

5. Existing community profile

5.1 Introduction

The mid-North Coast region of NSW comprises the local government areas (LGA) of Bellingen, Coffs Harbour, Gloucester, Greater Taree, Great Lakes, Port Macquarie-Hastings, Kempsey and Nambucca. The Coffs Harbour LGA is one of the fastest growing regions in NSW (Coffs Harbour City Council, 2004c). Important characteristics of the mid-north coast include its popularity as a tourist destination, its growing attraction for retirees and others migrating from large urban areas in NSW, Victoria and Queensland, its historic reliance on agriculture as a mainstay of the regional economy and its sensitive biophysical environment.

The Coffs Harbour LGA is located approximately 550 km north of Sydney and covers an area of 1174km². The estimated population for the Coffs Harbour LGA at June 2004 was 66 529 (Coffs Harbour City Council, 2005) with the majority of the population located along the coast. Major urban centres in the LGA are Coffs Harbour, Sawtell and Woolgoolga. Major industries within the LGA include retail trade, construction and property and business service sectors (Coffs Harbour City Council, 2005).

The study area is located between 8km and 33km north of Coffs Harbour and comprises a number of discrete urban settlements, rural residential development and rural / agricultural development. Key features of the community structure of the study area are:

- **Woolgoolga:** The largest urban settlement in the study area. In 2001, Woolgoolga had a population of 4 526 comprising 7.2% of the LGA (Coffs Harbour City Council, 2004c). The majority of urban development within Woolgoolga is located on the eastern side of the Pacific Highway. Development in Woolgoolga is diverse with mixed residential use, a range of commercial / retail business, substantial tourism and holiday accommodation development and a variety of community services and facilities including health, education, entertainment and recreation. Significant rural residential development including Country Club estate is located west of Woolgoolga, predominantly along Bark Hut, Newmans and Woolgoolga Creek Roads. Consultation with stakeholders has indicated that residents of these rural residential areas identify strongly with the Woolgoolga community.
- **Arrawarra / Mullaway / Safety Beach:** Three discrete, but proximate coastal settlements, located north of Woolgoolga on the eastern side of the Pacific Highway. In 2001, the combined population of these three settlements was 2 430 (Coffs Harbour City Council 2004a). Development within each of these settlements is predominantly residential with limited commercial development.
- **Sandy Beach / Emerald Beach:** Two discrete, but proximate, coastal settlements located south of Woolgoolga adjacent to the existing highway. In 2001, the combined population of these settlements was 3,651 people. Development within each of these settlements is predominantly residential with limited commercial development. They rely on Woolgoolga to provide services such as health, retail and business. A distinct feature of Sandy Beach is that it includes urban areas both side of the existing highway and is the only settlement in the study area which does not have direct access from the highway. Access is available only from Graham Drive and via an overbridge crossing the highway at Diamond Head Drive for the eastern section of Sandy Beach.
- **Sapphire / Moonee:** Two discrete, but proximate, coastal settlements located to the south of Woolgoolga on the eastern side of the highway. In 2001, the combined population of these settlements was 3 456 people (Coffs Harbour City Council, 2004c). Development in these settlements is predominantly residential with commercial development mainly in the form of tourist and holiday accommodation as well as the relatively new Moonee shopping centre. Coffs Harbour is a key community and business hub for these localities in terms of health services, major stores, education, and business facilities.

- Rural residential areas: There are several large rural residential areas within the study area including precincts between Sapphire and Moonee, Forest Glen, Heritage Park, Avocado Heights and Emerald Heights and the Country Club estate west of Woolgoolga. The majority of the rural residential development is located to the west of the highway.
- Rural / agricultural development: There are many smaller rural living areas and agricultural properties interspersed through the study area, again mostly to the west of the existing highway.

5.2 Demographic profile

In order to predict potential social impacts due to the highway upgrade proposal, the demographic profile of the community in question needs to be understood. The following section focuses on the community within the study area and includes data for the entire LGA and the region for comparative purposes where appropriate. Information used in the development of the profile has been sourced largely from data provided by Coffs Harbour City Council, as well as data from the 1996 and 2001 Census of Population and Housing.

5.2.1 Population

The NSW North Coast is one of the fastest growing regions in NSW. Data obtained from the 2001 Census shows an annual growth rate of 1.9% for the Coffs Harbour LGA between 1991 and 2001 (refer Table 5.1). This is higher than the Mid-North Coast Statistical Division (1.4%) and NSW (1.1%) for the same period. In 2005, Coffs Harbour LGA accounted for 22.8% of the population of the Mid North Coast Statistical Division and 1% of the whole of NSW. Table 5.1 provides population counts for selected areas in 1991, 1996 and 2001 and identifies the annual growth rate for each.

Table 5.1: Population Data

Locality	1991 Population	1996 Population	2001 Population	Annual Growth Rate (1991-2001)
New South Wales	5 732 032	6 038 696	6 371 745	1.1%
Mid-North Coast Region	240 753	262 985	275 274	1.4%
Coffs Harbour LGA	51 520	58 337	61 635	1.9%
Ararawarra, Mullaway, Safety Beach	2 033	2 333	2 430	1.9%
Woolgoolga	4 165	4 493	4 526	0.8%
Sandy Beach, Emerald Beach	2 637	3 373	3 651	3.8%
Moonee, Sapphire	2 187	2 910	3 456	5.8%

Historically, along the mid-north coast the population has been increasing, and this trend is expected to continue, with the area becoming a popular destination for retirees and sea-changers. Population growth projections for the next 30 years indicate that Coffs Harbour will continue to grow rapidly. By 2030 the population is estimated to be in the vicinity of 100 000 (Coffs Harbour City Council, 2004a). Coffs Harbour, like other coastal locations on the Mid-North Coast's coastal fringe, will continue to attract "baby boomers" and people wanting a different, more relaxed lifestyle from metropolitan areas and rural inland areas.

The overall land capacity needs of the LGA are outlined in Table 5.2.

Table 5.2: Land Capacity Needs of the Coffs Harbour LGA

Land Capacity Needs	Persons
Estimated 2004 Population	67 000
Estimated 2030 Resident Population	100 000
Need to Accommodate	33 000
Existing land use zones can accommodate	26 000
Need for new land use zones to accommodate	7 000

(Source: Coffs Harbour City Council, 2004b)

The Land Capacity Assessment prepared by Coffs Harbour City Council identifies land that is already zoned for urban development (un-subdivided land and infill development) and areas potentially suitable for future urban development. Table 5.3 summaries the assessment's findings.

Table 5.3: Future Development in the LGA

Location	Predicted 2004 population	No potential dwellings on zoned residential land ⁱ	No. of potential dwellings on proposed residential land	Potential increase in population	Predicted 2031 population
Coffs Harbour Rural	2236	36	0	90	2326
Nana Glen/Bucca	1542	60	25	243	1785
Ulong	107	10	0	29	136
Coramba	302	38	73	320	622
Bonville	1943	247	140	890	2833
West Boambee	1798	0	40	166	1914
Sawtell/Toormina/East Boambee/ North Bonville	14875	828	0	2788	17,663
Coffs Harbour Urban	25529	2916	1033	12,480	38,009
Korora	3247	509	500	2673	5920
Moonee / Sapphire	3908	1694	0	5397	9305
Sandy Beach / Emerald Beach	3810	656	127	1917	5727
Woolgoolga	4646	1074	500	3550	8196
Ararwarra, Mullaway and Safety Beach	2487	482	157	1638	4125
Red Rock/Corindi	1492	404	150	1453	2945
Total	69,057	8249	2895	35,394	104,451

Table 4.3 shows that an additional 35,400 people could be housed within the Coffs Harbour LGA. Within the study area, there is the potential that the number of potential dwellings on currently zoned residential land total 3906. An additional 787 dwellings could be built on land that is proposed to be zoned residential land in future. It is anticipated that this potential dwelling yield would accommodate an additional 12, 502 people within the study area (from the projected 2004 population) by 2031.

On 5 July 2007, Council adopted the *Our Living City Settlement Strategy* (Coffs Harbour City Council 2006). The *Our Living City Settlement Strategy* predicted a population of 30,619 for the Northern

Beaches area (which in addition to the four localities shown in Table 16.3, includes Red Rock / Corindi Beach / Corindi Plateau and Korora). The *draft Mid North Coast Regional Strategy* land supply calculations were used in the development of the Our Living City Settlement Strategy. While there are some differences with the population predictions included in the Our Living City Settlement Strategy (compared to the Land Capacity Assessment), the overall predicted 2031 population of 27,353 for the localities shown in the table is generally consistent to the Strategy's prediction for the Northern Beaches area.

5.2.2 Age profile

The Mid-North Coast region of NSW is aging more rapidly than the State as a whole. This reflects its continued popularity as a destination for retirees. The median age of the region in 2001 was 41 years old, an increase from 39 years old in 1996. People over the age of 65 make up 16% of the population, higher than the NSW average of 13% in 2001. The population of over 65s in the LGA has been increasing more rapidly than other age groups since 1991, however, this is not a region-specific trend as it was also recorded at State level. In terms of the Coffs Harbour LGA, Table 5.4 provides details on the age distribution based on the 2001 census and changes in the distribution since 1991.

Table 5.4: Age Distribution in the Coffs Harbour LGA 1991 to 2001

Age Group (Years)	1991 Population	2001 Population	Coffs Harbour LGA % Change	NSW % Change
0-4	3 997	3 838	-3.9	-0.8
5-9	4 234	4 444	4.9	6.6
10-14	4 128	4 899	18.7	7.1
15-19	3 636	4 479	23.1	0.42
20-29	5 932	5 721	-3.5	-3.7
30-39	8 223	7 669	-6.7	5.5
40-49	6 785	9 519	40.2	20.5
50-59	4 695	7 653	63	39.8
60-64	2 559	3 083	20.4	5.8
65 +	7 115	9 881	38.8	22.8

The decrease in the number of 0-4 year olds in the LGA is much higher than the 0.8% change recorded at the NSW level. Persons over 40 years make up over half of the population in the Coffs Harbour LGA, with dramatic increases in that age band in the ten years to 2001. This shows the general trend of the LGA as being popular with retirees and people looking to have a more relaxed lifestyle. It is also generally consistent with the data at state level, which shows a declining birth rate and an aging population.

5.2.3 Employment and income

Centrally located between Sydney and Brisbane, Coffs Harbour is a regional employment and economic centre. It serves as a sub-regional centre supported by Woolgoolga and Sawtell as district centres. Linking the three centres is the Pacific Highway, which runs adjacent to the coast through the area. In 2001, the retail sector was the largest employer in Coffs Harbour, accounting for 19.4% of total employment. The second largest industry health and community services (11.0%) followed by accommodation, cafes and restaurants (9.0%). The biggest increase in jobs during the ten years to 2001 was in construction, retail trade, accommodation, cafes and restaurants, and service industries. Between 1991 and 2001 employment increased 82.5% in health and community services, this being largely attributed to the completion of the Coffs Harbour Health Campus (Coffs Harbour City Council, 2004a).

In the ten years to 2001, there has been a decrease in the unemployment rate, from 17.3% down to 12.4% (Coffs Harbour City Council, 2004c). Although the unemployment rates are comparable to that of the Mid-North Coast, it is much higher than the NSW estimated unemployment rate of 7.2% in 2001. The unemployment rate is higher for men than for women, reflecting the decline in full time jobs and the greater take-up of part-time positions by women. Within Woolgoolga, the 2001 unemployment rate, at 18.6%, is significantly higher than the LGA average. This locality also has the highest proportion of the population not in the labour force (Coffs Harbour City Council, 2004a).

Fifty-three percent (53%) of the Coffs Harbour population is on low-average weekly income (brackets \$300- \$599 and \$600- \$1000), which is considerably higher than the 39% figure for NSW. In the higher income bracket, 21% of the population in Coffs Harbour earns over \$1000 a week, compared to 37% in the state. Incomes within Woolgoolga tend to be lower than the LGA as a whole.

5.2.4 Housing and accommodation

Approximately 88% of the Coffs Harbour LGA population live within the narrow coastal plain extending 51km from Bonville in the south to Arrawarra in the north. Of the 2001 population, an estimated 37.4% live in the main Coffs Harbour urban area, 22% in Sawtell / Toormina / Bayldon, 7.2% in Woolgoolga and 21.5% in the remaining coastal villages. Approximately 12% of the population live west of the coastal range (Coffs Harbour City Council, 2004c).

The number of private dwellings in the Coffs Harbour LGA has increased from 23,598 in 1996 to 26,437 in 2001 (the 2001 figure also includes figures for Red Rock/ Corindi¹). The overall annual increase in housing stock is 9%, which is higher than the state average of 5.9%. Detached dwellings are the dominant form of dwelling type, increasing from 63% of the housing stock in 1996 to 65% in 2001. Detached housing is expected to continue to be the main form of housing in the City (Coffs Harbour City Council, 1997). Over 62% of housing in the study area is privately owned or being purchased. Another 30.6% of dwellings are being rented.

Settlement patterns have wide ramifications for transport planning, economic development and social development. Decreasing home occupancy rates compound increasing pressure from a growing population. This means more dwellings are required per head of population. These two factors of population growth and decreased occupancy rates create a demand for additional housing and infrastructure.

