



COFFS HARBOUR HIGHWAY PLANNING

SAPPHIRE TO WOOLGOOLGA
ROUTE OPTIONS

COMMUNITY UPDATE 3

December 2002

UPGRADING THE PACIFIC HIGHWAY

planningnsw



This community update describes the route options for upgrading the Pacific Highway from Sapphire to Woolgoolga. The options comprise an upgrade of the existing highway from Sapphire to Moonee and four options from Moonee to north of Woolgoolga. The options are on display and community comment is being sought.

Project Update

The steering committee managing the development of the Coffs Harbour Highway Planning Strategy includes representatives of PlanningNSW, Coffs Harbour City Council (CHCC) and the Roads and Traffic Authority (RTA).

Planning for the strategy is being funded by the NSW Government as part of its \$1.6 billion commitment to the 10-year Pacific Highway Upgrading Program.

The principal objectives of the program are to:

- Significantly reduce road accidents and injuries.
- Reduce travel times and freight costs.
- Have a community satisfied with the physical development of the route.
- Have a route that supports economic development.
- Manage the upgrading of the route in accordance with Ecologically Sustainable Development (ESD) principles.
- Maximise effectiveness of expenditure.

Coffs Harbour Section

In October 2002, Coffs Harbour City Council received an independent peer review of the planning process for the highway south of Sapphire (including a possible future bypass of Coffs Harbour). The peer review endorsed the work previously undertaken by the steering committee.

The steering committee has agreed to recommence investigations into the feasibility of a long-term bypass of Coffs Harbour. These will compare the inner corridor bypass of Coffs Harbour with an upgrade of the existing highway through town. The results of these investigations will be exhibited for public comment in mid 2003. The steering committee also reaffirmed that the outer and central corridors have been ruled out for further investigation as possible bypass routes.

Sapphire to Woolgoolga Section

This community update relates to investigations for the Pacific Highway upgrade between Sapphire and Woolgoolga. It explains how you can comment on the displayed route options and how the preferred route will be selected.

At this stage there is no preferred option between Moonee and Woolgoolga.

An announcement regarding the preferred route is expected to be made in mid 2003.

Route Options

The route options are described below in two sections:

- Sapphire to Moonee section.
- Moonee to Woolgoolga section.

Figure 1 (below) provides an overview of the route options and the proposed interchange arrangements. Major constraints that guided route option development are illustrated in Figure 2.

Further details on the issues associated with each of the route options can be found in the Draft Route Options Development Report and the technical Working Papers (see back page for details).

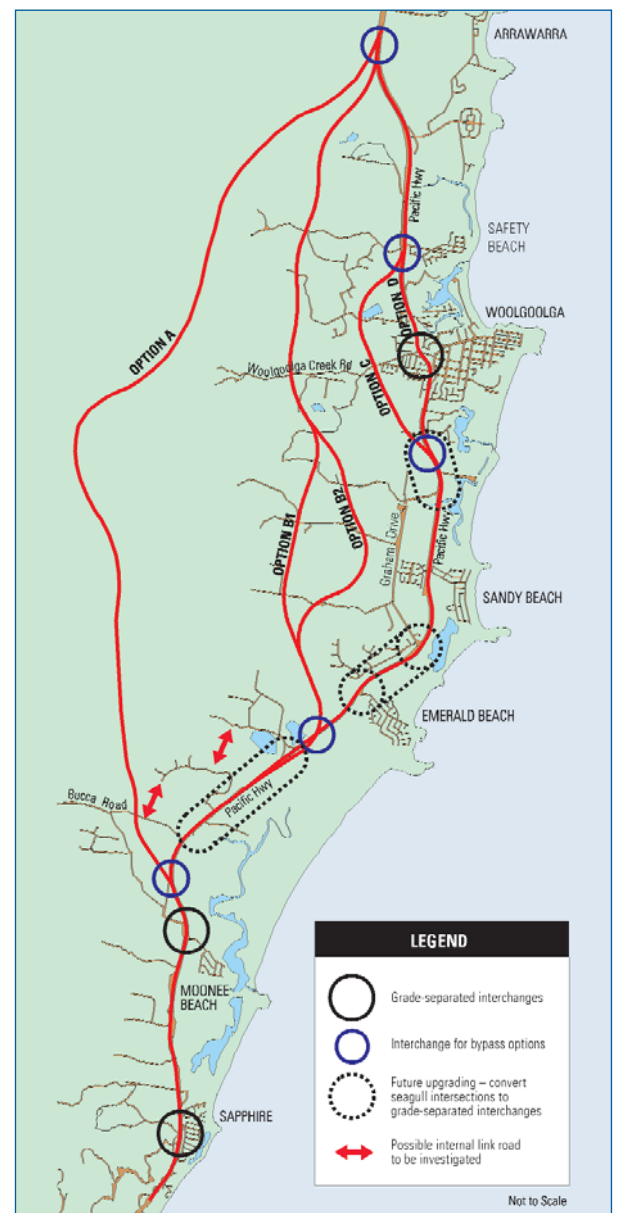


Figure 1: Strategic Overview

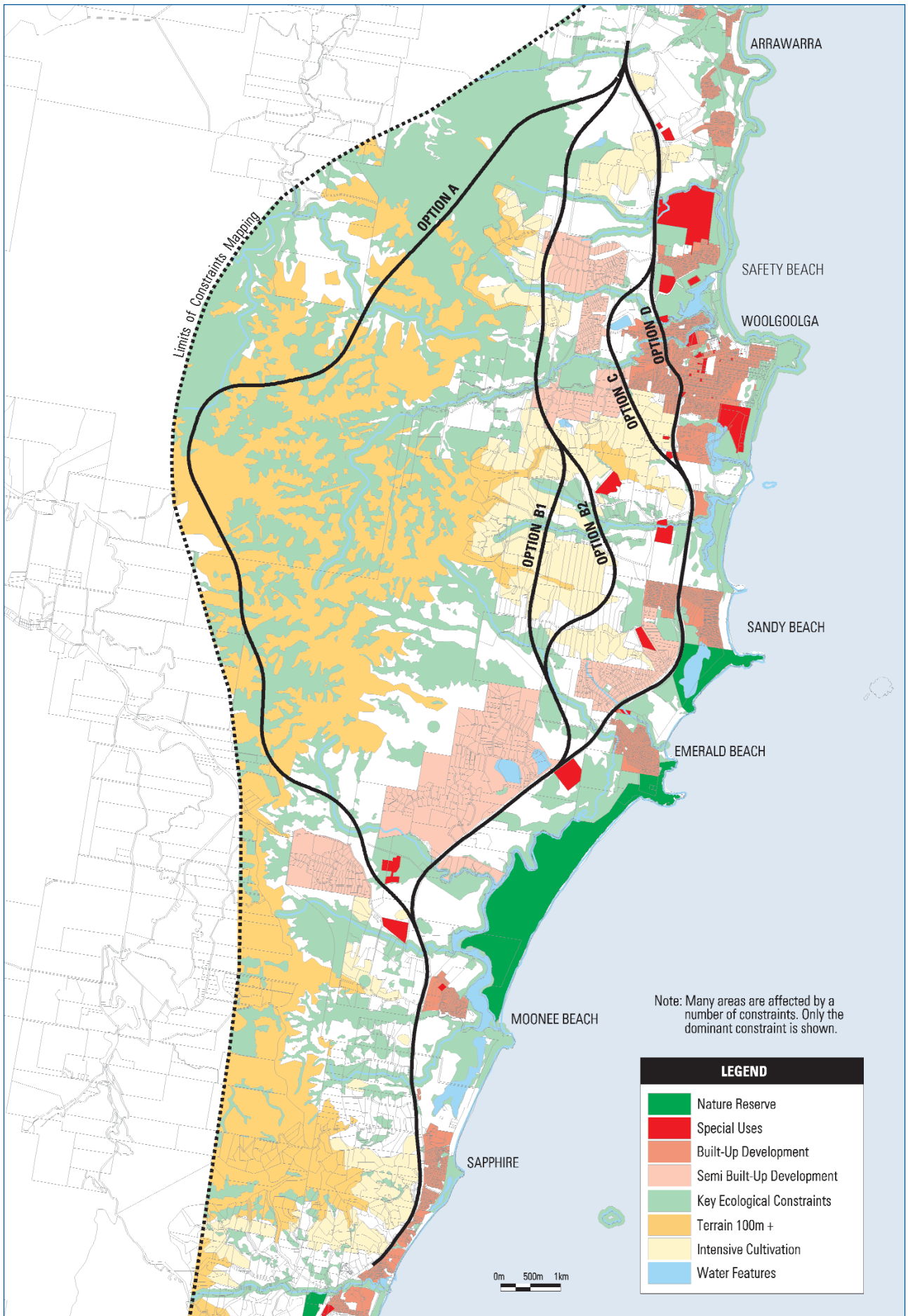


Figure 2: Constraints Map

Sapphire to Moonee

Between Sapphire and Moonee, the only feasible option is to upgrade the highway to dual carriageways either along or in the vicinity of the existing road. This is due to extensive urban development constraints to the east and mountainous terrain constraints to the west of the highway. Figures 3 to 7 illustrate the proposed alignment and intersection arrangements.

