Lismore. The number of dwelling approvals within Lismore Part A SLA remained stable between 2005/05 to 2007/08 whereas the remainder of Lismore LGA experienced a decrease in dwelling approvals.

Macroplan states that there is likely to be strong demand for residential development within Lismore East, Richmond Hill and Goonellabah.

The Submarket Analysis states that the "two major drivers of growth in Lismore, particularly when compared to coastal localities, are employment opportunities and housing affordability." Southern Cross University and major medical facilities within Lismore are also considered by Macroplan to increase demand for residential uses

Residential Prices

Macroplan provide an overview of residential sales in 2006/07 and assess that the majority of the 157 residential sales within this period can be classified as being with the low price range (less than \$312,000 for detached houses, and below \$259,000 for other dwellings). The Submarket Analysis states that Lismore Central and Lismore Heights comprised a higher proportion of low priced sales, whereas Lismore East comprised a high proportion of high priced sales.

Recommendations / Housing Requirements

Based on the demographic profile, current supply and demand characteristics, and the current cost of residential dwellings within Lismore, the Macroplan Submarket Analysis recommends that the following be undertaken to ensure that future residential uses accommodate requirements of the Lismore population:

- "The submarket demand is primarily for affordable housing for the aging population, which will require facilities and services in close proximity to the urban areas.
- "A diversity of product is required within Lismore Central area to provide affordable rental housing for seniors and students.
- "Smaller households comprising of families without children or singles is increasing, resulting in the adaptation and diversity of housing products.
- "Higher priced housing quality should continue to be provided within Lismore East to encourage growth and diversity.
- "There is currently little housing diversity within the Lismore LGA, however affordable housing diversity, both in terms of typology and rental/ ownership, will be required to accommodate the submarket
- "Additional housing will be required in order to retain affordability and provide opportunities for submarket demand."

Implications

Macroplan identify that there is need for increased supply of residential land which offers a variety of residential product, in proximity to the Lismore City Centre and community facilities, but is also affordable. The current supply of developable residential land is insufficient to meet the level of population growth which should be occurring within Lismore, as identified in the FNCRS. An increase in residential land supply is required to support demand generated by employment opportunities and to increase diversity of residential product which will appeal to more markets and enhance the affordability of residential product in Lismore. An increase in residential land supply which is appropriate for residential development will be capable of

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retaining the current population of Lismore and its future generation, but will also attract migration to Lismore City.

The Submarket Analysis highlights that Lismore East is attracting high sales prices, which is an area that has been designated a high proportion of residential land supply under the LUS. Therefore, other areas need to be identified for residential uses which will not generate such high land prices. North Lismore Plateau would provide a significant level of affordable residential supply over an extended period of time. It would meet the requirement for additional residential supply, with a diversity of product appealing to separate market sectors, and would be affordable as it is not located in an established, premium location.

This document provides a clear overview of the key characteristics of the Lismore residential market, however some of the data sources are not recent and an update of residential sales, residential prices, and dwelling approvals would provide a more detailed overview of the current conditions of the market.

B.3.2 PWC Supply Demand Assessment

Pricewaterhouse Coopers (PwC) was commissioned by North Lismore Plateau landowners to undertake an assessment relating to the Demand Supply Analysis for Urban Residential Development in the Lismore Local Government Area. The aim of the report was to identify opportunities for future urban residential development within the Lismore LGA through the evaluation of current supply and demand characteristics of the residential market.

The Supply Demand Assessment argues that the current supply of residential land is significantly lower than stated by Lismore City Council within it's LUS. PwC conducted site inspections of residential land supply within Lismore and utilised 'A Critical Analysis of Lismore City Council's Urban Development Strategy' prepared by Riordans Consulting Surveyors and Stephen Fletcher & Associates Pty Ltd to assess the current supply of developable residential land supply.

The Critical Analysis, as outlined within the PwC Demand Supply Assessment found the following:

- Approximately 147.7 Ha of existing vacant residential zoned land within Lismore is constrained, compared to 31 Ha identified as constrained by Lismore Council
- Therefore the developable / unconstrained supply of residential land is 108.3 Ha, which is significantly lower than the 255 Ha identified as developable / unconstrained by Council.
- "It forecast that, without a change in the strategy, Lismore could soon reach a situation of having grossly insufficient land on the market, (especially affordable land) for urban residential development."

Having assessed that the supply of developable residential land is approximately 108 Ha, PWC states that the negative to low population growth which has previously occurred within Lismore may be caused in part to the lack of developable residential land. The limited supply of residential land has had a significant increase in demand for good quality residential land, therefore also increasing land prices. PwC state that the cost of land has increased at a Compound Annual Growth Rate of 13.2% between 2002 and 2007. Land prices are also enhanced by the role and function of the Lismore City Centre, which provides employment opportunities, community and commercial facilities which are not available elsewhere within the Far North Coast region. PwC also state that, through consultation with local real estate agents, that there is strong demand for good quality residential land within Lismore, therefore resulting in higher prices for land that is released to the market which also sells very quickly due to current lack of supply.

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Increased demand for residential supply will be supported by population growth due to the role and function of Lismore as the "commercial centre of the far north coast, especially for the provision of employment, continued investment of the Lismore City Council in the local area amenities and the availability of attractive social infrastructure, including the medical and specialist facilities of the Lismore Base and St Vincent's Hospitals and the Southern Cross University." The Demand Supply Assessment also stated that the allocation of 8,000 dwellings within Lismore LGA under the FNCRS will have a significant impact on the level of demand for residential land and diversified residential product within Lismore.