5.2.5 Place of birth and ethnicity

Information from the 2001 census has identified Australia as the most common birthplace of residents in the Coffs Harbour LGA (83%). The next most common birthplaces were the United Kingdom (4.7%), New Zealand (1.3%) and India (0.6%). Approximately 92% of the population speaks only English at home. At the State level, the three most common birthplaces are Australia (69%), United Kingdom (4.3%) and New Zealand (1.6%). Although India is not the fourth most common birthplace at state level, it comprises 0.6% of the population like Coffs Harbour LGA.

As Woolgoolga has one of the largest and most established Sikh communities, a separate Sikh Cultural Assessment was undertaken as part of the environmental assessment to specifically address concerns regarding potential impacts from the Proposal.

¹ The inclusion of Red Rock/Corindi is due to a change in the local government area boundaries. Red Rock/Corindi was amalgamated into Coffs Harbour LGA from the Pristine Waters LGA.

5.2.6 Indigenous persons

The 2001 census recorded a total of 1 809 people of indigenous descent within the Coffs Harbour LGA, representing 3% of the population, compared to 2% of the NSW population. Within the study area, indigenous communities are focused at Corindi and Red Rock with the Yarrawarra Cultural Centre forming an important resource for the community.

5.3 Study area demographic features

This section provides a more detailed account of the demographic characteristics of the main settlements in the study area.

5.3.1 Arrawarra / Mullaway / Safety Beach

- 2001 population of 2 430 persons, with an annual growth rate of 1.9%
- Highest proportion of 60 to 69 year olds and the lowest proportion of 0 to 4 year olds and 20 to 39 year olds in the LGA
- Unemployment rate 3% lower than the LGA rate A quarter of households in this locality earned between \$300 and \$499 per week
- Similar proportion of single dwellings as the LGA as a whole, while caravans represent over a quarter of the housing stock.

5.3.2 Woolgoolga

- The largest 2001 population of the study area (4 526 persons) with a slow annual growth rate of 0.8%.
- A popular locality for retirees, the highest proportion of people over 80 years of age and a higher than average proportion of 60 to 79 year olds. All other age groups are under-represented.
- Higher unemployment rate than the LGA average and also has the highest proportion of the population not in the labour force. Incomes in this locality tend to be lower than the LGA average.
- High proportion of caravans, which represent 10% of the housing stock. It has less than the LGA's average number of flats and semi-detached dwellings.

5.3.3 Sandy Beach / Emerald Beach

- 2001 population of 3 651 persons being the second highest annual growth rate in the study area of 3.8%.
- Predominantly populated by families with young children, with relatively few elderly people.
- Slightly higher percentage of unemployed people than the LGA as a whole. The labour force is 5% greater than the LGA average and the proportion of households earning between \$500 and \$999 per week is 6% higher than the LGA average.
- Over 85% of dwelling stock is single dwellings, higher than the LGA's average of 65%.

5.3.4 Moonee / Sapphire

- 2001 population of 3 456 persons is the largest annual growth rate (5.8%) of all settlements in the study area.
- Comprises more elderly families with teenage children with an average proportion of people over 60 years of age.
- Unemployment rate is less than the LGA average and incomes over \$1000 per week in this locality is 10% higher than the LGA average.
- Nearly 75% of its dwelling stock is separate dwellings.

5.4 Community services and facilities

Woolgoolga and the surrounding settlements contain a range of local services, while Coffs Harbour acts as a major regional centre with a more comprehensive range of services including government, health and higher education facilities.

The Woolgoolga Town Centre Study included an analysis of existing community facilities and services (Coffs Harbour City Council, 1996) and the priorities for the future provision of facilities and services. It found that community facilities serve a diverse and large population catchment extending from Bucca Road and Moonee Creek in the south, the North Coast railway to the west and the LGA boundary to the north. The demographic characteristics of the study area requires a correspondingly diverse range of community services including facilities for elderly people, childcare services and schools. The majority of local services are located within Woolgoolga town centre and the population in the catchment is required to travel to the services. Travel to Coffs Harbour and / or Grafton is required for regional services.

The largest educational facility within the Coffs Harbour LGA is the Coffs Harbour Educational Campus. Elsewhere in the LGA, there are five state and three private secondary schools, seventeen state and five private primary schools and 31 pre-schools and child care centres. Other educational facilities include the North Coast Regional Botanical Gardens and the National Marine Science Centre (Coffs Harbour City Council, 2004c).

Local health services are provided in Woolgoolga and the nearest hospital being located in Coffs Harbour (Coffs Harbour Health Campus and Baringa Private Hospital). In the study area, there are about 60 general practitioners and 22 dentists. There are also other specialists and medical practitioners within the study area (Coffs Harbour City Council, 2006).

There is a large representation within the Coffs Harbour LGA of Christian churches and community facilities. Churches within Woolgoolga include St Augustine's Anglican Church, St Francis Xavier as well as churches from other Christian denominations. As well as Christianity, Sikhism is represented within the area through the two Gurdwaras: the Guru Nanak temple and the First Sikh temple located in Woolgoolga. The temples play an important role in the provision of support and services for the local Sikh community. Also within Woolgoolga is the Woolgoolga Neighbourhood Centre, which provides community information as well as services.

As the largest town within the study area, Woolgoolga is the base for emergency services including police, ambulance, fire brigade, sea rescue and rural fire service.

Professional services (such as legal, accounting and banking) are provided locally in Woolgoolga with a more comprehensive range of services provided in Coffs Harbour. Aged care is provided primarily through the Woolgoolga and District Hostel and Retirement Village. The provision of additional aged care facilities, including outreach programs, is seen as a future challenge for the area given the ageing nature of the population.

Recreation facilities in the area are largely associated with the beaches. A need for a wider range of recreational facilities including sporting and bicycle facilities was identified in the Woolgoolga Town Centre Study.

5.5 Transport and access

Settlement patterns and transport are inextricably linked. The linear form of urban settlement together with the low housing density has made it difficult to develop an affordable public transport system

within the Coffs Harbour LGA. Cars are the most commonly used form of transport in the study area. 77% of people travel to work and of this number, 76% use their cars (Coffs Harbour City Council, 2004c). This reliance on cars is not only less desirable with respect to the environment, but at odds with Coffs Harbour's social structure which comprises lower household incomes and a higher proportion of elderly than the State average.

The Pacific Highway is the dominant transport link in the Coffs Harbour LGA, carrying almost 40,000 vehicles per day north of High Street in Coffs Harbour (in 2004), an increase of 43% from 2001. The 2004 average annual daily traffic (AADT) north of Clarence Street in Woolgoolga is 18,527, reducing to 10,890 north of Arrawarra Creek (Connell Wagner, Traffic and Transport Assessment, 2007).

Some 90.7% of tourists to the area travel by road. The volume of traffic on the highway, particularly around holiday periods, generates conflict with local users, making it difficult for accessing and crossing the highway, moving around and between the town centres and parking. High traffic volumes though the centre of towns can also cause a severe reduction in amenity.

Access to the towns and villages of the LGA is predominantly via the Pacific Highway, and the Coffs Harbour State of the Environment Report 2004 notes that issues concerning community segregation, safety, aesthetics, noise and air pollution should be at the forefront of future decisions concerning the long-term development of the Highway.

Within the study area, there are three operators that provide bus services, being Ryans Bus Service, Busways Services and Sawtell Coaches. Ryans Bus Services operates a regional bus service between Coffs Harbour, Woolgoolga and Grafton that services areas such as the Country Club Estate, Safety Beach, Mullaway, Arrawarra, Sapphire, Moonee, Emerald Beach and Sandy Beach. They also operate numerous school bus routes in the study area, utilising the bus interchange at Korora. In terms of regional services, Greyhound Coaches (five services daily) and Premier Coaches (three services daily) operate from Sydney and Brisbane and pass through Coffs Harbour with stops in the study area.

Access to Coffs Harbour by rail is limited to three northbound and three southbound passenger services per day (Sydney-Brisbane/Casino route) with the only passenger railway stations at Sawtell and Coffs Harbour.

Coffs Harbour Airport provides an alternative means of transport to the mid-North Coast, with three regular passenger airlines (Qantas, VirginBlue and Brindabella Airlines) currently servicing the airport and connecting the city to other regions. The airport handles about 30,000 aircraft movements a year, 5,000 of these being passenger flights. Approximately 260,000 passengers use the airport annually.

5.6 Business activity

Within the Coffs Harbour LGA, the main primary sector activities include agriculture (predominantly bananas, fishing, forestry and extractive industries). Industrial activity within the LGA occurs in five main areas, being Coffs Harbour, Coffs Harbour South, Coffs Harbour Jetty, Woolgoolga and Sawtell. Building construction and food manufacturing are the major contributors to the local economy. The contribution of the services sector (wholesale and retail trade, finance, business and professional services and health, community and cultural services) to the local economy is expected to increase. The services sector is focused on Coffs Harbour city.

The largest industry outputs come from the property and business services sector (\$455.1m in 2001) and retail trade (\$288.6m in 2001). The wholesale and retail sectors are highly dependent on the seasonal tourist trade (particularly Coffs Harbour) and big increases in these business sectors in the past 10 years show the increasing dominance of tourism in Coffs Harbour's economy (Coffs Harbour

City Council, 2004a). The largest increase in output in the past 10 years have come from the government, administration and defence sector which saw an increase in output of 62%. Other big increases came from the health and community services sector and the education sector, both increasing by 53%. The 2004 / 2005 gross regional product of the Coffs Harbour LGA was estimated at \$1,689.4m. This made up 22% of the gross regional product of the Mid-North Coast Statistical Division and 0.6% of the Gross State Product (Coffs Harbour City Council, 2005).

Agricultural production represented approximately 1.2% of the total industry output for the Coffs Harbour area. Banana production remains the most significant agricultural activity, however there has been a steady decline in banana plantations in the region in the past ten years, with blueberries becoming the fastest growing crop. However, other fruits and vegetables are also grown including avocados and tomatoes.

Within the study area, the focus of economic activity is Woolgoolga and it is an important hub, providing a number of key services for surrounding beachside villages. It provides a support role to the major regional centres of Coffs Harbour and Grafton.

Sixteen percent of jobs in Woolgoolga are related to agriculture, which indicates the continuing significance of the banana and other produce industries in the business activities of Woolgoolga. In 2004 / 2005, agriculture, in combination with fishing and forestry accounted for 2.8% of the gross regional product. Hartley Associates International (The Impact on Agricultural Lands of Pacific Highway Upgrade: Sapphire to Woolgoolga, 2007) report that the Banana Industry Council estimates that 450 hectares are under banana plantations north of Bucca Road, with an additional 500 hectares around Coffs Harbour.

Coffs Harbour City Council has identified three main business precincts in Woolgoolga as follows:

- Beach Street Precinct – effectively the town centre and main commercial precinct. It contains a variety of retail and service based businesses including numerous operations catering for the tourist market.
- Pacific Highway Precinct - extends for approximately 300m north of the Pullen Street / Pacific Highway intersection. This precinct is dominated by motorist / tourist related uses including two service stations and three motels. Council notes that this precinct relies on highway traffic.
- River Street Business Precinct - located between the highway and Beach Street and contains number of automotive related uses, agricultural supply outlets, speciality shops and fast food outlets.

Businesses within Woolgoolga generally serve a local function with a limited reliance on passing trade on the highway. Businesses provide products and professional services to cater for the local population. Aside from the transient tourist and visitor population, Council has defined a trade catchment served by Woolgoolga as extending from Halfway Creek and Red Rock in the north, to Upper Corindi in the west and Emerald Beach in the south (Coffs Harbour City Council, 1996).

In order to minimise the escape of expenditure from the local area to Coffs Harbour and other larger centres, the Woolgoolga Chamber of Commerce is instituting programs to encourage patronage of local businesses. Council and the Chamber of Commerce are also investigating mechanisms to encourage relocation of businesses to Woolgoolga from surrounding areas and further a field.

In addition to commercial business, Woolgoolga has an industrial estate of some 31.3 hectares located in south Woolgoolga. Business types include mechanics, auto electricians, plumbers, panel beaters, painters etc.

5.7 Tourism activity

Tourism NSW (2005) has produced data for the North Coast tourism region providing a broad overview of patterns and trends in tourism in the region that are also of relevance to the study area. In the year ending September 2005, the North Coast region had 3.1 million domestic overnight visitors. Another 145,000 were international visitors. Although the international visitor data was unreliable, domestic visitors spent almost 12.8 million nights in the region, a decline of 2.1% from the previous year.

The Coffs Harbour Economic Profile 2005 identifies road transport as the main form of transport for tourists, with the majority of visitors to the area travelling by private car and a smaller number using air and an even smaller number using rail and coach transport. Trends for the Mid North Coast region indicate that the majority of visitors are from Sydney or elsewhere in NSW with 90.7% utilising car travel. The value of tourism to the local economy is seen as critical and protection and enhancement of the tourist industry is a key local business objective.

In terms of tourist activity within Woolgoolga, the main tourist attractions include the beaches, headlands, lake, flora reserve and surrounding countryside (Coffs Harbour City Council, 1996). Community consultation suggests that the 'village' type atmosphere of Woolgoolga and other northern beaches combined with the range of budget and family accommodation are key tourist attractors in the study area. Of the total visitors to Woolgoolga approximately 31% find accommodation with friends and relatives. Woolgoolga is considered to be a tourist destination in its own right with many regular annual visitors to the area. Community consultation indicates that day-trippers from Coffs Harbour also visit Woolgoolga and it is hoped to increase this trend with the development of more attractions within the town.

