

INQUIRY INTO PACIFIC HIGHWAY UPGRADES

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Date Received: 29/07/2005

Subject:

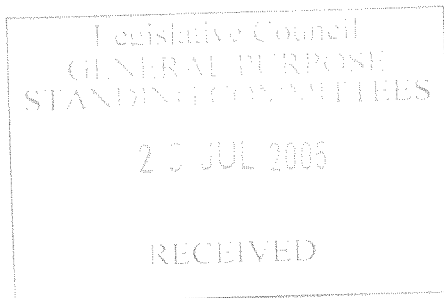
Summary Joint submission with Mr R.R. Greentree, Chairman, Richmond River Cane Growers Association

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*Sunshine
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25 July 2005

Committee Director
General Purpose Standing Committee No 4
Parliament of NSW
Parliament House
Macquarie Street
SYDNEY NSW 2000

PARLIAMENTARY INQUIRY INTO PACIFIC HWY UPGRADE

The New South Wales Sugar Industry is represented by the New South Wales Sugar Milling Co-operative Limited (NSWSMC), which operates three raw sugar mills and a white sugar refinery, and the New South Wales Cane Growers Association which represents the 600 New South Wales cane farmers.

The New South Wales Sugar Industry is very concerned about the potential impact of five separate section studies currently being carried out by the RTA relating to the Pacific Highway Upgrade; namely Tintenbar – Ewingsdale, Ballina – Woodburn, Woodburn – Iluka, Iluka – Harwood and Harwood – Halfway Creek.

Please find attached a copy of our industry's submission relating to the public display of route options for the Ballina – Woodburn section.


We are particularly concerned at the outcome of the route options in the Ballina – Woodburn study. The Co-operative is represented by a senior management person on the Ballina – Woodburn study Community Liaison Group and the Canegrowers Association is also represented by senior personnel. Our industry representatives had been taking the view that a pragmatic final route selection could be reasonably negotiated with RTA and the consultants. However, our confidence in being able to negotiate a reasonable outcome has been seriously damaged by the announced route options. We feel that RTA and the consultants have viewed the sugar industry as the path of least resistance and have given undue weighting to environmental issues relating to what we regard as degraded heathland on the western side of the Richmond River between Broadwater and Pimlico and a degraded Broadwater National Park. Little weighting appears to have been given to the economic contribution to the local Ballina – Lismore economy of which our Broadwater industry has been a cornerstone for 125 years providing over 2,000 direct and indirect jobs,

A strong majority (70% - 80%) of the Ballina – Woodburn Community Liaison Group has been pressing RTA to properly consider an alternative route in the Woodburn to Broadwater section. This alternative route known as the “flood-free route” would avoid the risk of severe increased flooding in the up-river areas of the Richmond River from Broadwater through Woodburn to Coraki created by the construction of 1 in 100 flood embankments and bridging across the Mid-Richmond floodplains under Route Options 1A, 1B, 1C, 2A and 2B.


Whilst the flood-free route runs through the Broadwater National Park, the recommended route largely follows a high denuded sandy ridge currently used as a fire trail. The flood-free route would be beneficial in providing an effective fire break and the construction of fauna underpasses would protect fauna much more effectively than the present situation where the existing Pacific Highway runs through the National Park south of Broadwater.

The majority of the Community Liaison Group doesn't believe that the RTA is willing to extend the study area to fully consider the flood-free route. The CLG finds this hard to accept given that the Tintenbar – Ewingsdale study area was extended to allow consideration of all possible routes.

We welcome the opportunity to appear at your Inquiry.



G M Messiter
CHIEF EXECUTIVE OFFICER
NSW SUGAR MILLING
CO-OPERATIVE LIMITED



R R Greentree
CHAIRMAN
RICHMOND RIVER CANE
GROWERS ASSOCIATION



SUBMISSION TO THE ROADS & TRAFFIC AUTHORITY

BY

NEW SOUTH WALES SUGAR MILLING CO-OPERATIVE LTD.

and

NEW SOUTH WALES CANE GROWERS' ASSOCIATION LTD.

WOODBURN TO BALLINA UPGRADE OF THE PACIFIC HIGHWAY

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**SUBMISSION TO THE ROADS AND TRAFFIC AUTHORITY
ON BEHALF OF NEW SOUTH WALES SUGAR MILLING CO-OPERATIVE AND
NEW SOUTH WALES CANE GROWERS' ASSOCIATION**

INTRODUCTION

The upgrading of the Pacific Highway is arguably the most important infrastructure project in Australia. The New South Wales Sugar Milling Co-operative (NSWSMC) recognises the significant state and regional benefits which the project will deliver. The Pacific Highway passes through the three cane growing areas of the three major northern rivers flood plains.

