

Appendix D COST SHIFTING BY IMPERIAL DECREE

Mayor: We're on track

Catherine Clifford

15 May 2015, 4 a.m.

THE mayor of Muswellbrook Shire, Martin Rush, said council's draft Budget for 2015-16 will meet the ongoing needs of the communities it serves.

Cr Rush said council will not be raising rates for the whole of its current term and the draft 2015-16 Muswellbrook Shire Council budget reflects that commitment.

The draft document was presented to a Muswellbrook Chamber of Commerce and Industry breakfast at the Muswellbrook Race Club on Tuesday.

Cr Rush said the 2015-16 Budget includes a number of measures that will invest in council's future financial security.

These will be achieved in three broad areas: a human resources organisational review; achieving energy efficiencies by sourcing 40 per cent of council's energy from renewables; and allocating additional resources to the Commercial Building Fund to extract higher yields.

"That was a fund that was begun in 2008 and in that year provided a zero dividend and by 2016-17 it will provide a \$1 million annual dividend to the General Fund.

"It's contributing about \$800,000 in the 2015-16 Budget," he said.

In response to a question from the floor about the Commercial Fund, Cr Rush explained the fund consisted of a number of properties, including Campbell's Corner, Market House, Loxton House, several residential properties and cash reserves.

He said the fund is operated strictly commercially and the properties are managed by a local real estate agent, yielding a dividend that ends up in council's General Fund as part of consolidated revenue.

Cr Rush said the revenue comes essentially from rentals of council's commercial holdings and it was council's intention to increase the yield by making careful investments.

"It is critical going forward because at some point the mining rate will start to decrease, and I'm not suggesting it's going to start to happen tomorrow or even in 10 years' time, but at some point it's going to reduce and the purpose of that Commercial Fund, in part, is to offset that devolution," Cr Rush added.

He also told the group \$21.4 million had been set aside for council's capital works program.

Major road repairs will take place on the Bylong Valley Way, Bureen Road, Wybong Road, Hebden Road, and the intersection of Crinoline and Palace Streets with the Golden Highway at Denman.

In 2015-16 allocations for re-gravelling gravel roads will increase by \$130,000, kerbing and guttering by \$60,000, bridge replacement by \$100,000 and car park improvements by \$230,000 most of which will be directed to Campbell's Corner and the western side of Bridge Street.

The mayor told the gathering the NSW government's Fit For The Future program, which aims to make sure local councils have a sturdy balance sheet in the years ahead, is now underpinning much financial decision-making.

"While Fit For The Future anticipates scores of mergers across the state, Muswellbrook Shire Council has been identified as having the scale and the capacity to continue to stand alone."

Cr Rush said council has recently released its mining-affected road network strategy.

"Consultation was undertaken with industry stakeholders to ensure that road re-alignments, road closures and construction of new roads are planned in a co-ordinated way leaving the present and post mining-affected road networks with maximum efficiency.

"Council anticipates a strategy of delivering considerable savings to the coal industry while creating a better and safer road network, both in the short term and in the long term," he said.

The public has until Tuesday, June 9, to lodge a submission on the draft 2015-16 council budget.

Determined in-camera by Neil Pope, Martin Rush and Cardno (Rio Tinto)



UPBEAT: Muswellbrook Mayor Martin Rush presenting Council's draft 2015-16 Budget at the Muswellbrook Race Club,

Appendix E The Rio Tinto/Neil Pope \$46 million dollar Rio savings deal

MINE AFFECTED ROADS NETWORK PLAN

Neil Pope – Director Community Infrastructure at Muswellbrook Shire Council; and

Keith Blackmore - Senior Partner – Cardno

Abstract

Muswellbrook is at the heart of a major coal resource and a number of large mines have developed and are expanding.

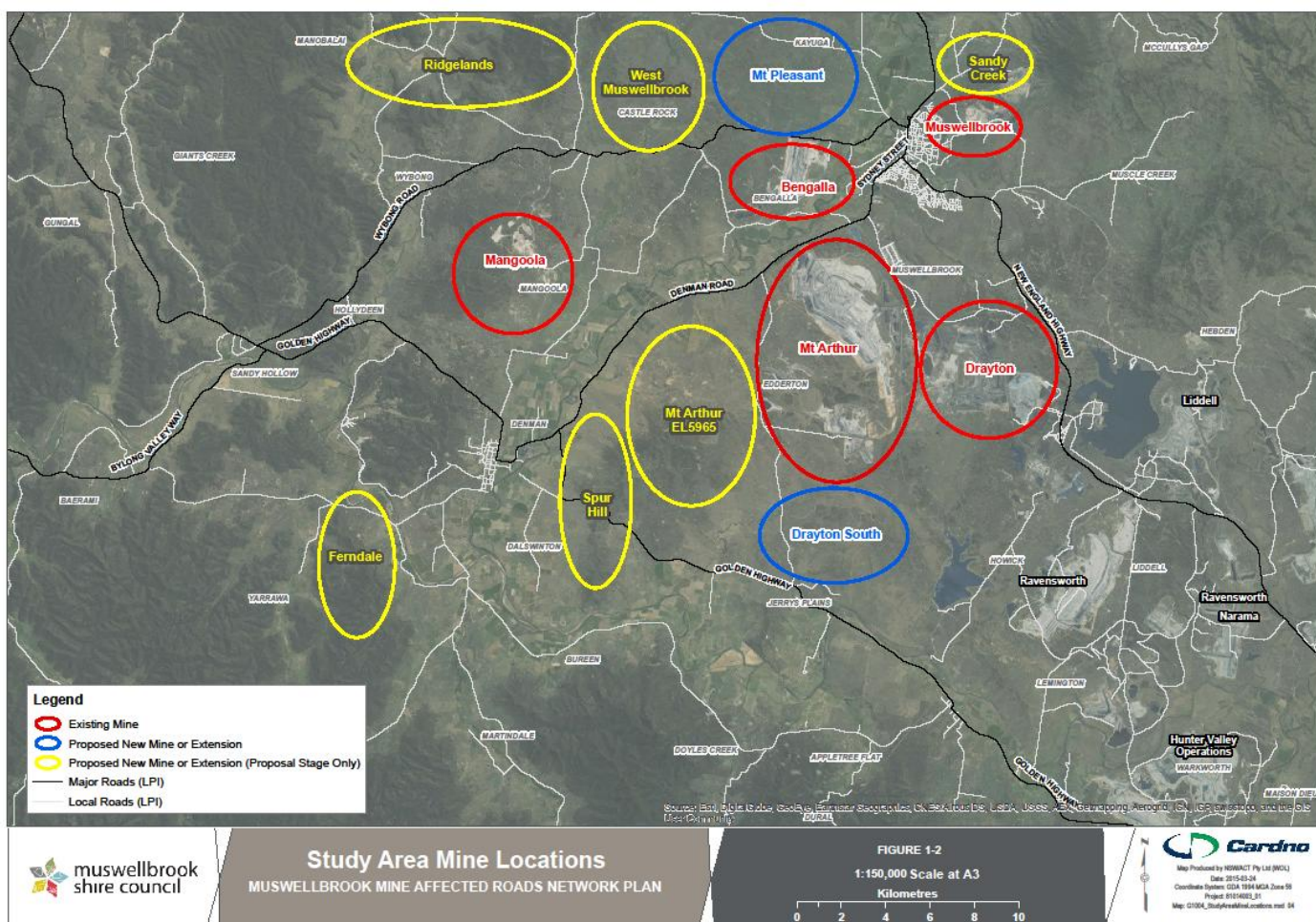


Fig 1 Study Area Mine Activity



Previous road planning has been informed by the 1997 Western Roads Strategy, and via reactive analysis to each application. The EIS generally have failed to capture the impacts on a network level. The 1997 Plan was becoming less relevant as mining investment plans have changed. Several major proposed road deviations caused the plan to be reviewed.

This paper will explain how Council has devised a strategic approach and engaged with the State Government and four major mining companies as funding partners to develop a strategic plan and funding strategy to inform the planning and road management for the next twenty years. Council has engaged consultants Cardno to provide the technical and planning work.

Key Words: Traffic Roads Network Planning Contributions Plan Collaboration

Introduction

The scale of the roadworks required to provide and sustain appropriate access to the enormous scope of the combined mining activities (Ref Figure 1) with the shire has the potential to severely impact on council's financial sustainability. Failure to provide adequate maintenance of these new and upgraded assets throughout the life of the mining phase could have serious safety and financial consequences.

It is also critical to assess the impacts of road network efficiency for all road users and to ensure the community is left with a suitable network legacy post-mining activity.



Muswellbrook productive mine capacity rose from 4Mt pa in 2001 to 62Mt pa in 2013. Further expansion is being planned, although the current downturn has caused delays to investment.

The Upper Hunter Strategic Regional Land Use Plan states (in Chapter 5): 'It is estimated that 63 per cent of the gross regional product comes from mining. Between 2006 and 2010, direct employment in mining in the region rose from 5,500 to more than 11,000. Mining support industries, such as engineering, construction, transport, logistics and human resources have also become well established in Singleton and

Muswellbrook.' (Department of Planning and Infrastructure, 2012)

Previous road planning in the North West sector was guided by the Western Roads Strategy (ERM Mitchell McCotter, 1997) and via reactive analysis to each application in other sectors. The EIS have failed to capture the impacts on a network level. We estimate that for every tonne of coal transported out (by rail), inputs represent around 4%. Inputs are road transported and include, for example: diesel; plant; explosives; and services. This has never been clearly identified in EIS analysis; but the heavy vehicle impacts are very significant in terms of Equivalent Standard Axle (ESA) loading. Construction activity can be intense and lead to abnormal use of roads with consequent accelerated damage. Development of a new mine costs in excess of \$1B (\$US), and see multiple contracts running concurrently and up to 700 construction workers on site. Council monitored these movements and compared them with EIS predictions and found that they were up to twice the predicted levels.



These are State Significant developments and the State is the consent authority; however, Council has successfully negotiated conditions into planning consents that attempt to attribute roadworks directly to the mines that have triggered them; and the application of ongoing contributions to maintenance, or in some cases maintenance agreements of sections of road for the life of the mine. Voluntary Planning Agreements

(VPA) bind these commitments to the consents.

The 1997 Plan was becoming less relevant as mining investment plans changed. Several major proposed road deviations caused the plan to be reviewed. The mines are generally progressing westward, and this meant mining through roads. The resulting cumulative impacts of the network efficiency were becoming an increasing concern.

Conceiving the Project

Staff identified that a new road network plan was required. The aim is to manage logical, orderly and equitable provision of appropriate, efficient and safe road access to existing and planned mines.

We decided to follow the processes outlined in the RTA Publication - Network and Corridor Planning Practice Notes as they apply in this context. I (Neil Pope) had prior experience managing development a shire-wide plan for Taree urban growth in the early 1990's. We researched modern traffic survey methods and s94 Planning. The scope was expanded to include consideration of:

- Analysis of ESA-km;
- Maintenance over the life-cycle;
- Update of the Asset Management Plan;

The brief was developed as a two-stage process, with the second stage scope and pricing to be refined after completion of the first stage.

Stage 1

(a) Document review

(b) Traffic modelling sufficient to provide comparison of various options and scenarios; and finally to provide a rigorous basis (nexus) for planning, infrastructure and financing decisions to follow.

(c) An appropriate arterial and collector road plan for the parts of the network predominantly servicing the

mining industry for the medium (20yr) and long (40yr) term.

Stage 2

(d) Implementation and funding strategy; including:

- Infrastructure required, and the triggers for provision.
- A prioritised schedule of works.
- All lands required (conceptual not survey accurate);
- Operational and maintenance costs.

(e) Developer Contributions Plan

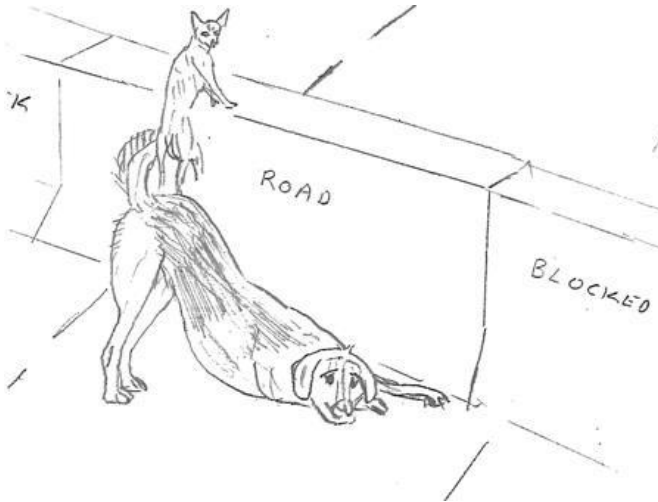
Detailed notes explained the issues and expectations under each sub-section.

At the time of writing this paper, Stage 1 was complete; however, Stage 2 had not commenced

The preliminary estimate of the cost of the work was \$400,000. For context, the preliminary estimated scope of road and bridgeworks exceeded \$120M. In late 2012, staff put a proposition to Council that such a study was justified and represented value to the stakeholders. Council supported the project in principle, and was prepared to co-fund it; and authorised staff to seek funding contributions from key stakeholders.

A steering committee was formed to oversee the project: myself; one NSW Planning and Environment (DoPE) representative; one Roads and Maritime Services (RMS) representative; and one councillor.

Staff sought funding contributions of \$50,000 towards the Strategy from six industry members, RMS, and DoPE. Most stakeholders approached could readily identify the potential value to them. By April 2013, staff had received commitments of \$250,000 funding for the Strategy from four industry members and the DoPE. RMS provided in-kind support.



Without trust, respect and collaboration from the stakeholders this project would not have progressed

The Contract

The brief was refined by the steering group members and a tender was formulated using AS 4122. The Request for Quotation (RFQ) was via Local Government Procurement Partnership's Vendor Panel (Prescribed under the regulation). Eight pre-qualified suitably experienced consulting companies were invited to submit quotations. In September 2013 the contract was awarded to Cardno.

Meetings were held with Cardno and the various stakeholders and the steering group to commence work. The mines were requested to provide information about their growth and development plans. The RMS were also investigating replacement options for Kauyuga Bridge; so it was decided to integrate this work with the strategy.

Traffic Modelling

SkyHigh Traffic Data undertook origin-destination surveys in the district around Muswellbrook. The field method involved the use of video equipment to collect images of vehicles' numberplates at sixteen two-directional stations. Observations were classified into:

1. Non-heavy (light) vehicles

2. Heavy vehicles

3. B-doubles and larger vehicles

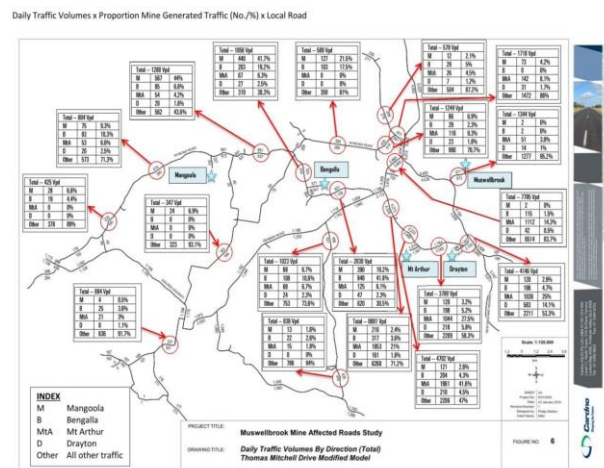
This analysis provides an indication of movements between observation stations as well as travel times. Vehicle number plates were observed within the study area over the course of the survey period, and these were processed and analysed for subsequent reporting.

