period between 2006-2007 and 2015-2016 and outlines infrastructure projects and associated funding for the period. The key drivers of infrastructure spend will be population growth and distribution, ageing and longevity, technological change, industrial and commercial development, cost pressures, infrastructure renewal and environmental issues.

The range of infrastructure needs addressed in the State Infrastructure Strategy includes:

- Human services.
- Justice.
- Transport.
- Electricity.
- Water.

The upgrade of the Pacific Highway is identified as an important aspect of the strategy. This re-affirms the State Government commitment with the Federal Government to provide a total of \$640 million each for the period 2006- 2009 for the upgrade of the Pacific Highway.

3.1.3 Action for Air

The NSW Government's Action for Air provides key strategies and guidelines for protecting and improving the quality of air in New South Wales. The original plan was released in 1998 and progress was reviewed in 2001, 2004 and 2006.

The Policy covers a range of key strategies, including the following which are relevant to the development of transport infrastructure projects:

- Integrating air quality goals and urban transport planning – to reduce the growth in vehicle kilometres travelled by effectively integrating urban and transportation planning and improving transport choices.
- Provide more and better transport choices – to improve transport choices and encourage reduction in vehicle trips and kilometres travelled by both passenger and commercial vehicles.
- Make cars, trucks and buses cleaner – to reduce exhaust and evaporative emissions from new and in-service cars, trucks and buses.

In late 2005, the RTA set up an air quality monitoring station at Korora to obtain data in the vicinity of the existing Pacific Highway. This is the first such activity for the Pacific Highway and it provided valuable data of relevance to the study area and the Proposal. The results showed that the levels for all tested air quality parameters comply with the relevant standards (working paper 8: Air Quality Monitoring)

The second strategy in the Policy becomes increasingly important as Coffs Harbour and the northern beaches continue to grow. The Proposal would provide new transport opportunities in the study area mainly through the local road network improvements that would result, and especially in terms of better accessibility / connectivity between communities for motorists, bus services, pedestrians and cyclists.

The strategy to reduce emissions will be influenced by broader government and industry initiatives. However, the Proposal has been developed so that more efficient vehicle operations can be achieved along the corridor, for both local traffic and the growing number of freight vehicles and other through traffic that uses the existing highway as a north / south regional arterial route.

3.1.4 Road Safety 2010

Road Safety 2010 is a NSW Government policy document focussing on the need to improve road safety on metropolitan and regional road networks. Road Safety 2010 contains commitments to building and maintaining better and safer roads and cites the upgrading of the Pacific Highway as a key initiative in this regard.

The Proposal incorporates a high standard of road design, especially in relation to access control, vertical and horizontal alignment and the dual carriageway cross section details. Road safety was, and continues to be, an important criterion used in the assessment leading to the adoption of the Proposal, as well as being a key driver in the refinement of the design (particularly the inclusion of a local access road network).

3.2 Regional strategies and policies

3.2.1 North Coast Regional Environmental Plan

The statutory implications of the plan are discussed in Section [2.3](#). The primary objectives of the plan are:

- a) to develop regional policies that protect the natural environment, encourage an efficient and attractive built environment and guide development into a productive yet environmentally sound future,
- b) to consolidate and amend various existing policies applying to the region, make them more appropriate to regional needs and place them in an overall context of regional policy,

- c) to provide a basis for the co-ordination of activities related to growth in the region and encourage optimum economic and social benefit to the local community and visitors to the region, and
- d) to initiate a regional planning process that will serve as a framework for identifying priorities for further investigation to be carried out by the Department and other agencies.

The plan also provides specific guidelines for the provision and development of strategic transport links, principally roads, which are the key to economic growth and prosperity in the region. Clause 53 (2) (b) states that “where traffic is in conflict with local traffic, make provision for traffic to bypass major urban areas”. This is especially true for designated primary arterial roads, of which the Pacific Highway is one.

The Proposal complies with this guideline through specific design features. Except for two at-grade intersections at the southern end, controlled highway access would be achieved through use of grade-separated interchanges at five strategic locations that recognise and accommodate existing and future land use plans in the study area. The provision of a local access road network along the entire length of the upgrade would also increase safety along the highway. With an alternative travel route for local movement between the northern beaches communities, potential traffic conflicts between local and through traffic would be minimised. The bypass of Woolgoolga would also significantly reduce conflicts between local movements and through traffic.

Strategic planning objectives of the North Coast Regional Environmental Plan of particular relevance to the Proposal are listed in Table 3.1.

Table 3.1: NCREP Strategic Planning Objectives

Objective
Agricultural Resources
To conserve the productive potential of agricultural land.
To ensure that commercial agriculture is not affected adversely by incompatible uses which impair its long term sustainability.
To ensure that industries and services that support agriculture are not disrupted.
Geological Resources
To prevent sterilisation of known resources by inappropriate development on or near to potential extraction sites.
Natural Environment
To protect areas of natural vegetation and wildlife from destruction and to provide corridors between significant areas.
To protect the scenic quality of the region, including natural areas, attractive rural areas and areas adjacent to waterbodies, headlands, skylines and escarpments.
Coastal Planning
To enhance the visual quality of the coastal environment.
Heritage
To conserve the environmental heritage (including the historic, scientific, cultural, social, archaeological, architectural and aesthetic heritage) of the North Coast Region.
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.
Transport
To safeguard the role and efficiency of the main road system of the region, particularly by recognising the importance of primary arterial roads.
To facilitate maintenance and improvement of transport in the region.