In addition to the Yelgun to Chinderah section, now completed, with the loss of approximately 75 hectares of productive cane land and 30 hectares of potential cane land, the sugar industry is potentially impacted by six RTA study areas, ie:

- Tintenbar – Ewingsdale
- Ballina By-pass
- Ballina – Woodburn
- Woodburn – Iluka
- Iluka – Harwood
- Harwood – Halfway Creek

The New South Wales sugar industry is an important industry in the Northern Rivers region. It is vital therefore that the Pacific Highway upgrade complements the activities of the industry and is planned to minimise disruption to the industry.

This submission outlines the significance of the New South Wales sugar industry to the regional economy, its strategic directions, renewable energy generation, the potential impact of the loss of cane lands and the industry preferred route developed in co-operation with the RTA.

1. NEW SOUTH WALES SUGAR INDUSTRY

The sugar industry has made a major contribution to economic development and employment to the Northern Rivers region for over 120 years. The industry continues to grow and has strong prospects for future expansion in the Broadwater Mill area.

The New South Wales sugar industry generates over \$200 million of direct and indirect economic input to the region each year. Direct and indirect employment is estimated at over 2,000 full-time equivalent (FTE) jobs and the industry is an important component in the fabric of many regional communities.

The New South Wales sugar industry has excellent environmental credentials and is proactive in maintaining sustainable farming systems and environmental management. It is the only industry to achieve self regulation status for its management of acid sulphate soils. The New South Wales sugar industry was awarded the Rivercare 2000 Gold Award for Industry (Primary) by the Department of Land and Water Conservation for its management of acid sulphate soils.

The industry's highly developed drainage systems have been upgraded and improved and are vital for future productivity and to facilitate environmental management.

2. STRATEGIC DIRECTIONS

2.1 *Land Use*

The strategic plan of the NSWSMC identifies potential loss of cane growing lands as a key threat to future viability. The Co-operative and the New South Wales Cane Growers' Association (NSWCGA) are proactive in the preservation and enhancement of sugar growing land which is a specialised resource in terms of soil quality, slope, climate and ground-water characteristics and is confined to very limited areas in the region.

It is recognised that the ongoing viability and survival of the industry are dependent on the continued availability of land that is capable of producing sugar cane.

2.2 *Harvesting and Transport*

The cost of harvest and haul-out of cane to the delivery pads represents approximately one-third of the cost of production of sugar cane. The New South Wales cane growing sector are considered to be leaders in low cost harvest operations. Significant capital investment over the years in the rationalisation of harvesting groups, optimisation of cane pad location and large scale haul-out equipment has resulted in New South Wales growers achieving the highest level of efficiency of harvesting in the Australian sugar industry.

Similarly, the transport task for the Milling Co-operative also accounts for approximately 30% of total operating costs. For this reason, our cane road transport system is finely tuned. Technology such as GPS tracking of harvesters and cane trucks, computer scheduling of truck trip times and cane age has been introduced to achieve high levels of efficiency.

It must be emphasised that cane land losses within close proximity of the mill will inevitably lead to increases in the average transport cost and therefore make a proportionately greater negative economic impact than any losses more distant from the mill.

Increased efficiency of harvest and transport operations is a key strategic priority of the New South Wales sugar industry.

2.3 *Expansion of Production at Broadwater*

Sugar production is a capital intensive, high fixed cost industry, and volume of throughput is therefore vitally important to contain costs of production. In addition to impacting cost of production at Broadwater Mill, loss of cane production effects the profitability of the total Milling Co-operative and hence the returns to its members in its three mill areas – Condong, Broadwater and Harwood.

The Co-operative believes that increasing cane production is vital to maintaining its viability, therefore preservation of cane producing lands is a key strategic priority.

While the Condong Mill and Harwood Mill have limited expansion potential, Broadwater Mill is currently expanding cane production and is therefore the 'crown jewel' as far as the Co-operative's future viability is concerned. The following table is an indication of the investment made by cane growers and the Milling Co-operative in expanding cane production in the Broadwater Mill area.