The OD work was supplemented with conventional classification counts. The model was developed and calibrated against existing historical count records; and a number of growth rate forecasts.

Road works occurring on Thomas Mitchell Drive at the time of the counts affected the use of that route. The traffic model was adjusted accordingly to match pre-roadworks distributions of traffic available from previous counts and studies.

The base model can attribute traffic from various mines to the each network link by volume and by vehicle class.

Figure 2



Local 'Mine Related Traffic' in this study only refers to traffic with origin or destination at one of the four Muswellbrook mines on the day of the count. It does not include the TMD Industrial Estate, or traffic that interacts with the many mines just outside the LGA. The proportion of mine-related traffic to total traffic volumes has been assessed to determine the

roads that are impacted the most by the local mines. The modelling identifies the proportion of local mine related traffic compared to total traffic, and the proportion of heavy vehicle (HV's) traffic including Multi-Combination Vehicles (MCV) for each road section. The % HV on the network studied attributable directly to the four mines varied between 26% to 70%.

The majority of the traffic (approx. 71%) on the northern section of Thomas Mitchell Drive (between the Industrial Area and Denman Road) is not directly linked to the local mines.

Crash history

Crash history was analysed; however, the relatively low numbers made drawing conclusions difficult. Within the five year period, three fatal crashes and 34 injury crashes were recorded. The fatal crashes occurred on Edderton Road and Wybong Road West, and the roads with the most crashes are Wybong Road (21) and Thomas Mitchell Drive (20).

Crash history was utilised during the recent upgrade design for works at: Edderton Rd where the two fatalities occurred; Wybong Road West, Bylong Valley Way; and for Thomas Mitchell Drive.

Road Capacity

The RMS mid-block level of service (LoS) for rural roads is defined by a number of factors. An assessment of the existing road conditions identified that all road sections within the study area operate well within the acceptable LoS C or higher, apart from Thomas Mitchell Drive North between Denman Road to the Industrial Area (identified as a mid-block Level of Service of D) and over capacity by 124 veh/hr.

Detailed consideration was also given to constraints on over-size and over-mass vehicles, as these are very common at Muswellbrook.

Future Demands on the Network

In order to identify and model options, the future demands needed to be predicted.

Cardno tabulated existing consents and consulted with the various mines and the DoPE to develop 20 year and 40 year mine growth scenarios. Mine life expectancies were charted.

Summaries of mine planning listing: coal tonnages; employment levels; and mine progression planning. Although there is high uncertainty and a downturn at present; the proposed and potential mine operations identified will see mine activity continuing at an increased level within the Muswellbrook LGA for the foreseeable future.

Background traffic growth rates have been estimated at 0.9% from several sources:

- The Hyder (2008) Muswellbrook Bypass report states (on Page 66) that: The marginal through traffic growth on the New England Highway should be calculated at 1.45% between 2007 and 2020 and 1% until 2037.
- Census data period 2006 to 2011; growth was 0.83%pa).

The Shire has a diverse economy with various rural, urban and service sectors. All of these are critically important to a balanced diverse economy, which will continue to exist post mining. Viticulture and horse breeding are significant rural activities. There is small scale tourist industry activities associated with these operations. These activities do not generate large numbers of vehicles; but they do have very specific issues.



It is important that the operational needs of all road users be considered and that the impacts on safety and efficiency of the overall rural road network as a result of mining activity be properly assessed and mitigated to an acceptable level.

Road Network Scenarios

The various options were compared by the steering group on a Multi-Criteria Analysis considering: Conceptual costs over lifecycle; Network Efficiency; Safety; Environmental; and Social

The network options need to provide safe and efficient local access from the State network, rather than alternative or parallel routes. Some of the local network is used for emergency purposes.



The Hunter River and floodplain and the Ulan railway line present significant constraints to additional linkages from Wybong Road to Denman Rd. Significant geographical constraints exist on the Golden Highway at Ogilvie Hill. The coal resource lease areas also constrain options significantly.

Within each precinct, several alternatives were compared. The evaluation has determined that the following strategies offer the best solution in the short, medium and long term.

To improve the connectivity of Wybong Road to the New England Highway north of Muswellbrook, implement Option 1C which includes:	Estimated Cost (+ 30% Contingency)
1. Replace the Kayuga Bridge in its current location	\$7M
2. Upgrade Aberdeen Street from Kayuga Bridge to the New England Highway	\$6.4M
3. Upgrade Wybong Road (East) and Kayuga Road from the new southern Link Road to Kayuga Bridge.	\$5M
To address the proposed closure of sections of Wybong Road and Castlerock Road to facilitate coal extraction by the Mt Pleasant Mine, implement Options 2B and 3A which include:	Estimated Cost (+ 30% Contingency)
4. Construct a Southern Link Road connecting Wybong Road (East) via Overton Road to the Bengalla Link Road west of the Hunter River crossing (Option 2B) in lieu of the previously proposed Northern and Western Link Roads	\$23M
5. Upgrade Dorset Road and connect to Castlerock Road (to rural road standard) to facilitate access to properties on these roads.	\$11M
6. Modify the proposed Bengalla Link Road Diversion (Option 3A)	\$33M
7. Extend Bengalla Link Road and Upgrade Wybong Road	\$21M
To improve connectivity to, and the functioning of, the Main Road Network, implement Options 3C and 3D which include:	Estimated Cost (+ 30% Contingency)
8. Upgrade Wybong Road (West) (Option 3C) and Reedy Creek Road (Option 3D) in the long term	\$42M \$12M
9. Pursue the reclassification of Thomas Mitchell Drive as a Main Arterial Road under State control	Nil

10. Reconstruction of Edderton Road (Northern and Southern Diversion) on the less efficient alignment	Northern \$25M Southern \$29M
11. Examine opportunities to forego the reconstruction of Edderton Road on the less efficient alignment (as proposed by Mt Arthur Mine and the proposed Drayton South Mine) in lieu of contributions for works to improve the safety and efficiency of the Golden Highway	Nil
12. Consult with NSW Roads and Maritime Services in relation to options to avoid or rectify problems associated with the Golden Highway. In particular: - the Ogilvies Hill alignment and gradients; - the ability of the bridge crossing of the Hunter River near Denman to accommodate oversize vehicles; and - potential mine subsidence impacts at Ogilvies Hill from proposed underground mining; and, - main road traffic within Denman township.	Nil

Figures 3, 4 & 5 below show the specific initiatives that form the Road Network Plan recommendations.

The traffic impacts the critical alternative road improvements have been modelled to allow comparison of the respective traffic benefits. From this it was concluded that the Wybong Road to Bengalla Southern Link Road Connection was a viable alternative, in lieu of the Western and Northern Link Roads.

Growth comparisons were run through the traffic model for Yr 2034 and Yr 2054.

Stage 2 Implementation Strategy and Developer Contributions Plan

This work was not complete at the time of writing this paper; an update will be given at the conference.

The work involves:

Works scheduling and cost apportionment (required upgrading and maintenance of local roads)

Preparation of a Developer Contributions Plan (based on the apportionment of traffic directly attributable to existing and future mining operations in the Shire).

Where possible, the various options are linked to 'triggers'. The aim is to minimise the 'pool' of works to be funded by a contributions Plan; by, where possible, linking a section of work to a particular mining development.

Costing is being done on a lifecycle basis. We also require contributions for operational maintenance and periodic capital maintenance; not just the initial construction and upgrade costs.

For roads that will be permanently lost and for roads that will be significantly diverted to the extent that the route efficiency is permanently compromised, there should be an attempt to minimize the impact; but where inevitable, there shall be compensation.

If it is impractical to restore the network post mining; then that compensation could be either via works elsewhere on the Mine Affected Roads Network, or via a contribution.

The Network Plan and funding strategy will need to be a 'dynamic document' responding over time to the performance of the roads within the network, and to changing circumstances affecting the likely rate of growth in demand on the road network.

Construction

Council is currently managing a very large capital roadworks program.

Council has been fortunate over the past two years during the development of this strategy to secure very significant grants and contributions towards the mine affected network from:

- Hunter Infrastructure Investment Fund (HIIF) \$4M;
- Resources for Regions (R4R) Rounds 1, 2 & 3 \$22.5M;
- Direct mine contributions \$7M;
- Councils own revenues \$3.6M

The work being done on this strategy and on the Thomas Mitchell Drive Contributions Plan has informed and supported the various application assessments and the composition of the grant applications which require sound planning and business cases.

Council has directed these funds to sections of the network that cannot be directly attributed (triggered) by a single mining activity. This \$37.1M has made a significant improvement to the network.



Conclusion

The scope of the collective roadworks in this Plan is very significant; and certainly could threaten the financial sustainability of the council going forward if not carefully managed.

The strategy provides a means whereby mining related proposed changes to the local road network can be considered at least at a shire wide context and financial responsibilities fairly distributed to various stakeholders.

The completed Plan will be used by relevant government agencies (local and state) to guide the development of priority safety, traffic, asset and infrastructure maintenance, and improvements. It will also be used by industry and the community to understand proposed changes in the network over time that may influence their decisions

References

Some text, and diagrams in this paper have been sourced from the Muswellbrook Mine Affected Roads Network Plan (CARDNO for MSC, 2015)

ARTC (2013) Hunter Valley Strategy – Final

CARDNO for MSC (2015) Muswellbrook Mine Affected Roads Network Plan

Department of Planning and Infrastructure (2012) *Upper Hunter Strategic Regional Land Use Plan*

ERM Mitchell McCotter for MSC (1997) Western Roads Strategic Traffic Study

GHD for Department of Planning and Infrastructure (2015) Thomas Mitchell Drive contributions plan

HYDER for RTA (2009) HW9 New England Highway Detailed Traffic Study and Modelling of Proposed Muswellbrook Bypass

Authors Biography and Photographs

Neil Pope BE (Civil) MIE Aust.
Director Community Infrastructure,
Muswellbrook Shire Council
PO Box 122 Muswellbrook NSW 2333
Australia
Neil.pope@muswellbrook.nsw.gov.au



I have worked in this interesting role for the past 9 years. In 2006, this council was not financially sustainable. By a range of initiatives, Council has transformed itself into one of the most viable of its group, and is carrying out works programs that rival all but the largest councils in the state.

During this time Muswellbrook has experienced a mining construction boom. How Council leveraged this phase, was critical to its future sustainability. Planning and provision of renewed and upgraded public infrastructure has been a priority with record levels of expenditure each year, and set to continue for a few years yet.

Prior to this, I worked for 27 years in Local Government Engineering, 16 of those at Manager level. My experience includes large city growth councils to rural multi-purpose councils. My main interest these days is in infrastructure planning and associated financial management.

Keith Blackmore

Senior Planner – CARDNO
3/60 Beaumont Street, Hamilton NSW 2303
Australia
Keith.Blackmore@cardno.com.au



The Muswellbrook Mine Affected Roads Network Plan (Stage 1 of the Project) has proven to be a complex process involving detailed traffic analysis and growth forecasting for an industry subject to global fluctuations and extremes (almost on a daily basis). We now have a road plan that, subject to historical constraints, offers the best possible levels of efficiency and safety for its users. Stage 2 of the project will put in place a number of strategies that will implement the recommendations of the Road Network Plan over time.

Keith has been a practicing town planner since 1981, during which time he has gained broad experience in the preparation and assessment of major development proposals, project management of a number of innovative strategic planning initiatives, major rezoning proposals, urban design analysis and Land and Environment Court work. The diversity of the projects has not only enabled him to gain extensive planning knowledge and experience but also an understanding of the issues involved in related disciplines such as transport planning and environmental management.