As previously noted, the Proposal has been developed to fulfil the transport objectives identified in the plan. The likely implications of the Proposal in relation to the other objectives identified in Table 2.1 are assessed in other relevant investigations undertaken and reported in the environmental assessment and associated working papers (in particular the assessments for: agriculture; construction methods / staging; flora and fauna; visual and urban design; Aboriginal and non-Aboriginal heritage).

3.2.2 Draft Mid North Coast Regional Strategy

The draft Mid North Coast Regional Strategy was released in December 2006 outlining the strategy for the next 25 years for the region incorporating Clarence Valley, Coffs Harbour, Bellingen, Nambucca, Kempsey, Port Macquarie-Hastings, Greater Taree and Great Lakes. It addresses issues including:

- Settlement and housing.
- Settlement character and design.
- Economic development and employment growth.
- Environment and natural resources.
- Natural hazards.
- Cultural heritage.
- Water supply.
- Regional transport.

The Strategy identifies Coffs Harbour as a major regional centre to:

“serve(s) the Coffs Harbour/ Bellingen/ Nambucca subregion and has several regional functions including air transport, tertiary education, high level health care and resort tourism. It has significant capacity to grow in the life of this Strategy. A mix of medium to high densities will be encouraged around the town centre and in key precincts such as the jetty area and Park Beach”

Woolgoolga has also been identified as a major town, being self-contained and providing services to the subregion including shopping, business and farm support services.

In addressing regional transport, the Strategy acknowledges that 65% of travel to the region is via road travel, with the Pacific Highway being the major north-south corridor. The Pacific Highway will continue to be the primary north-south road. Under the Strategy, efficiency and safety of the highway would be protected, particularly through the Pacific Highway Upgrade Program which would see 500km of Pacific Highway upgraded through the Mid North Coast.

As shown in Table 3.2 below, the Proposal is compatible with and fulfils the aims of the draft Mid North Coast Regional Strategy:

Table 3.2: Draft Mid North Coast Regional Strategy aims

Strategy aims	Proposal consistency
Protect high value environments, including significant coastal lakes, estuaries, aquifers, threatened species, vegetation communities and habitat corridors by ensuring that new urban development avoids these important areas and their catchments.	Flora and fauna assessments undertaken during the route option and environmental assessment phases have been an input into the selection of the preferred route and the refinement of the concept design for the Proposal. Where feasible and practical, the preferred route has been selected and the concept design refined to avoid and/or minimise impacts on areas of high value environments (refer working paper 7: Flora and Fauna Assessment).
Cater for a housing demand of up to 58 400 new dwellings by 2031 to accommodate the forecast population increase of 91 000 and any anticipated growth beyond this figure arising from increased development pressures in the southern part of the Region.	The Proposal facilitates the future land use development along the study area, and in the Mid North Coast region, through a more efficient highway, and the incorporation of grade-separated interchanges at locations within the study area that will experience future increase in development..
Ensure that new housing meets the needs of smaller households and an ageing population by encouraging a shift in dwelling mix and type so that 60 percent of new housing will be in greenfield locations and 40 percent in existing urban areas.	N/A
Ensure an adequate supply of land exists to support economic growth and the capacity for an additional 47 000 jobs in the Region by protecting existing commercial and employment areas and securing sufficient land to support new employment opportunities.	N/A
Encourage the growth and redevelopment of the Region's four major regional centres and six major towns through urban design and renewal strategies as a means of protecting sensitive coastal and natural environments and strengthening the economic and administrative functions of these centres as well as meeting increased density projections.	The Proposal will facilitate future growth and redevelopment of Coffs Harbour and Woolgoolga, through the bypass deviating around Woolgoolga, and providing a safer, more efficient route for traffic travelling from the northern beaches to Coffs Harbour.
Protect the coast by limiting urban sprawl, by focusing new settlement in areas identified on local strategy maps and restricting unplanned new urban or rural residential settlement.	Where feasible and practical, the preferred route has been selected and the concept design refined to avoid and/or minimise impacts on areas identified for future development. The Proposal facilitates the consolidation of existing developed areas and the development of areas identified for future

	development through a more efficient highway and the incorporation of grade- separated interchanges at locations that will provide efficient access to these areas.
Only consider additional development sites outside of agreed local strategies if they can satisfy the Sustainability Criteria (Appendix 1).	N/A
Limit development in places constrained by coastal processes, flooding, wetlands, important farmland and landscapes of high scenic and conservation value.	Issues such as flooding, impact on wetlands, important farmland and high scenic landscapes have considered during both the route option and environmental assessment phases of the development of the Proposal (refer Sapphire to Woolgoolga: environmental assessment).
Protect the cultural and Aboriginal heritage values and visual character of rural and coastal towns and villages and surrounding landscapes.	Assessments of cultural and Aboriginal heritage values and visual characteristics of the study area were undertaken during the route option and environmental assessment phases of the development of the Proposal. These assessments have been an input into the selection of the preferred route and the refinement of the concept design for the Proposal. Where feasible and practical, the preferred route has been selected and the concept design refined to avoid and/or minimise impacts on Aboriginal heritage (refer working paper 3: Aboriginal heritage) as well as considering the visual character of the coastal towns and surrounding landscapes (refer Sapphire to Woolgoolga environmental assessment).

3.2.3 North Coast Urban Planning Strategy

The North Coast Urban Planning Strategy – Into the 21st Century, prepared by the Department of Planning in 1995, outlines a range of strategy outcomes for the future settlement patterns for the North Coast area of NSW including all local government areas between Tweed Heads and Hastings (Port Macquarie).