Crop Year	Broadwater Crop (Tonnes of Cane)	Broadwater Cultivated Area (ha)
1985	412,681	11,059
1986	471,577	10,963
1987	477,997	10,820
1988	493,897	10,851
1989	420,378	10,809
1990	391,377	10,761
1991	514,046	11,234
1992	682,551	11,585
1993	717,774	12,013
1994	838,043	12,746
1995	838,084	13,350
1996	906,600	13,667
1997	1,021,720	13,792
1998	1,012,241	13,926
1999	1,009,628	14,186
2000	780,218	14,260
2001	881,028	14,799
2002	943,616	15,315
2003	978,797	15,743
2004	1,026,601	15,826
2005 (est.)	1,100,000	16,000

2.4 Sunshine Electricity Co-generation Project

Sunshine Renewable Energy Pty Ltd, a subsidiary of the NSWSMC, has formed an unincorporated Joint Venture ("Sunshine Electricity") with Delta Electricity Australia Limited, a subsidiary of State-owned Delta Electricity, to construct two new 30 megawatt co-generation facilities at Broadwater and Condong Mills.

Construction has commenced and the Broadwater facility is expected to be fully operational in June 2007. The fuel source for the co-generation plant at Broadwater will be sugar cane bagasse and sugar cane trash. Its output is planned to be 220 gigawatt hours, equivalent to about one-third of the total annual electricity demand of the Richmond Valley which includes Lismore, Casino and Ballina.

The capital cost of the Broadwater project will exceed \$80 million, which is funded principally by non recourse loan funds. However, both the NSWSMC and Delta Electricity will make significant cash equity contributions to the combined projects. The New South Wales Government through Delta Electricity is therefore committed to the success of the co-generation projects.

The projects will make a major contribution towards meeting Australia's greenhouse gas reduction targets, and improve regional air quality by phasing out cane fires. It will use cane-based fuels which are currently burnt off and wasted to generate income from renewable energy, adding value to the sugar cane crop and improving the viability of the region's sugar industry. During construction at Broadwater, an anticipated 170 (FTE) jobs will be generated over a 2-year period. After operations commence in 2007, employment in the field and factory is expected to grow by 33 (FTE).

The Sunshine Electricity project is recognised by governments and the community as being one of Australia's most important renewable energy projects. It has received a significant amount of financial support from both the Federal and New South Wales Governments through the following programs:

- | | |
|----------------|---|
| Federal | <ul style="list-style-type: none">♦ Regional Partnerships Program♦ Australian Greenhouse Office – Renewable Energy Commercialisation Program♦ Sugar Research and Development Corporation |
| State | <ul style="list-style-type: none">♦ Delta Electricity (Equity Participant)♦ Department of State and Regional Development – Regional Business Development Scheme♦ Sustainable Energy Development Authority |

The volume of sugar cane production in the Broadwater Mill area will be a key determinant of the project's viability, as cane-based fuels are the lowest cost renewable fuel. It is vital therefore that the Co-operative achieves the projected production volumes on which the finance was justified, over the life of the project (and importantly, over the 15-year life of the project finance).

Available cane area and cane production therefore must be maximised to ensure the project's success. Any significant loss of cane growing lands must therefore be avoided in planning for the Pacific Highway Upgrade. A significant loss of cane growing lands, ie greater than 50 hectares, will have a direct impact on the viability of the project as well as an indirect 'knock on' effect on morale and productivity of other New South Wales cane growers.

3. IMPACT OF THE ROUTE OPTIONS ON CANE LANDS

Directors and senior staff of the NSWSMC and members of the Richmond River Cane Growers' Association have participated actively in the Community Liaison Group and Sugar Focus groups, and have provided detailed information to the RTA study team. Our people have studied the Route Options published in May (RTA/Pub.05.102) and made a detailed assessment of the impact of the various route options on cane growing lands.

This detailed assessment is attached and in summary concludes that an appropriate route is available which meets the RTA goals of lowest cost, minimal impact on existing communities, the environment and the sugar industry.