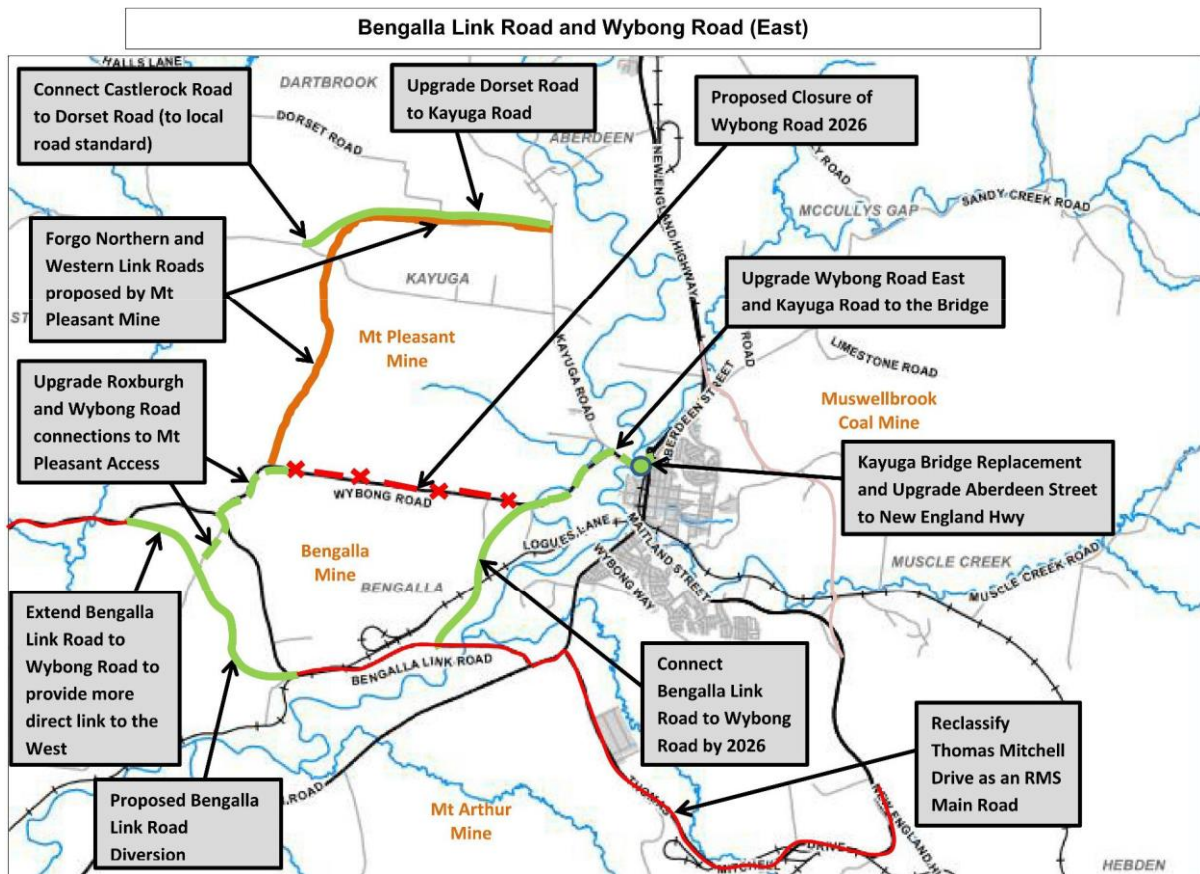


Fig 3 Network Plan - North-eastern Sector

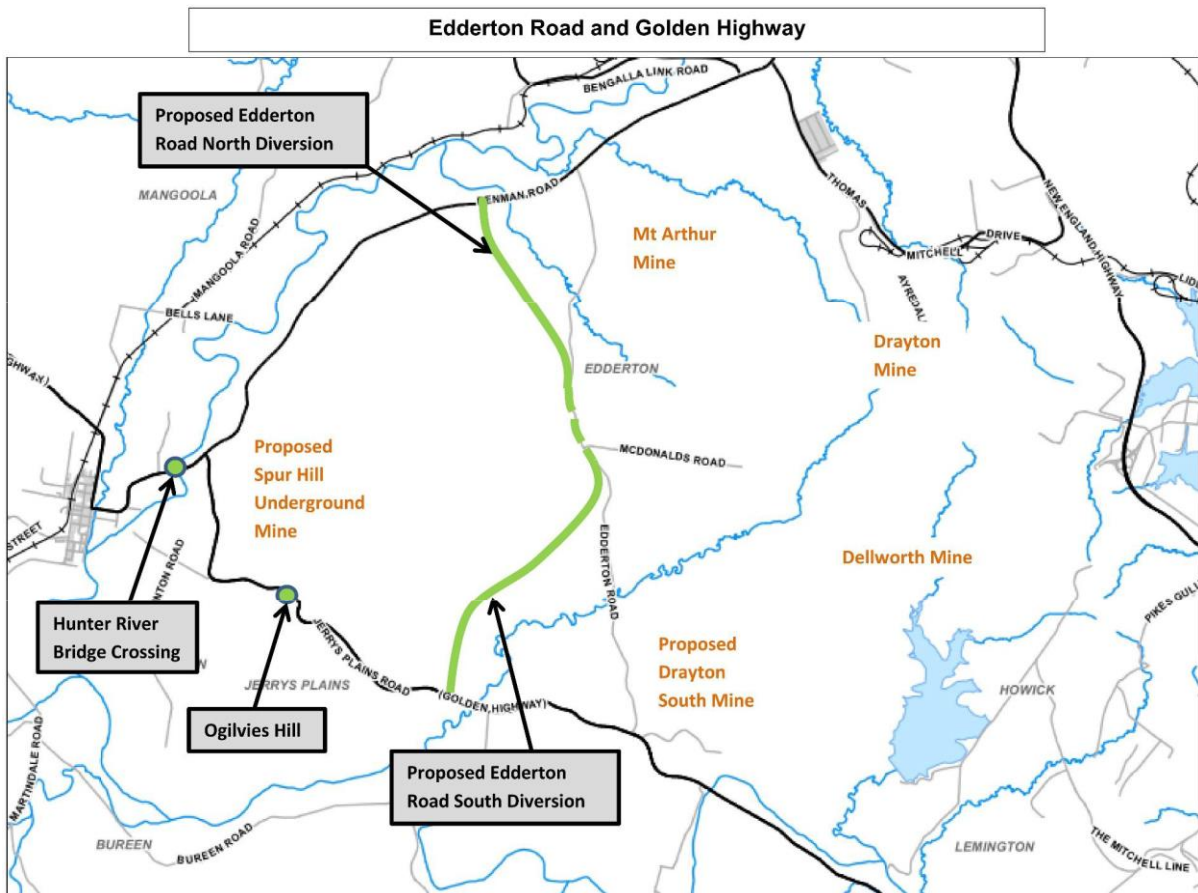


Fig 4 Network Plan – Southern Sector

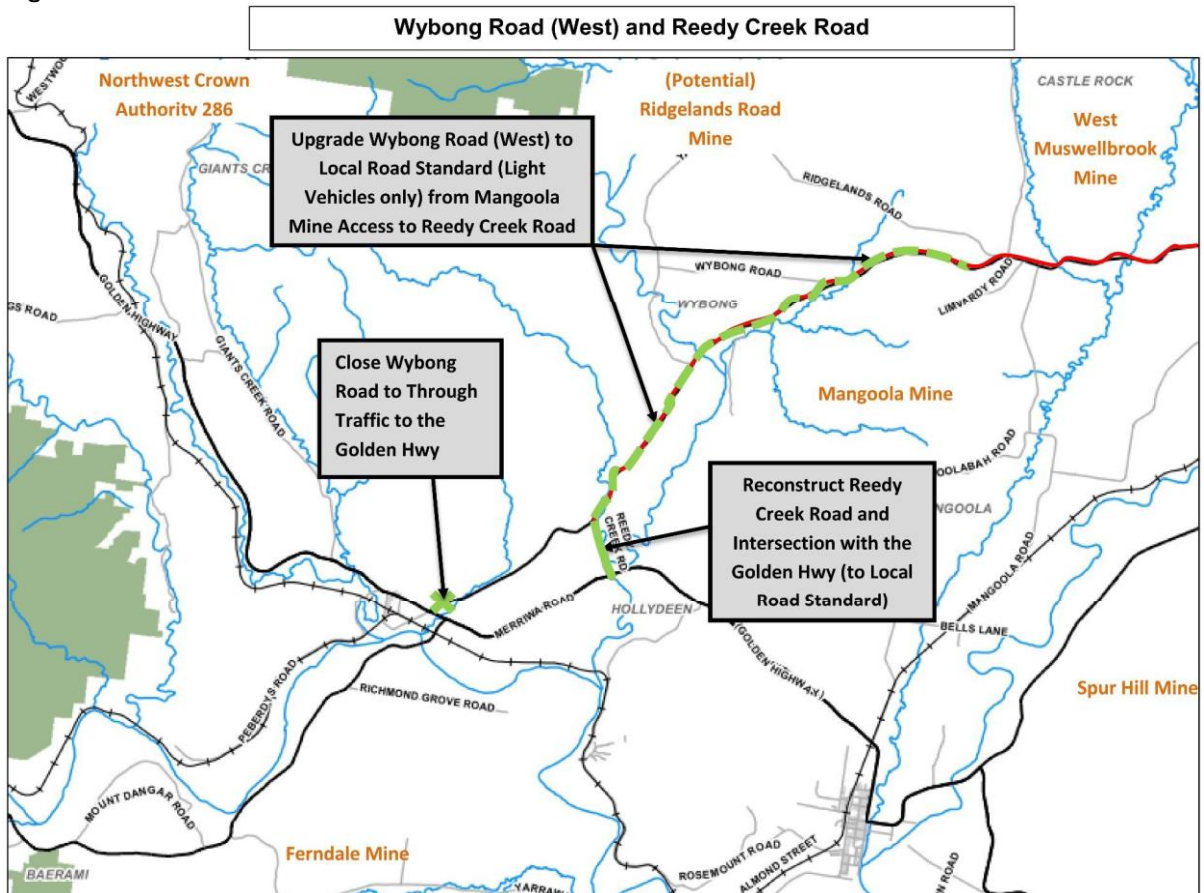
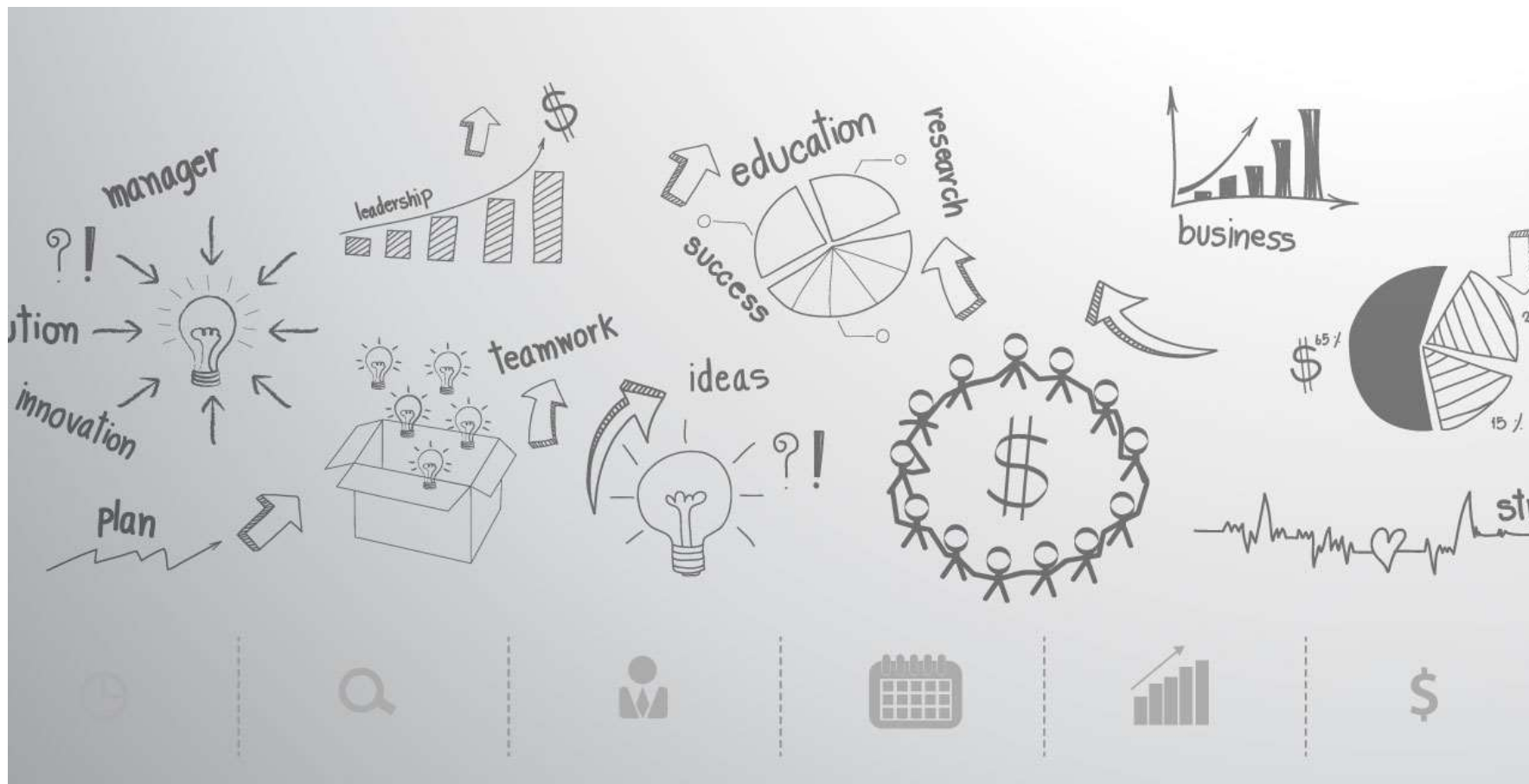


Fig 5 Network Plan – Western Section

Appendix F Wybong Action Group Submission



Who just discovered Sim City?? As published by MSC
The 3 Projects and SRV Document Cover



Budget snapshot of 'Ros Kelly's whiteboard' as published by MSC

A Psychiatrist can explain the various meanings inclosed

Dancing rings around the public purse for personal exclusive benefit.

Cover for MSC Financial Overview

Muswellbrook Mine Affected Roads

Road Network Plan

81014003



DRAFT

Prepared for
Muswellbrook Shire Council

27 March 2015

"- a nefarious strategy to devolve millions of dollars of road construction expenses required by Approvals for mining to the rate and tax paying communities of NSW and Muswellbrook from the coal mining industry of the upper hunter valley, leading to unsafe, inefficient and second rate roads and the waste of millions of dollars of scare public funds"
J Shewan. Wybong Action Group, Ridgeland Community Association

5.2 Options to Improve the Connection of Kayuga Road to the New England Highway



Figure 5-3 Options 1A, 1B and 1C

5.2.1 Option 1A – Extend Wybong Road (at Kayuga Road) to the New England Highway (at McCullys Gap Road)

Assumptions – Length 2.35kms (Approx.), two bridge crossings (50m and 100m long over creek and river), two major intersections, traffic control at intersections only.

- **Land Ownership** - Requires acquisition of privately owned farm land over the full length of the proposed road. Option would require the purchase and loss of productive agricultural land.
- **Terrain and Land Use** - Improved agricultural land on flood plain.
- **Environmental Factors** - Flood prone (1 in 100 Year Flood Level Approx. RL 148m AHD). This option involves construction within the flood plain and bridging over the Hunter River and Sandy Creek with potential to impact adversely on the flow of flood waters.
- **Intersections** – Roundabout at Kayuga Road, T-intersection at New England Highway
- **Road and Traffic Benefits**
 - Provides a direct connection from the extension of Wybong Road to the New England Highway for north bound traffic and to the McCullys Gap Road interchange on the proposed Muswellbrook Bypass for south bound traffic.
 - Provides an alternative to the Bengalla Link Road and Thomas Mitchell Drive route to gain access to the south without having to enter Muswellbrook CBD.

- **Cost – \$42M** (includes 30% contingency costs added). Includes the construction of a new bridge over the Hunter River. Existing Kayuga Bridge would remain for weight limited local traffic only.

5.2.2 Option 1B – Extend Wybong Road (at Kayuga Road) to Aberdeen Street at the New England Highway (Refer to Figure 5.3 above)

Assumptions – Length 0.85kms (Approx.), one bridge crossing (100m length over river), two major intersections, traffic control at intersections only.

- **Land Ownership** - Requires acquisition of privately owned farm land over the full length of the proposed road.
- **Terrain and Land Use** - Improved agricultural land on flood plain. This option involves the purchase and loss of productive agricultural land.
- **Environmental Factors** - Flood prone (1 in 100 Year Flood Level Approx. RL 148m AHD). This option involves construction within the flood plain and bridging over the Hunter River with potential to impact adversely on flow of flood waters.
- **Intersections** – Roundabout at Wybong and Kayuga Road and intersection Aberdeen Street.
- **Road and Traffic Benefits**
 - Provides some improved convenience for north bound traffic.
- **Road and Traffic Weaknesses**
 - Duplicates the existing Kayuga Bridge/Aberdeen Street connection to the New England Highway.
 - Offers little advantage over the existing route.
- **Cost – \$30M** (includes 30% contingency costs added). Includes the construction of a new bridge over the Hunter River north of the existing Kayuga Bridge.

5.2.3 Option 1C – Upgrade Kayuga Road and Aberdeen Street from Wybong Road to the New England Hwy, including Replacement of Kayuga Bridge (Refer to Figure 5.3 above)

Assumptions – Length 0.85kms (Approx.), replace existing bridge, two minor intersections, traffic control at intersections only.

- **Land Ownership** – Public road reserves.
- **Terrain and Land Use** – Existing public roads.
- **Environmental Factors** - Flood prone (1 in 100 Year Flood Level Approx. RL 148m AHD). This option involves construction within the flood plain and bridging over the Hunter River.
- **Intersections** – Roundabout at Wybong and Kayuga Road and intersection at Aberdeen Street.
- **Road and Traffic Benefits**
 - Provides some improved convenience and safety for north bound traffic.
- **Road and Traffic Weaknesses**
 - Existing route.
- **Cost – \$13M** (includes 30% contingency costs added). Includes the construction of a new bridge over the Hunter River at the existing Kayuga Bridge location.

Note: Funding sources to be determined in Stage 2

sneaky?