The Strategy aims to provide a more coherent approach to the planning of settlements along the North Coast, with regard to a number of issues related to each area's capacity and constraints, in order to better accommodate the predicted growth in population. The Strategy also complements the North Coast Regional Environmental Plan.

The Strategy envisaged a population for Coffs Harbour of 87,000 by the year 2016. It notes that there is sufficient zoned land to accommodate this increase, however there are significant planning issues associated with such an increase in population, including water supply and waste management.

The Strategy discusses the need for specific attention to be given to increasing traffic congestion and road network problems around Coffs Harbour. This was considered an impediment to growth and has been highlighted as a strategic issue for further investigation. The Strategy obviously pre-dates the Pacific Highway Upgrade initiative including the Coffs Harbour Highway Planning Strategy.

3.2.4 Upgrading the Pacific Highway Discussion Paper / Memorandum of Understanding

The RTA's Discussion Paper on upgrading the Pacific Highway was released in 1997 and contained details of the proposed funding and management arrangements for the then 10 year upgrading program between Hexham and Tweed Heads. As of the end of July 2006, 233 kilometres of Pacific Highway were double lane divided road.

In December 2005, the NSW and Australian governments announced a jointly funded program of \$960 million for the three years to 2009. In June 2006, both the two governments signed a Memorandum of Understanding for Pacific Highway duplication and safety works package and committed an additional \$160 million each. This brings to \$1.3 billion the level of funding the two governments have committed to upgrading the Pacific Highway until the end of 2009 under the new agreements.

3.3 Local strategies and policies

3.3.1 Woolgoolga Town Centre Study (1996)

A town centre study was completed in 1996 for Woolgoolga, outlining existing and future planning issues such as traffic and transport, commercial environment, recreation and open space, as well as tourism and community services. The study area for the Town Centre takes in much of the Woolgoolga town area stretching from the headland to west of the highway.

The Study identified traffic and transport as being one of the key issues affecting the amenity of Woolgoolga. The proposed bypass to the west of Woolgoolga would significantly alleviate traffic problems such as noise, heavy vehicles and accessibility constraints associated with the existing highway. The Proposal would therefore provide opportunities for Council and other bodies like the Chamber of Commerce to implement some of the strategies outlined in the Study.

3.3.2 Woolgoolga Business Lands Information Sheet (2000)

The Woolgoolga Business Lands Information Sheet provides a Masterplan for the Woolgoolga town centre. It encompasses strategies for the development of the centre and provides design principles for urban development within the area.

The proposed bypass of Woolgoolga would assist in the realisation of plan objectives by diverting a large proportion of through and heavy vehicles from the town. This would facilitate the movement of local motorists, pedestrians and cyclists and improve the amenity of Woolgoolga, which is a key strategy of the Masterplan.

3.3.3 Coffs Harbour City Council Draft "Our Living City" Settlement Strategy (2005)

The Draft "Our Living City" Settlement Strategy has been developed to achieve a vision for Council's strategic directions until 2030. The Strategy is separated into three Working Papers: Economic Sustainability, Environmental Sustainability and Social Sustainability and looks at issues and possible strategic actions to improve the amenity of the City. In conjunction with this strategy, in 2004 a Land Capacity Assessment was undertaken providing an assessment of the population capacity of existing and future development in the Coffs Harbour local government area.

The Land Capacity Assessment estimated that 107,000 people could be accommodated within the local government area by the year 2030, although it is only projected for a population of 100,000 in 2030. The Land Capacity Assessment identifies land with an approved development application or where development had begun, un-subdivided residential land as well as areas of potential residential land. The assessment anticipates that approximately 43 percent of the increase in population would be along the northern beaches, from Korora to Red Rock / Corindi.

The strategy identifies issues and suggests strategic actions in order to manage Coffs Harbour's growth in a sustainable manner. The Social Sustainability Working Paper discusses a range of issues including health, liveability, access and services and facilities for the existing and future population as well as crime and safety. The Economic Sustainability Working Paper looks at issues of business, employment and infrastructure, while the Environmental Sustainability Working Paper addresses issues of conservation, resource management and efficiency.

The preferred route for the Coffs Harbour Highway Planning Strategy (including the Sapphire to Woolgoolga upgrade) was taken into account when these documents were drafted. Upgrading the highway will see benefits, particularly road safety, travel efficiency and improved community accessibility that are consistent with the Strategy. The Strategy was on public exhibition from July to October 2006. A number of community submissions requested that the Strategy be halted until the upgrade route was selected and all environmental studies were completed.

In a letter dated 11 October 2006, the Department of Planning advised Council that "it is appropriate that the preferred route (for the highway upgrade) be shown in the Strategy as this major infrastructure corridor needs to be considered in the future planning of the Coffs Harbour local government area." At its meeting on 17 May 2007, Coffs Harbour City Council resolved "to make provision for the Pacific Highway upgrade at Coffs Harbour to be included for consideration in the Our Living City Settlement Strategy." At the meeting, Council also resolved "that Council and the community request both the State and Federal members to continue to lobby on the City's behalf for an acceptable highway to the west of Coffs Harbour."

At its meeting on 5 July 2007, Coffs Harbour City Council endorsed the Our Living City Settlement Strategy and resolved to lobby the Department of Planning to allow for endorsement of the Strategy whilst the Department is finalising their Mid North Coast Regional Plan. The Strategy endorsed by Council incorporated the preferred route for the upgrade of the Pacific Highway. No actual western route has been shown on the endorsed Strategy plans. Instead, words explaining Council's resolution (of 17 May 2007) for an acceptable highway west of Coffs Harbour were included in the endorsed Strategy.