Grade-separated interchanges are proposed at Sapphire and at Moonee Beach. All access to the highway between the two interchanges will be left-in / left-out only.

Two alternatives have been prepared for the Sapphire interchange – at either Headland Road (see Figure 5) or at Gaudrons Road/Split Solitary Road (see Figure 6). The intersection arrangements for both alternatives take into account future traffic needs and land use planning.

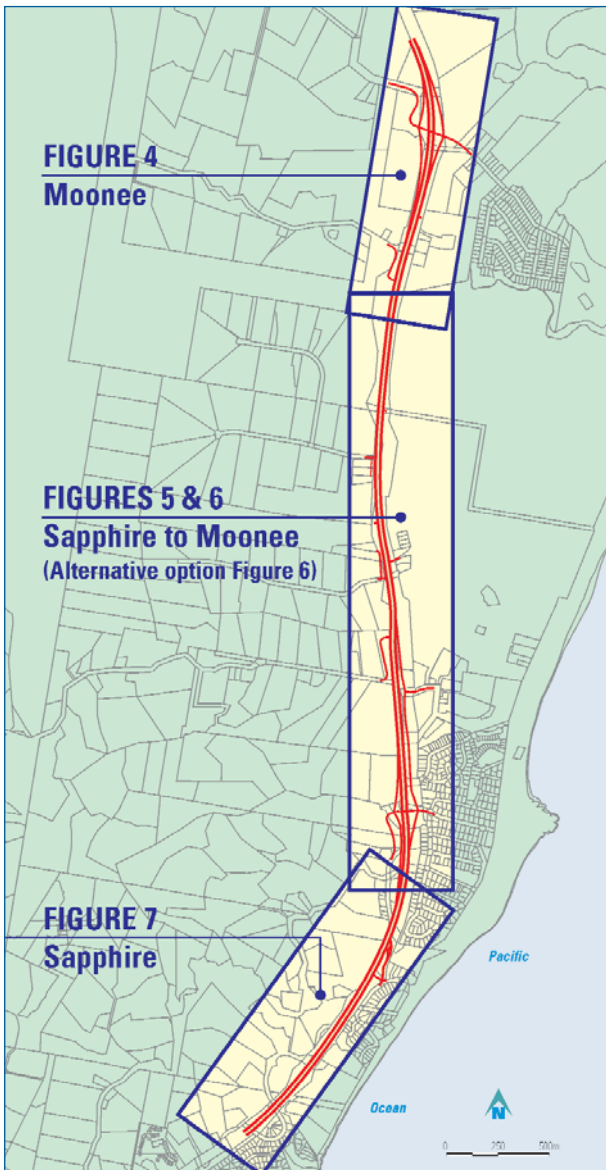


Figure 3: Sapphire to Moonee Key Map

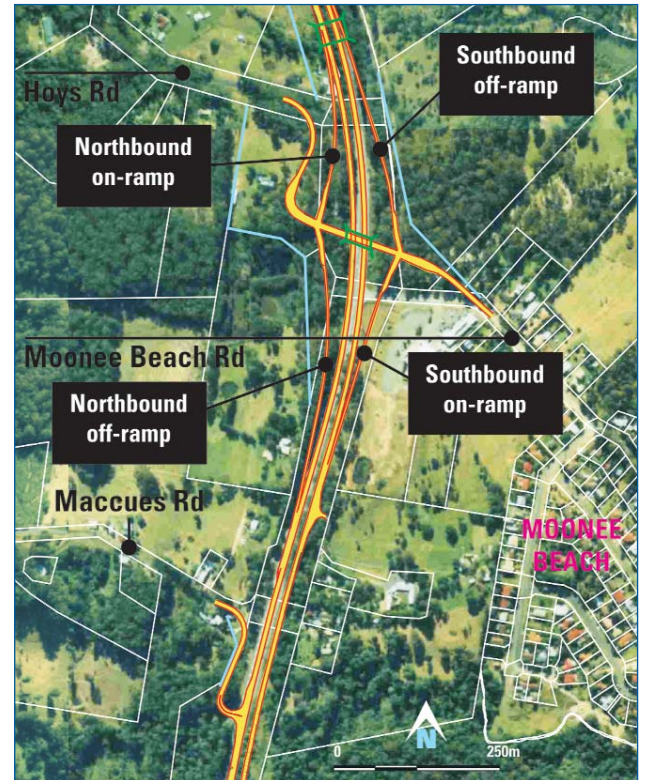


Figure 4: Moonee



Figure 7: Sapphire

LEGEND	
	Proposed road boundary
	Existing access to highway closed
	Bridge
	Left-in/ left-out only
	Seagull intersection