Heritage and conservation register

Item

Field Name of Item

Value Kayuga Bridge over Hunter River

Field Item Number

Value 4301657

Field Type of Item

Value Built

Field Item Sub-Type

Value Iron Lattice Bridges

Field Roadloc

Value

Field Address

Value **** Kayuga Road Muswellbrook 2333

Field Local Government Area

Value Muswellbrook

Field Owner

Value Roads and Traffic Authority

Field Current Use

Value Road bridge

Submission to Muswellbrook Council Road Network Plan 27 March 2015

Field	Former Use
Value	Road bridge

Statement of significance

Field	Statement of significance
Value	<p>The iron lattice truss Bridge over the Hunter River has significance because:</p> <ul style="list-style-type: none"> * it has been an important item of infrastructure in the history of New South Wales for over 120 years, * it was a technically sophisticated bridge structure for its time, * it has strong aesthetic lines and enhances the aesthetics of the environment, * it contributed significantly to the social and commercial development of the Hunter Valley region of New South Wales. * it is an excellent representative example of this type of bridge. <p>This bridge has been assessed as being of State significance.</p>

Field	Date Significance Updated
Value	16 March 2001

Description

Field	Designer
Value	John A McDonald
Field	Builder
Value	John Musson & Co
Field	Construction years
Value	**** - 1881

Submission to Muswellbrook Council Road Network Plan 27 March 2015

Field	Physical description
Value	<p>Kayuga Bridge over the Hunter River is a 2-span continuous lattice truss, 77m long with timber beam approaches. It is supported on 3 piers made from pairs of tubes fabricated from curved and shaped wrought iron plates riveted together, and with cross ties attractively shaped to form a vertical set of elliptical holes. These help give the bridge a striking appearance.</p> <p>It has two main spans each 39m in length, a total of nine approach spans and an overall length of 162m. The Bridge is a single lane bridge 4.75m wide between kerbs. The roadway is carried on cross girders covered with a timber deck.</p>
Field	Physical Condition and/or Archaeological Potential
Value	Original condition assessment: 'The bridge is in good condition.' (Last updated: 13/03/2001.) 2007-08 condition update: 'Poor.' (Last updated: 17/4/09.)
Field	Modifications and dates
Value	****
Field	Date condition updated
Value	17 April 2009

History

Field	Historical notes
Value	<p>The Kayuga Bridge is the second oldest lattice bridge and was completed in 1881. The Iron lattice Bridges and the large group of timber Bridges (MBK1998) are the most significant bridges of the colonial period. They were the major bridges of their time and carried the burgeoning road network across many of the major rivers in New South Wales. Whereas the construction of timber truss bridges extended over a long period, from the 1860s to the 1930s, and was associated with three prominent engineers in the Department of Public Works (Percy Allen, E M De Burgh and Harvey Dare), the construction of the iron lattice bridges was confined to a short period, from 1881 and 1893, and all were designed by bridge engineer John A McDonald.</p>

Submission to Muswellbrook Council Road Network Plan 27 March 2015

Listings

Field	Heritage Listing
Value	Reference Number
	Gazette Number
	Gazette Page
Field	Heritage Act - s.170 NSW State agency heritage register
Value	

Field

Field Register of the National Estate

Value

Field

Assessment of Significance

Field	Historical Significance
Value	The Bridge has high historical significance as it is on a main road. It is a large bridge with long spans over a major river, indicative of the then burgeoning road network. It has historic associative value based on its ability to represent the endeavours of local settlers, with their need for safe and reliable access across the Hunter River. It is associated with bridge designer John A McDonald. It significantly helped open up the Hunter Valley Region of New South Wales.
Field	Historical Association
Value	****

Submission to Muswellbrook Council Road Network Plan 27 March 2015

Field	Aesthetic/Technical Significance
Value	Aesthetically, the bridge with its long lattice trusses and decorative piers designed with pairs of braced metal cylinders with elliptical openings present an imposing yet attractive reminder of the past. It has strong aesthetic lines and enhances the aesthetics of its environment. As such, the Bridge has aesthetic significance.
Field	Social Significance
Value	Because of their numbers, the complete set of lattice truss bridges gain high social significance. As well as having significance to the local community, the construction of this major Bridge has contributed significantly to the development of the Hunter Valley region of New South Wales.
Field	Research Significance
Value	The Bridge has high technical significance because of its integrity and good condition, which contribute to its ability to demonstrate aspects of technology, design and style in bridge construction. Collectively, the bridges are good examples of the variety in lattice truss construction from 1874 to 1893.
Field	Rarity
Value	****
Field	Representativeness
Value	One of an excellent representative group of this type of bridge.
Field	Integrity/Intactness
Value	Intact
Field	Assessed Significance
Value	State

References

Field	Type
Value	Author
	Year
	Title

Submission to Muswellbrook Council Road Network Plan 27 March 2015

Field	Written
Value	MBK
	1998
	Study of Relative Heritage Significance of all Timber Truss Road Bridges in NSW

Field

Study details

Field	Title
Value	Year
	Author
	Inspected by
	Guidelines used
Field	Study of Heritage Sig. of pre 1930 RTA Controlled Metal Road Bridges in NSW
Value	2001
	Cardno MBK
	Yes

Field

Custom fields

Field	Roads and Maritime Services Region
Value	Hunter
Field	Bridge Number
Value	1557
Field	CARMS File Number
Value	****

Submission to Muswellbrook Council Road Network Plan 27 March 2015

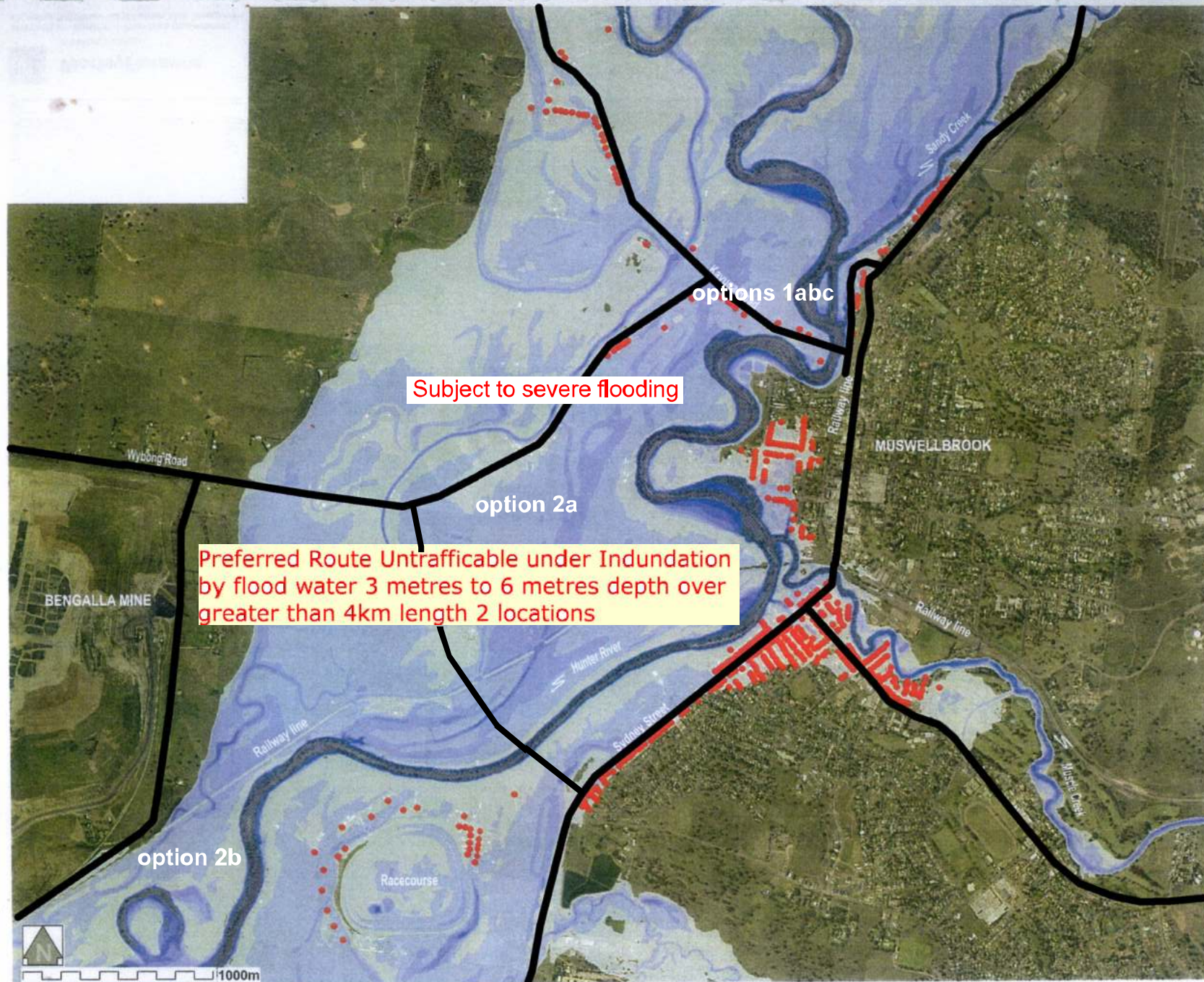
Field	Property Number
Value	Bridge
Field	Conservation Management Plan
Value	****

Images

*Kayuga Bridge - General View*

FIGURE 8.2

DRAFT



Depth (m)

0
1
2
3
4
5
6

LEGEND:

• Damaged Properties



Worldwide Resources & Energy
Ridgeland Community Association

301015-02907 - Hunter River Flood Study (Muswellbrook)
R2 - 301015-02907 with 140319 - Mistle Creek 100yr Damages.doc

PROPERTIES DAMAGED DURING
THE 1% AEP EVENT (MUSWELLBROOK)

5.3 Options to Address Wybong Road Closure in 2026



Figure 5-4 Options 2A and 2B



Figure 5-5 Option 2C Northern and Western Link Roads

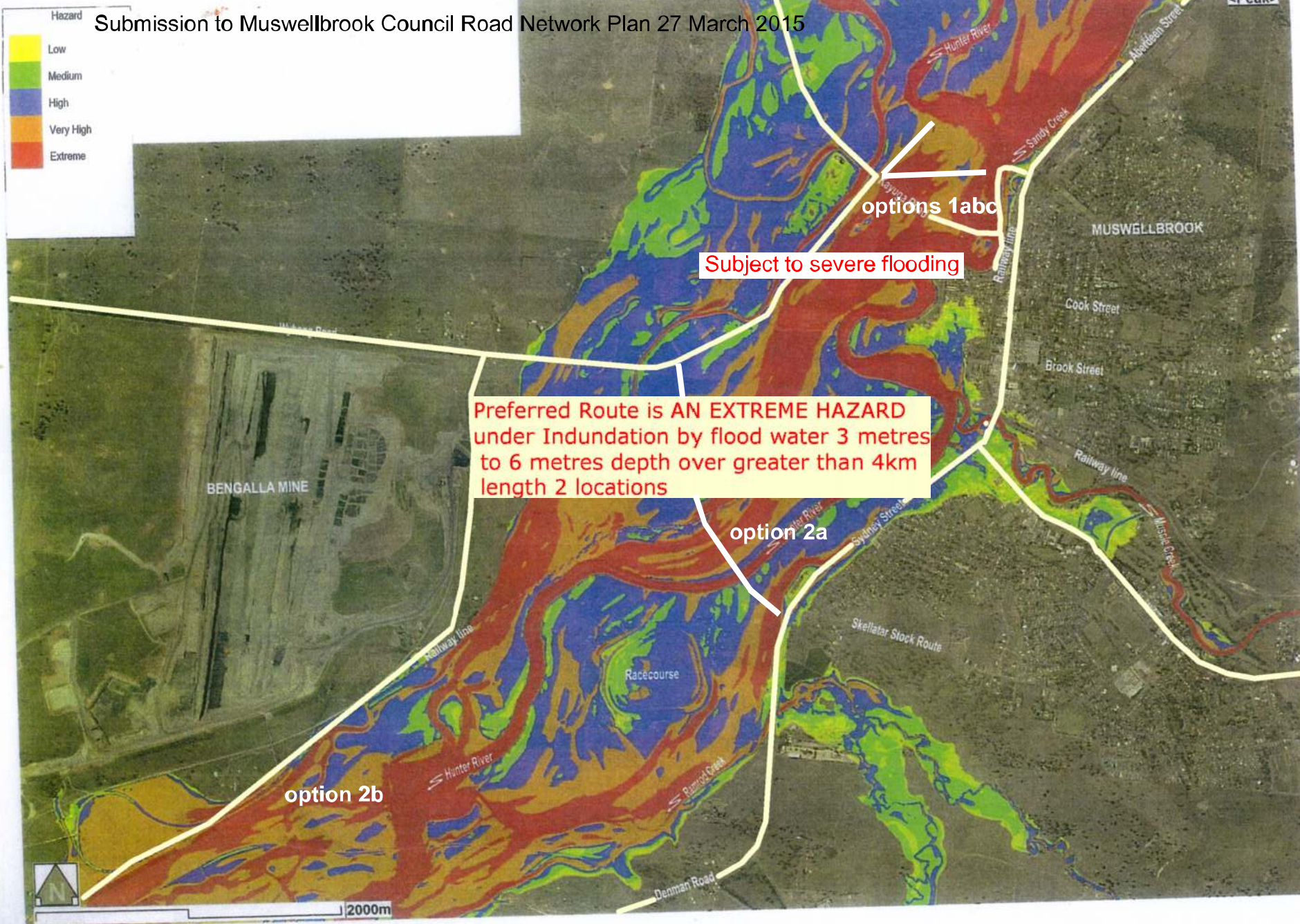
5.3.2 Option 2A – Connect Wybong Road (via Logues Lane) to Denman Road (at Skellatar Stock Route)

Assumptions – Length 2.3kms (Approx.), two bridge crossings (40m over rail line and 100m over river);

- **Land Ownership** - Requires acquisition of privately owned farm land over the full length of the proposed road.
- **Terrain and Land Use** - Improved agricultural land on flood plain. This option involves the purchase and loss of productive agricultural land.

FIGURE I.5

DRAFT



- **Environmental Factors** - Flood prone (1 in 100 Year Flood Level Approx. RL 146m AHD). This option involves construction within the extensive flood plain, bridging over the coal rail haulage line and bridging over the Hunter River with potential to impact adversely on flow of flood waters. Upstream urban areas may be affected.
- **Intersections** – At Wybong Road and Denman Road
- **Road and Traffic Benefits**
 - Utilises the existing Logues Lane alignment.
 - Provides a connection to South Muswellbrook residential areas.

Road and Traffic Weaknesses

- Location provides little relief to anticipated mine-related traffic demands in the north-west.
- Flood plain extends for full length including over Wybong Road and Denman Road.
- Road subgrade and ramping on both sides of bridge within flood plain and floodway.
- Potential flooding implications (involves a significant reduction in the width of the flood way - urban areas upstream may be affected). To avoid interruption of flood waters, bridge lengths may need to be extended at considerable additional cost.
- Hunter River and the Coal Rail Line separation is significant (approx. 786 metres) likely to require one long bridge or two bridge spans.
- Acquisition of privately owned farm land involved.
- Potential opposition from residents at Skellatar Stock Route intersection and surrounds.
- **Cost** – \$37M (includes 30% contingency costs added)

5.3.3 Option 2B – Connect Wybong Road (via Overton Road) to Bengalla Link Road

Assumption – Length 3.5kms (Approx.), one bridge crossing (40m over rail line), one major intersection, traffic control at intersection only.