3.3.4 Coffs Harbour City Council Rural Residential Strategy (1999)

Council prepared the Rural Residential Strategy to assist in the planning for possible locations of rural residential development within the local government area, to cater for the increase in demand for such living. The areas targeted are mainly situated immediately to the south and north of Coffs Harbour. To the north, the area west of Korora was nominated for preferred rural residential development, as well as an area known as West Sapphire. The objectives of the strategy have been taken into consideration during development of the Proposal in this area and this has influenced the local access road planning and the proposal to provide an overpass at Headland Road to facilitate cross highway movement for residents of west Sapphire.

3.3.5 Rural Lands Strategic Plan (2003)

The Coffs Harbour Rural Lands Strategic Plan was developed by Council in partnership with the community having first been presented as a draft in 2001. The adopted plan did not include a discussion or strategy on the subdivision of land zoned Rural 1A and this became an important issue in the Commission of Inquiry into the Strategic Plan. The outcome was a moratorium on the subdivision of such land from September 2004 until a new strategic urban development plan had been completed for the local government area.

The Plan is supplemented by a draft local environmental plan that amends the Coffs Harbour City LEP 2000. Most of the amendments apply to the rural villages and deal with changes to zonings, or development permitted. Another amendment proposed changes to the Rural Residential Development Strategy, including land release programs and investigation areas.

The Rural Lands Strategic Plan was subsequently altered by:

- Lifting of the moratorium on subdivision within the Rural 1A zone on the basis that the maximum potential is only 124 additional allotments across the LGA.
- Retention of the minimum subdivision size of 40 hectares for land identified for agricultural purposes.
- Retention of a special provision for six-hectare minimum allotment size on lands to be mapped for 'coastal frost-free horticulture'.
- Preference to be given to closer rural settlement rather than dispersed settlement across the Rural 1A zoned lands. This will include allowing dwellings on existing allotments of less than 40 hectares where they are within two kilometres of a nominated village. The suggested villages are Coramba, Nana Glen and Corindi Beach (subject to bushfire assessment).

The Rural Lands Settlement Plan was adopted by Coffs Harbour City Council in June 2007.

The Plan undertook composite constraint mapping of the local government area to identify areas which would be suited to subdivision. Land identified as being suitable for subdivision were mostly within the interior of the local government area around Lowanna, Ulong and inland from Corindi Beach. To the west of Woolgoolga, there are few identified opportunities for property owners to subdivide rural properties.

3.3.6 Estuary Management Study and Plan: Moonee Creek, Moonee Beach, Coffs Harbour: Final Draft Report (2006)

The Estuary Management Study and Plan is a guide to assist local future land use and natural resource management and has been prepared under the NSW Government's Estuary Management Program. The Study and Plan identify values of the estuary (including a range of ecological, recreational, scenic, heritage, educational and economic benefits) and issues of concern that have been raised through extensive studies and community consultation. The issues of concern included water quality, erosion, recreational uses of the estuary and invasion of weeds / lack of native vegetation.

Long-term management objectives and specific strategies to be implemented by Council are presented under the broad headings of Water Quality, Bank Erosion / Sedimentation, Ecology, Catchment Development, Waterway Usage, Heritage and Future Management Mechanisms.

The Proposal would cross Sugarmill, Cunninghams and Skinners Creeks, all tributaries of Moonee Creek, as well as Moonee Creek itself and as such, it could potentially result in indirect impacts on the estuary. Table 3.3 shows the objectives / strategies of the Estuary Management Plan of relevance to the Proposal and a comment on how the Proposal would manage potential impacts.

Table 3.3: Objectives of the Estuary Management Plan

Objective / Specific Strategy	Compliance Statement
Water Quality	
Reduce the level of pollutant and sediment loads entering Moonee Creek	A construction environment management plan for the project would put in place measures to minimise any spillage of pollutant or sediment into the estuary.

Objective / Specific Strategy	Compliance Statement
Bank Erosion and Sedimentation Objectives	
Stabilise and rehabilitate foreshores that have become degraded due to inappropriate usage and foreshore development	A construction environment management plan would put in place measures to minimise any further damage to the estuary foreshores and undertake remediation of any foreshore damaged during construction.
Ecology / Biodiversity Objectives	
Prevent the degradation of existing habitats throughout the estuary, and ensure protection and sustainability of existing fauna communities, particularly threatened species	There would be minimal impact to the existing habitats in the estuary. The development and implementation of a construction environment management plan would put in place measures to minimise potential impacts on fauna communities.
Future Catchment Development Objectives	
Ensure that all future development considers the environmental sensitivity of Moonee Creek and does not place any additional stress on the existing natural environment, including additional pollutant loads and surface runoff	The sensitivity of Moonee Creek is being assessed in a Flora and Fauna Working Paper for the Proposal. The upgrade of the highway to a high standard highway would reduce the potential for pollutant spills into the estuary.

An Estuary Management Study for Hearn's Lake is in preparation and it will result in the development of an Estuary Management Plan. As with the Moonee Creek estuary, any potential impacts on this and other estuaries traversed by the Proposal would be minimised through appropriate environmental controls / management measures such as erosion / sedimentation / water quality control basins. Comprehensive mitigation measures for the Proposal are presented in the revised Statement of Commitments as part of the environmental assessment.