International and domestic overnight travellers, as well as domestic daytrip travellers come to the region overwhelmingly for holidays and / or leisure. A substantially lower number come to the region to visit family and friends, with the least likely reason for international and domestic overnight visits being for business. These features indicate that Woolgoolga and environs is a destination rather than a passing through point on a longer journey.

Tourist activity in the Mid- North Coast is a highly seasonal market with peaks during school and summer holidays. This results in tourist facilities (such as accommodation) being used for short periods at high use followed by prolonged periods of limited use.

6. Socio-economic impacts

6.1 Introduction

Major highway construction and changes to the local road network can have both positive and negative effects on people at an individual and community level. This section provides an essentially qualitative assessment of the potential impacts that could arise from the construction and operation of the proposed Sapphire to Woolgoolga upgrade.

For the purposes of the assessment, a number of categories of socio-economic issues relevant to the study area have been identified. These issues have been identified from experience with previous highway upgrade projects and an understanding of characteristics of the community within the study area, the latter including expressed attitudes and values in relation to the upgrade options during the route selection phase and subsequently during the design development of the preferred route. For each of the issues identified, a discussion of the related effects of the Proposal is provided.

The discussion of socio-economic issues is generally separated into the upgrade section between Sapphire and south Woolgoolga and the bypass section around Woolgoolga. As the upgrade section involves amplification of the existing highway, the focus of that part of the assessment has been on identifying any additional or incremental impacts that would result.

The socio-economic issues categories that have been considered include:

- Community cohesion: discussion in relation to the potential for the Proposal to introduce a physical or psychological separation between different community areas or to reinforce an existing severance. On the other hand, positive effects could include improved community interaction and cohesion such as through sympathetic consideration of existing and future land use patterns.
- Amenity effects: this issue relates to both positive and negative effects on the amenity or values of a place and is typically expressed through the key factors of noise impact, visual impact and air quality impact.
- Access and movement patterns: this issue relates to the ease and safety with which members of the community can move both within their community and externally to it. The issue is concerned mainly with local vehicular, pedestrian and cyclist movements.
- Land use and property impacts: this issue relates to broad land use impacts that would result directly or indirectly as a result of the Proposal and a more detailed analysis of effects on individual properties or groups of properties
- Effects on business: this issue relates to direct and indirect effects on business activity including employment and income.
- Effects on tourism: this issue could be regarded as a sub-set of the above issue, but given the importance of tourism to the study area's economic prosperity, has been considered separately in terms of likely direct and indirect effects. It is therefore concerned with the general attraction of the overall study area as a tourist destination as well as implications for specific facilities / features / places.

This socio-economic assessment draws on the information in the preceding sections of this report but also uses findings from a range of other assessments including the agricultural land use, traffic noise and landscape / visual studies.

It is recognised that several other project impact issues, such as road user costs and benefits and environmental costs and benefits can also be broadly applicable and relevant to the broad subject of socio-economic impacts. However, these are issues of significance in the context of the Proposal and as such, are the subject of separate working papers.

6.2 Community cohesion

Construction of the Proposal has the potential to disrupt the existing patterns of community interaction. The Proposal has the potential to create physical and psychological barriers for local neighbourhoods either by dividing contiguous groups or by forming barriers between communities and local facilities and/or services.

Impacts on community cohesion resulting from the Proposal could also be a positive one. The severity of impacts on community severance depends on existing patterns of land use settlement. The existing Pacific Highway alignment forms a significant physical barrier between Woolgoolga township and rural residential development to its west, and between east and west Sandy Beach.

Development of an improved transport corridor also has the potential to provide better linkages between communities by providing improved travel times, road network performance and road safety.

6.2.1 Upgrade section

Construction stage

Roadworks could see the temporary interruption of access along local access roads as well as travel along the highway. However, the RTA during the construction period would have a website and freecall line for the community to keep them informed about the roadwork programme.

However, any impacts during the construction stage would be temporary and transient, as the impacts would move as the construction moves, there would not be any lasting community cohesion issues.

Operational stage

The existing Pacific Highway already forms a significant physical barrier between some of communities within the study area including separating the rural residential estates of Heritage Park, Avocado Heights and Emerald Heights from the service providing towns to the east of the highway. The existing highway has, along with other physical and environmental factors, fundamentally influenced the form and separation of the many urban and rural settlements along the northern beaches of the Coffs Harbour local government area.

The upgrade section of the Proposal would involve amplification of the existing highway corridor, however this would not increase the level of separation between the discrete communities as much of the new highway is located within the existing road reserve. However, a range of features have been incorporated into the design to facilitate improved connectivity. Features include:

- A separate local road network,
- Construction of overbridges at Headland Road, Killara Avenue, Smiths Road and Graham Drive South,
- Construction of overbridges as part of the interchanges at Sapphire (Gaudrons Road / Split Solitary Road), Moonee Beach, Emerald Beach and Graham Drive North.
- Replacement of overbridge at Diamond Head Drive, Sandy Beach

These features would increase the sense of community cohesion as it would improve local access, enabling residents of the rural residential estates to the west of the highway to travel to and from the service providing towns to the east of the highway without having to access the highway. Residents from Emerald Beach, for example would be able to access the school in Emerald Heights without interacting with the highway.

Aside from the accessibility benefits of the proposed local access roads, all of the local communities in the study area will have the opportunity for access to the high standard dual carriageway via the planned interchanges.

6.2.2 Bypass section

Construction stage

During the construction phase, there is the potential that some local access roads would be temporarily closed to facilitate the construction of the bypass. However, during this construction stage, the RTA would have a website and freecall line for the community to keep them informed about the roadwork programme.

Any impacts would be temporary and transient, as the impacts would move as the construction moves, there would not be any lasting community cohesion issues.

Operational stage

In the bypass section, the Proposal has the potential to form a distinct physical and visual barrier between numerous rural properties. However, overpasses or underpasses are proposed at all public roads crossed by the Proposal (including Unwins Road, Greys Road, Woolgoolga Creek Road, Newmans Road and Bark Hut Road) to enable continued road access to the west of the route.

The location of the Proposal also provides greater cohesion between the urban residential areas within Woolgoolga, as the Proposal would facilitate the diversion of heavy vehicles from the existing highway, and as such, provide for improved access and connectivity for existing (and future proposed) development in the area. Properties between the existing highway and the Proposal, including the Country Club Estate, would be able to access Woolgoolga without having to cross a highway with heavy and through traffic.

6.3 Amenity effects

Amenity can be simply regarded as what people hear, see and smell and how this affects their sense of well being. It can be measured in terms of visual, noise and air quality impacts and changes in these aspects due to a change in proximity to (in this case) a new road structure and its associated traffic.

Visual changes include alterations to the existing landscape environment that are measured in terms of the following three factors:

- visual impact: which is greatest in areas where there is a substantial change to the homogeneity of the landscape;
- visual sensitivity: a measure of the visibility of the Proposal and the concern this causes for adjacent land users; and
- scenic quality: a measure of the visual variety and interest from the road users' perspective.

As well as visual amenity, there are other proximity effects resulting from new exposure to traffic and resultant noise and/or air pollution. Noise and/or air pollution can create real and/or perceived diminution to the amenity of an area and can be regarded as a social effect. Traffic noise is assessed in relation to background noise conditions and is influenced by many factors including the road surface, speed of the vehicle, type of vehicle and the volume of traffic. As part of the environmental assessment investigations, a noise and vibration assessment was undertaken and the results of the noise modelling are found within the environmental assessment and the working paper (working paper 2: Noise and Vibration Assessment). The influence of the Proposal on traffic volume relates directly to the

potential for increases (or decreases) in air quality. An increase in traffic volume is likely to have a perceived negative impact on air quality at a local level (and vice versa).

6.3.1 Upgrade section

Construction stage

Potential amenity effects during the construction stage would include noise and dust from construction sites, construction compounds and batch plants and visual and odour related impacts. These impacts would be temporary and transient, as construction moves along the alignment length.

The locations of compound sites and batch plants would be selected so that there would be minimal noise and odour disruption to surrounding sensitive land uses.

Operational stage

The upgrade section of the Proposal would result in minor visual impact on the existing landscape along the existing highway corridor. The potential visual impacts relates to the increase in the existing scale of the existing road infrastructure. These impacts can be reduced with the introduction of various mitigating measures that would include appropriate urban and landscape design, these impacts of scale are considered to have a negligible impact on the existing visual landscape.

For the upgrade section, residents affected by traffic noise from the Proposal are already impacted by traffic noise from the existing highway. Noise levels as a result of the Proposal would overall not be appreciably different than those experienced currently, and would be lower than those experienced if the Pacific Highway is not upgraded (Wilkinson Murray, 2007). Most houses within Sapphire, Moonee, Heritage Park, Avocado Heights, Emerald Beach and Sandy Beach would experience a slight reduction in noise levels, however, some properties within each of these areas would experience either no change or a slight increase. The upgrade section incorporates a range of noise management measures such as low noise pavement and in some locations noise walls to meet the appropriate noise level criteria.

6.3.2 Bypass section

Construction stage

Potential amenity effects during the construction stage would be due to the noise from construction sites, construction compounds and batch plants and visual and odour related impacts. These impacts would be temporary and transient, as construction moves along the alignment length.

As the Proposal passes through the spurs of the hills to the west of Woolgoolga, there may be the need to utilise blasting in order to remove rock in these areas, creating associated short term noise and vibration. Blasting would be conducted in consultation with DECC and the community and conform to Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration. However, short term noise, vibration and dust effects would be expected.

The location of compound sites and batch plants have been selected so that there would be minimal noise and odour disruption as well as having good access from the existing Pacific Highway.

Operational stage

The southern and central sections of the bypass section pass through areas of rural and rural residential land use. This section of the Proposal would introduce a new source of noise and air emissions into this area. The northern section of the Woolgoolga bypass traverses the Wedding Bells State Forest. Whilst a new source of noise and air emissions would also be introduced into this area, the rural nature of the landscape means that there are few sensitive receptors that would be impacted.

The bypass section of the Proposal would have visual impacts, particularly as it cuts through the spurs of the hills and would require the implementation of specific amelioration strategies, particularly in locations where the Proposal crosses steep ridges. The Proposal traverses an area of high scenic quality and there would be moderate to high adverse impacts as a result of the Proposal and appropriate amelioration strategies would be implemented (the landscape and urban design strategy is outlined in the Sapphire to Woolgoolga environmental assessment).

For the bypass section, the Proposal would introduce a new noise source to an area that currently has low background noise levels and little to no noise impacts from the existing highway or other road traffic. Noise levels would increase through this area, however the Proposal incorporates a range of features such as low noise pavement and noise walls to meet the appropriate noise level criteria.

The general amenity of areas in the vicinity of the existing highway through Woolgoolga would substantially improve as the Proposal would remove a majority of through traffic, including heavy vehicles, from the existing highway. The anticipated decrease in traffic numbers would equate to a reduction in noise and vibration and air pollution as well as fewer accidents likely to occur through Woolgoolga. These would provide a flow-on affect of benefiting community health and reducing stress caused by use of the existing highway.

6.4 Access and movement patterns

Changes to access and egress, including safety effects, and the creation of alternative linkages for regularly used travel paths can result in social impacts for a local community as they have to change their movement patterns. The following discussion relates to physical movement and access patterns and the effects of the Proposal on these. Community cohesion and connectivity, which focuses on the non-physical connections within communities, is discussed in Section [6.2](#) above.

6.4.1 Upgrade section

Construction stage

Potential impacts on the continued use of the highway and surrounding local roads and travel paths will be considered during the preparation of a work program for the staging and phasing of the construction of the Proposal. As the Proposal comprises separated carriageways, there are options to construct part of the Proposal independent of the existing highway, thereby minimising disruptions.

A traffic management plan would be completed as part of the Construction environment management plan and would address issues such as potential temporary closures of local roads, impacts on existing traffic including pedestrian and cyclist traffic and temporary access arrangements for construction sites.

Operational stage

Through the upgrade section, an objective of the Proposal is to rationalise/reduce the existing large number of access points along the Highway for safety and efficiency reasons. Along this section of the Proposal there would be four grade-separated interchanges located at the major residential centres (Sapphire, Moonee Beach, Emerald Beach / Graham Drive South and Graham Drive North). There would also be left-in/left-out intersection at Campbell Close on the western side and a right-in/left-out intersection with the eastern local access road (the existing highway) opposite Campbell Close at the southern end of the Proposal.

At these interchanges and intersections, local traffic would be able to access the Pacific Highway. These controlled entry points onto the highway are designed to improve the access and safety of local

traffic moving onto or from the Highway. Local access roads would be constructed next to the highway to accommodate local traffic removing the need for local traffic to negotiate the faster flowing highway and heavy vehicle traffic. The Proposal would make local movement along the northern beaches from Sapphire to Woolgoolga safer and more efficient.

The reduced number of road and access connections to the highway, however, may result in incrementally longer travel distances to and from many properties. However, the increased control of access points would result in significantly improved safety benefits compared to the many potential conflict locations along the existing highway. As part of the Proposal, no properties would have access directly onto the highway. As such, the local access road would not only provide for local traffic movement, but also access to properties, local streets and villages.

6.4.2 Bypass section

Construction stage

Potential impacts on the continued use of the highway and surrounding local roads and travel paths will be considered during the preparation of a work program for the staging and phasing of the construction of the Proposal. This is particularly important to the west of Woolgoolga, where some properties are only able to be accessed via one route.