NOTE: Proposed road boundaries are indicative only and may change

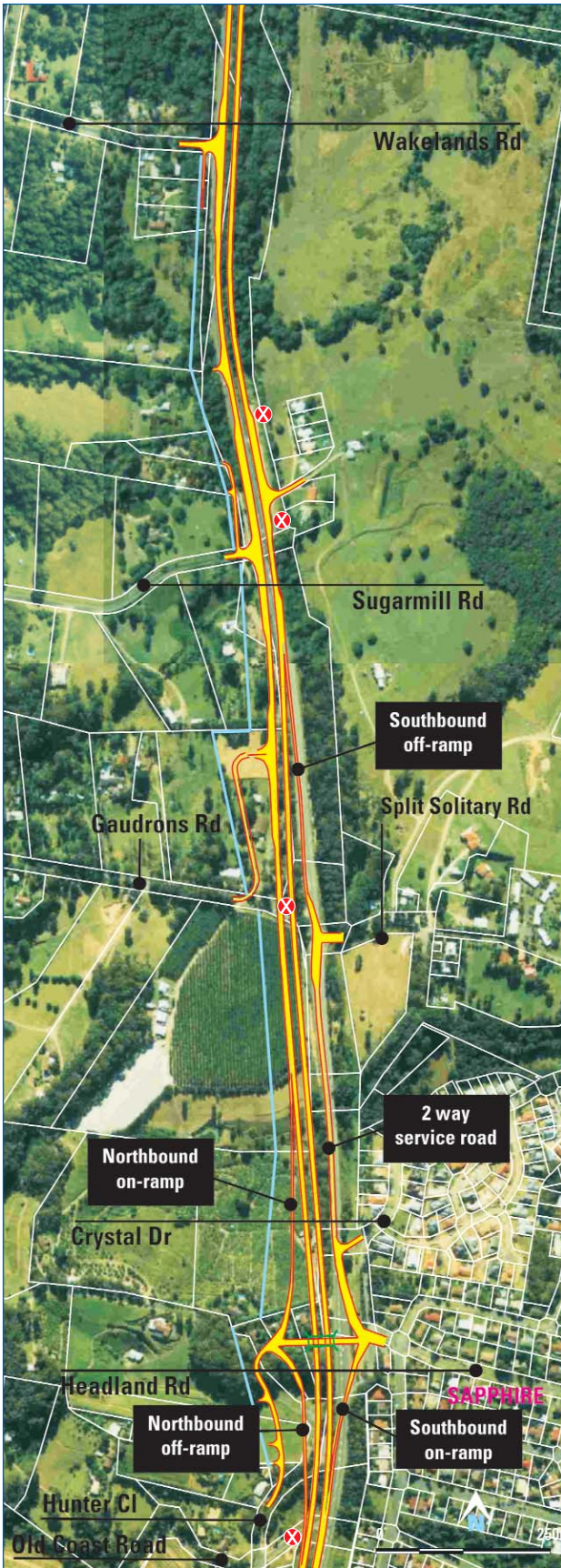


Figure 5: Sapphire to Moonee – Headland Road Option

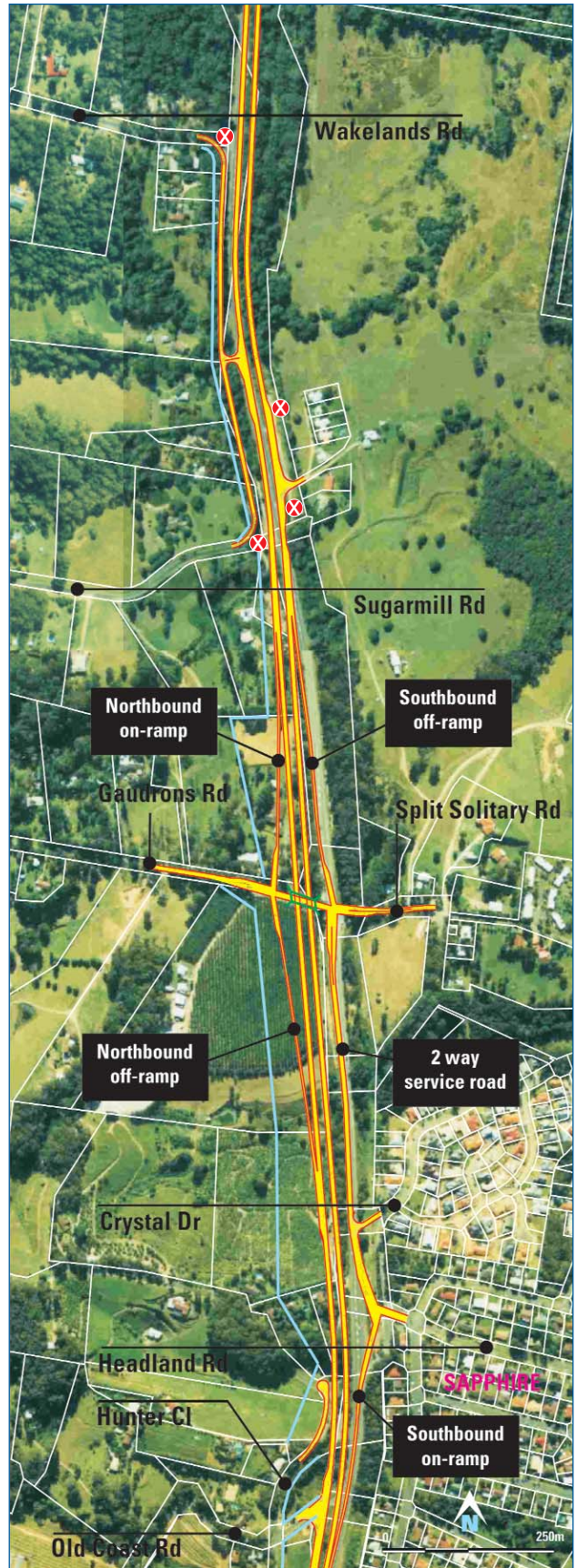


Figure 6: Sapphire to Moonee – Gaudrons Road/Split Solitary Road Option

LEGEND	Proposed road boundary	Existing access to highway closed	Bridge	Left-in/left-out only	Seagull intersection
	<p>NOTE: Proposed road boundaries are indicative only and may change</p>				

Moonee to Woolgoolga

One refined option has been selected within each of the three bypass corridors (Options A, B and C) which were outlined in Information Sheet No 2. Each of the refined options has been developed to minimise social and environmental impacts.

Two sub-options have been developed for Option B – B1 and B2. Option D is a major upgrade of the existing highway through Woolgoolga.

The route options are illustrated in Figures 8 to 14 and the main features are discussed below. Each option includes the 5.2 km section between Sapphire and Moonee.

Option A (Figure 9)

- Total length 25.6 km with an estimated cost of \$370M.
- Deviates to the west from existing highway north of Moonee with a grade-separated interchange.
- Traverses State Forest land along steep ridges of the Coastal Range for most of its length.
- Avoids residential land at Forest Glen, Heritage Park, Avocado Heights, Emerald Heights, Sandy Beach and West Woolgoolga.
- Directly affects approximately eight rural residential properties in the Sapphire to Moonee section.
- Bypass section has very little effect on agricultural property with only one property likely to be severely affected.
- Would have a major impact on key habitats and movement corridors identified by National Parks and Wildlife Service (NPWS).
- Passes near a number of important Aboriginal sites including a gazetted Aboriginal Place.
- Requires overpasses or underpasses of three local roads and a number of State Forest access roads.
- All accesses to the highway north of Sapphire would be grade-separated interchanges or left-in / left-out only.
- Rejoins existing highway at Arrawarra Creek with a grade-separated interchange.

Option B1 (Figure 9)

- Total length 22.1 km with an estimated cost of \$290M.
- Deviates from existing highway near Lake Russell, just north of Smiths Road with a grade-separated interchange.
- Southern end passes through the foothills east of the State Forest with a mix of cleared and forested land.
- Separates into sub-option B1 between Johnsons Road and Grays Road to run west of the high point in the ridge between Johnsons and Holloways Roads.
- Avoids residential land at Forest Glen, Heritage Park, Avocado Heights, Emerald Heights and Sandy Beach.
- Directly affects approximately 26 rural residential properties (including Sapphire to Moonee section and West Woolgoolga).
- Has major impact on 22 agricultural properties.
- Passes close to a variety of migratory bird aquatic habitats.
- Would have a medium impact on key habitats and movement corridors identified by NPWS.
- Crosses State Forest at its northern end.
- Requires overpasses or underpasses of nine local roads and a number of State Forest access roads.
- All accesses to the highway north of Sapphire would be grade-separated interchanges or left-in / left-out only.
- Rejoins existing highway at Arrawarra Creek with a grade-separated interchange.

Sub-Option B2 (Figure 9)

- Total length is 22.8 km with an estimated cost of \$270M.
- Deviates from existing highway near Lake Russell, just north of Smiths Road with a grade-separated interchange.
- Southern end passes through the foothills east of the State Forest with a mix of cleared and forested land.
- Separates into sub-option B2 between Johnsons Road and Grays Road to pass to the east of the ridge between Johnsons and Holloways Roads.
- Avoids residential land at Forest Glen, Heritage Park, Avocado Heights, Emerald Heights and Sandy Beach.
- Directly affects approximately 26 rural residential properties (including Sapphire to Moonee section and West Woolgoolga).
- Has major impact on 28 agricultural properties.
- Passes close to a variety of migratory bird aquatic habitats.
- Would have a medium impact on key habitats and movement corridors identified by NPWS.
- Crosses State Forest at its northern end.
- Requires overpasses or underpasses of nine local roads and a number of State Forest access roads.
- All accesses to the highway north of Sapphire would be grade-separated interchanges or left-in / left-out only.
- Rejoins existing highway at Arrawarra Creek with a grade-separated interchange.

Option C (Figure 12)

- Total length is 23.3 km with an estimated cost of \$240M.
- Deviates from highway near Hearns Lake Road and rejoins at Safety Beach Drive with grade-separated interchanges.
- Avoids residential land at Forest Glen, Heritage Park, Avocado Heights and Emerald Heights.
- Directly affects approximately 23 rural residential properties (including Sapphire to Moonee section and West Woolgoolga).
- Has major impact on 9 agricultural properties.
- Traverses urban investigation areas south west of Woolgoolga.
- Crosses western end of Woolgoolga Reservoir.
- Would have a medium impact on key habitats and movement corridors identified by NPWS.
- Requires overpasses or underpasses of five local roads.
- All accesses to the highway between Sapphire and Moonee Beach and between Graham Drive North and Safety Beach would be grade-separated interchanges or left-in / left-out only.

Option D (Figures 13 and 14)

- Total length of 22.9 km with an estimated cost of \$260M.
- Requires a major upgrade of existing highway through Woolgoolga.
- Would severely affect one agricultural property and requires total or partial purchase of approximately 40 residential and commercial properties in Woolgoolga.
- Requires closure of local roads and provision of service roads which would result in substantial local access changes.
- All accesses to the highway between Sapphire and Moonee Beach would be left-in / left-out only and grade-separated interchanges would provide access to Woolgoolga.
- Two sub-options displayed:
 - Figure 13 – Partial interchanges at River Street and at Safety Beach Drive with a two-way service road between Clarence Street and Safety Beach Drive.
 - Figure 14 – Partial interchanges at Pullen / Clarence Streets and at Centenary Drive connected by two one-way service roads.