4. Land use and development

4.1 Introduction

The pattern of land use of the study area which incorporates the northern beaches of Coffs Harbour is very diverse, ranging from intensive tourist developments and closer settled residential towns / villages through to large rural holdings and forestry. The main settlements of the study area are summarised below and this is followed by an account of each main land use category.

Sapphire

Sapphire has two main land use precincts, one being the intensive beachfront tourist facilities and medium density housing area at the southern end of the study area and the second being the beachside residential suburban area. Coffs Harbour is the main key work / commercial / community hub for residents in this area. The area west of the highway (and extending north to Moonee) is predominantly rural residential development with limited agricultural land use.

Moonee Beach

Moonee Beach is a quiet beachside residential village east of the highway, but it is undergoing rapid change as the urban development envisaged as part of the Moonee Beach Development Control Plan takes effect. The opening of a large shopping centre at Moonee Beach reflects the significant land use change occurring in this locality.

Sandy Beach / Emerald

This area is predominantly residential with limited tourist facilities and accommodation interspersed. Sandy Beach and Emerald Beach are closer settled urban precincts, while Emerald Heights is a rural residential subdivision. Commercial facilities in these areas are very limited and they rely on either Woolgoolga or Coffs Harbour for routine goods and services.

Woolgoolga

Woolgoolga is the largest urban settlement within the study area and is an important hub providing key facilities and services for the smaller surrounding settlements along the northern beaches and for nearby rural areas. Key services include health, education, religion, entertainment facilities and economic facilities. Residential development is varied and consists of beachside living and rural farmland. New urban release areas are approved and /or planned in several precincts near Woolgoolga including Hearnese Lake, West Woolgoolga and south Woolgoolga. .

Arrawarra / Mullaway / Safety Beach

These small village areas are situated in the northern section of the study area and comprise residential development, both closer settled and rural living, with holiday accommodation and limited services including corner shops, small schools and recreation facilities.

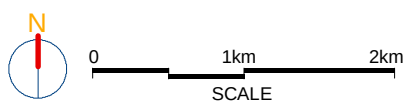
There are other rural-residential settlements to the west of the existing highway on the northern beaches. Situated between the coastal towns of Moonee Beach and Emerald Beach: Avocado Heights, Heritage Park and Emerald Heights are all rural-residential estates that rely on the settlements to the east of the highway for the supply of goods and services.

4.2 Existing land use

As noted above, land use along the proposed highway route is highly variable with mixed residential, tourism, rural residential, agricultural, recreational, conservation and forestry uses (see Figures 4.1a and 4.1b).

4.2.1 Rural Land

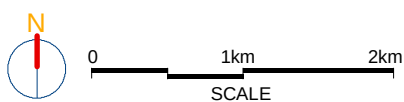
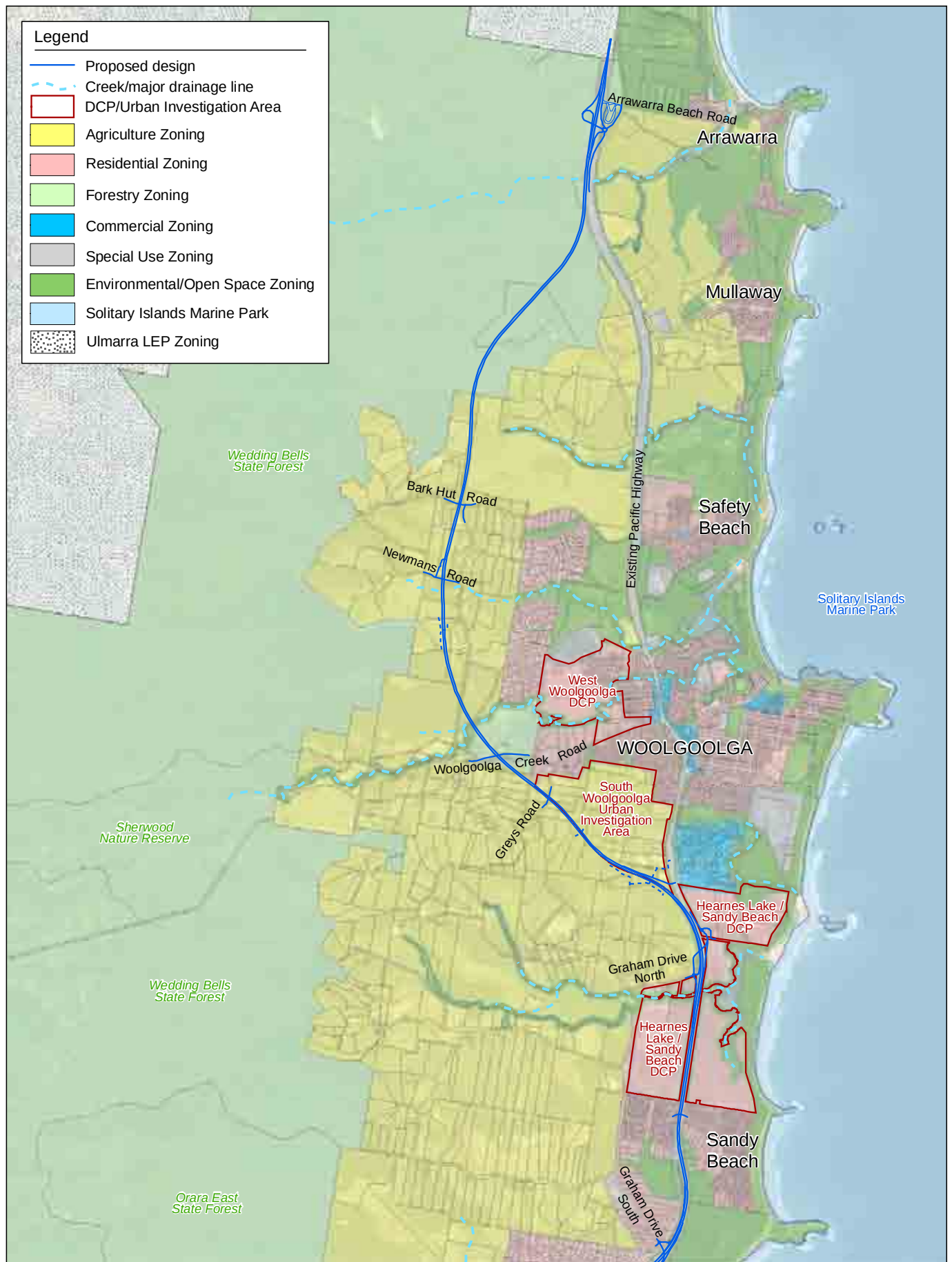
Rural land use in the study area comprises forestry, agricultural and rural-residential uses.