A traffic management plan would be completed as part of the Construction environment management plan and would address issues such as potential temporary closures of local roads, impacts on existing traffic including pedestrian and cyclist traffic and temporary access arrangements for construction sites.

Operational stage

The transfer of through traffic from the existing highway to the bypass would result in improved access and local traffic movement around Woolgoolga. Vehicular traffic and pedestrian and cyclist traffic would also improve as a result of the Proposal.

Access for the length of the bypass would be via two interchanges, one south of Woolgoolga (Graham Drive North) where the Proposal deviates from the existing highway alignment, and another at the northern end of the bypass at Arrawarra, where the Proposal re-connects with the existing highway alignment. The existing road network providing access to properties to the west of the bypass would either be retained or modified to ensure that access to these properties is retained. Where required, these roads would pass over or under the bypass. Local traffic to the west of Woolgoolga would not have direct access to the bypass.

For traffic within Woolgoolga, there would not be any change to accessing the existing highway. To access the Proposal, traffic would travel along the existing highway to either the south Woolgoolga or Arrawarra interchange.

The major change to access through the bypass section would be to agricultural properties at the southern end of the bypass. These properties have new access arrangements incorporated into the design. The properties would have access from the existing Pacific Highway via Unwins Road and an underpass under the Proposal.

6.5 Property and land use impacts

6.5.1 Property acquisition

Property acquisition required for the Proposal would cause the main land use impact in the study area.

There would be 127 properties affected by acquisition for the Proposal. Approximately 83 properties would be affected along the upgrade section, with a further 44 properties affected through the bypass section. Two types of property acquisition would be required; partial acquisition and total acquisition. Partial acquisition is undertaken where only part of an existing property is needed to facilitate the development of a project. The design for the Proposal has considered potential impacts to properties and attempts to minimise acquisitions. Total acquisition is required where the Proposal affects the whole, or a majority of, a property. Land acquired as part of a total acquisition of a property, but not required by the RTA for the Proposal, would be subsequently sold.

The RTA is authorised under the *Roads Act 1993* to acquire properties that would be directly affected by a project. The acquisition would be undertaken in accordance with the *RTA Land Acquisition Policy* and the owners compensated in accordance with the *Land Acquisition (Just Terms) Compensation Act 1991*.

There would be 47 hectares of State Forest lands affected by the Proposal. The process of acquisition of such land is legislated in the *Forestry Act 1916*. Under Section 16A of the 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*).

Table 6.1 indicates the properties that would be directly affected by the Proposal including the area and the percentage of the property that would be impacted. It is emphasised that these property impact details may alter during the detailed design phase of the proposed project and as a result of negotiations with the owners. The property number indicates the property shown in Figures 6.1a-6.1h.

Table 6.1: Properties directly affected by the Proposal

Property number	Owner	Total property area (ha)	Area of property directly affected (ha)	Percentage of property directly affected
1	Private	2.426	0.511	21.1%
2	Private	1.804	0.814	45.1%
3	Private	1.330	0.390	29.3%
4	Private	2.339	1.402	59.9%
5	Public	0.073	0.073	100.0%
6	Private	0.407	0.129	31.6%
7	Private	6.022	1.350	22.4%
8	Private	4.265	0.635	14.9%
9	Private	0.066	0.066	100.0%
10	Private	0.065	0.065	100.0%
11	Private	0.078	0.078	100.0%
12	Private	0.155	0.155	100.0%
13	Private	0.551	0.551	100.0%
14	Public	0.379	0.379	100.0%
15	Private	0.970	0.076	7.8%
16	Private	1.032	0.319	30.9%
17	Private	4.104	0.187	4.5%
18	Private	0.394	0.197	50.0%
19	Private	0.407	0.407	100.0%
20	Public	0.404	0.404	100.0%
21	Private	4.084	1.495	36.6%

Property number	Owner	Total property area (ha)	Area of property directly affected (ha)	Percentage of property directly affected
22	Private	9.158	3.862	42.2%
23	Private	3.041	0.231	7.6%
24	Public	0.680	0.077	11.3%
25	Public	2.042	2.042	100.0%
26	Public	2.069	0.944	45.7%
27	Public	2.038	1.248	61.3%
28	Public	0.383	0.383	100.0%
29	Private	2.083	0.237	11.4%
30	Private	1.009	0.097	9.6%
31	Private	0.420	0.046	10.9%
32	Private	12.021	0.071	0.6%
33	Private	9.200	0.435	4.7%
34	Private	0.410	0.078	18.9%
35	Private	0.411	0.105	25.5%
36	Private	0.410	0.116	28.2%
37	Private	4.196	0.491	11.7%
38	Private	10.155	0.361	3.6%
39	Private	40.483	0.214	0.5%
40	Private	16.668	0.599	3.6%
41	Private	6.297	2.562	40.7%
42	Private	2.492	1.719	69.0%
43	Private	11.307	1.403	12.4%
44	Private	4.068	0.163	4.0%
45	Public	0.325	0.069	21.2%
46	Private	0.405	0.076	18.7%
47	Private	0.412	0.017	4.1%
48	Private	1.607	0.698	43.4%
49	Private	7.930	0.463	5.8%
50	Public	10.102	0.473	4.7%
51	Private	17.392	0.858	4.9%
52	Public	4879.028	2.126	0.0%
53	Public	1.099	0.212	19.3%
54	Private	1.787	0.211	11.8%
55	Private	44.158	1.789	4.1%
56	Private	24.814	1.099	4.4%
57	Public	2.853	0.512	17.9%
58	Private	37.044	0.714	1.9%
59	Private	4.322	0.584	13.5%
60	Private	85.282	3.840	4.5%
61	Private	0.575	0.323	56.2%
62	Private	0.492	0.078	15.8%
63	Public	4.580	2.211	48.3%
64	Private	47.331	0.928	2.0%
65	Private	3.068	0.502	16.4%
66	Public	80.731	0.074	0.1%

Property number	Owner	Total property area (ha)	Area of property directly affected (ha)	Percentage of property directly affected
67	Private	13.283	1.417	10.7%
68	Private	2.134	0.295	13.8%
69	Private	0.468	0.468	100.0%
70	Private	1.672	1.028	61.4%
71	Private	0.575	0.575	100.0%
72	Private	0.131	0.131	100.0%
73	Public	7.530	0.175	2.3%
74	Private	1.587	0.012	0.8%
75	Private	31.299	1.419	4.5%
76	Private	12.884	1.252	9.7%
77	Private	0.060	0.015	25.0%
78	Private	0.056	0.056	100.0%
79	Private	40.761	0.099	0.2%
80	Private	2.151	0.510	23.7%
81	Private	9.966	1.457	14.6%
82	Private	6.152	1.552	25.2%
83	Private	6.410	1.149	17.9%
84	Private	10.152	0.703	6.9%
85	Public	0.406	0.406	100.0%
86	Private	0.394	0.394	100.0%
87	Private	24.843	4.882	19.6%
88	Private	4.092	3.516	85.9%
89	Private	2.277	0.199	8.7%
90	Private	3.811	2.084	54.7%
91	Private	3.304	0.047	1.4%
92	Private	8.959	3.697	41.3%
93	Private	10.843	0.870	8.0%
94	Private	7.353	1.733	23.6%
95	Private	4.993	0.136	2.7%
96	Private	4.367	1.359	31.1%
97	Private	2.217	1.675	75.5%
98	Private	2.195	0.689	31.4%
99	Private	2.709	0.062	2.3%
100	Private	2.170	0.832	38.3%
101	Private	2.080	0.771	37.1%
102	Private	1.903	0.335	17.6%
103	Private	2.351	0.161	6.8%
104	Private	2.462	1.209	49.1%
105	Public	30.274	5.783	19.1%
106	Public	14.190	30.585	215.5%
107	Private	2.574	0.345	13.4%
108	Private	22.844	2.284	10.0%
109	Private	61.034	1.642	2.7%
110	Private	5.195	2.384	45.9%
111	Private	13.168	1.375	10.4%

Property number	Owner	Total property area (ha)	Area of property directly affected (ha)	Percentage of property directly affected
112	Private	6.714	3.557	53.0%
113	Private	6.408	1.925	30.0%
114	Private	6.856	2.524	36.8%
115	Private	3.971	0.513	12.9%
116	Private	6.031	6.031	100.0%
117	Public	2.551	2.097	82.2%
118	Private	2.364	0.403	17.0%
119	Public	0.268	0.268	100.0%
120	Public	0.378	0.378	100.0%
121	Private	2.169	0.489	22.5%
122	Private	2.389	1.195	50.0%
123	Private	10.177	6.336	62.3%
124	Private	99.163	3.022	3.0%
125	Private	11.554	1.261	10.9%
126	Public	3119.654	28.698	0.9%
127	Public	32.307	7.334	22.7%

6.5.2 Upgrade section

The upgrade section would affect a large number of properties but would have a minor impact on the nature of land use. The upgrade would be mostly constructed within the existing highway road reserve and as such, the affected adjacent properties would be predominantly partial acquisitions. However some properties would require total acquisition due to the area or extent of impact on the property, most usually in the vicinity of proposed interchanges.

Most existing urban settlements and rural residential precincts along the upgrade section would have current access arrangements altered as a result of the Proposal, which in this section includes the local access road network. The Proposal would also mean changed access for virtually all highway fronting properties that currently have direct access. The local road network that has been incorporated into the design has been specifically developed to accommodate the future land use and travel demands in the study area. Local traffic movement along the northern beaches would be enhanced without the need to access the highway, as well as providing access to properties along the existing highway.

6.5.3 Bypass section

The bypass section is a whole new road corridor and it would require substantial property acquisition. As a consequence, the Proposal would directly affect existing rural lands (including horticultural cultivation, rural residential development and forestry).

A landscape supply business would also be affected near the south Woolgoolga interchange. No urban residential land would be affected although the route would pass through the south-western corner of South Woolgoolga Urban Investigation Area.

Property acquisition through this section would be a combination of partial or total acquisitions and would mostly involve agricultural and forestry lands. Some forty agricultural properties would be affected by the Proposal and the consequences for those operations are addressed in the working paper on Agricultural Assessment.