- **Land Ownership** – Bengalla Mine.
- **Terrain and Land Use** - This option involves the loss of some productive agricultural land.
- **Environmental Factors** - Flood fringe (1 in 100 Year Flood Level Approx. RL 143m AHD). This option involves bridging over the coal haulage rail line and some construction within the edge of the flood plain.
- **Intersections** - At Wybong Road and Bengalla Link Road.
- **Road and Traffic Benefits**
 - Provides a direct link between Bengalla Link Road to Wybong Road offering access to Kayuga Road and the New England Highway.
 - Offers an alternative to the proposed Mt Pleasant Western and Northern Link Roads at potentially less cost.
 - Utilises the existing flood-free Overton Road alignment.
 - Avoids the need for an additional river crossing and development within the floodway.
- **Road and Traffic Weaknesses**
 - Road and bridge ramping within flood plain.
- **Estimated Cost** - \$23M (includes 30% contingency costs). Could be funded by Mt Pleasant Mine as a cheaper alternative to the proposed Western and Northern Link Roads.

subjective assertion
NOT Fact

improper consideration

5.3.4 Option 2C – Western and Northern Link Roads (Mt Pleasant Mine)

Assumption – Length 10.3kms (Approx.), 6.8kms of new road and 3.5km of road upgrade to Dorset Road, one major and one minor intersection, traffic control at intersections only.

- **Land Ownership – Mt Pleasant Mine**
- **Terrain and Land Use** - This option involves the loss of some grazing land.
- **Environmental Factors – Undulating and cleared rural land.**
- **Intersections** - At Wybong Road and Kayuga Road.
- **Road and Traffic Benefits**
 - Addresses the proposed closure of Wybong Road.
- **Estimated Cost - \$47M** (includes 30% contingency costs).

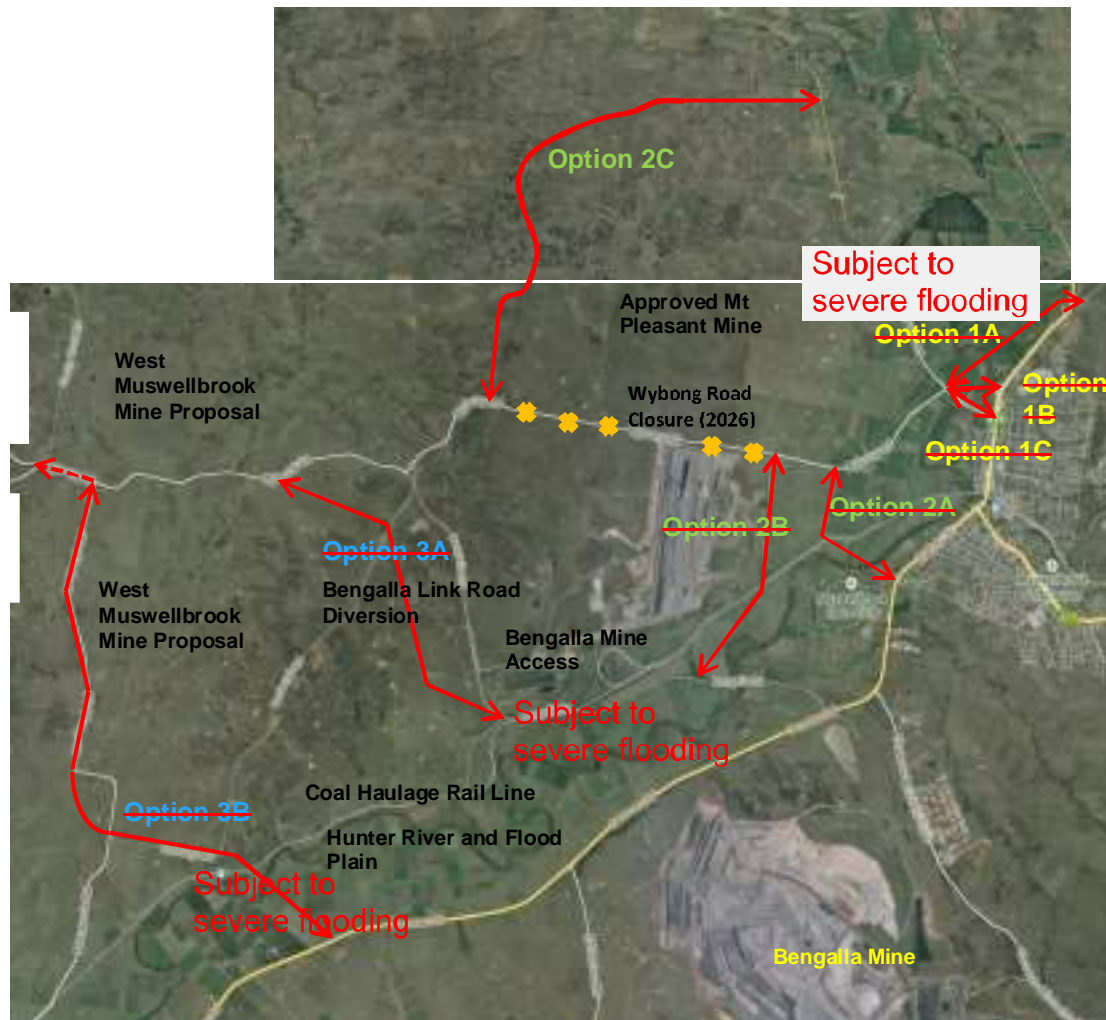
Mt Pleasant Project Environmental Assessment 9/1997
Vol 1 Ch 14
14.2.3 New Link Roads

MT Pleasant Mine Approval Conditions 22/12/99
7.2 Road Transport

1. The Applicant shall, as required by Council and/or the RTA:
 - (a) At its own expense construct a bridge to carry the Bengalla Link Road over the proposed Mount Pleasant rail loop, in liaison with the operators of the Bengalla Mine;
 - (b) prior to the closure of Castlerock Road, construct at its own expense, the Mount Pleasant Northern Link Road to Dorset Road;
 - (c) prior to the closure of Wybong Road, construct at its own expense, the Mount Pleasant Western Link Road, from the intersection of the Bengalla Link Road to the intersection of the Mount Pleasant Northern Link Road, generally in accordance with Council's Western Roads Strategy;
 - (e) should the following intersections be required, undertake construction works at:
 - (i) the intersection of the Western Link Road and access to the mine site,
 - (ii) the intersection of the Bengalla Link Road and the Western Link Road,
 - (iii) the intersection of Castlerock/Mount Pleasant Northern Link Road and the Western Link Road,
 - (iv) the intersection of the Mount Pleasant Northern Link Road and Kayuga Road.

Options to Improve Connectivity from the North West Sector to the Main Road Network

- **Option 3A** – Modified Bengalla Link Road Diversion
- **Option 3B** – Connect Wybong Road (via Mangoola Road, Roxburgh Road and an existing crown road reserve) to Denman Road
- **Option 3C** – Upgrade Wybong Road (West)
- **Option 3D** – Upgrade Reedy Creek Road to the Golden Highway

**Figure 5-1 Options 1A to 3B**

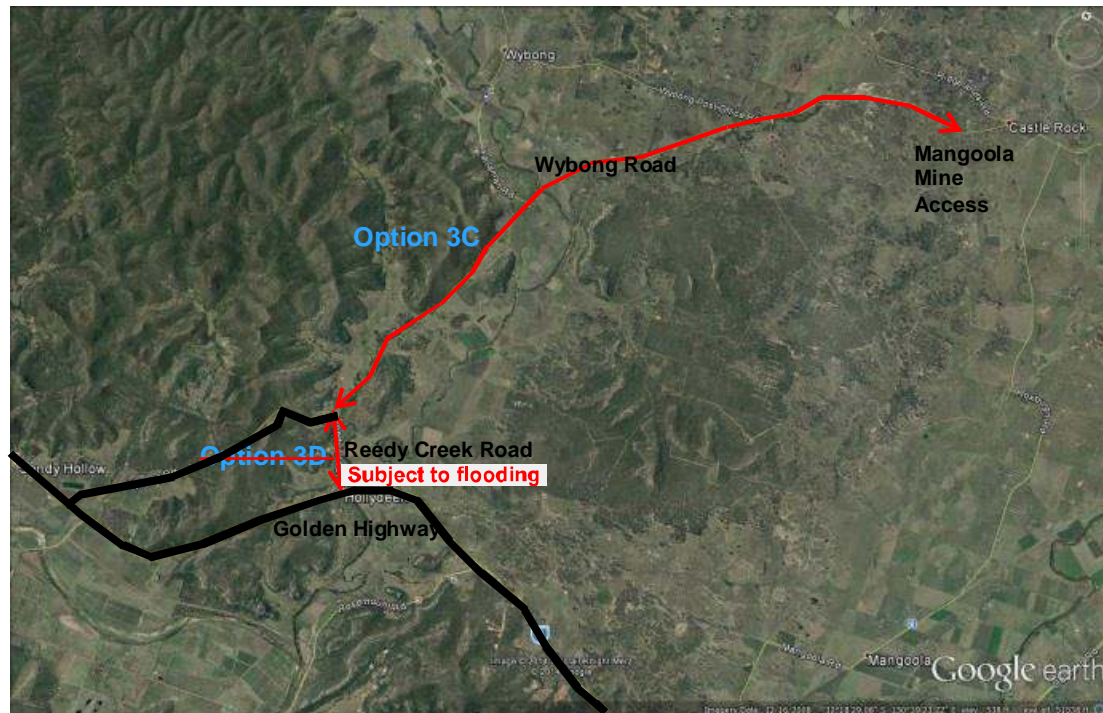


Figure 5-2 Options 3C and 3D

5.4 Option 3A – Modified Bengalla Link Road Diversion

(Refer to Figure 5-1 above)

Assumptions – Length 5.2kms (Approx.), 2 major intersections, traffic control along route, nil property acquisition.

- **Land Ownership** – Existing public road reserve.
- **Terrain and Land Use** – Public road.
- **Environmental Factors** – Minimal.
- **Intersections** - Existing
- **Road and Traffic Benefits**
 - Utilises the existing road reserve. No land acquisition involved.
 - Crossings of the Hunter River and the Coal Rail Line are existing.
- **Road and Traffic Weaknesses**
 - Concentrates all traffic to a single travel corridor.
- **Cost** – \$33M (includes 30% contingency costs)

residence adjacent

Option 3A IS IRRELEVANT as the Modified Bengalla Link Road is mandated by DOP Approval for Bengalla Continuation Project which Council has no standing to seek modification.

This Option includes the western diversion of Bengalla Link Road as proposed in the Mine Continuation of Bengalla Mine. However, it also seeks to have the road alignment and intersections in the north located to best facilitate the future extension of the road to the north west to link with Wybong Road to provide a more direct travel path. The road extension and associated intersection with Wybong Road would be pursued in the longer term and would be funded by new mines in the north-west.

improper consideration

5.5 Option 3B – Connect Wybong Road (via Mangoola Road, Roxburgh Road and an Existing Crown Road Reserve) to Denman Road



Figure 5-6 Option 3B

Assumptions – Length 9.58kms (Approx.), 3.5kms new road and 6.08kms upgrade of existing, one bridge crossing (100m over rail line and river), one multi-cell box culvert crossing (Mangoola Road), two major intersections and two minor intersections, traffic control along route and at intersections, limited property acquisition.

- **Land Ownership** – Public road reserve and privately owned farmland. Some land acquisition involved.
- **Terrain and Land Use** – Undulating existing road in the north. Flood prone improved agricultural land in the south. This option involves the purchase and loss of some productive agricultural land (near Craig's End) and some grazing land (to straighten Mangoola Road and for the bridge and approaches).
- **Environmental Factors** - Flood Level Approx. RL 128m AHD. No significant implications for flooding impacts from a reduction in the width of floodway and flood storage. The location is well downstream of any urban areas.
- **Intersections** – Upgrade existing intersection at Wybong Road, minor intersections at Roxburgh Road and major intersection at Denman Road.
- **Road and Traffic Benefits**
 - Intersects with Wybong Road in the vicinity of Ridgeland Road (Mangoola Mine entrance and future West Muswellbrook Mine) – Future mine-related traffic generators.
 - Utilises a significant section of the existing Mangoola Road and Roxburgh Road alignments.
 - Elevated land on the north-western bridge approach reducing the extent of the bridge ramp on one side.
 - Hunter River and the Coal Rail Line are reasonably adjacent to each other (approx. 300 metres).
 - Existing road reserve south of the Hunter River connecting to Denman Road. Minimal land acquisition.
 - Results in a better distribution of traffic by providing an alternative travel path to the Bengalla Link Road.
 - Facilitates the efficient movement of vehicles to and from the south (alternative to Thomas Mitchell Drive) in the long term with the potential to connect to the Golden Highway by a realigned Edderton Road.
- **Road and Traffic Weaknesses**
 - Involves some vertical (levelling) and horizontal (straightening) adjustments to the existing road alignment.

rabid inconsistency

ignores single lane acidified, water infiltrated substrate, light traffic construction

- **Cost – \$63M** (includes 30% contingency costs added) – NB. This route lies partially within the Mangoola Mine EL area and the West Muswellbrook EL area. Opportunity may exist for conditional land dedication thereby reducing the estimated cost.

improper consideration

5.6 Option 3C – Upgrade Wybong Road (West) from Mangoola Mine Access to Reedy Creek Road

(Refer to Figure 5-2 above)

Assumptions – Approx. Length 13.5kms, four minor intersections, one major intersection, traffic control along the route, nil property acquisition.

- **Land Ownership** – Existing road reserve.
- **Terrain and Land Use** – Undulating narrow road surrounded by unimproved rural land.
- **Environmental Factors** – Flooding at Pheenys Creek causeway.
- **Intersections** – One major intersection and four minor intersections.
- **Road and Traffic Benefits**
 - Utilises the existing Wybong Road alignment.
 - No land acquisition.
- **Road and Traffic Weaknesses**
 - Existing rural road would require reconstruction to widen and improve durability.
 - Major intersection improvements required at Reedy Creek Road and Golden Highway.
- **Cost – \$42M** (includes 30% contingency costs added). A significant proportion of the upgrading of Wybong Road could be justified as works-in-kind required from future mines in the north.

improper consideration

5.7 Option 3D – Upgrade Reedy Creek Road to the Golden Highway

(Refer to Figure 5.2 above)

Assumptions – Length 1.4kms (Approx.), one minor intersection at Wybong Road, one major intersection at Golden Hwy, traffic control along the route, nil property acquisition.