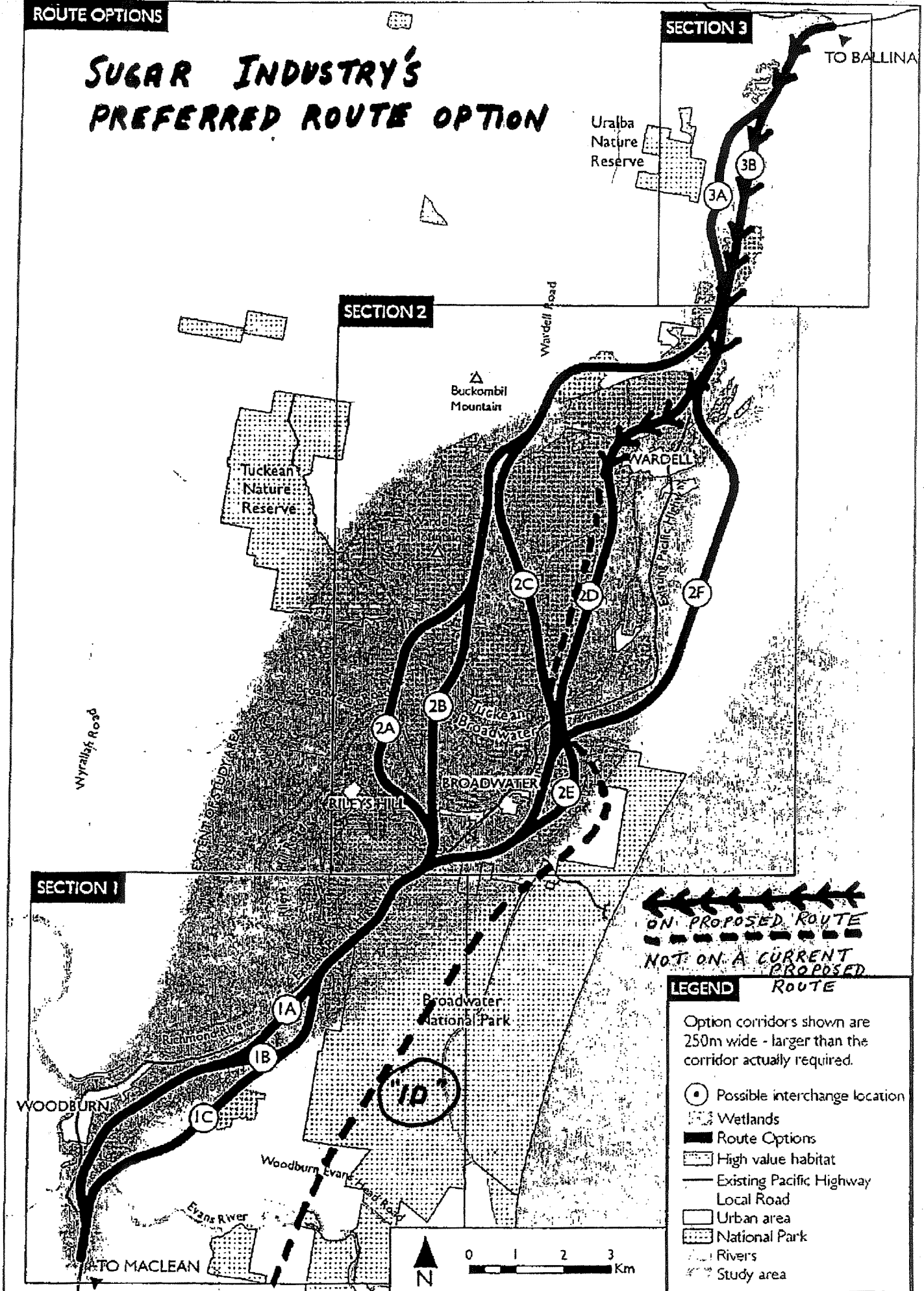
4. PREFERRED ROUTE

The preferred route from the south incorporates options "1D" (the flood free route discussed with RTA to the east of 1C), 2E (east of Cooks Hill) to river crossing, 2D and 3B. It is considered that with fine tuning, these basic route options will provide the RTA with a low cost solution which minimises adverse impacts on the community, the sugar industry and the environment.

It should be emphasised that option 2F, particularly, is unacceptable as it will decimate a large number of productive cane farms, cause major disruption to the established drainage patterns on the flood plain and will be extremely costly in terms of foundations and flood heights.

ROUTE OPTIONS

SUGAR INDUSTRY'S PREFERRED ROUTE OPTION



DETAILED ASSESSMENT OF ROUTE OPTIONS

Conducted by

NEW SOUTH WALES SUGAR MILLING CO-OPERATIVE LIMITED and
NEW SOUTH WALES CANE GROWERS' ASSOCIATION LTD

THE WOODBURN TO BALLINA UPGRADING OF THE PACIFIC HIGHWAY

The following comments on the various route options displayed by the RTA are made herewith. The comments on the route options are made in the order they were considered.