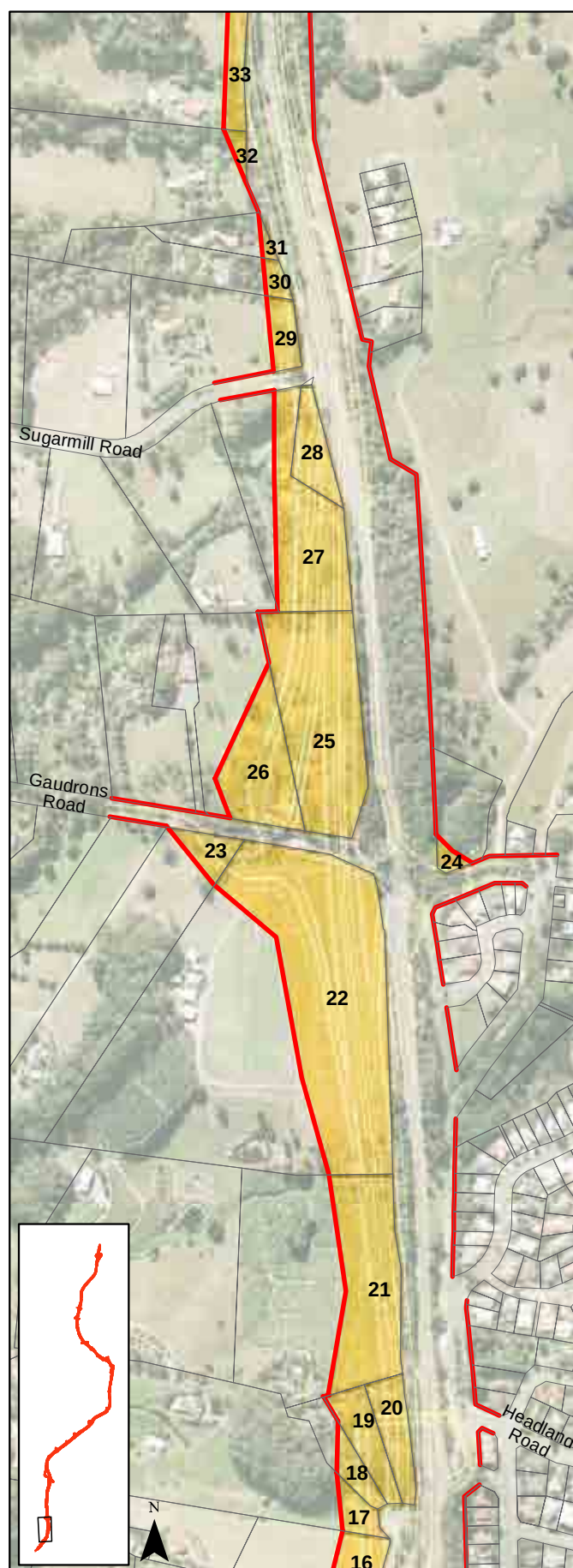
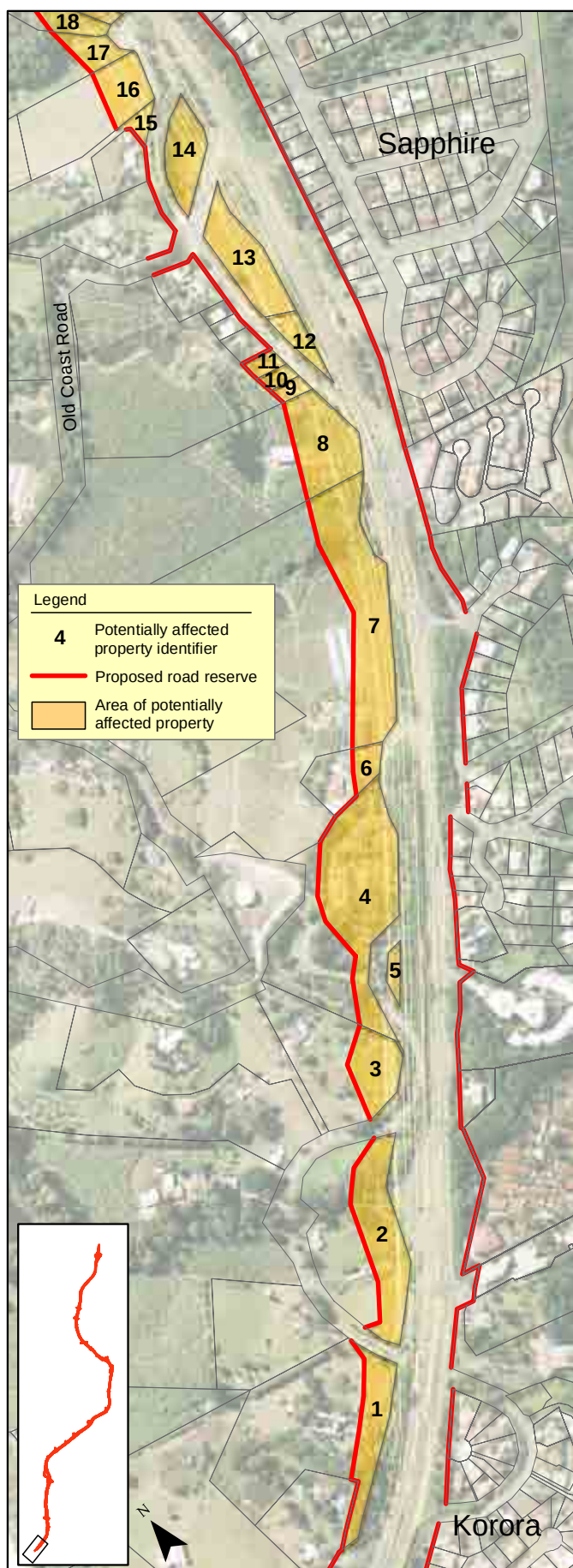
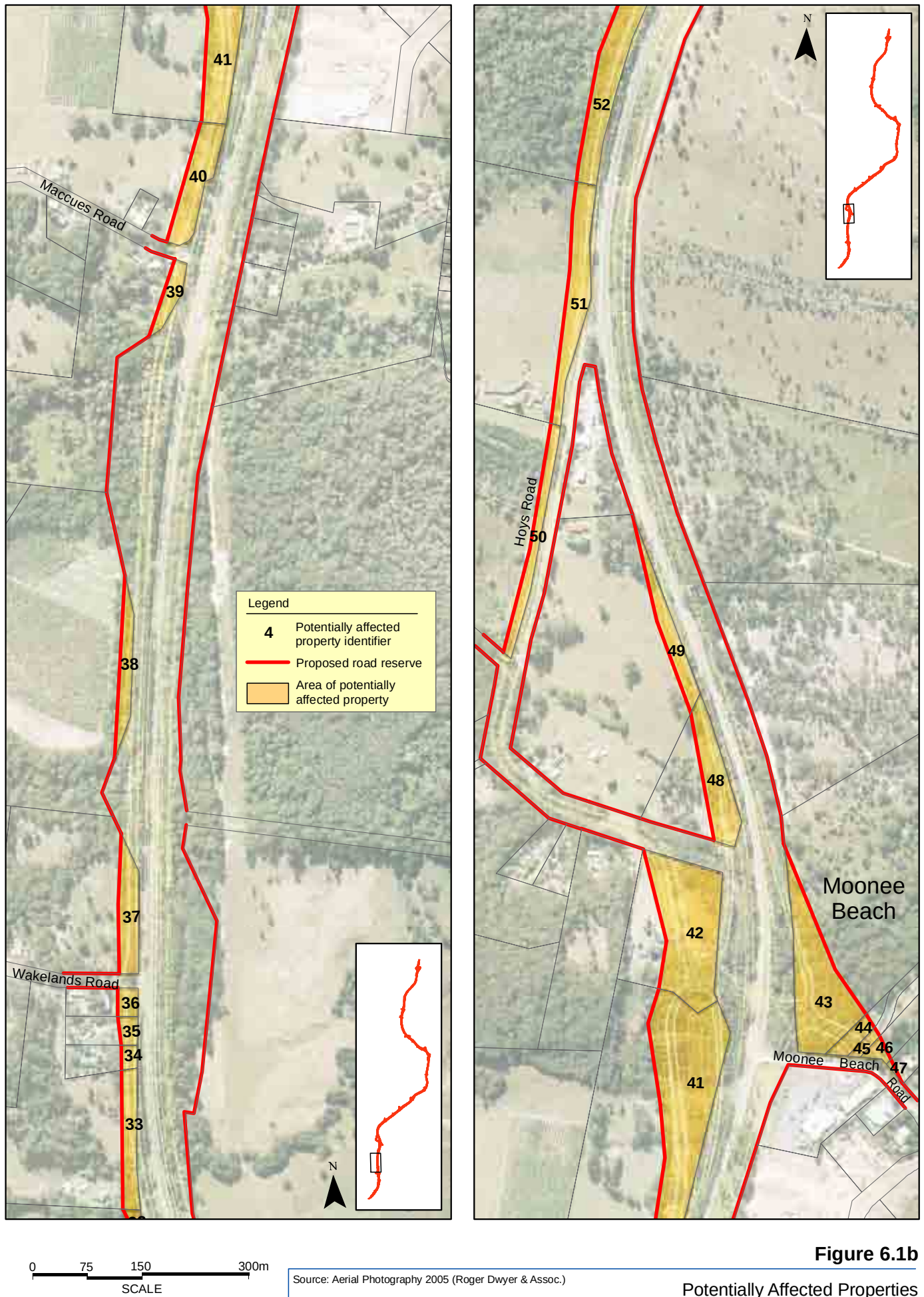
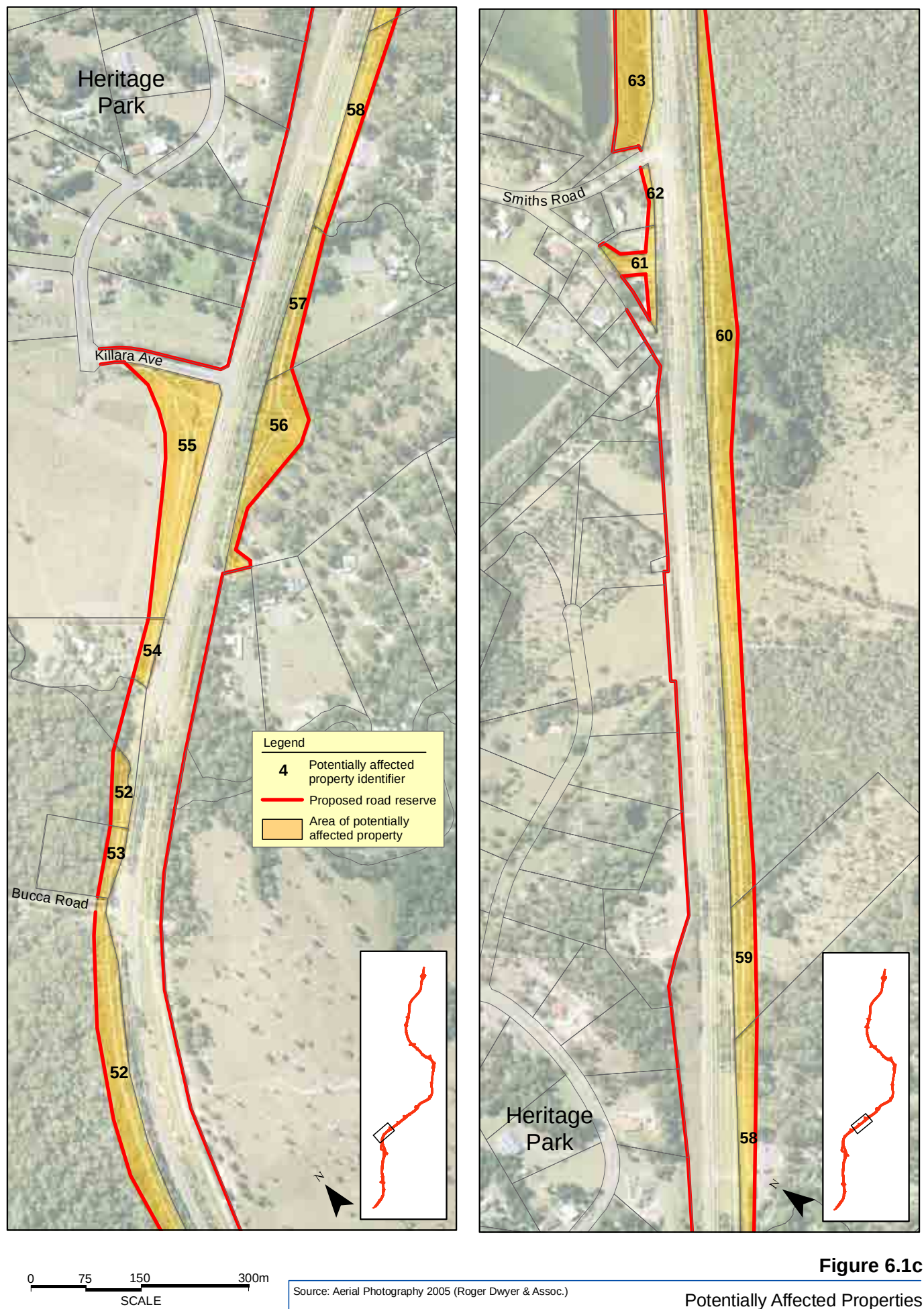