Source: Coffs Harbour LEP 2000 (Coffs Harbour City Council)

Figure 4.1a

Existing Land Use



Source: Coffs Harbour LEP 2000 (Coffs Harbour City Council)

Figure 4.1b
Existing Land Use

Agricultural land use is generally situated to the west of the existing highway, away from the urban and smaller village centres. The main agricultural activities are banana growing, other cultivation such as blueberries, cattle grazing, or a combination of agricultural uses. Although banana plantations are the dominant crop, in the past 10 years there has been a decline of approximately 5% per annum in the number of hectares of bananas. A more recent increase in other crops such as blueberries has been notable in the study area.

Forest lands form a westerly boundary to most of the urban and rural development of the study area and include the Wedding Bells State Forest, Conglomerate State Forest and Orara East State Forest. To the west of Woolgoolga and bisecting Wedding Bells State Forest, is the state heritage listed Sherwood Nature Reserve (part of the high conservation value old growth forest).

The forests within the study area are commercially logged for timber. They accommodate recreational uses and also provide for the conservation of old growth and biologically significant forest. The State Forests are divided into Forestry Management Zones (FMZs). The design of the Proposal was developed in a manner that minimised the impact on specific areas within the Wedding Bells State Forest (particularly Zone 3A) that are zoned for conservation and protection.

4.2.2 Commercial land

Along the upgrade section between Sapphire and south Woolgoolga, there are numerous commercial properties, mostly tourist and accommodation facilities. Some, such as the Nautilus and Aqua Luna Resorts at Sapphire have direct access onto the highway. Other commercial properties in the upgrade section along and near the existing highway include businesses such as a service station, shop, nursery and kennels.

Commercial properties along the Woolgoolga bypass section include a landscape supplies operation and numerous agricultural businesses.

The Woolgoolga commercial area is the dominant business precinct in the study area and the more recently opened Moonee Beach shopping centre is another large commercial zone. There are a number of commercial properties within Woolgoolga along the existing highway that have some reliance on passing trade, including service stations and motels. Woolgoolga provides key services to the rural areas and smaller coastal villages in the north beaches section of the Coffs Harbour local government area.

4.2.3 Residential land

The main urban precincts within the study area include Sapphire, Moonee Beach, Emerald Beach, Sandy Beach, Woolgoolga, Safety Beach, Mullaway and Arrawarra. In addition, there are numerous rural residential precincts including west Sapphire, Forest Glen, Heritage Park, Avocado Heights, Emerald Heights and the Country Club Estate to the west of Woolgoolga. Smaller rural residential development is interspersed elsewhere in the study area.

In 2001, the number of private dwellings within the Coffs Harbour LGA was 26 437, an increase of 9% from 1996. The most dominant private dwelling type was detached housing, accounting for 65% of all dwelling structures within the LGA.

Population predictions for the Coffs Harbour LGA indicate that around the year 2030, the population could reach approximately 100 000. As such, there has already been an increase in the number of dwellings being built to accommodate the predicted increase in population. In the period of 2004/2005, the total number of residential dwelling planning approvals was 784, an increase of 15.5% from the

previous year. The population along the northern beaches area of the LGA is predicted to increase from 19 558 in 2004 to approximately 36 770 in 2030 (Coffs Harbour Land Capacity Assessment 2004).

4.3 Land development activity

Since development of the Sapphire to Woolgoolga upgrade project started in 2001, there have been no new releases of unzoned lands for rural and urban development. Development that has occurred since 2001 includes:

- Infill development within the established coastal villages and within the rural-residential estates such as Heritage Park and Country Club Estate.
- Subdivisions particularly in the existing rural residential estates of Heritage Park and Avocado Heights
- Smaller subdivisions on the fringe of coastal villages including Sapphire and Safety Beach.

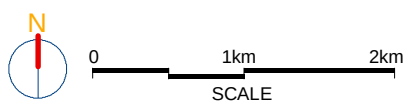
In 2004/2005, Council received 1938 development applications, making it the fourth straight year of high DA numbers. In the area covered by the Moonee Beach Development Control Plan, a number of substantial residential DAs have been submitted and/or approved by Council in 2006. One includes approval for 131 dwellings, and another for subdivision in 57 lots. Other areas where there have been large development applications include Emerald Beach (approval for a 173 dwelling Seniors Living Centre and Village Centre), West Woolgoolga (application for a 25 lot subdivision) and Hearnes Lake (application for an 86 lot and a 295 lot subdivisions).