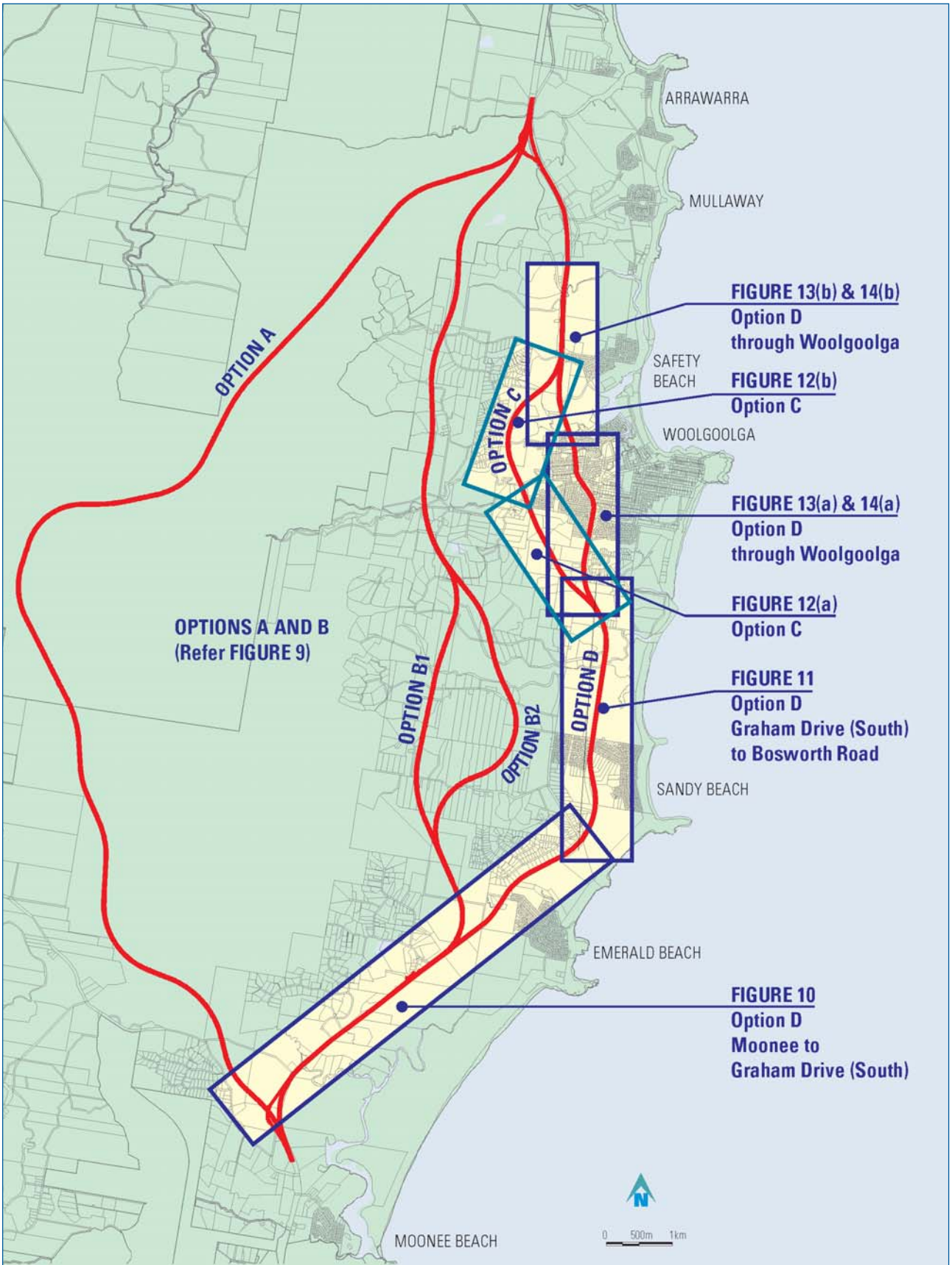


Figure 8: Moonee to Arrawarra Creek Key Map

UPGRADING THE PACIFIC HIGHWAY

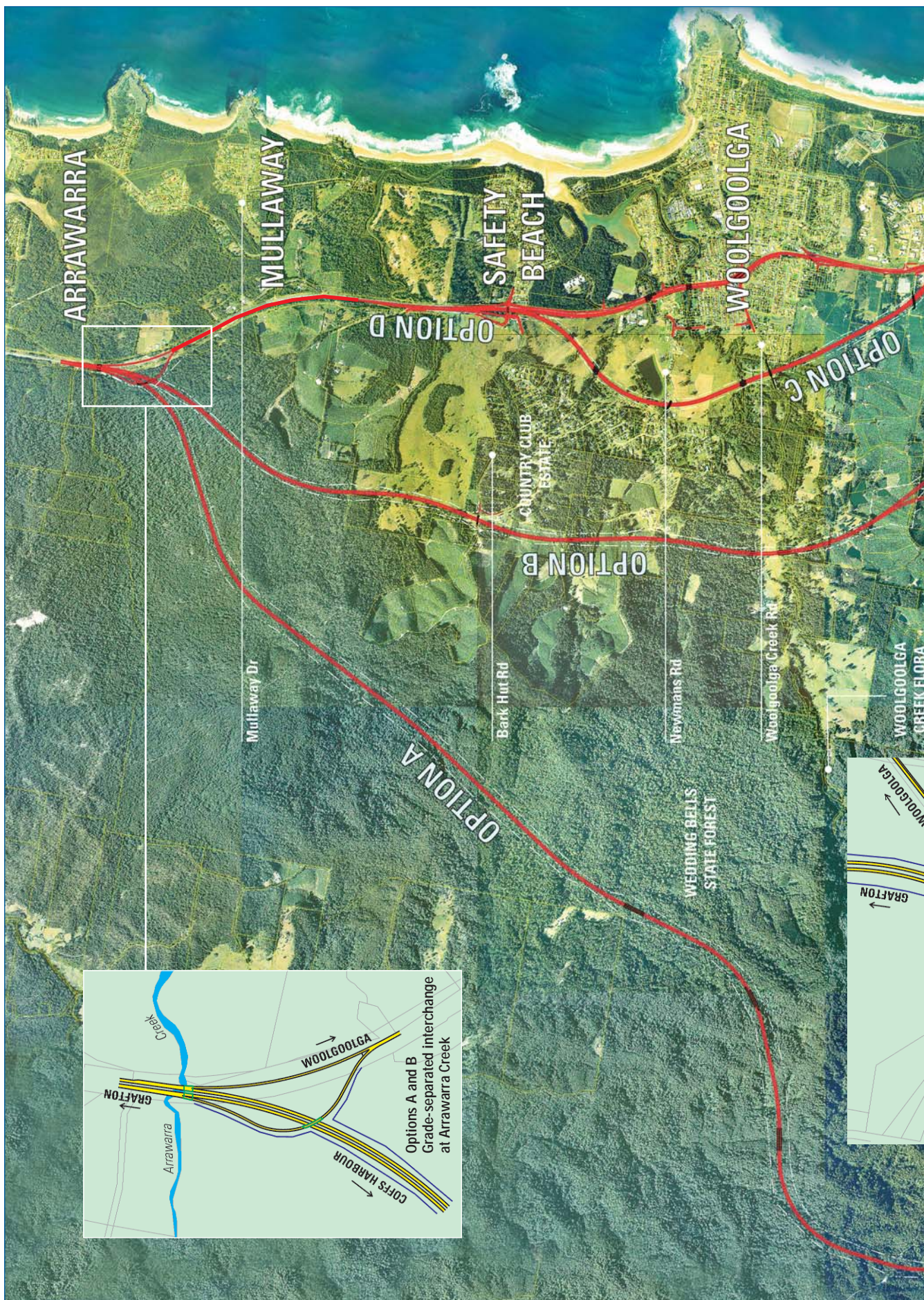
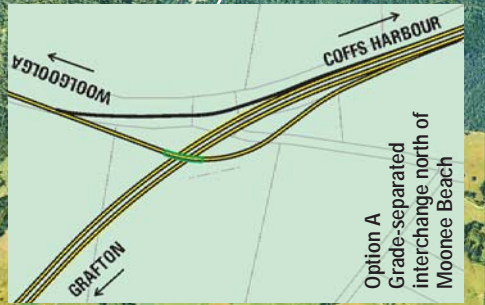
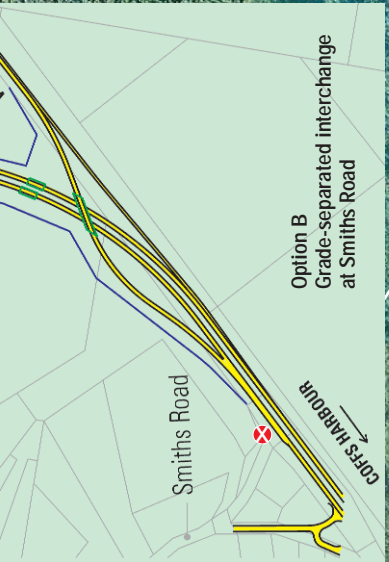