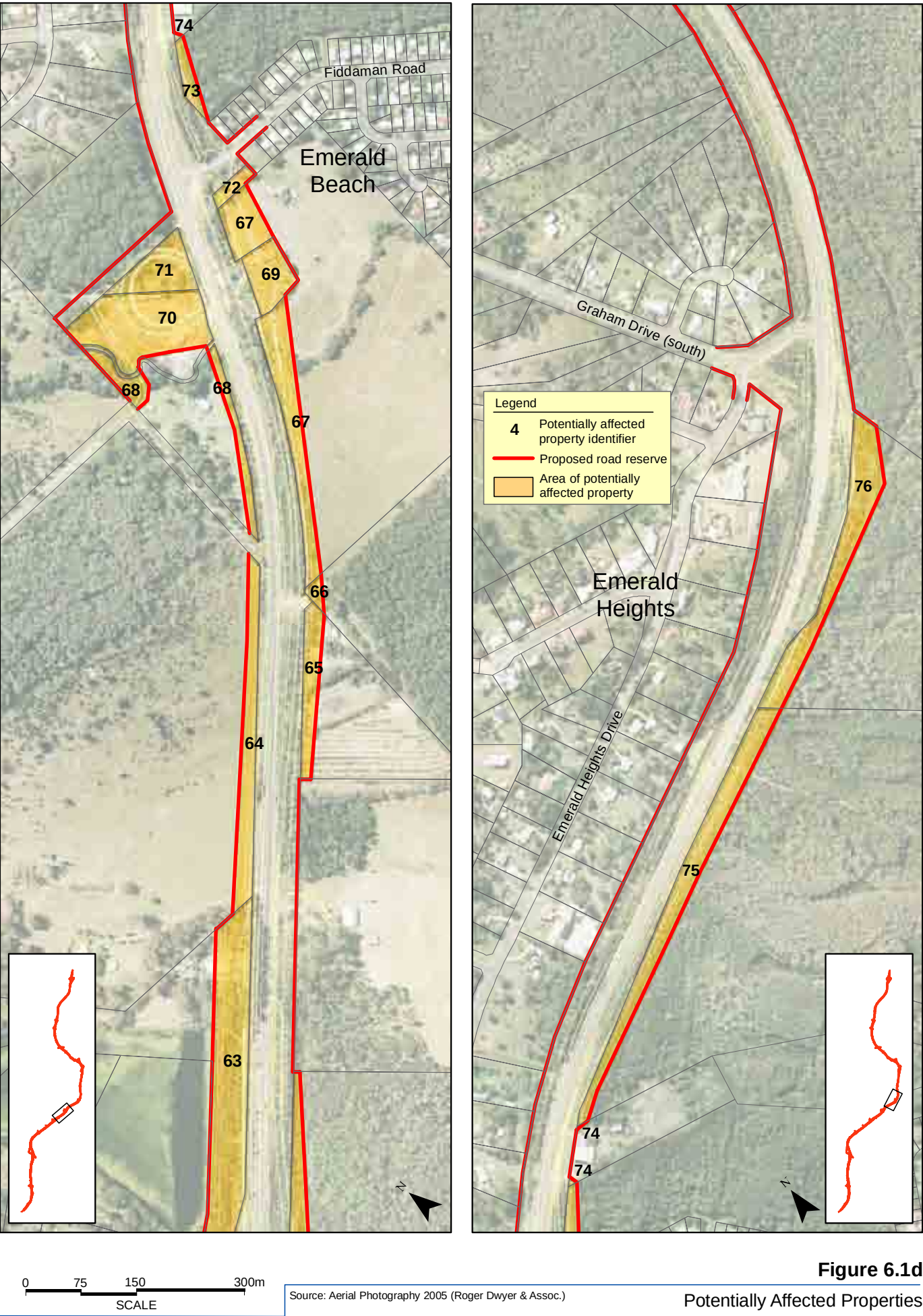
Figure 6.1a

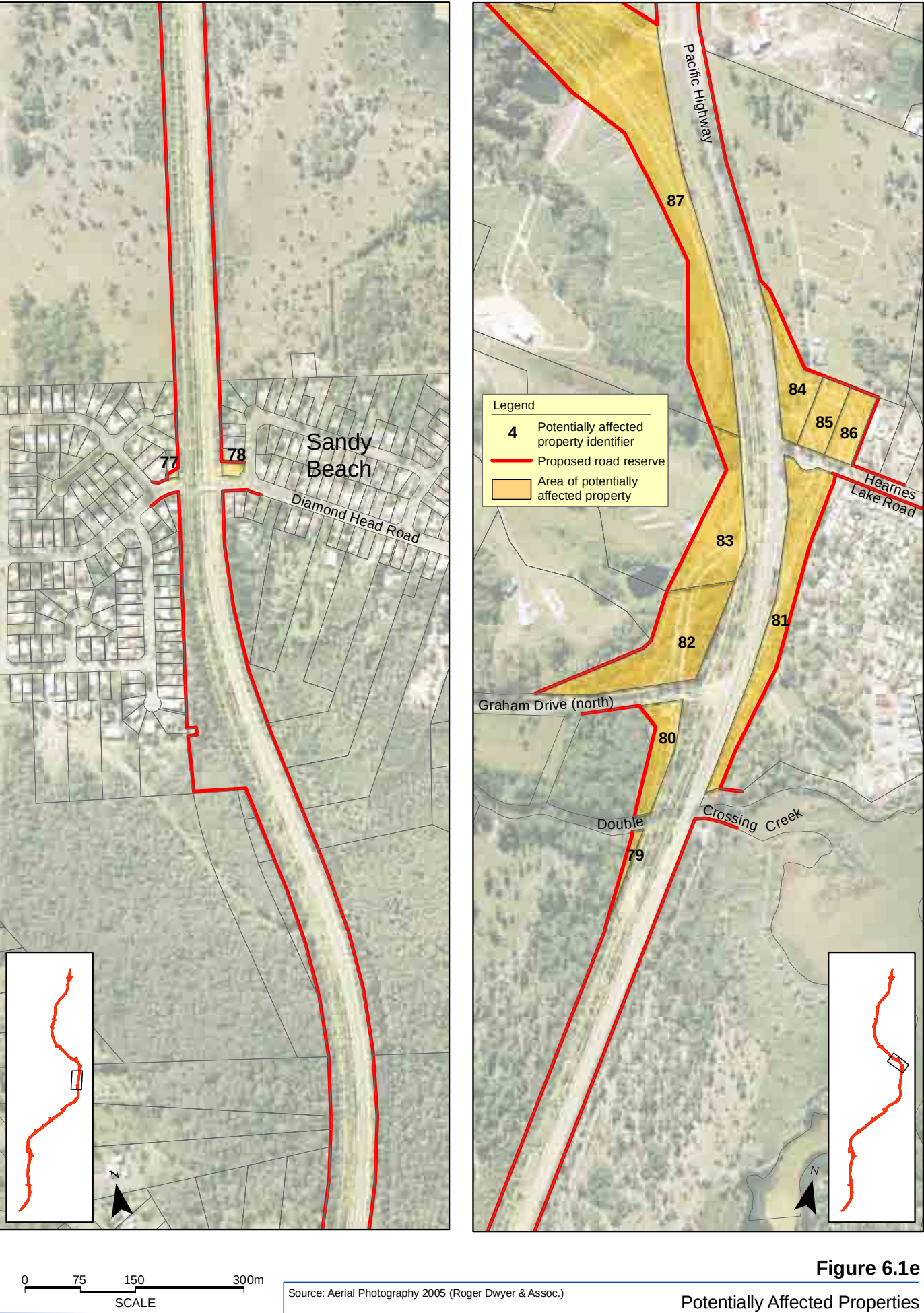
Potentially Affected Properties

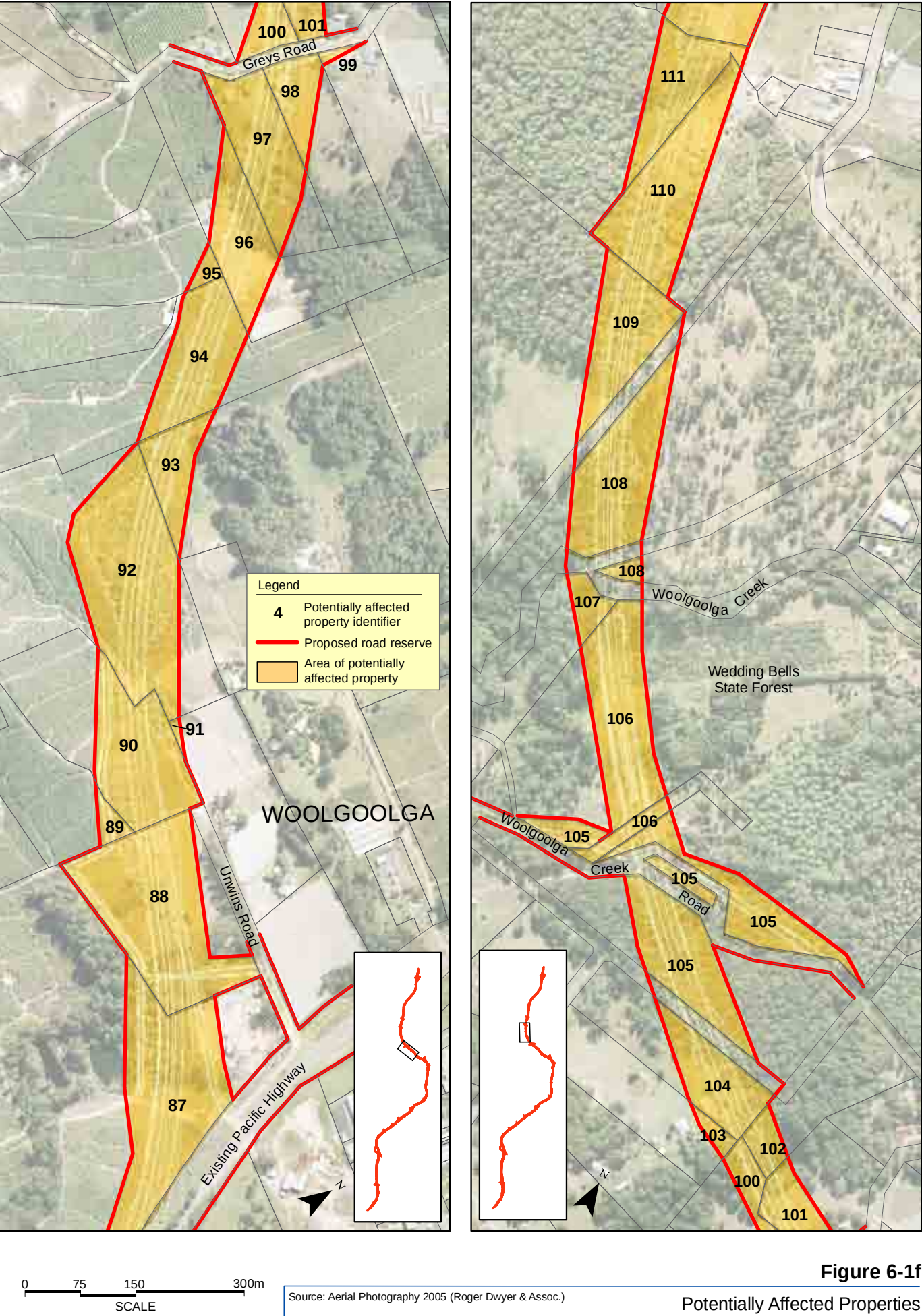
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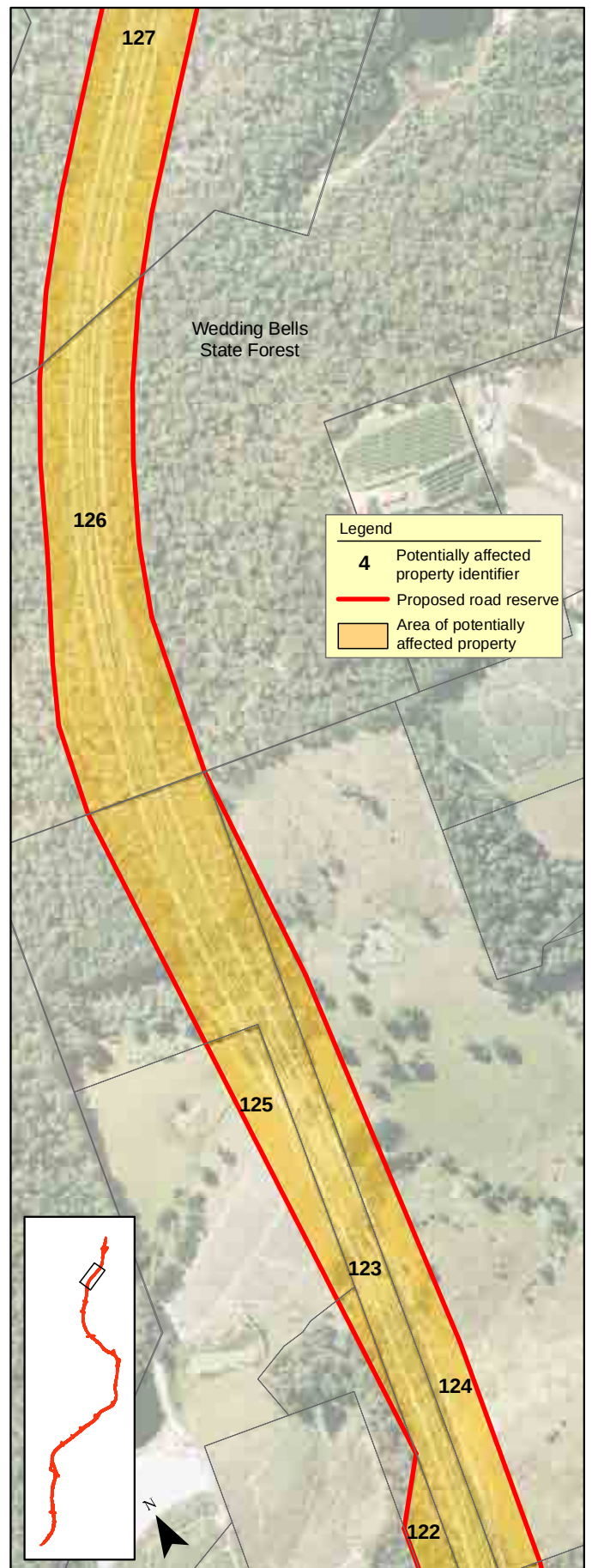
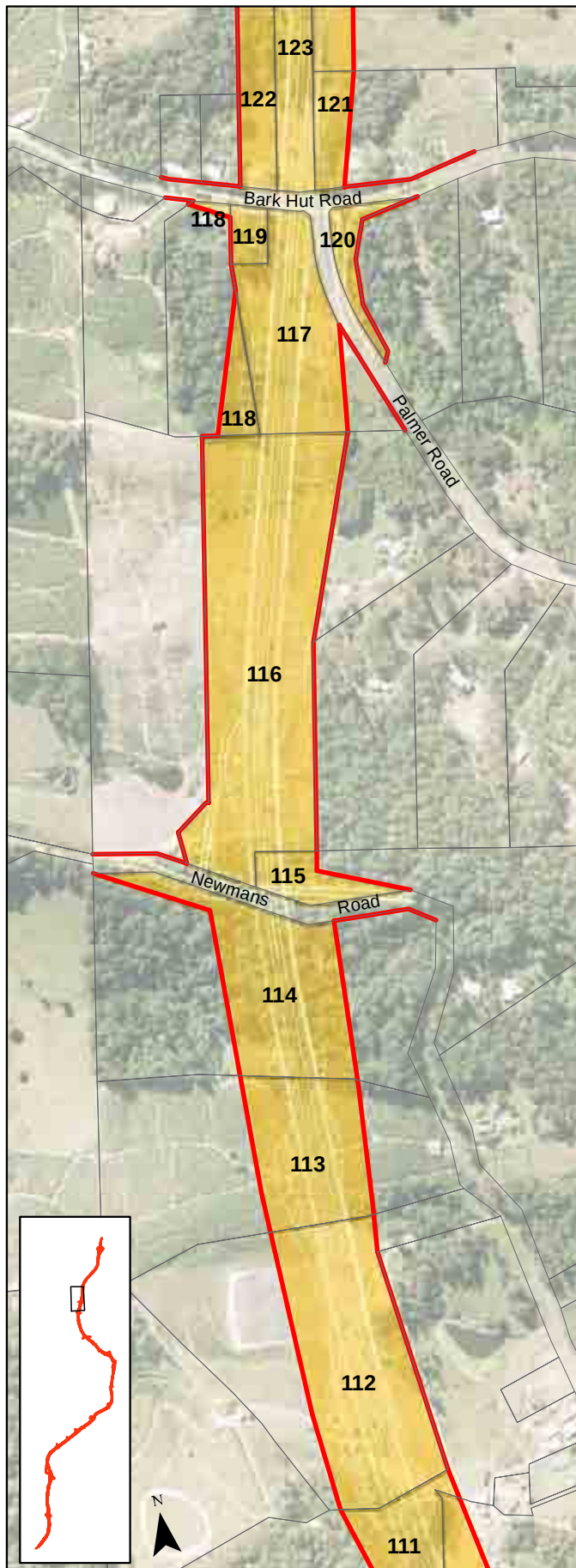