Although most new development along the northern beaches in recent years has been residential, consent was granted in 2004 for the new shopping centre at Moonee Beach, adjacent to the intersection of the Pacific Highway and Moonee Beach Road. This development also prompted substantial reconstruction / re-configuration of the Pacific Highway / Moonee Beach Road intersection and approaches. In May 2007, approval was obtained for the redevelopment of the former Pelican Beach resort at Sapphire to cater for both tourists and residents.

In its Land Capacity Assessment, Coffs Harbour City Council has estimated that there are approximately 3 546 existing or planned dwellings (i.e. approved dwellings) within the study area that could help accommodate the increase in population. Within the same area, Council has estimated that there could be an additional 1 006 dwellings built within land that has the potential to become residential land to accommodate the anticipated population increase. Potential residential lands range from small yielding locations such as Tiki Road with potential to house nine people, to larger locations such as the south Woolgoolga Urban Investigation Area which has the potential to house 1250 people (refer Figure 4.2a and 4.2b).

Council has conducted preliminary assessments of the south Woolgoolga Investigation Area and it is expected that more detailed investigations would be undertaken to determine whether the area is suitable for re-zoning from its existing rural zoning to make some form of urban development a permitted use.

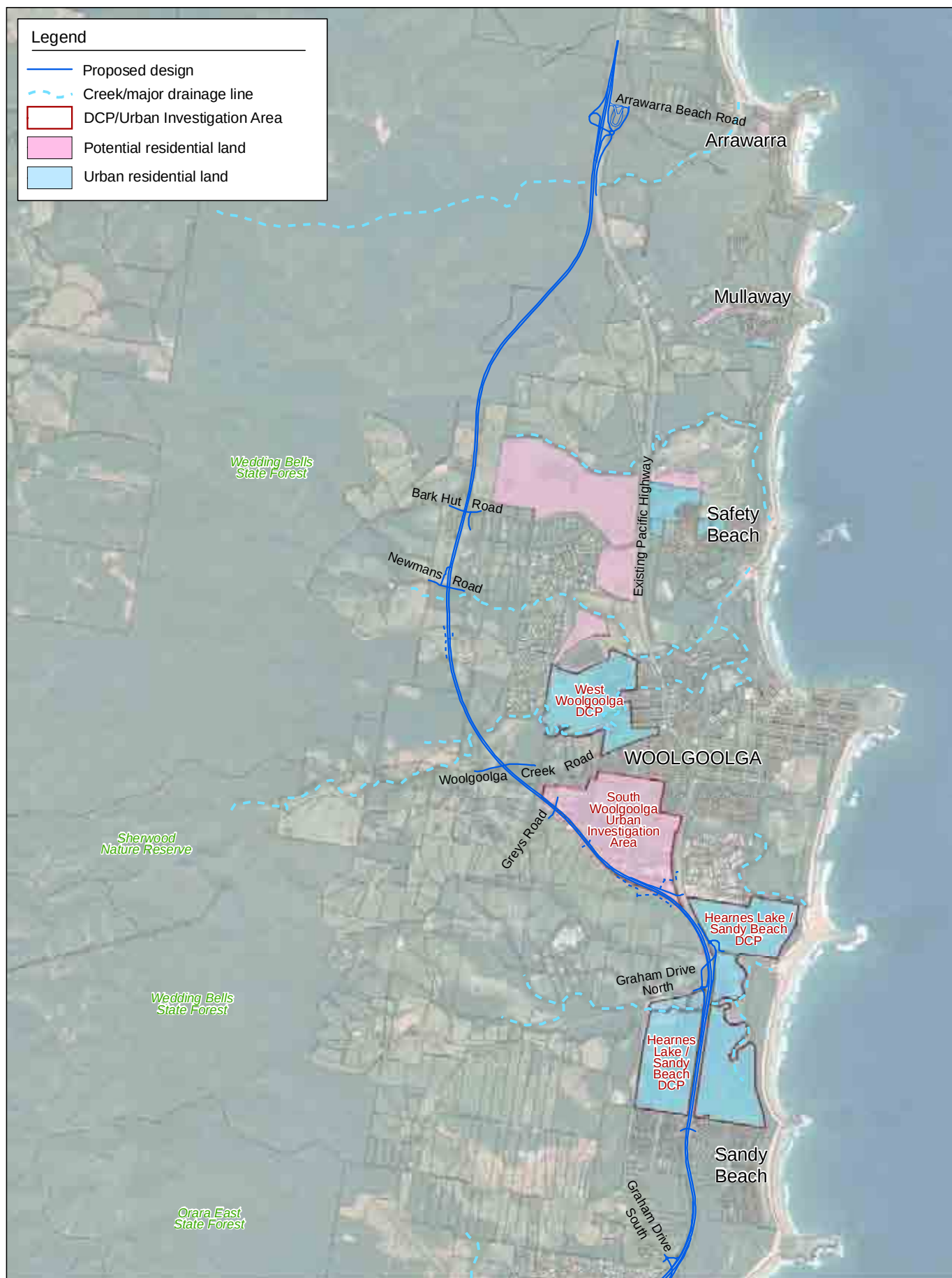
In order to control development within the study area, Council has developed a series of location-based Development Control Plans. An overview of these plans is provided below in terms of the relationship to the Proposal and the potential impacts for the expected land use and development.