Figure 9: Moonee to Woolgoolga



Details of Options C and D are shown in Figures 10, 11, 12, 13 and 14

Left-in/left-out only accesses to Option B



NOTE: Proposed road boundaries are indicative only and may change

Option C and D – Upgrade of Existing Highway – Moonee to Woolgoolga

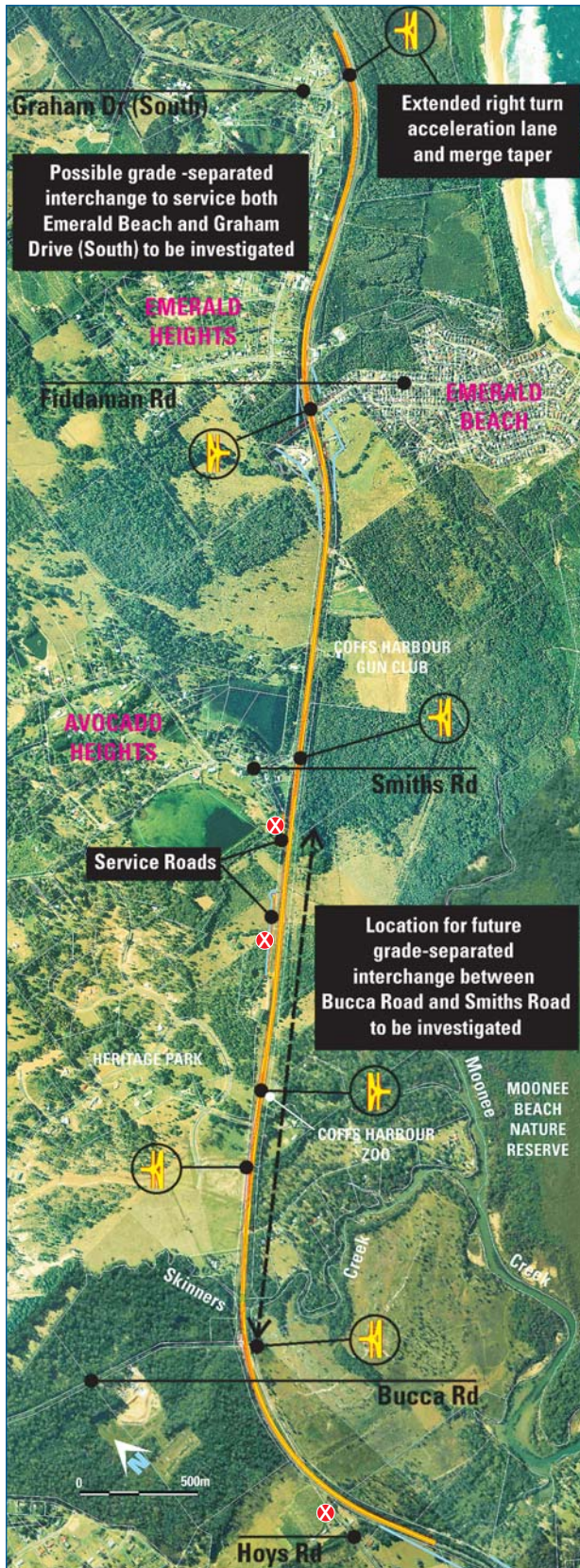


Figure 10: Moonee to Graham Drive (south)

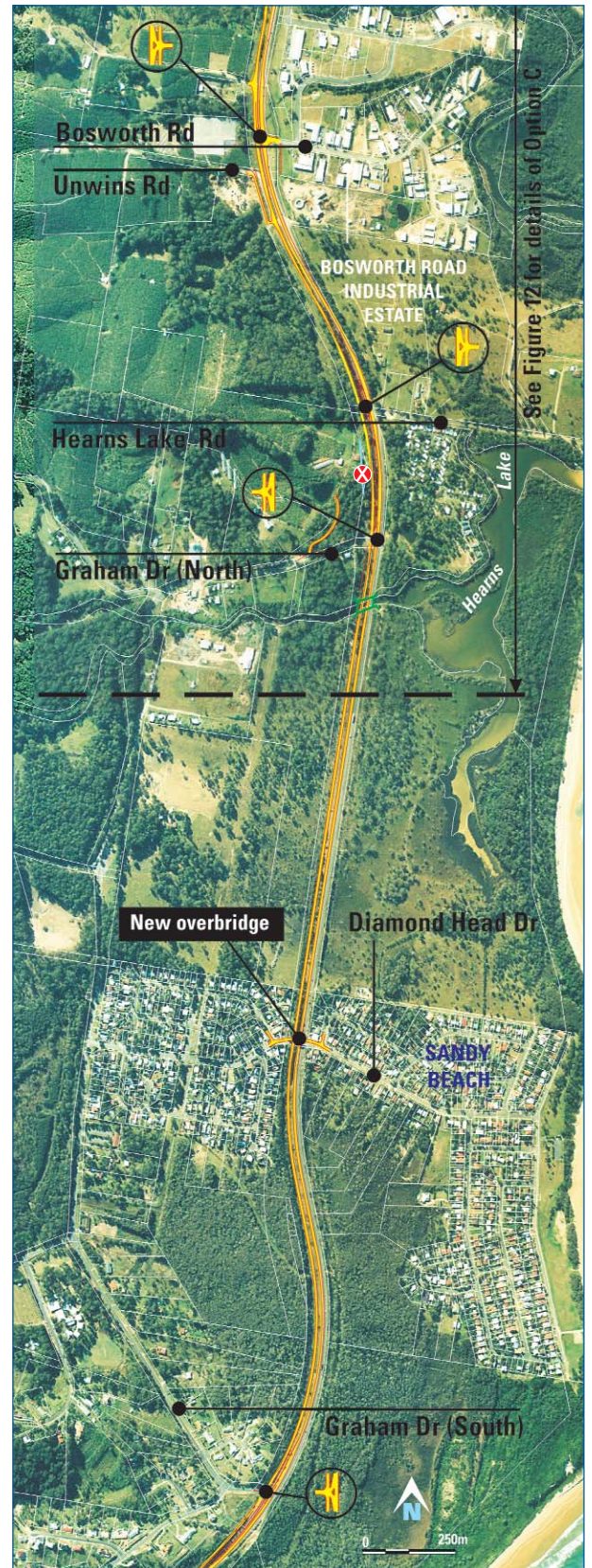


Figure 11: Graham Drive (south) to Bosworth Road

LEGEND	
	Proposed road boundary
	Existing access to highway closed
	Bridge
	Left-in/left-out only
	Seagull intersection