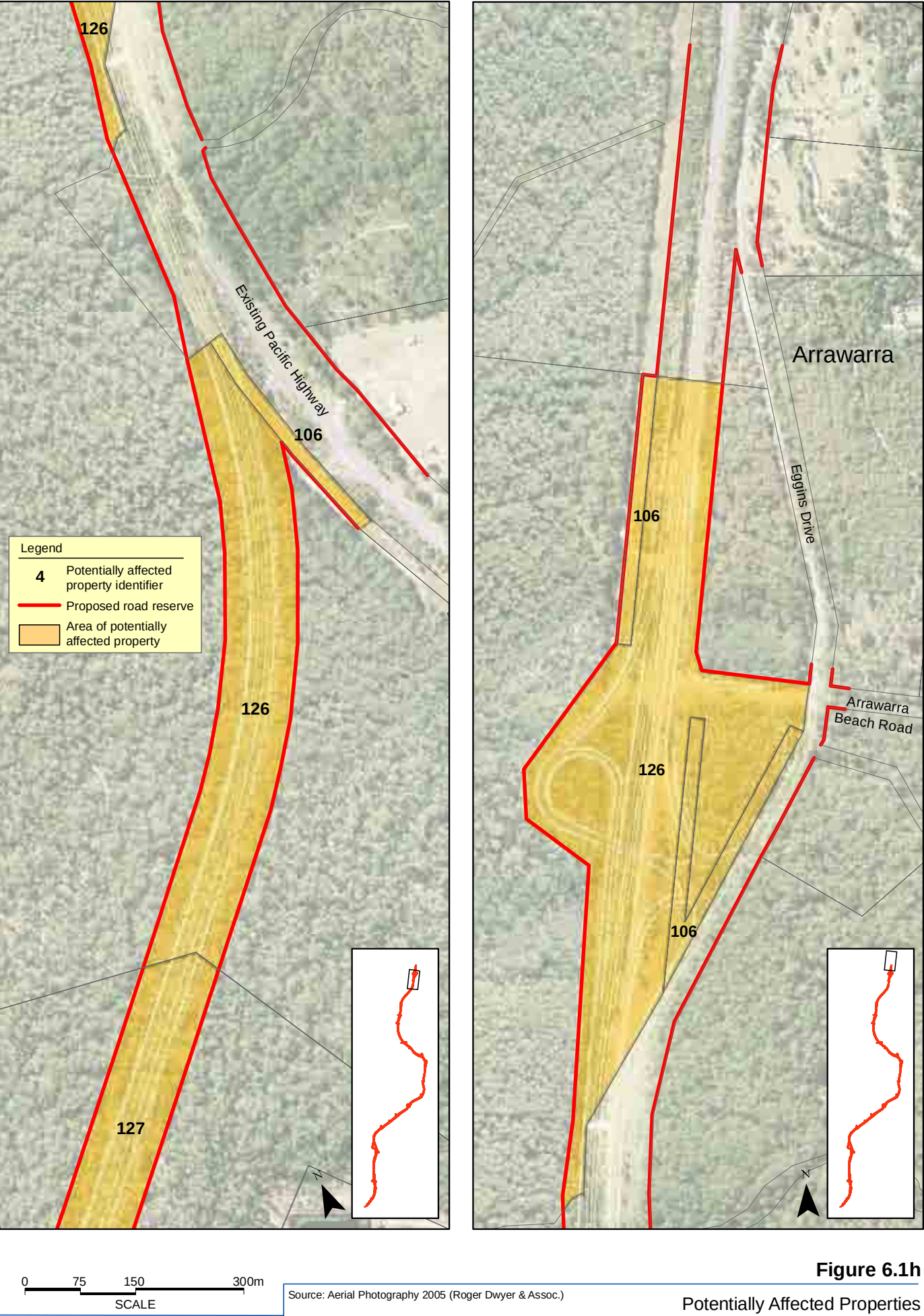


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Source: Aerial Photography 2005 (Roger Dwyer & Assoc.)

Figure 6.1g

Potentially Affected Properties



The Proposal would result in the diversion of through traffic away from the existing highway in Woolgoolga which would revert to a local traffic route. All roads crossed by the bypass section would be served by highway underpass or overpass so that rural properties to the west retain road access to and from Woolgoolga. As such, aside from the existing highway changing to a local road, there would be no changes to the existing local road network.

In these circumstances, it is unlikely the Proposal would cause any change in the pattern of land use along this part of the highway corridor aside from the lands directly required for highway construction. Rather, the Proposal would facilitate the future land use development within the area, accommodating for the increase in traffic generated by development in areas such as the potential south Woolgoolga Urban Investigation Area.

6.5.4 Future land use changes

The primary cause of land use changes along the northern beaches is expected to result from the statutory planning changes and land market forces in response to predicted population growth in Coffs Harbour. While the Proposal would provide the improved access and travel conditions essential for future development of the area, the actual land use change would be independent of the highway upgrade.

As part of its future land use planning for the area, Coffs Harbour City Council would have to consider the s117 Ministerial Direction (under the Environmental Planning and Assessment Act 1979), direction No.7 (Commercial and Retail Development along the Pacific Highway, North Coast) when proposing any draft plan for land use change. However, this would be in the context of the Proposal being an access controlled route with no direct property access to the highway and any land use change necessarily being independent of the operation of the highway.

6.6 Effects on business activity

Substantial research has been undertaken into the effects of highway upgrade proposals on business activity. The direct impacts of such proposals depend on the nature of the upgrade and can include property acquisition requiring closure of the business, changes to access to a site or changes to the operation that alters its income or viability. These issues have been addressed in Section 6.5 in terms of property and land use effects.

This section focuses on indirect impacts on businesses that can occur - including diversion of traffic and reduction in passing trade, and loss of exposure, which can result in a decrease in trading and consequent economic loss. In some instances, these impacts are beneficial when heavy traffic is removed and local access and amenity improved. As would be expected, reduction in employment is directly related to businesses relying on passing trade (Parolin and Garner, 1996).

6.6.1 Upgrade section

Construction stage

During the construction of the Proposal, there may be a situation where construction may temporarily block access to a business that has direct access onto the highway. This may affect the patronage of those businesses, particularly those that may rely on passing traffic.

Potential impacts on business activities will be considered during the preparation of a work program for the staging and phasing of the construction of the Proposal. A traffic management plan would also be put into place during the construction stage.

Due to the large scale of construction for the Proposal and the work force required, it is expected there may be a range of economic benefits for businesses in Woolgoolga, Coffs Harbour and the northern beaches throughout the duration of the construction. This is likely to occur through increased demand for workforce accommodation and goods / services. The construction may also generate employment opportunities in the local area. There may be additional impacts on community services (e.g. medical, social and commercial) resulting from labour relocating to the area, however given that the construction workforce is expected to be approximately 300 persons it is anticipated that this impact would not be significant. The construction activity would be expected to generate employment opportunities in the local area, especially through subcontractor and material supply.

Operational stage

The upgrade section of the Proposal could potentially alter patronage to businesses that currently have direct highway access (such as the service stations at Sapphire and north of Emerald Beach). Under the Proposal, access to these businesses would be via the local access road and not the highway, making accessibility of these businesses from the highway more difficult. The extent of adverse impact due to the change in access would be largely a function of the reliance on trade from through traffic on the highway. However, these businesses may benefit from the improved connectivity with the local residences and villages, thereby increasing local patronage.

As the Proposal would be built along the existing alignment, there would be no reduction in passing highway traffic, however, as access is not possible from the highway; appropriate signage would be required to provide location and access arrangements.

6.6.2 Bypass section

Construction stage

Access would be maintained to the existing roads and existing highway to enable trucks to get farm produce to sale and to enable forestry trucks access to the highway.

There would also be short-term economic benefits for Woolgoolga, with increases in patronage (as well as local employment) during the construction of the Proposal (refer section 6.6.1).

Potential impacts on business activities will be considered during the preparation of a work program for the staging and phasing of the construction of the Proposal. A traffic management plan would also be put into place during the construction stage.

Operational stage

There could be adverse consequences for businesses in Woolgoolga. Research into the economic impacts of bypasses similar to the Proposal (Garner and Parolin 1996) indicates that the loss of "stopper" traffic (ie. typically short stops for fuel, food, rest facilities) would have the main impact, with businesses such as service stations and food outlets possibly experiencing reduced turnover and employment.

The Coffs Harbour City Population Profile 2004 indicates that Woolgoolga is an important hub providing a number of key services for the smaller surrounding (pre-dominantly residential) villages. Feedback from community consultation undertaken early in the development process, confirmed that there is a very small number of Woolgoolga businesses that have a strong reliance on passing traffic. Businesses that potentially rely on highway traffic through Woolgoolga include service stations and motels. These businesses could experience a decline in patronage due to the lack of exposure to through traffic on the highway. However, this lack of exposure would be partially offset by the improvement in the general amenity and accessibility to the commercial centre of Woolgoolga. The main commercial centre in Woolgoolga is located less than a kilometre from the existing highway, and

is not within view of passing motorists. The Coffs Harbour Retail Strategy 2006 indicates that the commercial centre of Woolgoolga should be consolidated and then further expanded to the period up to 2031. The Proposal would facilitate increased amenity and accessibility for local residents to access the commercial centre at Woolgoolga.

The economic importance of “stayer” highway traffic (i.e. travellers seeking accommodation and other services) is unlikely to be substantially affected by the Proposal. The improved amenity in Woolgoolga resulting from removal of through traffic could potentially benefit many businesses catering to short and long stay highway travellers.

Additional benefits to the local economy can also be expected through the general improvement to the road infrastructure, both within the study area and more broadly, the Pacific Highway Upgrade Program. The Proposal would provide economic growth for the area benefiting both the local and the regional areas through increased freight efficiency, travel times and level of service. These would provide flow-on benefits resulting in a reduction in transportation times and costs, providing better access for goods and services to markets as well as opening/ strengthening access to inter-regional markets.

Internal access routes through the State Forest would be either be maintained or modified in consultation with Forests NSW.

There would be approximately 40 agricultural properties which would be directly impacted, 15 of those are considered to have a critical impact, resulting in the property no longer being feasible (in its current state) as a farm.

Further information on the impact of the Proposal on agricultural farming (including non direct impacts such as the aerial spraying buffer) can be found in working paper 5: Agricultural Assessment.

6.7 Effects on tourism

Economic activity generated by tourism forms an important part of the local economy in the study area. The main tourist attractions in the study area are associated with the coastal village atmosphere and associated activities. Outside Coffs Harbour, the majority of tourist services are located within the Woolgoolga area.

No property associated with tourist operations would need to be acquired as a result of the Proposal. As such, potential effects on tourist activity would be confined to changes in access and effects on amenity that may make tourist areas and operations more or less attractive for visitors. The upgrading of the Pacific Highway is an important infrastructure initiative that would be of broad benefit to the tourism sector.

It is noted that the viability or success of tourist operations in the future will be dependent on a wide range of factors and would not be solely limited to the upgrade of the highway. Such factors include the broad scale issues such as health of the domestic and international tourist markets and broad economic activity, as well as detailed issues including signage and competition from other tourist areas in the locale.

6.7.1 Upgrade section

Construction stage

Impacts on tourism during the construction stage could arise due to changed access arrangements to tourist attractions, facilities and services in the study area, for similar reasons to those identified as for potential business impacts noted above.

Tourist facilities and destinations could also be potentially affected by an increase in dust, construction noise, traffic conflicts and visual impacts associated with construction. However, all such construction related impacts would be transient and short term as the works progress along the corridor and there are many measures that would be implemented as part of the Proposal to effectively avoid or mitigate such effects. As such, while there would be nuisance effects, the impacts on individual tourism operations and the industry are likely to be minor.

Operational stage

The proposed upgrade of the highway between Sapphire and south Woolgoolga would improve travel times and efficiency along this section of the highway and would enhance overall safety and ease of access to the numerous major tourist destinations in this area. Access to tourist resorts at Sapphire would be via the eastern local access road (existing highway).

The importance of car transport for tourists visiting the area is vital, meaning ease of access to and within the study area is of particular importance to tourism. The Proposal would improve travel times and road safety between Coffs Harbour and the coastal villages to the north which would have the potential to enhance the attractiveness of these areas for day trips to and from Coffs Harbour.

6.7.2 Bypass section

Construction stage

While there would be minimal impacts on tourism through the construction of the Proposal, there may be situations whereby tourist activities (such as hiking and bird watching) may be disrupted through the State Forest where construction is to take place.

Operational stage

While there may not be a heavy reliance on passing trade from the Pacific Highway, there could still be some loss of business to highway-related businesses (e.g. motels) as a result of traffic bypassing the town. Instead, as a result of the diversion of large traffic volumes and heavy vehicles around Woolgoolga, the town may see an increase in tourism (as a tourist destination) associated with improved amenity (less noise and traffic) that may entice tourists to the town. Appropriate signage along the highway should be considered in order to attract people to Woolgoolga.