- **Land Ownership** – Existing road reserve.
- **Terrain and Land Use** – Undulating narrow road surrounded by unimproved rural land.
- **Environmental Factors** – Nil
- **Intersections** – One major intersection and one minor intersection.
- **Road and Traffic Benefits**
 - Utilises the existing Reedy Creek Road alignment.
 - No flooding or environmental issues.
 - No land acquisition.
- **Road and Traffic Weaknesses**
 - Major intersection improvements required at Reedy Creek Road and Golden Highway.
- **Cost – \$12M** (includes 30% contingency costs added). A significant proportion of the upgrading of Wybong Road could be justified as works-in-kind required from future mines in the north.

residence adjacent

flooding occurs

improper consideration

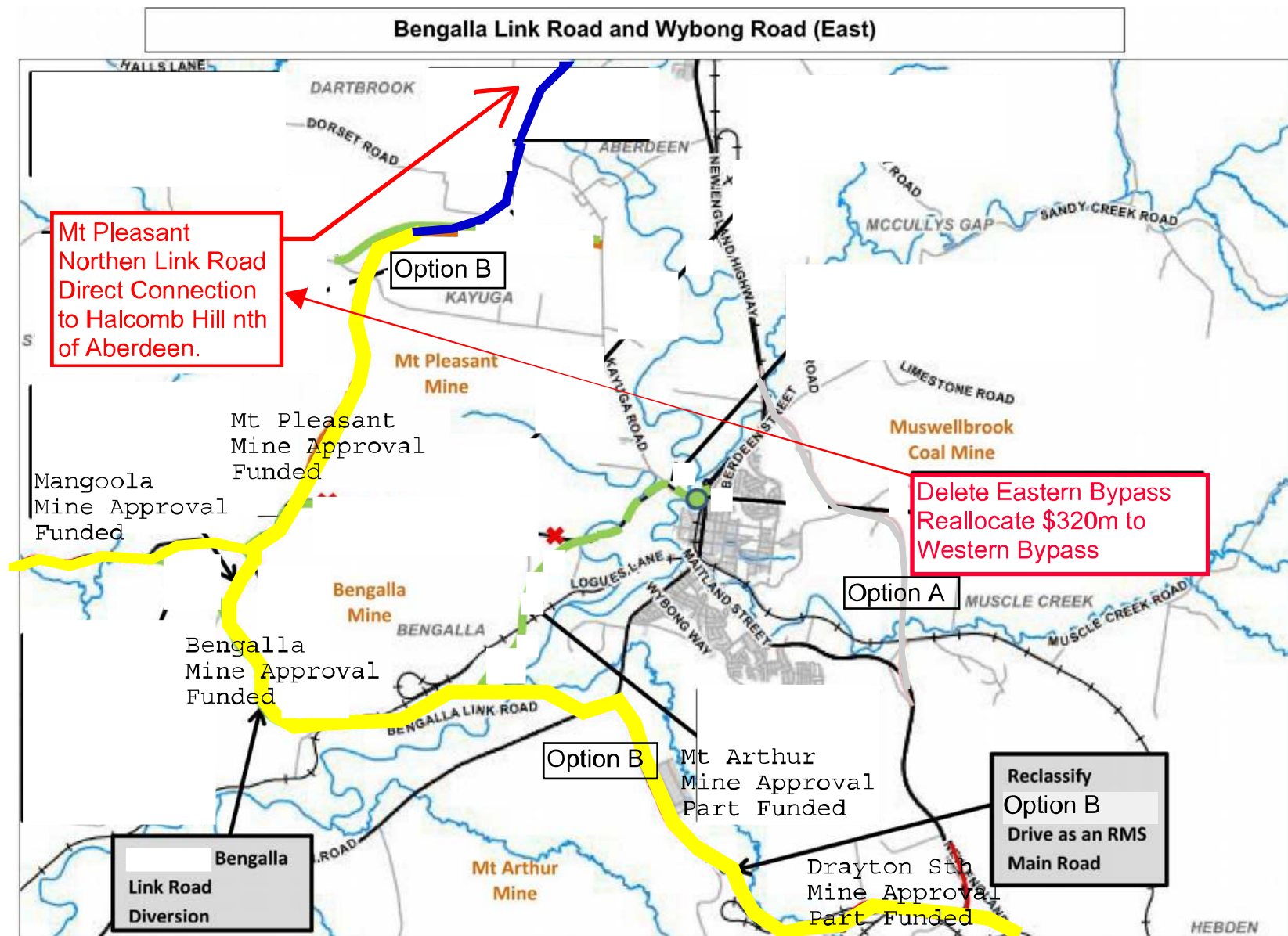


Figure 6-1 Road Network Plan (North-eastern Sector)

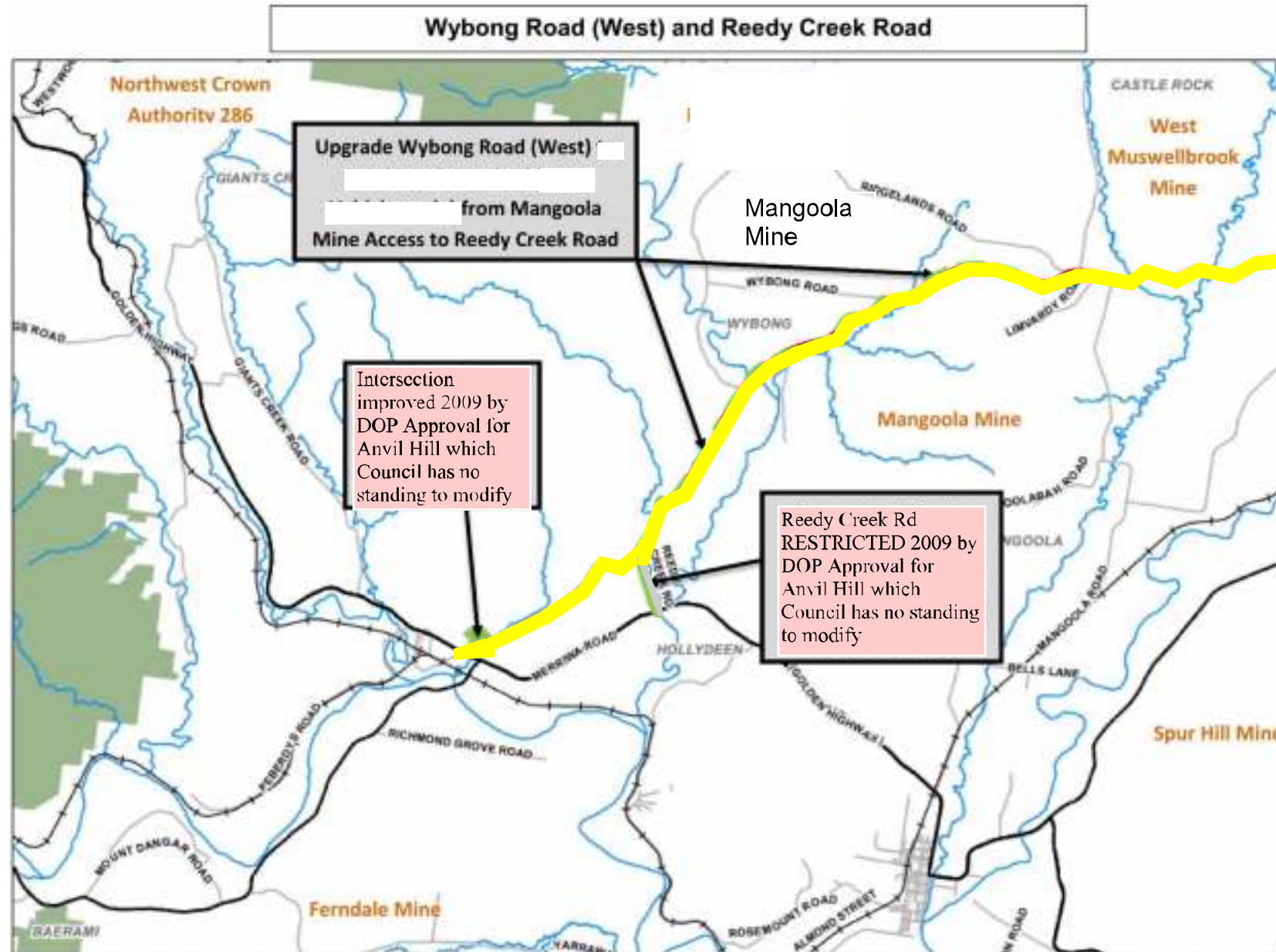


Figure 6-3 Road Network Plan (Western Sector)

THE ONLY SENSIBLE OPTION

3.12.3 Reedy Creek Road

Reedy Creek Road provides a short cut for drivers seeking to gain access to Wybong Road (West) from the Golden Highway and vice versa. It is assumed that only drivers with local knowledge would use this shortcut. It is not a road significantly impacted by mine-related traffic. While the volumes of traffic utilizing this road are relatively low, there is some concern in relation to the adequacy and safety of the design of its intersection with the Golden Highway. Additional investigations are needed in relation to the geometrics of the road and the intersections, and the need to improve safety for drivers.



Reasons for Reedy
Creek Rd rejection
for Mine Access in
2006 Approval,

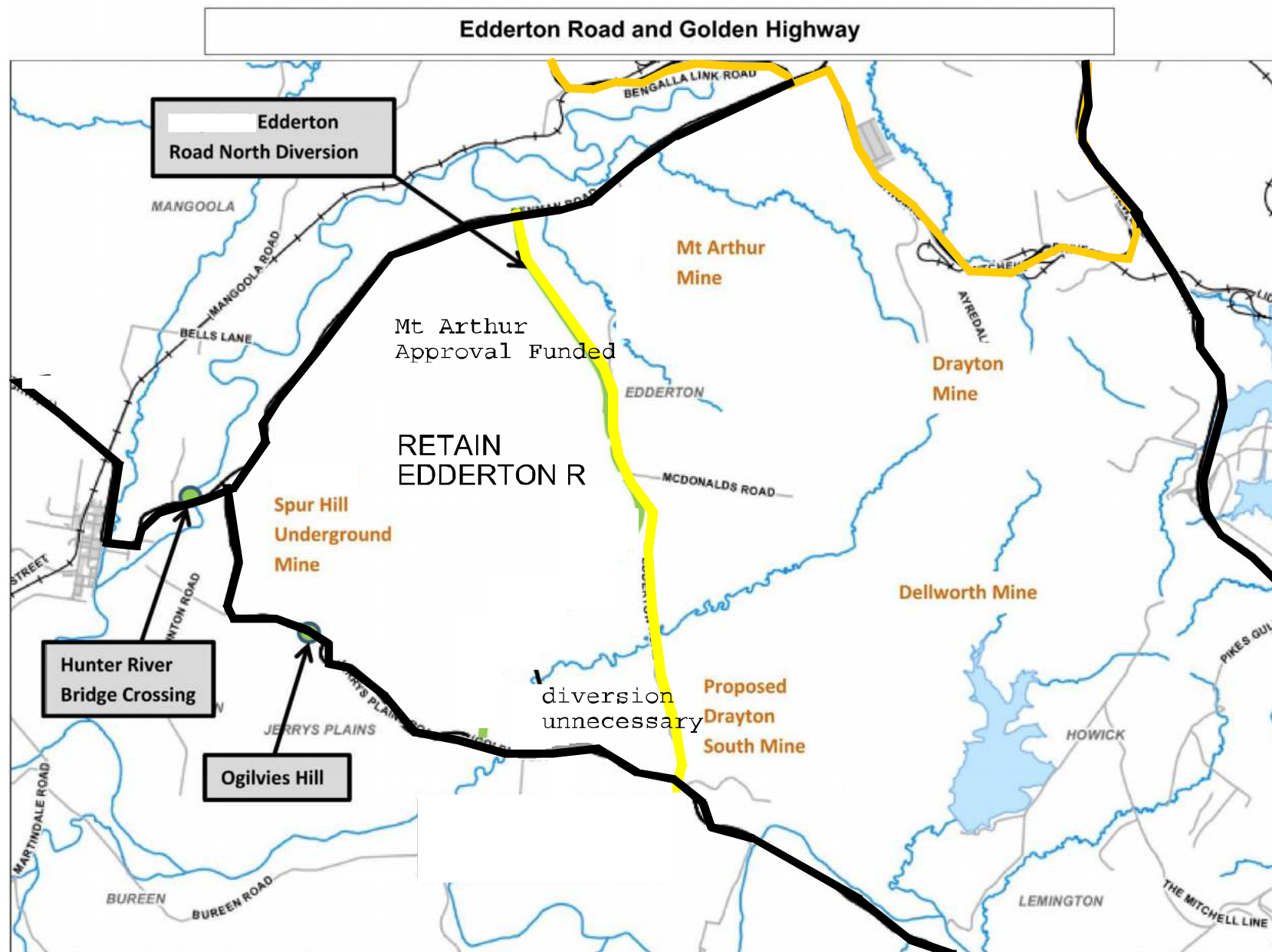


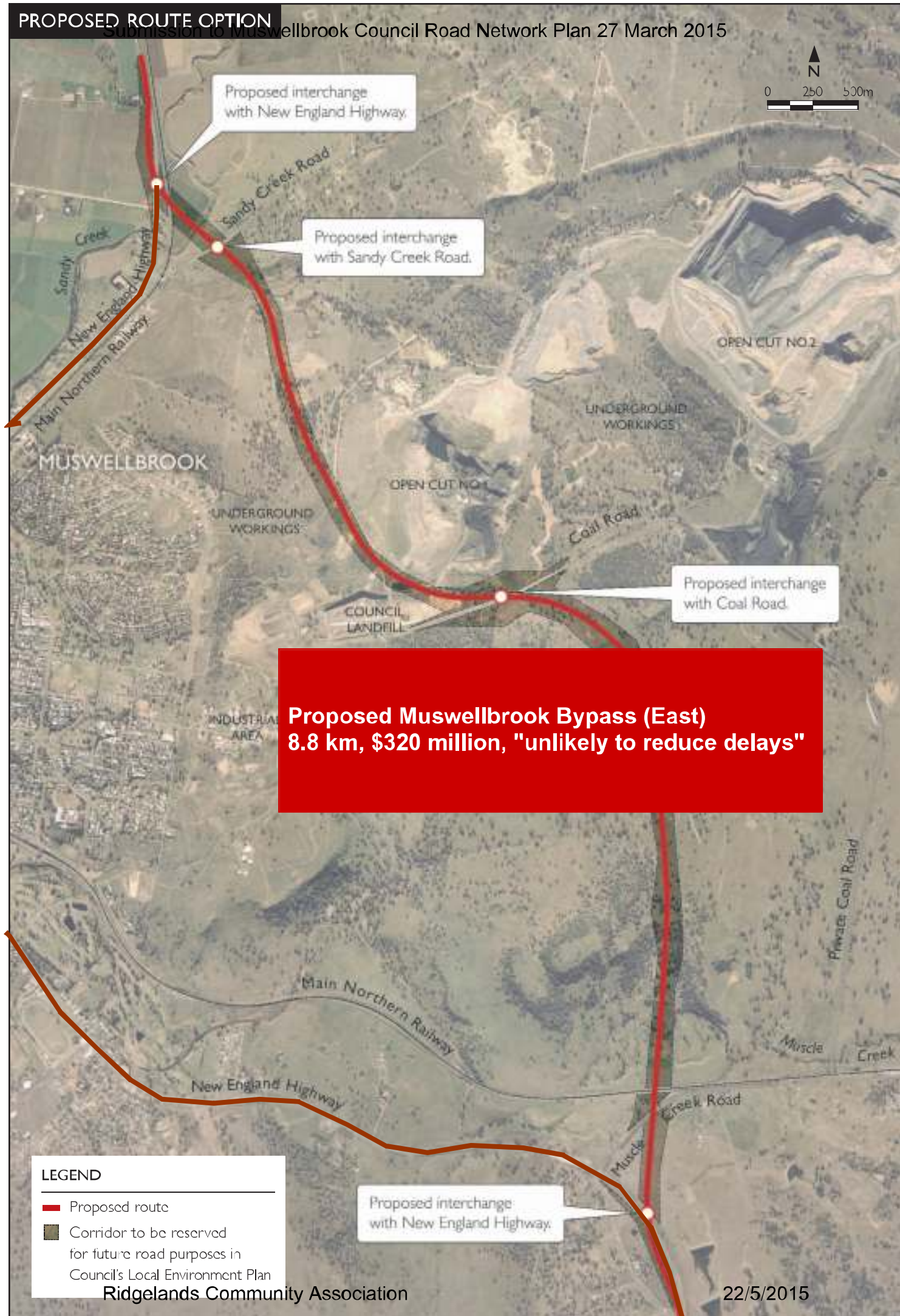
Figure 6-2 Road Network Plan (Southern Sector)