NOTE: Proposed road boundaries are indicative only and may change

Option C – Woolgoolga Bypass



Figure 12(a): Graham Drive (north) to Woolgoolga Creek Road

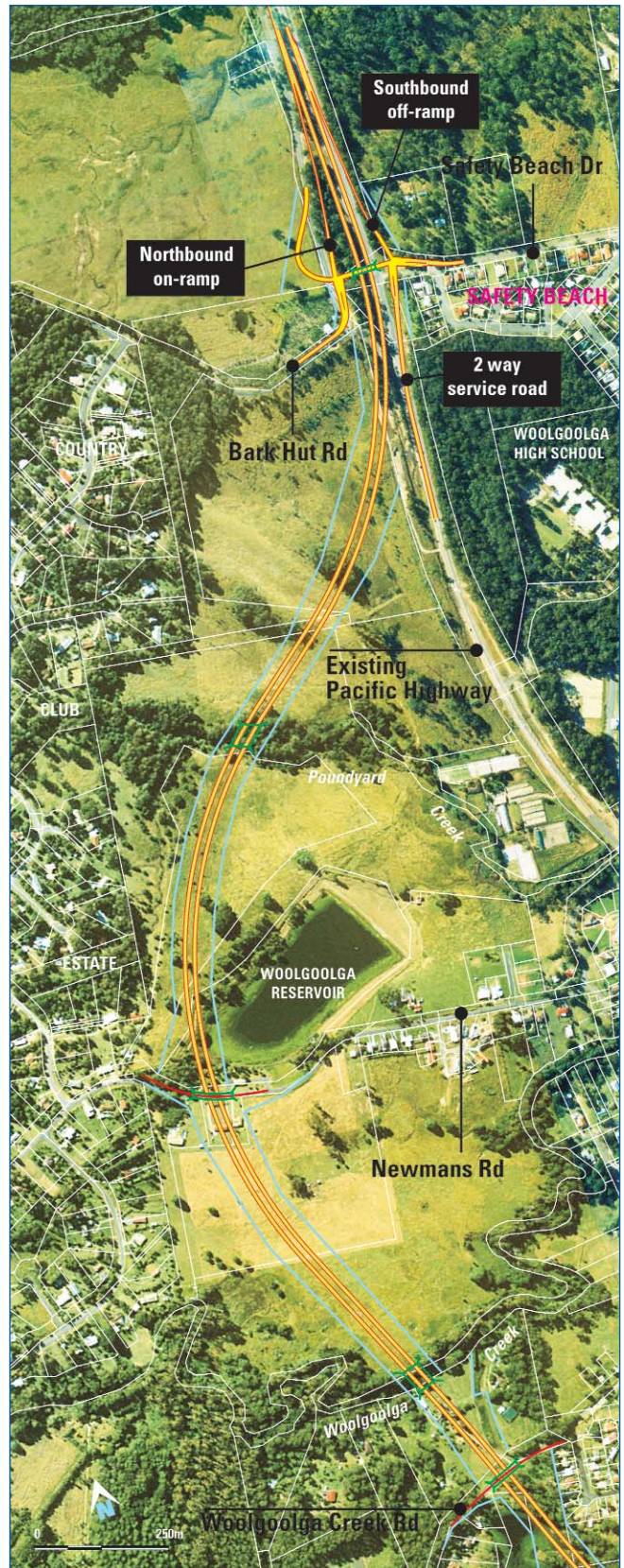


Figure 12(b): Woolgoolga Creek Road to Safety Beach Drive

LEGEND		Proposed road boundary		Existing access to highway closed		Bridge		Left-in/left-out only		Seagull intersection
	NOTE: Proposed road boundaries are indicative only and may change									

Figure 13 – Option D through Woolgoolga:
 Partial interchanges at River Street and at Safety Beach Drive with a two-way service road between Clarence Street and Safety Beach Drive



Figure 13(a): Bosworth Road to Poundyard Creek

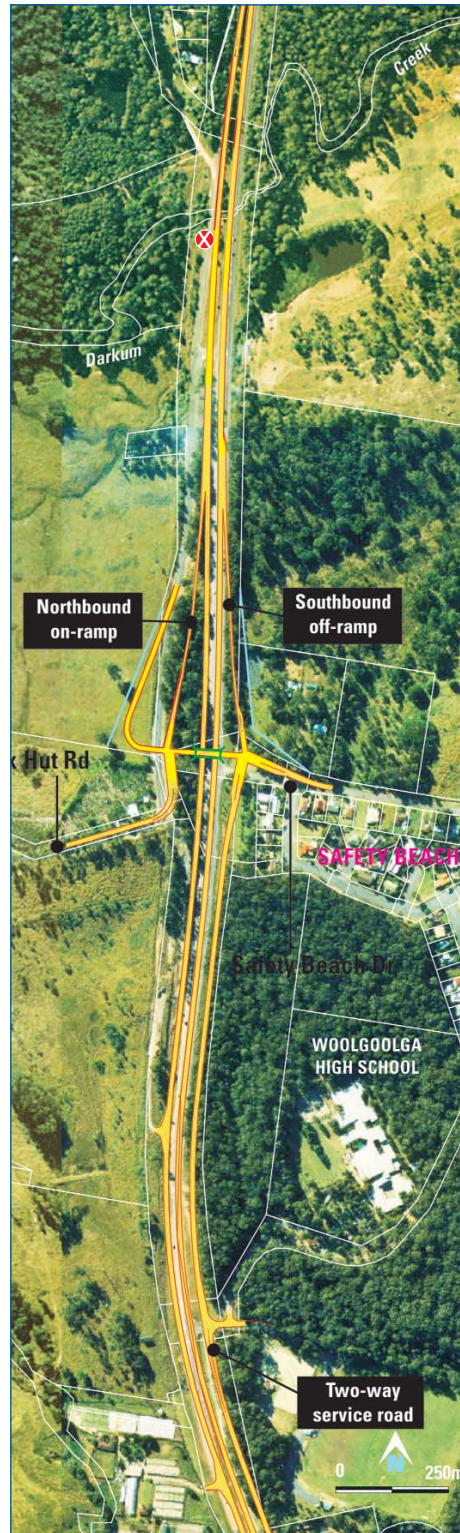


Figure 13(b): Poundyard Creek to Darkum Creek

LEGEND	Proposed road boundary	Existing access to highway closed	Bridge	Left-in/left-out only	Seagull intersection

NOTE: Proposed road boundaries are indicative only and may change

Figure 14 – Option D through Woolgoolga:
 Partial interchanges at Pullen/Clarence Streets and at Centenary Drive connected by two one-way service roads



Figure 14(a): Bosworth Road to Poundyard Creek

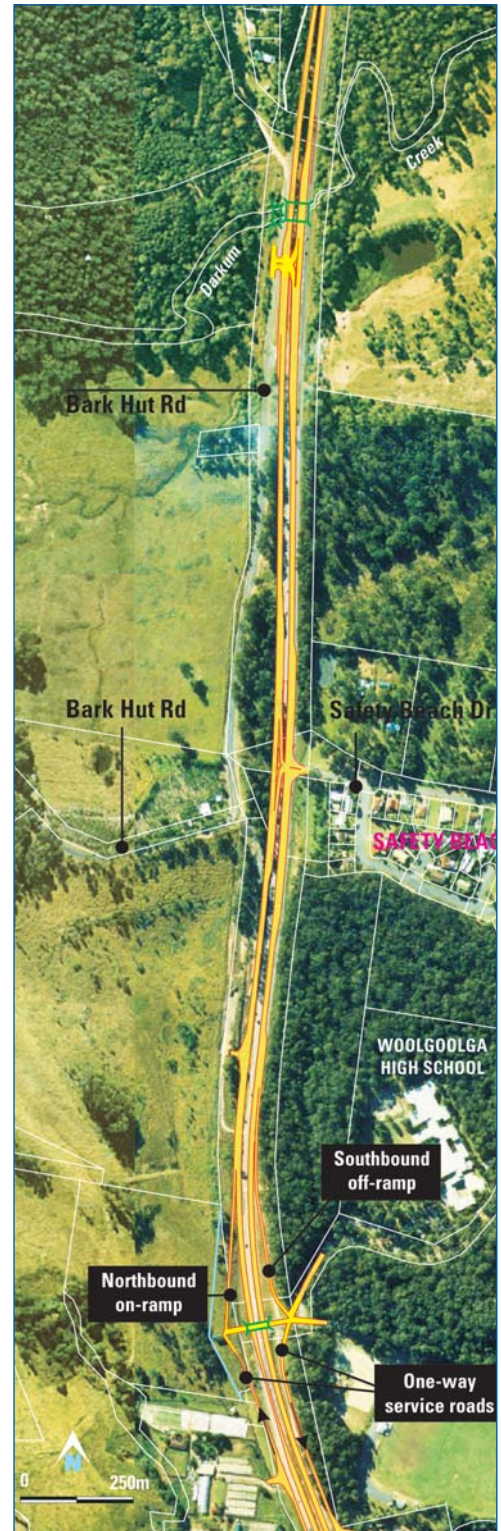


Figure 14(b): Poundyard Creek to Darkum Creek

LEGEND	Proposed road boundary	Existing access to highway closed	Bridge	Left-in/left-out only	Seagull intersection