Some tourist businesses in the rural west Woolgoolga area, although not directly affected by the Proposal, are likely to be adversely affected by reduced amenity such as traffic noise and landscape / view impacts. However, management measures have been incorporated to mitigate against adverse impact (refer Chapter 7) The improved amenity in Woolgoolga resulting from removal of through traffic could potentially benefit many businesses catering to short and long stay highway travellers.

7. Proposed management measures

This section presents possible mitigation measures that can be introduced to minimise the potential socio-economic impacts resulting from the Proposal.

Recommended mitigation measures include:

Construction stage

- Provision of traffic management procedures to manage access issues during construction (access to properties and businesses).
- Provision of appropriate noise mitigation measures during the construction phase (to mitigate noise pollution).
- Construction batch plants and other ancillary facilities to be located away from sensitive land uses
- Appropriate environmental controls during construction in order to maintain the environmental amenity of the surrounding environment (eg. water quality / detention basins, dust mitigation measures, blasting and noise control measures)
- Implementation of a Construction Environment Management Plan and sub-plans including a traffic management plan, the latter to address matters such as temporary access changes and impacts on local businesses and tourism.

Operation Stage

- Provision of appropriate noise mitigation measures during the operational phase (to mitigate noise pollution).
- Urban design and scenic management of the Proposal to comply with the RTA Pacific Highway Urban Design Framework (to improve the visual sensitivity and scenic quality of the upgrade).
- Interchanges near Woolgoolga and other northern beaches settlements to be designed for clear and efficient access for both local residents and visitors.
- Provision of a continuous local access road between Sapphire and south Woolgoolga to:
 - Provide safer access to properties that currently have direct highway access.
 - Enable residents to travel to local schools, shops etc. without having to use the new highway.
 - Provide an alternative route between Sapphire and Woolgoolga for school buses, motorists, pedestrians and cyclists who do not wish to use the highway.
- Installation of appropriately designed overpasses / underpasses in order to allow continued local road and property access.
- Signage at the interchanges south and north of Woolgoolga, promoting the town as a place to obtain fuel and supplies and for an overnight stay (ie. promote the town to attract passing traffic for short stops / stays).
- Signage at the new interchanges at Emerald, Moonee and Sapphire promoting tourist facilities including resorts / holiday accommodation (promote the area as a tourist location).

7.1.1 Other opportunities

In addition to the management measures to be implemented by the RTA, it is apparent from the experience of other comparable projects that there are also strategies that could be adopted by community stakeholders to assist in mitigating certain socio-economic impacts from the Proposal. These strategies would typically seek to identify future advantages that can be realised for the local community when a bypass has been opened. They are usually centred on programs that enhance the character and amenity of certain community places / areas and that promote and revitalise business activities and community events. In planning for this stage, there is the added benefit of offsetting some of the adverse effects associated with the bypass Proposal.

In this context, the opportunities identified below are presented for consideration by stakeholders such as Coffs Harbour City Council, the Woolgoolga and Coffs Harbour Chambers of Commerce, individual

businesses and possibly some industry groups (eg. tourism organisations). The potential measures outlined below do not form part of the revised Statement of Commitments to which the RTA has confirmed commitment, nor do they amount to an exhaustive list:

- Increase local business promotional activities for Woolgoolga (promote the town to attract local residents).
- Strategies for the development and promotion of tourism on the Mid North Coast region (such as those included in the North Coast NSW Regional Tourism Plan 2004-2007 (North Coast NSW) and Coffs Coast-North Coast Region-Tourism Development Plan (Coffs Harbour City Council)) could be implemented (to promote the town as a tourist location to increase tourism and provide jobs).
- Implement general promotional activities for businesses within the Mid North Coast, such as the Manufacture Coffs Coast website to promote the area as a business opportunity area (promote investment and employment to the local area).
- Improve the amenity of Woolgoolga, implementing strategies and building on strategies like the Street Trees Masterplan (Coffs Harbour Council), Woolgoolga Business Lands Masterplan (Coffs Harbour Council) (improve amenity of Woolgoolga, increasing local and tourist patronage).
- Continual development of the Streets Ahead program and initiatives such as the Woolgoolga Curry Festival (increase tourism activity in Woolgoolga).

8. Summary and conclusions

Statutory planning

For major infrastructure projects in NSW, the key statute is the Environmental Planning and Assessment Act. The Proposal is being assessed under Part 3A of the Act, consistent with a Ministerial Order made in December 2006. The Part 3A process requires the preparation of an Environmental Assessment to accompany a request for planning approval from the Department of Planning. Part 3A of the Act integrates the approvals usually required under eight separate Acts. However, as the Proposal involves work that affects Double Crossing Creek and Cunninghams Creek (part of the Solitary Islands Marine Park), formal concurrence will be required under the Marine Parks Act.

Under the Commonwealth Environment Protection and Biodiversity Conservation Act, a proposed project that will or is likely to have a significant impact on a matter of National Environmental Significance requires approval from the Commonwealth Department of Environment and Water Resources. The assessment of relevant issues, including potential impacts to threatened and migratory species, concluded there would be no significant impact. The Proposal has been referred to the Department for assessment of the significance of potential impacts on matters of National Environmental Significance.

Strategic plans and policies

The Proposal has been reviewed in terms of consistency with the strategic plans and policies relating to matters such as highway planning, land use, economic development and environmental management. In many instances the Proposal had already been anticipated in these plans and strategies, mainly because the Sapphire to Woolgoolga project has been identified as one of the components of Pacific Highway Upgrade Program which commenced in 1996. As such, the Proposal is broadly compatible with and often directly complementary to stated objectives and future directions envisaged in those documents.

Property and land use

The number of properties affected by the Proposal is significant, with 127 lots directly impacted, incorporating 165 hectares of land.

Property acquisition required for the bypass section would lead to significant land use conversion from mainly rural pursuits and forestry into a major highway formation. In contrast, the upgrade section is mainly within the existing road reserve and also incorporates changes to the local access network that is expected to support both current and planned land use.

Significant changes to future land use within the study area are planned by Coffs Harbour City Council largely prompted by predicted population growth and increased demand for new areas for rural residential and urban living on the Mid-North Coast. These changes will occur through planning processes independent from the Proposal, but it is recognised that close integration with the highway plans is vital if future land use and urban development plans for the area are to be realised.

The primary method of mitigating property effects would be through the established acquisition processes contained in the RTA Land Acquisition Policy and compensation to owners in accordance with the Land Acquisition (Just Terms) Compensation Act. Similarly, acquisition of State Forest land would be in line with the established process as legislated in the Forestry Act. Any land acquired by the RTA but not required for the operation of the Proposal, would be sold on completion of construction.

Socio-economic impacts

Numerous categories of potential socio-economic impact associated with the Proposal have been considered in this report and other allied studies including noise and vibration, landscape / visual, and the agricultural assessment.

Table 8.1 gives an overview of potential impacts and the corresponding mitigation measures. Some of the important mitigation measures form an integral part of the design of the Proposal, while others were discretely developed to address specific impacts.

In addition to the property and land use effects identified above and the amenity and agricultural impacts detailed in the allied study reports, the main adverse socio-economic impacts from the Proposal include:

- Reduced environmental amenity for areas to the west of Woolgoolga along the bypass section mainly associated with the changed acoustic conditions and the landscape visual alterations.
- Adverse impacts on a small number of businesses with moderate to high dependency on passing trade from highway traffic

The main mitigation measures to be adopted by the Proposal in order to minimise/ avoid adverse impacts are indicated in Section 7 in this report.

The local and regional benefits as a result of undertaking the Proposal include:

- Generally enhanced local community interaction and cohesion resulting from a local access road network that facilitates better access between settlements along and on both sides of the highway corridor.
- Removal of current severance effects of the existing highway through Woolgoolga with substantial improvement in the environmental amenity of the town due to diversion of through traffic, including a large volume of heavy vehicles.
- Improvement in road safety through the provision of a high-standard highway with controlled access points, and the construction of a local access road to reduce local and through traffic conflicts.
- Improved community cohesion through the incorporation of a local access road network. To the west of Woolgoolga, cohesion and access would be maintained for properties to the west of the Proposal.
- Compatibility with future land use and development plans in the study area and provision of high standard transport infrastructure to support both local and regional road traffic needs well into the future.
- Likely increase in tourism activity due to the improved accessibility and safety for road travel to and within the study area by visitors as well as improved amenity of Woolgoolga as a destination.
- Increased local economic activity due to a combination of the above changes, reflected in increased business income and employment.
- Overall slight improvement in traffic noise levels along the upgrade section

Table 8.1: Potential socio-economic impacts and mitigation measures

Socio-economic issues	Upgrade section	Bypass section	Possible management measures
Community Cohesion	Negative: - Construction works could alter access and travel routes - Potential increase in the psychological separation felt by residents on the western side of the highway Positive: - Construction of interchanges and local access roads to enable east-west movement independent of the highway - Provide access from the west of the proposed highway (including the bypass) to the east via the proposed overpasses or underpasses.	Negative: - Construction works could alter access and travel routes - Some rural/agricultural properties to the West of the bypass will be severed from the wider Woolgoolga area (resulting in the feeling of psychological separation) Positive: - Increased cohesion within the Woolgoolga township due to the diversion of heavy vehicles and through traffic away from the existing highway and Woolgoolga - Most of the properties that are currently to the west of the highway would be to the east of the bypass - enabling access to Woolgoolga without crossing the highway	- Potential disruption to existing travel movements during the construction stage to be considered during the preparation of a work program for the staging and phasing of the construction of the Proposal. - Construction of overbridges as part of the interchanges at Sapphire (Gaudrons Road / Split Solitary Road), Moonee Beach, Emerald Beach and Graham Drive North. - Construction of overbridges at Headland Road, Killara Avenue, Smiths Road and Graham Drive South to provide additional East- West connection over the highway, - Replacement of overbridge at Diamond Head Drive, Sandy Beach
Amenity Effects	Negative: - Noise impacts on properties which are close to the Proposal - including construction compounds and batch plants. Positive: - Noise levels as a result of the Proposal would overall not be appreciably different than those experienced currently, and would	Negative: - Temporary construction noise impacts including blasting in some areas. - Introduces new noise level to rural properties along the bypass route - There will be moderate visual impacts Positive: - Increase in amenity (less noise, increased	- Provision of appropriate noise mitigation measures. - Urban design and scenic management of the upgrade to comply with the NSW RTA Pacific Highway Urban Design Framework. - Appropriate environmental controls during construction (ie development of a Construction environment management

	be lower than those experienced if the Pacific Highway is not upgraded	safety) in Woolgoolga due to the diversion of heavy and through traffic Increased road safety in Woolgoolga	plan).
Access and Movement Pattern	Negative: - Potential temporary road closures and/ or traffic disruptions during construction stage - Reduction in the number of direct access points along the highway - Longer travel/access times Positive: - Upgrade of the highway would facilitate planned future development along the northern beaches. - Increased safety and efficiency due to high standard dual carriageway highway and grade-separated interchanges - Local traffic can travel on local access roads increasing safety	Negative: - Potential temporary access and traffic disruption during construction stage - Change to some individual property access arrangements Positive: - Increased safety and efficiency due to high standard dual carriageway highway and grade- separated interchanges - Improved safety in Woolgoolga for vehicular/ pedestrian/cyclist movement - Improved access for local traffic in Woolgoolga	- Highway upgraded to improve road safety and transport efficiency and to facilitate planned future development along the northern beaches. - Interchanges built close to Woolgoolga and other beachside towns to enable easy access to town. - Local access roads to be constructed adjacent to the highway to separate local and through traffic. - Property access arrangements further developed in consultation with affected property owners. - Disruption to access for local roads and properties to be minimised during construction
Land Use and Property Impacts	Negative: - Partial and total acquisition of properties Positive: - No future development zone is impacted - Most development is within the existing road reserve - Upgrade of the highway to facilitate planned future development along the northern beaches.	Negative: - Partial and total acquisition of properties - Would directly impact on 40 agricultural properties - Minimal impact on the South Woolgoolga Urban Investigation Area Positive: - Does not impact on the West Woolgoolga Release area - Does not impact any urban zoned properties	Management measures relating to agricultural property impacts are outlined in working paper 5: Agricultural assessment

Effects on Business	Negative: • Potential temporary disruptions during construction • Access from the highway is restricted and may increase travel time to the businesses Positive: • Potential temporary increase in local employment during the construction stage • Business access on highway will now be from local access road and may increase local patronage	Negative: • Minor reduction in business due to reduction in passing traffic Positive: • Potential temporary increase in local employment during the construction stage. • Possible increase in local patronage of businesses due to increase in amenity and accessibility • Possible temporary increase in patronage of local businesses during the construction of the highway	• Ensure there is signposting along the Pacific Highway, indicating that food, supplies and services are available – especially at Moonee Beach and Woolgoolga.
Effects on Tourism	Negative: • Potential increase in travel times during the construction period. Positive: • Potential increase in tourism due to improved road safety and reduced travel times - especially in peak holiday season	Negative: • Potential temporary disruptions to tourist activities occurring at or near construction, particularly through the State Forest. • Through traffic bypass the town Positive: • Increased amenity of Woolgoolga as a tourist destination due to diversion of heavy vehicles and through traffic	• Ensure there is signposting along the Pacific Highway, indicating the availability of tourist facilities.

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