THE ONLY SENSIBLE OPTION

Table 5-1 Cost/Benefit Analysis

Road Improvement Option	Estimated Cost (\$M) includes 30% Contingency Costs	Potential Environmental and Land Use Impacts	Traffic Benefits	Comments
1A - Extend Wybong Road to NE Hwy (at McCullys Gap Road)	\$42M Funding ?	Significant	Good long term (with Muswellbrook Bypass)	All subject to Closure by Flooding with Extreme Risk to road users Options 1C, 2A, 2B have significant adverse amenity impact to commercial premises (Pet Medical Equine) and Aberdeen St and Ford St residences.
1B - Extend Wybong Road to NE Hwy (at Aberdeen St)	\$30M Funding ?	Significant	Moderate	
1C - Replace Kayuga Bridge, upgrade Wybong Road (East) and Kayuga Road from the new southern Link Road to Kayuga Bridge, upgrade Aberdeen Street from the New England Hwy, to the new Kayuga Bridge	Replace Kayuga Bridge \$7M Upgrade Wybong and Kayuga Rd \$5M Upgrade Aberdeen St \$6.4M	Minimal Funding ? High Residential Impact Heritage Bridge	Moderate	
2A - Connect Wybong Road (via Logues Lane) to Denman Road (at Skellatar Stock Route)	\$37M Funding ?	Significant	Minimal	
2B - Connect Wybong Road (via Overton Road) to Bengalla Link Road	\$23M Funding ?	Minimal	Good	
2C - Western and Northern Link Roads (Mt Pleasant Mine)	\$47M NIL Public Cost	Moderate	Moderate	Required by Mt Pleasant Mine Approval at Mt Pleasant Cost
3A - Modified Bengalla Link Road Diversion	\$33M (Modification of design would be at minimal additional cost)	Minimal	Moderate	Modified Diversion is cosmetic, irrelevant and un-necessary.
3B - Connect Wybong Road (via Mangoola Road, Roxburgh Road and an Existing Crown Road Reserve) to Denman Road	\$63M Funding ?	Significant	Moderate	Subject to Closure by Flooding with Extreme Risk to road users
3C - Upgrade Wybong Road (West) from Mangoola Mine Access to Golden Hwy	\$12m est NIL Public Cost	Minimal	Minimal (in short term) Good (in long term)	Upgraded 2010 by Mangoola Mine Approval (Recommended Option)
3D - Upgrade Reedy Creek Road to the Golden Highway	\$12M Funding ?	Minimal	Good	Not Feasible

Road Improvement Option	Estimated Cost (\$M) includes 30% Contingency Costs	Potential Environmental and Land Use Impacts	Traffic Benefits	Comments
A - Muswellbrook Bypass (East)	\$320m public funded	Significant	Minimal (Hyder)	Rendered irrelevant by superior Western Bypass
B - Muswellbrook Bypass (West) ie Option 2c (plus extension to Halcomb Hill)	\$47m est as required by Mt Pleasant Approval with Dorset Rd to Halcomb Hill extension funded by part reallocation of \$320m from redundant Muswellbrook Bypass (East)	Minimal	High Benefit	Provides a flood free (Keys Bridge excepted) well graded, 90km/hr Heavy Vehicle, Oversize and Highway Bypass to west of Aberdeen and Muswellbrook linking with Bylong Valley Way and Golden Highway at Sandy Hollow and Golden Highway at Edderton Road within existing funding envelope, with substantial savings while addressing the mining access needs to flood free access to Shire west & northwest and freeing the CBD of Heavy Vehicle, Oversize and through Highway traffic. Minimal Cost Option with most benefits.



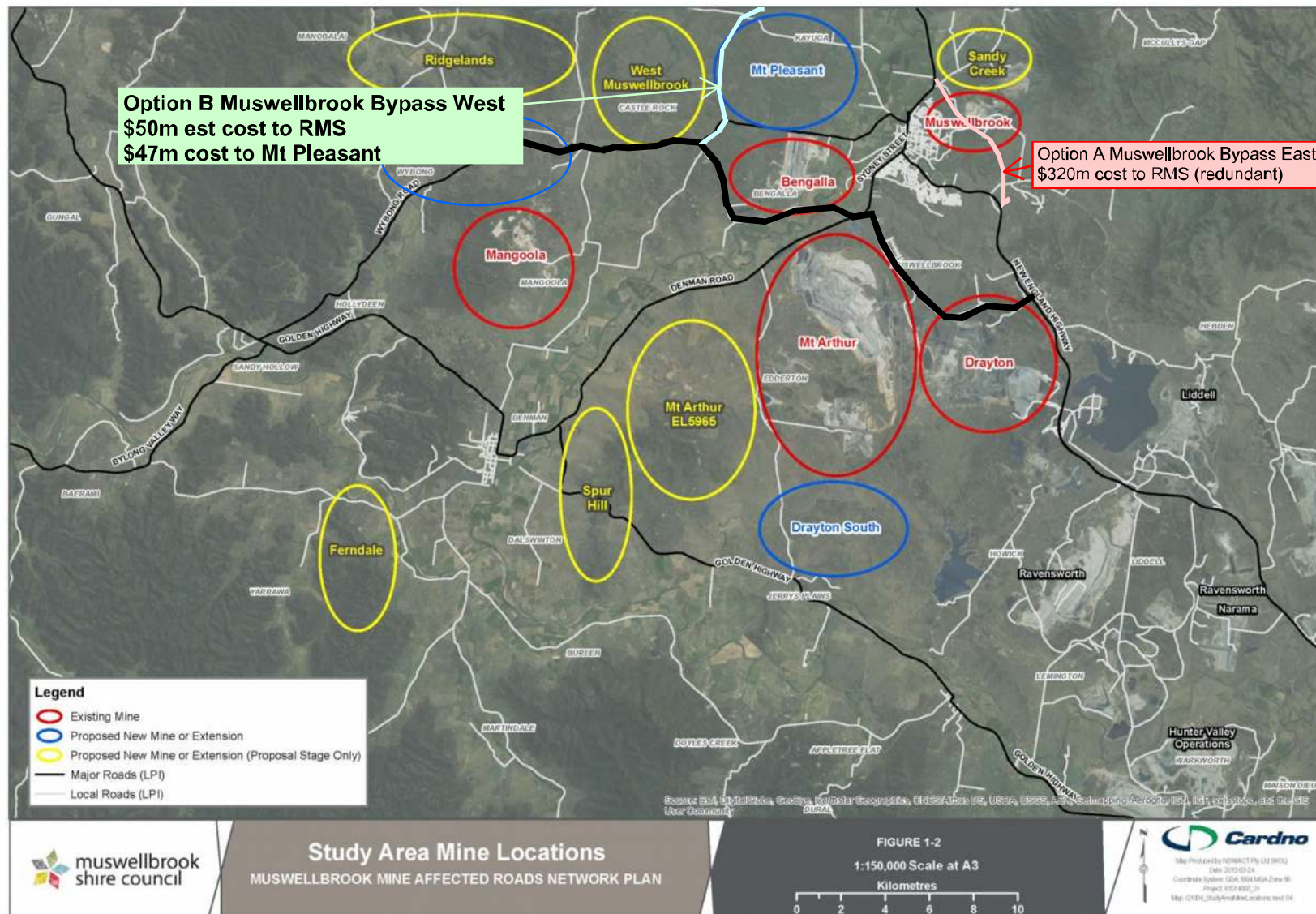


Figure 1-2 Study Area Mine Locations

The Muswellbrook Bypass (East) is UNVIABLE

The proposed Muswellbrook By-pass

The Muswellbrook By-pass will remove through traffic from the New England Highway within Muswellbrook town centre and South Muswellbrook. The Hyder By-pass Traffic Study suggests that "the through traffic reduction is unlikely to reduce delays of local traffic entering the New England Highway" and "in the future, local traffic growth will dominate the traffic performance of key intersections within Muswellbrook town centre, even if the bypass is built". As such, the construction of the by-pass is unlikely to have any significant impact on the local road network. However, should a direct link from Wybong Road to the New England Highway be constructed (Options 1A and 1B of this Plan), this route would offer some efficiencies for traffic coming from and travelling to destinations in the north of the Shire (including south bound through traffic connecting to the by-pass rather than using Bengalla Link Road and Thomas Mitchell Drive). In this case, the long term retention/reinstatement of Wybong Road would be beneficial in offering an alternative route for mine-related traffic in the north of the Shire.

Long term Alternate Route

5.10 Overall Assessment of Options

In assessing the overall performance of the road network over time, the following points need to be kept in mind:

1. The current road network will continue to function satisfactorily in the short term (0-10 years) until new mines and mine extensions result in traffic numbers approaching road capacity, and performance limits resulting in reduced levels of service at intersections and increased accident risks.
2. There is a significant cost to Mt Pleasant Mine associated with the closure of Wybong Road and the construction of the proposed Northern and Western Link Roads (Estimated at \$47M) to provide a connection between Wybong Road and Kayuga Road (and the New England Highway beyond). A significant cost saving could result if efficient alternative solutions for connection to the New England Highway are feasible.
3. Options 1A, 1B, 2A, and 3B all involve the construction of new roads and bridges within the flood plain of the Hunter River. Consideration will need to be given to the upstream impacts on flood behaviour due to obstruction of flows (i.e. increased velocities and depths of water during major flood events).

"The proposed Muswellbrook By-pass - The Hyder By-pass Traffic Study suggests that "the through traffic reduction is unlikely to reduce delays of local traffic entering the New England Highway" and "in the future, local traffic growth will dominate the traffic performance of key intersections within Muswellbrook town centre, even if the bypass is built".

"the long term retention/reinstatement of Wybong Road would be beneficial in offering an alternative route for mine-related traffic in the north of the Shire. "

The "significant cost to Mt Pleasant" is AN IRRELEVANT consideration to provision of effective and efficient road transport planning to the community by Council and is worthy of referral to NSW Auditor & Parliament

Re-allocation of \$320m from the Muswellbrook Bypass East to Option B Muswellbrook Bypass West is the most efficient solution for connection of the mines to the Shire West to the New England Highway and to bypass highway traffic from the CBD and south Muswellbrook.

Evaluation of Option B Muswellbrook Bypass West

The Option B Muswellbrook Bypass West makes efficient greenfield use of existing road alignments and mining approval related road realignments to bypass Aberdeen and Muswellbrook townships to and from north, south and west (New England Highway, Golden Highway, Bylong Valley Way ie Dubbo-Merriwa, Lithgow-Bathurst-Mudgee, Putty-Singleton, Scone) extending high quality highway upgrades from the Hunter Expressway at Branxton and pending Singleton Bypass to Halcomb Hill and pending Scone Bypass to Parkville for less than the projected cost of the Muswellbrook Bypass East alone., approx 120km of highway upgrades that fulfil all current and 20yr projections for the price of 10km Muswellbrook Bypass East that 'fails' basic project objectives & assessment criteria (Hyder)

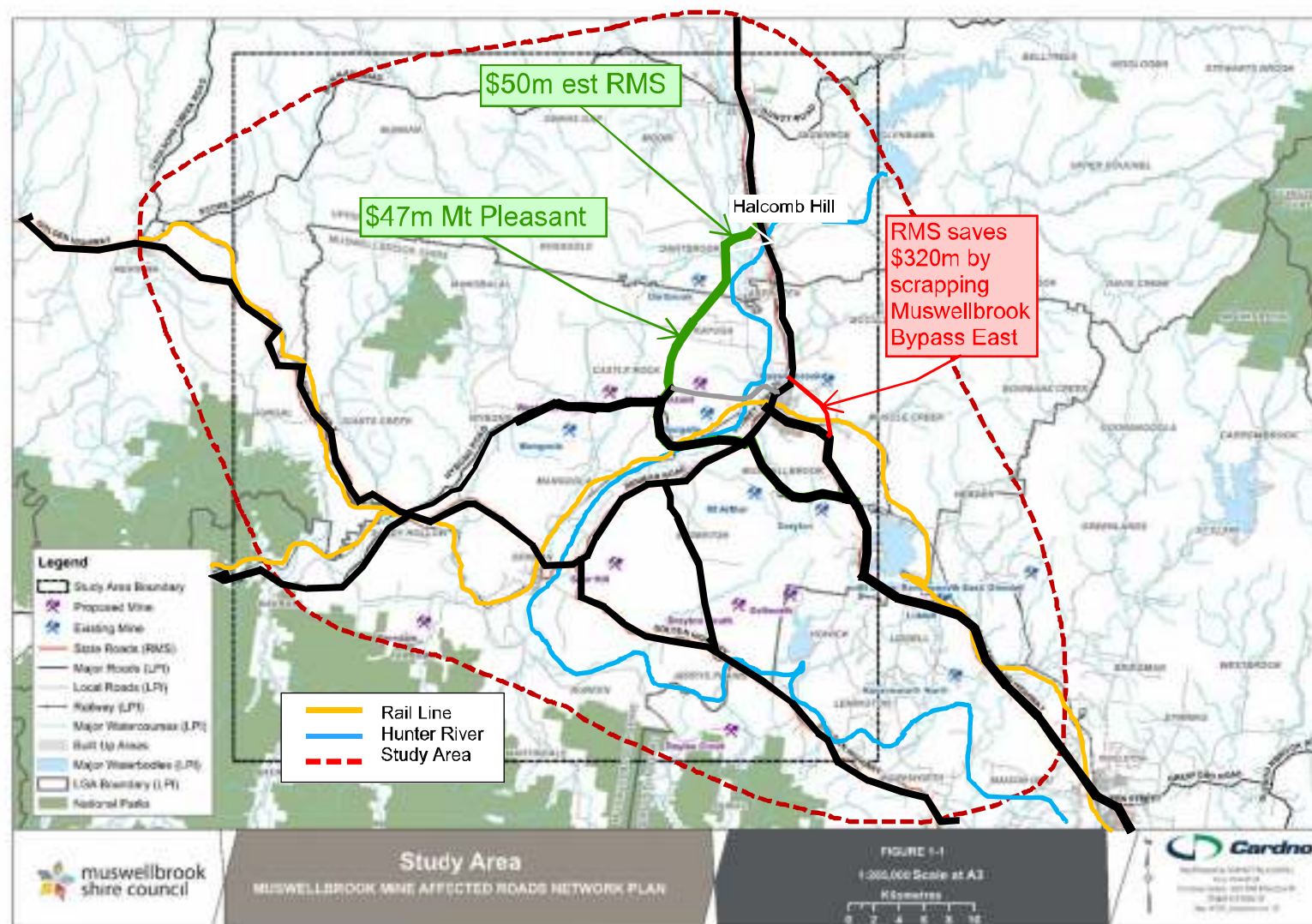


Figure 3-2 Corridor Study Area

Mayor: We're on track

Catherine Clifford

15 May 2015, 4 a.m.

THE mayor of Muswellbrook Shire, Martin Rush, said council's draft Budget for 2015-16 will meet the ongoing needs of the communities it serves.