Route 2F

- Anticipated that this route would see the industry lose approximately 406 hectares of cane land and production of 37,500 tonnes of sugarcane. Loss of production is significant and equates to approximately 3.75% of total mill production. This would have major consequences for the continued viability of the Broadwater Sugar Mill.
- The proposed route for this option crosses a multitude of lane ways used for cane transport including Carneys Lane, Owens Lane, Meaney's Lane, Walsh's Lane, Boundary Creek Road and Eversons Lane. These are all public roads and all would require either underpasses or overpasses to enable harvesting equipment and mill road transport to access cane pads and move between farms for orderly farming, harvesting and transport arrangements. It is anticipated that this option would also significantly increase mill transport time.
- Many farms would be completely lost to production such as Hartigan's and Carney's farms located immediately on the eastern side of the Richmond River where the highway would cross the river. Many other farms would be rendered useless because of the significant portion excised for the highway or alternatively because of major severance of the property. Much of the cane area between the highway and the river would also be lost because the remaining area of the individual property would be of a size not considered appropriate for current farming practices.
- In regard to sugarcane harvesting operations, there would be a requirement for the RTA to construct 3 additional cane loading pads to compensate the industry for 1 totally lost within the highway corridor and 2 that would be alienated from the mill transport system. All 3 new pads would also require heavy vehicle all weather access and it is anticipated that the approximate cost in this regard would be in the vicinity of \$100,000.
- Properties effected
Major loss of cane land (say approx 50% of individual farm or more):
Farm 4218 Gardner SM
Farm 4083 Hartigan FD
Farm 4082 Carney MA
Farm 4069 Flatley EJ
Farm 4095 Wilson NL & EA

Farm 4101 Walsh NJ & TM
 Farm 4102 Pring AR
 Farm 4105 Lowrey GS & CO
 Farm 4112 Wunsch FA & LM
 Farms 4107 & 4113 Dorey JR & OJ
 Farm 4105 Lowrey GS & CO
 Farm 4094 Morgan DB & K
 Farm 4117 Crook JM
 Farm 4118 Byrnes Est DF
 Farm 4120 Sugar Experiment Farm
 Farm 4121 Gittoes MA & RF
 Major severance problems (creation of unworkable or small blocks):
 Farm 4033 Hartigan FD
 Farm 4082 Carney MA
 Farm 4069 Flatley EJ
 Farm 4089 Lovett WS, FB, MW & WA
 Farm 4097 Flickgraz Pty Ltd
 Farm 4095 Wilson NL & EA
 Farm 4101 Walsh NJ & TM
 Farm 4102 Pring AR
 Farm 4105 Lowrey GS & CO
 Farm 4112 Wunsch FA & LM
 Farms 4107 & 4113 Dorey JR & OJ
 Farm 4105 Lowrey GS & CO
 Farm 4094 Morgan DB & K
 Farm 4117 Crook JM
 Farm 4118 Byrnes Est DF
 Farm 4120 Sugar Experiment Farm
 Farm 4121 Gittoes MA & RF
 Medium loss of cane land and severance issues:
 Farm 4086 Heneva Pty Ltd
 Farm 4060 Walsh RJ & RA
 Farm 4088 Wilson NL, EA & WK
 Farm 4100 Dorey OJ & SM
 Farm 4114 MacDonald Bros

- The route has major noise concerns for the township of Broadwater where it swings in close to Broadwater (inside of Route 2E). It would also have a major effect on the visual amenity of the Broadwater township.
- The highway route (again inside of Route 2E) would also impose difficulties in terms of the NSW Sugar Milling Co-operative's co-generation project. Arrangements would need to be put in place to ensure that the conveyor belt that has been approved to transport cane trash from the Co-op's storage area on the eastern side of the route option to the Broadwater Sugar Mill's boilers on the western side of the proposed route would not be affected in any way. It is anticipated that there would be significant cost involved in meeting this outcome. It also needs to be stated that the co-generation project DA was approved in December 2002 with construction tenders let and work already underway on the project.

