

Bruce Highway (Cooroy - Curra) Strategic Planning Study

Recommended Corridor Report

July 2008













Department of Main Roads

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The Association of Consulting Engineers

This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party

Job number 83593

Contents

Execut	ive Summ		age i
1	Introduction		1
	1.1	Purpose of This Report	1
	1.2	Limitations of this Report	1
	1.3	Overview of the Study Process to date	2
	1.4	Consultation Overview	6
	1.5	Data Limitations and Assumptions	6
	1.6	Report Structure	8
2.0	Public Display of the Proposed Corridor		9
	2.1	Community Response to Proposed Corridor	9
	2.2	Local Government response	11
	2.3	State Government Departments	11
	2.4	Commonwealth Departments	12
3.0	Options considered from feedback		13
	3.1	North Cooroy Interchange	13
	3.2	Kybong	16
	3.3	South Gympie Industrial Access	21
	3.4	Gympie Connection Road interchange	22
	3.5	Curra State Forest	23
	3.6	Further Cultural Heritage Investigation	23
	3.7	Fauna movement provisions	24
4.0	Recommended Corridor		26
	4.1	Implications on the proposed corridor	26
	4.2	Advantages of recommended corridor	26
	4.3	Corridor Design Intent	27
	4.4	Recommended Corridor Summary	27
5.0	The next stage		29
	5.1	Project Approval	29
	5.2	Implementation	29
	5.3	Referral of project to Commonwealth Department of Environment, Heritage an Arts	d 29
	5.4	Road design issues for future design phases	30
	5.5	Environmental Assessment and Management Requirements for future design phases	30

Appendices

Appendix A

Cultural Heritage Survey of Rocky Ridge, Gympie (Archaeo Cultural Heritage Services)

Appendix B

Fauna Movement and Road Impact Mitigation (Biodiversity Assessment and Management)

Executive Summary

Scope of the study

The Australian government commissioned the study to:

- determine the needs for the 65km stretch of highway between Cooroy and Curra
- develop a strategy to progressively meet these needs for the next 30 years

The Bruce Highway has been progressively upgraded north from Brisbane in response to increased traffic volumes, higher freight demands and population growth. The highway has been constructed to a six-lane standard from Brisbane to Caboolture. North of Caboolture, the Bruce Highway has been constructed generally to a four-lane rural highway standard to Cooroy. Construction to a six-lane standard is currently underway between Caboolture and the Caboolture Northern Bypass. The section of highway north of Cooroy is the next two-lane section requiring duplication to the four –lane rural standard. Currently, an urban section of the Bruce Highway north of the Gympie-Brooloo Road (Kidgell Street) to Pine Street is being upgraded to four lanes, running through Gympie to address current congestion and safety issues.

The current highway north of Cooroy has been progressively improved over a long period. The route was established when traffic volumes and speed were significantly lower than today. Periodic alignment and safety improvements have attempted to keep pace with the relatively recent rapid traffic growth in the corridor. However, the road is still a two lane multiple access facility providing the functional requirements of a dual carriage way rural motorway.

At many locations through the study area, the existing Bruce Highway does not meet the performance expectations for the AusLink National Network.

Purpose of this Report

This report has been prepared to document the study's process since the release of proposed corridor in March 2007. This includes describing the:

- Public display of the proposed corridor;
- Options considered from community and stakeholder feedback; and
- The recommended corridor.

Stage A: Constraints and Deficiencies

The initial stage of the project focused on the collection of base data, identification of deficiencies of the existing highway and mapping of constraints to establish a new corridor. This included a household travel survey, distributed to select households within the local area, and a newsletter introducing the study. The outcome of this stage of the study was the release of the Constraints and Deficiencies Report in December 2004 and staffed displays outlining the data gathered. The report release was supported by Newsletter 1 which sought community feedback.

Stage B: Option Generation and assessment

The release of Newsletter 2 sought community input to assist with the ranking of assessment criteria. Using the baseline information gathered and analysed during Stage A, the study team generated a wide range of possible corridor options, which were then assessed against selection criteria. This led to a number of shortlisted corridor options. Maps of these options and supporting documentation including Newsletter 3 and the Shortlisting Report were released for public comment in November 2005 at displays in various locations throughout the study area. A 12-week consultation period followed.

Between 7 November 2005 and 27 January 2006, the study team received almost 1,600 individual written submissions from households and groups, more than 400 phone calls and thirteen petitions with in excess of 2,800 signatures.

Stage C: Selection of the Proposed Corridor

Community concerns about the shortlisted options led to a public meeting on the 19 November 2005 and the subsequent election and formation of a community group called the Cooroy Curra Community Committee (CCCC). The study team took the opportunity to directly liaise with the CCCC to better understand the views of the community throughout the study area.