Cr Rush said council will not be raising rates for the whole of its current term and the draft 2015-16 Muswellbrook Shire Council budget reflects that commitment.

The draft document was presented to a Muswellbrook Chamber of Commerce and Industry breakfast at the Muswellbrook Race Club on Tuesday.

Cr Rush said the 2015-16 Budget includes a number of measures that will invest in council's future financial security.

These will be achieved in three broad areas: a human resources organisational review; achieving energy efficiencies by sourcing 40 per cent of council's energy from renewables; and allocating additional resources to the Commercial Building Fund to extract higher yields.

"That was a fund that was begun in 2008 and in that year provided a zero dividend and by 2016-17 it will provide a \$1 million annual dividend to the General Fund.

"It's contributing about \$800,000 in the 2015-16 Budget," he said.

In response to a question from the floor about the Commercial Fund, Cr Rush explained the fund consisted of a number of properties, including Campbell's Corner, Market House, Loxton House, several residential properties and cash reserves.

He said the fund is operated strictly commercially and the properties are managed by a local real estate agent, yielding a dividend that ends up in council's General Fund as part of consolidated revenue.

Cr Rush said the revenue comes essentially from rentals of council's commercial holdings and it was council's intention to increase the yield by making careful investments.

"It is critical going forward because at some point the mining rate will start to decrease, and I'm not suggesting it's going to start to happen tomorrow or even in 10 years' time, but at some point it's going to reduce and the purpose of that Commercial Fund, in part, is to offset that devolution," Cr Rush added.

He also told the group \$21.4 million had been set aside for council's capital works program.

Major road repairs will take place on the Bylong Valley Way, Bureen Road, Wybong Road, Hebden Road, and the intersection of Crinoline and Palace Streets with the Golden Highway at Denman.

In 2015-16 allocations for re-gravelling gravel roads will increase by \$130,000, kerbing and guttering by \$60,000, bridge replacement by \$100,000 and car park improvements by \$230,000 most of which will be directed to Campbell's Corner and the western side of Bridge Street.

The mayor told the gathering the NSW government's Fit For The Future program, which aims to make sure local councils have a sturdy balance sheet in the years ahead, is now underpinning much financial decision-making.

"While Fit For The Future anticipates scores of mergers across the state, Muswellbrook Shire Council has been identified as having the scale and the capacity to continue to stand alone."

Cr Rush said council has recently released its mining-affected road network strategy.

"Consultation was undertaken with industry stakeholders to ensure that road re-alignments, road closures and construction of new roads are planned in a co-ordinated way leaving the present and post mining-affected road networks with maximum efficiency.

"Council anticipates a strategy of delivering considerable savings to the coal industry while creating a better and safer road network, both in the short term and in the long term," he said.

The public has until Tuesday, June 9, to lodge a submission on the draft 2015-16 council budget.

**NB Only 1 submission (Wybong Action Group) was lodged on 1st exhibition
After 2nd exhibition only 1 other was lodged and it remained secret.**

Appendix G MSC Special Rate Variation

Objection to Muswellbrook Shire Council Special Rate Variation Application

Objection to Muswellbrook Shire Council Special Rate Variation Application

Concerning the unrealistic proposition of Muswellbrook as a Centre for Regional Government

- Muswellbrook Urban Area has a small population of several thousand persons.

Exhibit: ABS population statistics

- Muswellbrook Urban Area is subject to severe long term Population Growth Constraints of constrained long term land supply, inadequate public rail and inter-town public transport, excessive mine related fine particulate < PM10, < PM2.5 dusts, excessive NOx, SOx and heavy metal coal fired power station emissions, excessive rail and mine related noise.

Exhibits: MSC , NSW Health, NSW DOP, NSW PAC Reports, DRE TAS Map land use reservation of a preponderance of Coal Mining and Resource Extraction Leases

- The proposal for Muswellbrook to be granted Regional Centre status ignores the existence of competing regional populations such as Singleton (urban population 20,000) and Scone, (LGA population several thousand) with well-established and higher competing needs for location of State and Federal governance and service centres.

Exhibit: Sensus: Number and type of NSW and Federal Government Services, Agencies and Offices.

- Increasing Mining Industry Dominance of Muswellbrook LGA, shire wide economic activity, civil society and positions of governance.

Exhibit: MSC Councillor Pecuniary Interest Register, ABS labour force statistics.

- Muswellbrook is not a regional centre. Such characterisation and aspiration is delusional. Regional Centres in the Upper Hunter are Singleton (which has the most Federal and State presence, higher regional population and much more diverse economy, extensive CBD), Scone (Rural related government agencies,, extensive CBD) and Merriwa.

Exhibit: Sensus

- MSC maintains a large acreage of debt funded CBD commercial space vacant,, Muswellbrook has an existing, appropriate to population profile, regional presence as a hub of socio-economic disadvantage, casual telephone hand-set cleaners, social workers, NDIS, Police and Corrections facilities.

Objection to Muswellbrook Shire Council Special Rate Variation Application

Exhibit: Observably severe CBD (MSC Owned) Commercial Property Vacancy,, MSC
Community Profile

Concerning MSC Financial “Fitness for Future” Status

- MSC claims LGA ‘Fit for Future’ financial status

Exhibit: MSC Publications, Agendas and Minutes.

- Being “Fit for the Future” produces cognitive dissonance and financial concern when paired with MSC last minute proposition of immediate need for a “Special rate Variation” and “Regional Status Claim” through a massive debt funded major MSC Projects.

Exhibit: MSC Extra-Ordinary and Ordinary General Meeting Minutes & Business Cases

- MSC last minute proposition of immediate need for a “Special rate Variation” and “Regional Status Claim” through a massive debt funded major MSC Projects when paired with MSC prediction of severe writedown in the Mining Rate produces further cognitive dissonance and financial concern

Exhibit: MSC Rate Publication

- What are the objects, legal, trading, management and operational status of each fund for which MSC receives specific grants, mining VPA levies etc, eg DOP Mt Arthurs Coal Community Fund,, DRE Ridgeland Coal Community Fund,, DOP Wybong Uplands Land Management Strategy (WULMS) Funds,, Federal Stepping Stones-Greater Eastern Ranges Funds,, Federal Green Army Funds,, Federal, State and Local Conservation Volunteer Funds etc. What exactly is the MSC Future Fund, ABN Number, Principal Objects, Management structure etc? Where are its publicly available accounts and asset valuation listing.

Exhibit: DOP Approval Conditions,, WULMS FOI Documents,, Mangoola CCC minutes

- What is the legal and trading status of the MSC ‘future fund’ ? Is the MSC ‘future fund’ being used as core security for interest payments on multi-million dollar property development borrowings?

Exhibit: there no public oversight of this fund or other various MSC administered funds.

- What is the impact on “Fitness for the Future” of ongoing cumulative losses and interest payments exceeding \$1m every year for 50 years with regard to just the Business Case for the loss-making 500 seat Theatre, Convention and Performance Centre,, let alone the

Objection to Muswellbrook Shire Council Special Rate Variation Application

leaving aside of any building and construction warranty claim for the leaking Olympic pool repair of recent years?

Exhibit: none to be found

- The loss making, high interest, MSC 500 seat Theatre, Convention and Performance Centre proposal competes with, conflicts with and crowds out the commercial Muswellbrook Workers Club \$5m Redevelopment DA proposal.

Exhibit: MSC Extra-Ordinary and Ordinary General Meeting Minutes,, MSC DA's

- What is the impact on the increasing debt servicing ratio of the MSC "Fitness for the Future" of multiple-debt loading of the principal of the 'future fund' and risk potential of negative change to future fund property holding and tenancy valuations?

Exhibit: none to be found

Concerning MSC \$46 million Approved Road infrastructure 'give-away bonanza' 2015

- MSC has engaged in an *ultra vires* attempt to unilaterally release in excess of \$46m of collateralised MSC Western Roads Strategy obligations from Rio Tinto operated Mach Energy Mt Pleasant Project

Exhibit: MSC Western Roads Strategy 1997, Neil Pope & Cardno (Rio Tinto) Mine Affected Road Network Draft 2013, MCCI Minutes & media reports of Mayor commitment to reduce Mining Road consent costs to the industry, MSC Mine Affected Road Network Plan 2015 (the \$46m *ultra vires* 'giveaway'),, Notes of Mach Energy assurance of funding for the DOP MTP Approval Link Roads.

- The 2015 MSC \$46 million infrastructure 'give-away' when paired with MSC last minute proposition of immediate need for a "Special rate Variation" and "Regional Status Claim" through debt funded major MSC Projects of negative net value produces further cognitive dissonance and financial concerns.

Exhibit: Ratepayer majority (statistically valid) dis-approve of the MSC SRV Application,, MSC Publication.

Objection to Muswellbrook Shire Council Special Rate Variation Application

Inadequate SRV Project Selection Process

- A selection process for the projects and SRV was not determined by MSC until December 2016.

Exhibit: MSC Extra-Ordinary and Ordinary General Meeting Agenda and Minutes

- The community did not seek nor select the three projects forming the basis of the SRV application.

Exhibit: MSC Extra-Ordinary and Ordinary General Meeting Minutes.

Inadequate SRV and SRV Project Community Consultation

- The SRV Application was exhibited over the Christmas period when numbers of interested ratepayers are absent from the LGA.

Exhibit: MSC Ordinary General Meeting, Agenda and Minutes

- The Random Telephone Survey, the only community survey component with statistical validity and relevance disclosed a majority NOT in favour of the SRV and SRV Projects.

Exhibit: MSC Ordinary General Meeting Agenda and Minutes

Concerning the SRV 500 seat Theatre, Convention and Performance Centre.

- At both Community Meetings (Denman & Muswellbrook) there were approx. 40 persons in total present and there was no mention whatsoever of SRV or the \$10m debt funded 500 seat Theatre, Convention and Performance Centre or Major Projects.

Evidence: Notes of public meetings

- Campbells Corner was purchased by MSC and its upper level developed for the Muswellbrook Conservatorium of Music as teaching and Performance Space. The re-development of Campbells Corner is purported to have cost over-runs to ratepayers of 20% (from \$3m purchase to \$9m redevelopment to \$11m total and remaining in-complete, largely untenanted and financially unviable)

Exhibit: MSC Publications, Agendas and Minutes

Objection to Muswellbrook Shire Council Special Rate Variation Application

- MSC previously provided a \$200,000 grant to the commercial proponent of a Twin Theatre located in the workers club with unimpeded bar, gaming and shared toileting access for minors.

Exhibit: Muswellbrook Cinema, MSC Publications, Agendas and Minutes

- MSC also previously granted a \$600k loan guarantee to the commercial proponent of the Twin Theatre located in the workers club with unimpeded bar, gaming and shared toileting access for minors.

Exhibit: MSC Publications, Agendas and Minutes

- Who would use the 500 seat theatre? (Judas Priest ? Lock the Gate?? Jimmy the Junky? Kursa? Or NSW Minerals Council dinners) Does the proposed Theatre provide Open Access for public bookings?

Exhibit: none but questions.

- The loss making, high interest, MSC 500 seat Theatre, Convention and Performance Centre proposal competes with, conflicts with and crowds out the commercial Muswellbrook Workers Club \$5m Redevelopment DA proposal.

Exhibit: MSC Extra-Ordinary and Ordinary General Meeting Minutes,, MSC DA's

- MSC SRV plan to demolish and rebuild the Hill St/Bridge St/Brook St Block will alienate 25% of the CBD to non-rate paying entities adding to the cost. MSC is crowding out the CBD.

Exhibit: MSC CBD map

- MSC owns and is directly responsible for the high number of vacant main street business and commercial premises and uninviting graffiti prone shop fronts.

Exhibit: Muswellbrook CBD pictures,, Titles.

Concerning the SRV Aquatic Centre Proposal

- The Aquatic Centre proposal leaves aside any building and construction warranty claim for the leaking Olympic pool repair of recent years.

Exhibit: MSC Extra-Ordinary and Ordinary General Meeting Minutes,, MSC DA's

Objection to Muswellbrook Shire Council Special Rate Variation Application

- The Aquatic Centre proposal is an unnecessary luxury providing limited community benefit due to high public entry fees limiting users and commercial operators. Warranty claim for leakage repair undertaken at the recent conversion of the 55 yard pool to 50m Olympic standard with free under 18 entry would be a more communally beneficial alternative.

Exhibit: Public Opinion

- The Aquatic Centre proposal reduces the 50m Olympic Pool to 6 lanes

Exhibit: MSC Extra-Ordinary and Ordinary General Meeting Minutes

Concerning Rail Noise Attenuation Project

- Noise attenuation Project – No detail anywhere (ARTC or MSC) “Mr Rush says for construction of a rail noise abatement wall in cooperation with the Australia Rail Track Corporation” No EIS,, Noise contours,, etc

Exhibit: ARTC website,, Exhibit: Notes of meeting with MSC Public Officer Joshua Brown.

- Justification for Noise attenuation as printed by MSC is “soundproofing arrangements to enhance the ability to hold formal public and cultural events such as building openings and community memorial or ag raising activities without rail noise intrusion.”

Exhibit: Rail Noise attenuation does NOT attenuate 18,000 vpd road traffic noise,, 20% heavy and B-Double and stopping/starting at a number of pedestrian and road traffic signals. There is no benefit in Rail Noise Attenuation.

Concerning the Denman CBD alterations

- Denman Plan tried by MSC before, failed, had to be removed at great expense.

Exhibit: MSC Records.

- The Denman Plan is Funded with \$750,000 requisitioned from the Mangoola Coal Community Fund and does not require a SRV.

Exhibit: MSC Records, Agendas, Minutes.

Common setting aside of councillor Conflict of, Pecuniary and Non-Pecuniary, Interest

Objection to Muswellbrook Shire Council Special Rate Variation Application

- The Mayor is the ultimate beneficiary of some 3 months of Green Army works and 6,000 trees planted at Tax-Payer expense at 1300 Sandy Creek Road, McCullys Gap

Exhibit: 1300 Sandy Creek Rd, McCullys Gap,, likely Conservation Funds Audit.

I object to the Muswellbrook Shire Council Special Rate Variation and Projects as do the statistically determined majority of the rate payers of Muswellbrook Shire. Given MSC projections of rapidly falling mine rate revenue, claim to financial fitness, surplus and borrowings being used to fund the unsupportable and grandiose plans and for the reasons given above the Muswellbrook Shire Council Application for a Special Rate Variation and Projects should be refused at this time.

The MSC SRV has no public support and is an unjustifiable imposition on the rate payer.

Sincerely.

John Shewan