- It needs to be fully understood by the RTA that significant drainage works outside of the actual highway corridor would also need to be undertaken should farm drains be severed or need to be re-routed. This could also require major farm re-shaping and or levelling and would need to be incorporated into any compensation offered to landholders. It is considered that drainage arrangements would alter for all sugarcane blocks that the highway passed through.
- The proposed route would have major flood issues with the highway seen as creating a levy bank effect to impede the flow of water during flood periods. This is made even more important given that the proposed route passes through some of the lowest country at the bottom end of the Richmond River. The disturbance to the natural flow of floodwater in periods of major flooding in the area of Boundary creek and the township of Wardell will cause flood heights to be raised for the community of Cabbage Tree Island and residents of Wardell.
- The section of the Richmond River at Wardell is considered by locals to be a natural impediment to the escape of floodwater and the construction of the 2F option will only escalate the flooding impact in the areas mentioned together with the surrounding homes located on farms in that area.
- An overpass or underpass would need to be built to enable access along River Drive and given the size of farming and harvesting equipment the structure would need a 6 metre clearance.
- It is also assumed that the harvesting co-operatives operating in the area would charge an additional cost for cutting sugarcane where shorter rows have been created.

Route 2E

- This route does not affect sugarcane land or the Broadwater township as significantly as the route corridor inside this option, but it still has a major effect on the co-generation project in terms of the conveyor belt as detailed previously.
- It is suggested that this route would be more appropriately located to the east of Cook's Hill and to the east of the NSW Sugar Milling Co-operative's co-generation project area known as the "Ponderosa". This area will be a significant storage area for renewable fuel with both cane trash and camphor laurel woodchip being trucked to this area. A 7,000 tonne molasses storage area and a stockpile of mill mud for later distribution are also located at this site.
- There are major severance issues for Farm 4118 Byrnes Est DF (approx 7ha) with the route option going down the middle of the property rendering the majority of the farm unworkable. An additional cane pad facility would also be required to service the balance of this property.

Route 2D

- It was believed that the original plan was for this route option to be located on the sand ridge to the west of the cane fields in the Back Channel area with the original route having general sugar industry support. It now appears that the route option will travel through part of a number of cane farms including:
Farms 4216 & 4217 Bunjum Aboriginal Corporation
Farms 4214 & 4215 Law DW & PL
Farm 4213 Lovett WS, FB, MW & WA
Farm 4211 Law GA
Farm 4212 Law KG & EM
Farm 4118 Byrnes Est DF
- There are other concerns with this route option given the close proximity to Wardell although it is believed that with some minor route re-alignment these concerns re noise, etc can be met.
- Drainage through the local catchment via Bingal Creek also needs to be managed should this route be selected.
- The sugar industry would be in favour of this route if it was re-aligned on the sand ridge as original suggested by the industry with no (or minimal) effect on cane land and was kept to the west of the point of Law's Hill.
- While many comments may be made by others in regard to the environmental worth of the heath country through which the sand ridge runs, it must be pointed out that there have been 3 major fires through this area since the 1960s and that sand mining of parts of this area also took place in the past. The sand ridge option would also provide the benefit of a fire break. It must also be stated that some of the heath country is also on private land attaching to the land owned by, in many cases, the sugarcane growers who would be affected by the positioning of the route in its proposed corridor.
- It is suggested that the route could be aligned to also miss Cook's property to the west near the Wardell Recreation Ground and the community located on Lumley's Lane.
- The current option is not appropriate and would see some 42 hectares of cane land lost to the industry in the Back Channel area and another 7 ha at Farm 4118 Byrnes Est DF once this route option crossed the Richmond River near Broadwater. This would amount to production of around 4,500 tonnes of cane.
- If the route was to be placed on the sand ridge as originally supported and advised to the RTA the loss of productive cane land would only be the 7ha of the Byrnes farm. This reduces the loss of cane production to about 750 tonnes.
- There is also the alienation of the back part of Law's and Melino's farms which would need to be accessed via an overpass on Back Channel Road.

Route 2C

- It is suggested that there would be major fragmentation rendering the following farms inactive if this route was selected:
Farm 4208 Law DW & PL
Farm 4207 Lock WL & MJ
Farm 4205 Monti TR & MS
Farm 4211 Law GA (back section of this farm)
Farm 4118 Byrnes Est DF
- While this route does not have severance issues for KJ & LV Thelfo (Farm 4209), C Melino (Farm 4210) and DE Akins (Farm 4204) it is suggested that unless access arrangements are put in place, these farms would become dislocated from the mill transport system.
- There are also concerns with a catchment outlet at the intersection of proposed route options 2C and 2B although this relates to local flooding and is not seen as major.
- This route option considered to have less impact on the sugar industry than route 2B.
- There would be some significant loss of cane land estimated to be about 128 ha producing some 7,500 tonnes of cane which is currently harvested by Back Channel Co-operative Ltd. This Co-op's reduced tonnage for harvest would have a significant impact on the price of harvesting in this area and on current harvesting prices could see an increase of \$0.60 per tonne or 10%. The projected harvesting price increase would increase prices such that continued operation of the Back Channel Co-op in its current form would not be possible.
- This route option would see the loss of Lumley's and Thurgate's cane pads and a new pad would need to be constructed to service Thelfo's farm, together with access being provided by the RTA to Melino's farm.