NOTE: Proposed road boundaries are indicative only and may change

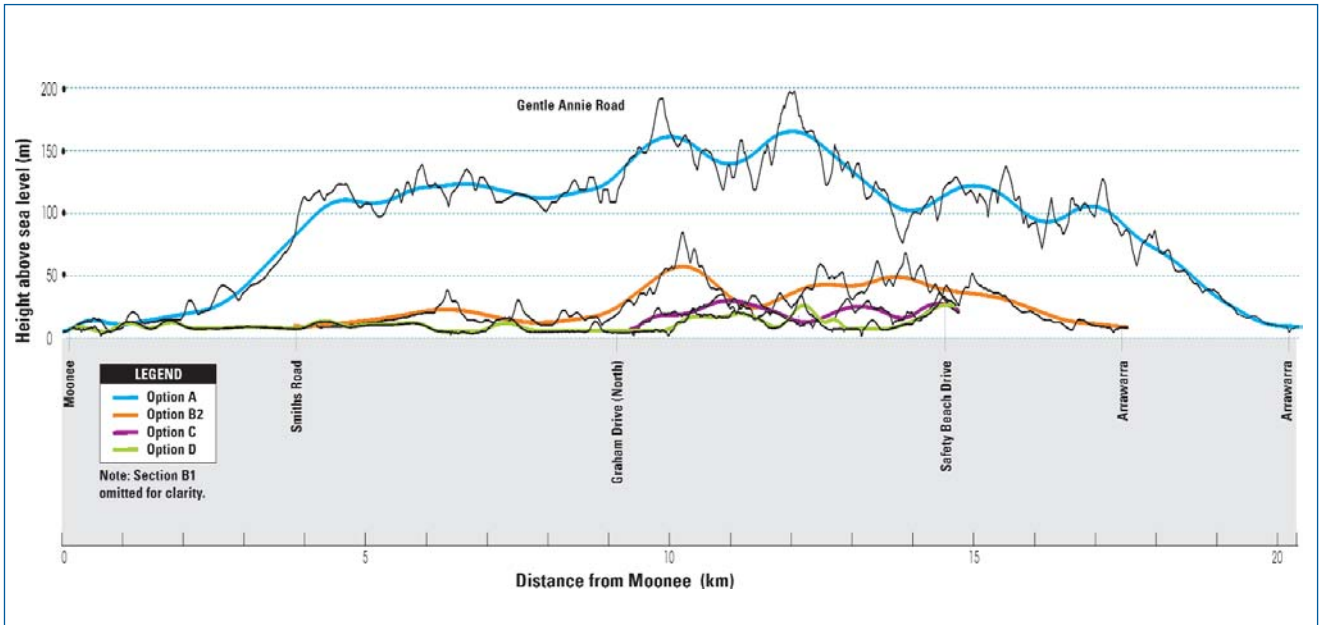


Figure 15: Longitudinal Sections (Profiles) Showing Heights of Route Options

Longitudinal Sections

Figure 15 (above) shows longitudinal sections along each of the route options. These sections illustrate each option in profile and how they compare in relative height above sea level. Features of the sections for each option are summarised in the following table.

	Option A	Option B1	Option B2	Option C	Option D
Highest Point above Sea Level	170 m	55 m	55 m	30 m	30 m
Highest Embankment	35 m	25 m	12 m	8 m	9 m
Deepest Cutting	35 m	45 m	30 m	8 m	11 m
Maximum grade	5%	4.5%	4.5%	3.5%	6.0%

Use of Route Options by Heavy Vehicles

The submissions received after the public display in March are summarised in the Community Involvement Summary Report (Corridor Options Stage). Issues of most concern included noise and air pollution, particularly from heavy vehicles. The Traffic and Transport Working Paper contains an assessment of the ability of the route options to attract heavy vehicles away from the existing highway.

Heavy vehicles (including semi-trailers and B-doubles) prefer to use routes which provide travel time savings and reduced VOC. The following table compares the estimated travel times and Vehicle Operating Costs for semi-trailers between Moonee Beach and Arrawarra Creek for each of the four options and the existing highway.

ROUTE	TRAVEL TIME (mins)	VEHICLE OPERATING COST (\$/vehicle) ⁽¹⁾
Option A	13.9 ⁽²⁾	16.00
Option B1	10.3 ⁽²⁾	13.60
Option B2	10.7 ⁽²⁾	14.10
Option C	11.1 ⁽²⁾	14.30
Option D	11.1 ⁽²⁾	14.00
Existing Highway	12.4 ⁽³⁾	13.80

Notes
 (1) Estimated Vehicle Operating Costs in 2002 using RTA Economic Analysis Manual.
 (2) Estimated travel time using Austroads formula.
 (3) Recorded travel time during day in 2002. With through traffic using a bypass, travel times on the existing highway are expected to be similar or slightly less than they are at present.

Comparing the route options with the existing highway in the previous table shows that:

- Option A increases both travel time (1.5 minutes per vehicle) and vehicle operating costs (\$2.20 per vehicle). Its longer length and substantial grades contribute to this outcome. As a result of these increases, heavy vehicles may continue to use the existing highway rather than Option A.
- Options B1, B2 and C provide travel time savings of between 1.3 and 2.1 minutes per vehicle with approximately the same vehicle operating costs. As a result of these savings, heavy vehicles may use these bypasses rather than the existing highway.
- Option D (upgrading of the existing highway) provides travel time savings of 1.3 minutes per vehicle with approximately the same vehicle operating costs.

Future Upgrading

Predicted population growth along the coastal strip north of Coffs Harbour will result in increased traffic volumes on the Pacific Highway. To cater for this growth, the design of the options allows additional carriageways or grade-separated intersections to be constructed within the proposed road reserve as follows:

Sapphire to Moonee

Sufficient road reserve width would allow for future upgrading to either three lanes in each direction or the provision of a service road.

Moonee to Woolgoolga

The four lane divided carriageway on Options A, B, C or D would cater for traffic for the foreseeable future.

Options A, B1 and B2

Proposed grade-separated interchanges at each end of these bypass options would cater for traffic for the foreseeable future.

Options C and D

Sufficient land would be acquired to allow grade-separated interchanges to be provided at Emerald Beach, Graham Drive South and at a location to be identified between Bucca Road and Smiths Road. Option C includes a grade-separated interchange at Graham Drive North. For Option D, the land required for a future grade-separated interchange at Graham Drive North would be identified in consultation with Council as part of the planning for the future development of the Hearn's Lake area. When these grade-separated interchanges are constructed, all other accesses onto the highway between Moonee and Woolgoolga would become left-in / left-out only.

What Happens Next?

The Coffs Harbour Highway planning process is illustrated at right in Figure 16. The route options are now on display from Monday 9 December 2002 to Friday 31 January 2003. Community feedback will be considered as part of the process to select a preferred route. Each option will be compared to identify the route that achieves the best balance between social, ecological, engineering and cost factors while providing for the future needs of road users and local communities.

A workshop with technical and non-technical participants, representing a range of government, council and community interests will be held. The recommendations arising from the workshop will be an input into the subsequent evaluation of the route options.

The draft Route Selection report will document the evaluation of the options. This report will be reviewed by the steering committee, with the decision on a preferred route expected to be announced mid 2003.