As a result of the input that the CCCC and local council representatives provided to the study team, the original assessment criteria were put aside, and a set of guiding principles agreed. The new criteria significantly increased the importance of social issues.

In April 2006, the Queensland State Government announced the proposed Traveston Crossing Dam. This proposal had a significant impact on a number of the shortlisted options being investigated, and required the consideration of alternative corridors between Federal and Kybong.

In July 2006, the Federal Minister for Transport and Regional Services, The Hon. Warren Truss MP announced the study team would release a Refined Study Area (RSA).

The RSA covered an area of approximately 63km², compared to the original study area which covered an approximate area of 800km². The shortlisted options previously released for public comment in November 2005 were subsequently removed from the study due to the release of the refined study area.

Five Community Focus Groups were formed. The CFGs met with the study team a number of times in November and December 2006 and provided views and important information that assisted the study team in finalising the proposed corridor location. The meetings also enabled CFG representatives to gain a greater understanding of the issues and constraints surrounding the selection of the highway corridor. It was not the role of the CFGs to determine or approve the location of the proposed corridor.

Options were developed taking account of the community feedback and reducing social impacts and aligning to existing infrastructure corridors such as the existing Bruce Highway, high voltage powerlines and the North Coast Rail Line.

In March 2007, the proposed corridor was released to the public display, through a twoweek display in Gympie and a mobile display visiting Cooroy, Federal, Kybong and Curra.

The study team received 308 items of feedback, including one petition of 316 signatures opposing the location of the Cudgerie Interchange and one 64-signature petition supporting the proposed corridor location at Kybong.

Stage D: Refinement of the Proposed Corridor

The proposed corridor was generally well received by the community. The principle issues raised were:

- Access to the highway corridor from other roads, overpasses and premises;
- Pollution water table, airborne and water tank contamination;
- Noise and Noise barriers;
- Environmental concerns;
- Property resumptions when and appropriate property values;
- Devaluation of property;
- Opposition to interchange locations Cudgerie Drive and Gympie Connection Road;

- Excessive lighting at interchanges;
- Support for interchange locations Cudgerie Drive, Mary River Road; and
- Support for the proposed corridor through Kybong, especially at Tandur Road.

The study team undertook extensive consultation and further research in respect of these issues. Further reporting was undertaken in respect of the 'Gympie Pyramid' and matters raised by Matilda Fuel Supplies.

The following changes are recommended to the proposed corridor placed on public display in March 2007;

- That the highway corridor incorporates additional north facing ramps for the industrial areas south of Gympie. These ramps include a northbound on ramp to the new corridor from the Penny Road/Noosa road intersection and a southbound off ramp from the new corridor to Flood Road.
- That the revised alignment through Curra State Forest be adopted as it reduces the number of affected landowners, eliminates the need to realign Old Maryborough Road and it has comparable environmental impacts to the proposed corridor.

It is also recommended that:

- An investigation be undertaken in the vicinity of Gympie Connection Road, when the project progresses at this location, to determine which local roads and intersections require upgrading to support the interchange.
- The remaining historic features of the 'Gympie Pyramid' be documented and that management measures for the construction phase of the project be implemented.
- At the detailed design stage investigations be undertaken to address potential noise and lighting impacts associated with the Cudgerie Drive/Cooroy Connection Road interchange.
- During detailed planning for the Traveston Crossing Dam the location and arrangement for the interchange is to be reviewed and opportunities investigated to achieve the best overall community benefit.
- The proposed highway corridor be subject to further environmental assessment and environmental and planning approvals processes. Targeted field surveys undertaken in 2006 have indicated the potential for the presence of threatened and endangered species listed under State and Federal legislation in certain areas along the proposed highway corridor. The proposed highway corridor also traverses numerous areas mapped as Regional Ecosystems (Not Of Concern, Of Concern, and Endangered), which are protected under the *Vegetation Management Act 1999*. In particular, further liaison with the Department of Natural Resources and Water, the Environmental Protection Agency and the Commonwealth Department of Environmental assessment and management measures as each stage of the design and construction of the highway upgrade is implemented. A cultural heritage survey in accordance with the requirements of the Queensland Aboriginal Cultural Heritage Act will also be required at the appropriate stage.

The recommended corridor is shown on the maps 1 to 5.