Route 2B

- The same problems exist for this route as per the top end of routes 2C and 2B, although the farms of DE Akins (Farm 4204) and GA Law (Farm 4211) would not suffer severance problems. Farm 4205 Monti, however, would suffer severe severance issues.
- This route has a major effect on farm properties once it crosses the Tuckean Broadwater dissecting the properties of BM & EJ Plenkovich (Farm 4190) and JW Sneesby Family Trust (Farm 4185), with both the back sections of these farms completely lost to cane production.
- After going through the Banks Estate area, the proposed route crosses the Richmond River at what is considered a bottle neck area for the catchment. Local evidence from those in the area suggests that the bridge would have the effect of delaying the escape of floodwater thus inundating cane land and local community areas.
- This 2B route would see 148 hectares of cane land lost incorporating some 11,000 tonnes of production from where the route crosses the Richmond River to the intersection of this route with the existing Pacific Highway route to the north of Wardell.

- This route would require the construction by the RTA of 2 additional cane pads with heavy vehicle all weather access to replace Threlfo's and Bank's Lane cane pads.

Route 2A

- This option is similar to 2B in terms of water release through the system in times of flood. It crosses a flat section of prime agricultural land and the proposed bridge structure would severely limit the amount of floodwater that could cross this area once the river broke its banks.
- Some 100,000 tonnes of cane is hauled from Dungarubba and this route would alienate service roads. The industry would need to be provided with access options in this regard.
- This route has a major effect on farms owned by RJ, DJ & EA Bell (Farms 4122 & 4123) and also community impacts as it bisects the two main residential areas of the township of Broadwater being the Rileys Hill Village and Broadwater itself. There are also residential concerns with route option 2B.
- Some 141 hectares of cane land would be lost if this option was adopted with 10,500 tonnes of cane being taken out of production.

Route 1C

- This route is the most easterly of the route options shown in the "Woodburn" area but will still take cane land from the following properties:
Farms 4130 & 4132 Newstead (Rileys Hill)
Farm 4128 Lickiss AJ & LJ
Farms 4119 & 4121 Gittoes MA & RF
Farms 4134 & 4435 J MJcGeary Family Trust
Farm 4136 Haynes DG & JR
- The total area of cane lost given the highway route and associated severance would be approximately 73 hectares producing some 4,500 tonnes of cane.
- This route in the "Woodburn" section of the proposed upgrade would only take small areas of cane although this option together with options 1A & 1B would create spillway effects and have the potential to inundate large areas of land. One option proposed is for a bridge-like highway to cross the lower areas, however, it is also believed that any structure created would still have a significant bearing on flooding in the area due to the impeding of water during and after a flood event. The industry does not support the creation of any obstruction that would hold up floodwater to the east of Woodburn. It is also assumed that the cost of a bridge-like structure would also be significant. The industry believes that any new highway should be located on a sand ridge (defined on the attached preferred route option for the sugar industry) much further to the east and located within the bounds of the National Park. This preferred route would join up with the proposed route 2E (itself relocated to the east of Cook's Hill). We have referred to this most preferred route option as "1D".
- If route 1C was adopted the industry would require access to the Lickiss and Gittoes farms together with the construction of a heavy vehicle all weather access and a cane pad to service these farms.

- It is stated in the Route Options Development Report that the townships of Broadwater, Rileys Hill and Woodburn would be serviced by the existing road through Rileys Hill if this option is selected. It appears that this could be the same service road for both options 1A and 1B although this is not fully apparent from the Report. This is not an option for the sugar industry as it would require the addition of one further truck to the yearly transport fleet required by the NSW Sugar Milling Co-op Ltd to service the areas effected given the extra distance and time involved with the proposed service road as compared to the current situation of hauling cane back to Broadwater along the current highway. An analysis undertaken by the industry indicates that the service road through Rileys Hill and Broadwater would involve approximately 26,000 extra truck movements through these villages over a normal season. This is a cost that the industry cannot sustain and believes is unwarranted, given that there would be scope to incorporate a service road along side the route selected.