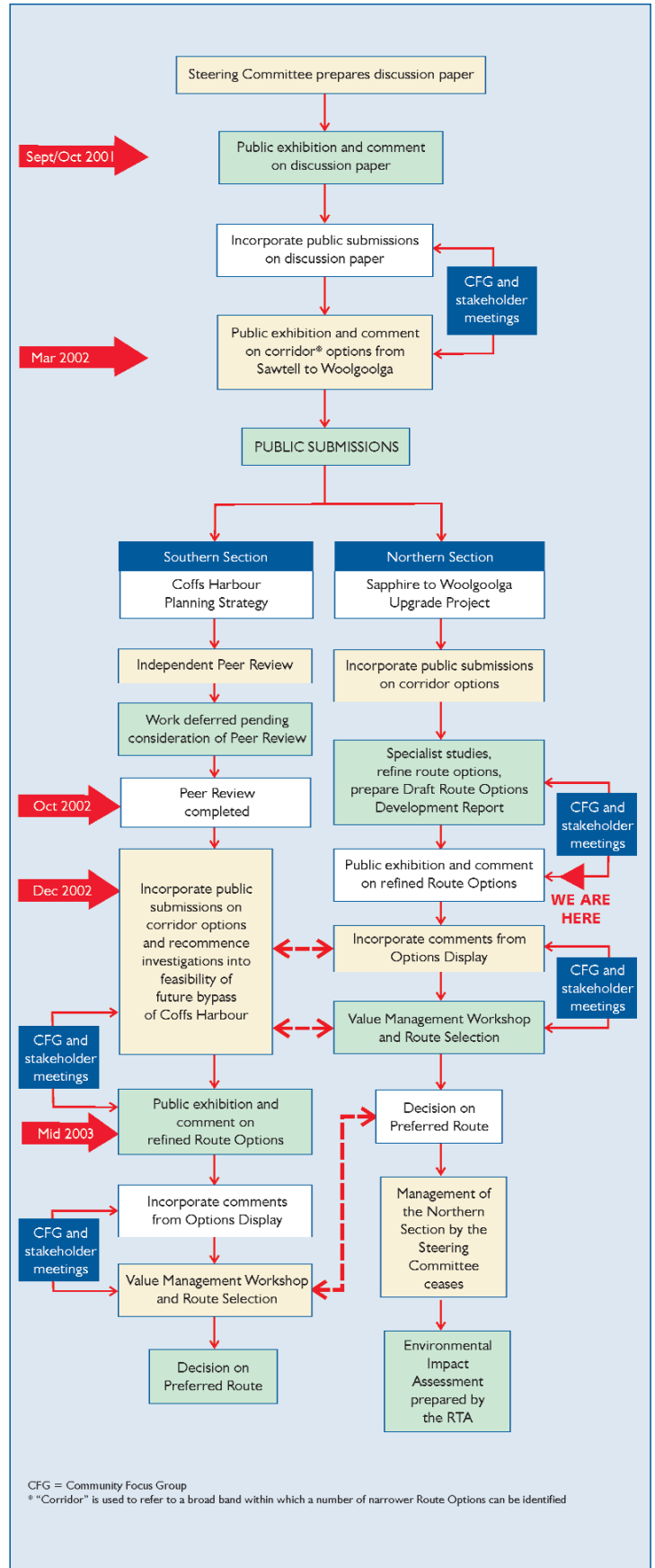


Figure 16: Highway Planning Process

Have Your Say

This form provides an opportunity for you to comment on the highway options that have been developed for the Pacific Highway between Sapphire and Woolgoolga as described in the accompanying community update and to provide input to the assessment of route options. If you wish to comment, please fill in this form and return it by mail to:

Coffs Harbour Highway Planning Strategy
Reply Paid 478
COFFS HARBOUR NSW 2450 **or** Fax to: (02) 6656 4495

Comment forms should be received by 31 January 2003

1)	As part of the route selection process, the options will be subject to detailed comparison of all relevant engineering, economic, environmental and social issues.
	For each of the options, what are the specific impacts and benefits that are of interest to you?
	(In previous feedback the following issues were commonly raised: effects on residential property; effects on agricultural land use; effects on businesses and tourism; effects on forestry activities; noise and vibration; visual and urban design; indigenous heritage; non-indigenous heritage; geology and soils; flora and fauna; air quality; community impacts; access effects; road safety; travel time and efficiency).
	Option A
	Option B1
	Option B2
	Option C
Option D	

2)	Of the options, and feasible alternatives, described in the community update, are there any changes or improvements you would like to see made?
	Sapphire to Moonee (Highway Upgrade)
	Moonee to Arrawarra (5 options)
	Option A
	Option B1
	Option B2
Option C	
Option D	
3)	Are there any other comments you would like to make?

If you are not already on the mailing list to receive further information and would like to be included, please fill out your details below.

(Mr/Mrs/Ms): _____ Surname: _____

First Name: _____ E-mail: _____

Address: _____

Phone: _____ (work) _____ (home)

PLEASE MAKE SURE YOU READ THE FOLLOWING CONFIDENTIALITY INFORMATION BEFORE COMPLETING THE COMMENT FORM

All information included in written representations is collected for the sole purpose of assisting in the assessment of this proposal. The information may be used by relevant staff and contractors, including the RTA's Project Manager, RTA Planning and Environmental staff and/or the RTA's contractor, Connell Wagner. Where the supplier (you) indicates at the time of supply of information that it should be kept confidential, the RTA will attempt to keep it confidential but there may be legislative or legal justification for the release of the information, for example under the Freedom of Information Act 1989 or under subpoena or statutory instrument. The supply of any information is voluntary. Each respondent has free access at all times to the information provided by that respondent but not to any information provided by other respondents. Any respondent may make a correction to the information that they have provided by providing the correction in writing to the same address where original representations were sent. The information is being collected and will be held by the RTA and/or its agents on behalf of the Steering Committee.



How to Comment

You can view the route options at the locations shown below. The displays provide large-scale maps showing existing property boundaries and giving key road and place names in greater detail. Additional information on the environmental and social constraints that guided development of the route options will also be provided.

Display locations

Coffs Harbour

- Coffs Harbour City Council (Mon-Fri 8 am-5 pm).
- Public Library, Duke Street (Mon-Fri 9:30 am-6 pm, Sat 9:30 am-3 pm).

Woolgoolga

- Public Library, Ganderton Street (Mon-Fri 9:30 am-5 pm, Sat 9:30 am-12 noon).

Sapphire

- Sapphire Service Station, Pacific Highway, Sapphire (6:30 am to 10 pm seven days).

Corindi Beach

- Yarrawarra Cultural Centre, 170 Red Rock Road (Mon-Fri 9 am to 4 pm).

Staffed displays will be held between 9 am and 8 pm as follows:

- Shop 28, opposite Big W, Park Beach Plaza, Coffs Harbour – Monday 9 and Tuesday 10 December 2002.
- Shop 3, Surfside Plaza, Beach Street, Woolgoolga – Thursday 12, Friday 13 and Saturday 14 December 2002.

The staffed displays will provide an opportunity for people to ask questions and discuss the route options in more detail with project representatives.

You are invited to comment by completing the enclosed form. Your views will be included as part of the options evaluation process.

If you made a submission during the earlier phase of the process, the issues raised in that submission will also be considered during the current part of the study.

Please return your comment form to:

Reply Paid 478, COFFS HARBOUR NSW 2450 by 31 January 2003.

If you wish to comment on issues that are not included in the attached comment form, additional written submissions are welcome at any time.

A Draft Route Options Development Report has been produced which outlines how the route options were identified, the major planning constraints and potential impact of each route option. The report is available on the project website or at the following display locations:

- Coffs Harbour City Council.
- Coffs Harbour and Woolgoolga Public Libraries.
- RTA Pacific Highway Office, Grafton.

The report contains a comprehensive summary of technical working papers that discuss the social, environmental, economic and engineering aspects of the route options. The working papers are available on the project website or by phoning the project freecall number.

Pacific Highway Upgrading Program

This is the single largest construction program in NSW for the last 40 years. Twenty-one major projects and 19 smaller projects have been opened to traffic. Four major construction projects are underway – including Karuah Bypass, Halfway Creek Realignment, Coopernook Bypass and Taree to Coopernook Upgrade. A further 15 are at various stages of planning and development, including the Bulahdelah, Moorland to Herons Creek and Kempsey to Eungai Upgrades.

The program has brought enormous improvements to road conditions and travel times. From 1997 to 2002, travel times between Hexham and the Queensland border have been reduced by around 55 minutes for passenger vehicles and just over an hour for heavy vehicles. Notorious accident spots have been removed with the completion of the Bulahdelah to Coolongolook Freeway, Yelgun to Chinderah Freeway, Raleigh Deviation and Ewingsdale Interchange.

As well as boosting tourism and transport efficiency, providing safer and more consistent overtaking opportunities has saved lives and reduced the incidence of serious injury accidents.

For more information contact:

Coffs Harbour Highway Planning Strategy
PO Box 478
Coffs Harbour NSW 2450

Phone: 1800 63 63 63 (Freecall)

Or go to the RTA website at
www.rta.nsw.gov.au/pacific.htm

Freecall 1800 63 63 63



----- BUILDING A SAFER HIGHWAY -----