Recommended Corridor Benefits

The recommended corridor was selected for the following key reasons:

- Provides the best overall balance sought by the community between functional, ecological, heritage, social and economic considerations and provides for staging opportunities south of Gympie.
- Best meets the objectives of the Cooroy-Curra Strategic Planning Study.
- Achieves high safety standards.
- Addresses the community concern about greater separation between communities and facilities and services that they rely on.
- Safer roads- separates high speed traffic from local traffic, pedestrians and other nonmotorised forms of transport, restricts driveway access, maintains reasonable spacing between interchanges and divides the highway carriageways.
- Efficient and effective transport limits access to the highway to promote high speed movement of passenger and freight vehicles, provide high level of flood immunity, designed for safe travel dynamics for heavy vehicles and road alignment standards promoting efficient movement of goods and people.
- Is relatively direct, making it attractive to longer distance freight and passenger traffic which provides a good outcome in terms of transport efficiency.
- Provides for greater use of public land and co-locates with existing infrastructure corridors, of the Bruce Highway, railway line and powerlines, where practical.
- Bypasses east of Gympie in a location that will serve the Gympie community by providing good access to local industry and business, better access to the developing coastal region and reasonable access from the highway through a service road system.
- Minimises proximity of heavy vehicles to populated areas, minimises noise and air quality impacts by not stopping or slowing heavy traffic in urban areas and separates high speed traffic from local traffic, pedestrians and other non motorised forms of transport.
- Allows for future growth areas by conforming with the Cooloola Shire Council planning scheme.
- Provides reasonable physical separation from existing and proposed major residential areas such that acceptable visual and traffic noise outcomes could be achieved with sensitive urban design.
- Minimises environmental impacts, by avoiding environmentally or culturally sensitive areas, minimising or mitigating environmental impacts.
- Retains the historic Traveston Homestead, Federal State School, local community halls and other historic sites.
- Retains the existing highway as a local road, to maintain property access and local road connectivity.
- Takes into account, wherever feasible, community views about the corridor location.

Recommended Corridor Summary

The recommended corridor duplicates the existing Bruce Highway between the Cooroy Bypass Interchange and Cooroy Connection Road. The duplication is to the western side of the existing carriageway and is generally within the existing highway reserve.

An all movements interchange utilising the existing underpass at Cooroy Connection Road/ Cudgerie Drive provides a northern access to Cooroy in addition to serving the township of Pomona and rural residential areas of Black Mountain. North of this interchange the proposed highway is separated from the existing highway corridor and the existing highway is retained to maintain the local road network.

North of Cooroy Connection Road the corridor aligns to the southern side of the existing highway reserve with significantly improved horizontal and vertical geometry. The recommended corridor crosses the existing highway near the Federal State School.

Within the area of the proposed Traveston Crossing dam the recommended corridor follows the dam's eastern buffer area. Should the dam not proceed then the location of the corridor may change to an alignment close to the existing Bruce Highway as originally favoured by the community. The existing highway will be inundated by the proposed dam; however a two lane service road aligning to the eastern side of the recommended corridor will continue to connect the local traffic which would otherwise have used the existing highway.

An all movements interchange on Traveston Road connects the service road around the dam and Traveston Road which link the corridor to the Federal, Coles Creek and Traveston areas. Additionally the interchange connects the area to the west of the proposed dam via Traveston Crossing Road.

North of the Traveston Interchange the corridor aligns to the eastern side of the high voltage powerlines up until Woondum Road, where it crosses back to the western side of the powerlines to provide the directional ramps of the Woondum Interchange. To provide priority and safety for the following major movements, this interchange includes south facing ramps only:

- Northbound from the new corridor into Gympie.
- Southbound out of Gympie onto the new corridor.

The corridor passes through the Woondum State Forest and then passes the industrial areas near Six Mile Creek (the Eldorado Gold Mine and Nolan's Meatworks) on its way to aligning to the eastern side of the existing North Coast Rail Line.

North facing ramps are provided near the industrial area south of Gympie to provide the movements which are not included in the Woondum interchange. These ramps include a northbound on ramp to the new corridor from the Penny Road/ Noosa Road intersection and a southbound off ramp from the new corridor to Flood Road. These ramps connect back to the existing Bruce highway via Hall Road.

An all movements interchange on Gympie Connection Road adjacent to the existing North Coast Rail Line provides significant flood immunity for an eastern access into Gympie and improved access to the developing coastal regions.

The corridor continues to align as close as feasible to the eastern side of the North Coast Rail Line until it reaches the Curra State Forest where the corridor moves to the east and aligns to the edge of the state forest. The corridor joins back to the existing highway at Curra approximately 1km north of the existing railway crossing. An all movements interchange links the corridor with the existing highway, Harvey Siding Road and Ashfords Road.

The recommended corridor is shown on the following maps 1 to 5