The industry also wishes to advise that in route option preference discussions it was agreed that there did not appear to be any requirement for an interchange at Broadwater. It appears that the full diamond option immediately north of Broadwater would have the effect of taking all of Farm 4118 Byrnes Est DF out of production with subsequent loss of up to 50 hectares of productive cane land.

Route 1A

- The comments made in regard to Route 1C are applicable to this route option.
- It will have a substantial effect on cane loss and severance for the following farms and the industry considers that all these farms would be lost unless an all weather service road was constructed together with cane pads to the east of the new highway:
Farms 4130 & 4132 Newstead
Farm 4121 Gittoes MA & RF
Farm 4135 J McGeary Family Trust
Farm 4136 Haynes DG & JR
- There would be 476.4 hectares lost if this route was implemented with annual production of 26,200 tonnes of sugarcane.
- If the cane farming land was rendered unviable, the current mill infrastructure comprising 6 cane pads would also be rendered useless. The replacement cost of this infrastructure is in the vicinity of \$120,000.
- This section travels close to the river bank and it is understood that the RTA has spent considerable sums in stabilising the river bank in the Woodburn area adjacent to the Pacific Highway given its unstable nature.

Route 1B

- This route is similar to the option Route 1A excepting that it takes a detour away from Route 1A around Lang's Hill. Same comments for this as Route 1A.

Route 3B

- This route holds no major concerns for the sugar industry, as long as access for harvesting and farming machinery is provided across the highway, as without such guarantee potential exists for alienation of farms to the west of the highway. It would be

hoped that the local service road would be able to be incorporated in the highway corridor so that there is no requirement to upgrade Pimlico Road for this purpose. This would see mill transport trucks probably travelling through the Wardell Township to access Broadwater Mill. There will be some 8,700 truck movements from this area to the Broadwater Mill over the 6 month duration of the crushing season.

- The industry needs access in this area to the service road and wishes to advise that it is in the process of building a cane pad in the Whyte's Lane (north) area and will require an all weather heavy vehicle access.

Route 3A

- The impact on cane land would be minimal although individually there would be significant impact on Jackson's farm which would be split by the highway. There would also be community concerns with this proposed route as it would come within close proximity of a residential area.
- The area of cane lost if this route was implemented would be 64 hectares with annual sugarcane production of 5,500 tonnes.

SUGARCANE AREAS LOST FOR EACH ROUTE OPTION

- The following table identifies areas lost to cane production for each of the proposed routes:

ROUTE OPTION	TONNES OF CANE LOST	HECTARES OF CANE LAND LOST	% of BROADWATER MILL AREA PRODUCTION LOST
2F*	37,500	406	3.76
2E	650	7	0.07
2D*	4,500	49	0.45
2C*	7,500	128	0.75
2B	11,000	148	1.10
2A	10,500	141	1.05
1C	4,500	73	0.45
1A	26,200	476	2.62
1B	26,200	476	2.62
3A	5,500	64	0.55
3B	Unknown	Unknown	Unknown

*The statistics for these routes include those for route 2E

- The worst case scenario for the sugar industry based on the above routes suggests that the industry could lose 69,200 tonnes of sugarcane production and 946 hectares of good quality agricultural land. This would have a major effect on the overall viability of the industry and is outside of our stated comments to the RTA that the industry could not afford to loss any more than 1% of productive cane land or 1% of total mill area production.
- The best case scenario from the above routes suggests that the RTA has available to it an option that would only reduce total mill area production by 9,000 tonnes and productive land by 122 hectares.

INDUSTRY'S PREFERRED OPTION

- Current highway route 3B continued to just north of Wardell then branch off to option 2D but moved from current location out of cane land and onto sand ridge and continue until veering west of the point of Law's Hill as the highway route approaches the Richmond River, crossing river approximately where indicated on both routes 2C and 2D, then veering to the east of Cook's Hill and the NSW Sugar Milling Co-operative Ltd's Co-generation stockpile area, then swinging back towards the existing highway and travelling along a flood free route as discussed with the RTA and indicated on the attached map as route option "1D" until it rejoins the existing highway south of Woodburn.
- It is anticipated that this route would only see the loss of some 1,500 tonnes or 13 hectares of productive cane land.

ROUTE OPTIONS

SUGAR INDUSTRY'S PREFERRED ROUTE OPTION