Source: Coffs Harbour Land Capacity Assessment 2004
(Coffs Harbour City Council)

Figure 4.2a

Potential residential areas



0 1km 2km
SCALE

Source: Coffs Harbour Land Capacity Assessment 2004
(Coffs Harbour City Council)

Figure 4.2b

Potential residential areas

4.3.1 Korora Development Control Plan (2004)

The Korora DCP applies to an area of generally rural lands just north of Coffs Harbour and to the west of the Pacific Highway. The Plan details a Masterplan for the management of development within this area, which will ultimately accommodate about 1 500 people, inclusive of the existing population.

The Plan has not taken into consideration the Pacific Highway Upgrade including the proposal for mainly partial acquisitions of highway fronting properties in this southern section of the study area. There are various access strategies addressed within the Plan, one being the closure of the intersection of Old Coast Road and the highway. This closure forms a part of the highway upgrade proposal, with Old Coast Road proposed to be connected to the local access road on the western side of the highway and linked over the upgraded highway to Headland Road at Sapphire.

4.3.2 Moonee Development Control Plan (2004)

The Moonee DCP relates to the area between Split Solitary Road and Moonee Creek on the eastern side of the highway, as well as an area of land on the western side of the highway generally between Hoys Road and Maccues Road. The Plan provides a number of strategies for development in this area, including housing, traffic and transport, community facilities and services, business, natural environment, urban design, recreation and open space, and servicing strategies. More specific planning controls are in place for the control of urban development within the area, and include aspects such as density, bushfire hazards, noise and archaeology.

The Plan had anticipated a major upgrade of the Pacific Highway along the current route and it also anticipated a full grade separate interchange at Moonee Beach Road to facilitate local access to and from this emerging urban area. In this regard, the Proposal would have minimal impact on the release area lands as it would be substantially contained within the existing highway road reserve.

The access strategy for the DCP provides for access to the highway via Split Solitary and Moonee Beach Road with an internal collector road, to minimise the number of intersections with the highway. While there would be minimal direct impact upon land within the Moonee Beach DCP area, the Sapphire and Moonee Beach interchanges have been developed in order to cater for the future residential development and traffic movement to and from the highway expected within this area.

An additional feature of the Proposal not anticipated in the DCP is the proposed local access road along the western side of the highway between Gaudrons Road and Hoys Road. This would provide access to the existing rural residential communities on the western side of the highway as well as alternative access for the western precinct of the DCP.

Overall, it is concluded that the highway upgrade proposal is compatible with and facilitates the land use and development plans envisaged in the Moonee DCP.

4.3.3 Hearnese Lake / Sandy Beach Development Control Plan

The Hearnese Lake / Sandy Beach DCP includes several precincts between Sandy Beach and the Bosworth Road industrial estate on the eastern side of the highway and adjacent to Graham Drive on the western side of the highway. The Plan controls urban development within this area which is expected to house approximately 1 350 people.

The Plan contains a number of strategies that addresses issues such as housing, traffic and transport, community facilities and services, business, natural environment, urban design, recreation and open space, and servicing requirements. More specific development controls also deal with matters such as subdivision, driveways, natural and habitat areas and cultural heritage management.

The Plan was prepared in the knowledge of the preferred route for the highway and it therefore allows for the amplification in this area and the proposed south Woolgoolga interchange. Indeed, it also acknowledges that the envisaged urban development in areas around Hearn's Lake Road and Graham Drive will not be able to proceed until the completion of the highway project. This is influenced mainly by the significant new local access road arrangements associated with the upgraded highway, including the separation of through and local traffic and closure of existing intersections with Hearn's Lake Road and Graham Drive north.

4.3.4 West Woolgoolga Development Control Plan

The West Woolgoolga DCP came into effect in 2004 and it controls development in this area that allows for 330 residences and hence, about 950 people (CHCC, Land Capacity Assessment 2004). The DCP addresses issues such as road design, access and movement.

The subject area was traversed by the discarded Option C and C1 route options, but the Proposal does not have any direct impact on the DCP. The Plan requires an acoustic report to be prepared for housing proposals within 300m of the Pacific Highway to ensure that future residents are not exposed to unacceptable traffic noise levels. At its closest point, the proposed bypass would be more than 300m from the DCP lands.

4.4 Land tenure and acquisition

Most of the land within the study area is privately owned freehold land but with some parcels of land owned by public authorities, including Coffs Harbour City Council, the RTA, Department of Primary Industries (Forests NSW) and other government departments. There are also a number of properties within the study area that are owned by Yarrawarra Aboriginal Corporation and the Coffs Harbour and District Local Aboriginal Land Council. Although it uses the existing highway road reserve, the upgrade section would require acquisition of many freehold parcels, many as partial strip type purchases. In contrast, the bypass section relies entirely on acquisition of freehold lands and State Forest land (see below). This would entail purchase of numerous properties which are mainly in rural use (for both agriculture and residential purposes). The extent of and process for these acquisitions is addressed in more detail in section 5.5.1.

The other notable land tenure of the study area are the public land holdings of the Department of Environment and Climate Change (Moonee Beach and Sherwood Nature Reserves) and the Department of Primary Industries (Wedding Bells State Forest). While the Proposal would not directly affect any lands in Nature Reserves, there would be substantial acquisition (47 hectares) of State Forest lands in the northern section of the route (refer section 5.5.1).