PwC state that the current supply of residential zoned land will be incapable of meeting demand for residential dwellings. The Demand Supply Gap examines the trend in dwelling approvals between 2002 and 2006 within Lismore, and PwC conclude that there is an annual shortfall of 21.6 dwellings between projected demand and actual demand for dwelling approvals.

The Supply Demand Assessment identifies the North Lismore Plateau as a potential residential development site, and outlines the following benefits for rezoning as 2(a) for urban residential development:

- Efficient use of the community's resources
- Economic support for businesses and therefore employment in the Lismore CBD
- Delivering the FNCRS requirements for future lot yields
- A showcase example of new improved planning and development.
- Effective growth on the north-western side of the city
- An attractive alternative to population movement to the coast

PwC also state that urban residential development at NLP "may potentially encourage future growth and further development in areas geographically west and north of the CBD in areas that are currently undeveloped and in close proximity to the city centre. This would provide an affordable alternative to previously identified sites lying east of the city centre."

The Supply Demand Assessment also addresses the issues relating to noise from the Lismore Showground and Lismore Speedway, stating that the Section 96 Directive limits the Speedway to only 14 events per year with action to be taken against any vehicles which exceed the noise levels.

Implications

The PwC Supply Demand Analysis also highlights that the current supply of residential land is insufficient to meet demand, therefore Lismore requires additional supply of appropriate residential land to keep people from leaving Lismore and in order to attract higher levels of migration to Lismore. The Supply and Demand Analysis also highlights that affordability of residential land is significantly impacted by lack of good quality residential supply. The lack of affordable residential land supply explains the lack of high levels of population growth in Lismore, as the area is no longer seen as a significantly cheaper alternative to the coastal markets. Lismore City is a Regional Centre within the surrounding region and offers a high level of social and economic infrastructure to support the needs of its resident population, and should therefore be capable of retaining and attracting a high level of residents.

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B.4 NORTH LISMORE PLATEAU

B.4.1 DUNOON ROAD PLANNING STUDY

The Dunoon Road Planning Study was prepared by Northern Rivers Engineers Planners and Scientists in 1994 after the planning study was undertaken by the Lismore City Council to investigate the potential for the North Lismore Plateau to be utilised for urban residential and rural residential development. The Study Area, as outlined in the Planning Study comprised an area of approximately 200Ha. The Study Area differs slightly from the current boundaries of the North Lismore Plateau site. This is discussed in Appendix

Supply and Demand

The Strategic Planning Assessment outlines the supply and demand argument for development of residential uses within the study area. The assessment includes population projections which anticipated the population of the Lismore LGA to increase by 14,840 people between 1991(40,580 people) to 2006 (55,420 people). Utilising these population projections, the Dunoon Road Planning Study considers that 7,867 allotments would have been required to meet population growth to 2006.

Based on the level of demand which was anticipated, the Strategic Planning Assessment concludes that the "supply of suitably zoned land is limited for both rural residential and urban residential while demand continues to increase. The availability of suitably located land close to Lismore, free of significant environmental constraints and conflicting landuses, and able to be economically serviced, will be a critical factor in Lismore's continued prosperity as a regional centre." The Study also states that the utilisation of the Study Area for urban residential uses would allow for approximately 1,500 lots which would meet 30% of residential demand to 2006.

Site Characteristics and Constraints

The Study Area is considered to be a highly desirable site for future residential development due to its location in relation to the CBD and the lack of development constraints relating to the characteristics of the site. The 1994 Planning Study clearly outlines that the NLP is flood free, close to the CBD, is not classified as good agricultural land and has no significant flora remnants or areas of animal habitat potential. The Planning Study also states that residential uses within the NLP will also maintain the centrality of the precinct Central Business District and enhance the function of the CBD as the regional centre of the Far North Coast region.

The Planning Study identifies the following potential constraints on residential development within the Study Area:

- Flooding Flooding is not a significant constraint for development within the Study Area.
- Habitat -- There are no areas of high conversation value within the Study Area, whilst a corridor network for vegetation conservation and habitat enhancement is suggested for consideration in future development.
- Heritage the Study Area has no Aboriginal heritage issues, however the dry stone wall located to the northwest of the Study Area does have some significant heritage value. Pioneer Memorial Park should also be considered for heritage value, pending increased visitation to the area. the location of these heritage sites in relation to the NLP will have to be assessed.
- Access The report states that "the preferred initial access point to service the proposal would be the Sexton Road extension to the central eastern part of the plateau, followed by the implementation of the

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McLeay Road deviation to Dunoon Road, and finally the reconstruction and use of the quarry access road connecting to Nimbin Road, . . . The cost of major access road construction, when distributed over the total yield in stages, is considered reasonable in relation to total costs".

- Quarry The North Lismore Quarry was located to the south of the Study Area. This is no longer an
 issue as the quarry has closed.
- Agriculture Agricultural land use do not form a constraint on development within the Study Area as the Study found that there were no consolidated areas of significant grazing or crop land within the Study Area.
- Community / Recreation Services The integration of community facilities will be included within the proposed development and will occur as required by the onsite resident population. The Planning Study also states that higher order community facilities within the wider Lismore community will need to be upgraded or expanded due to increased demand from population growth.
- Lismore Showground The Planning Study outlines that residential development on the Study Area has the potential to cause flooding at the Lismore Showgrounds due to run-off if proper drainage systems are not utilised in the design and development process. The sale yards also represent a potential constraint to residential development due to the noise generated by cattle sales.
- Speedway The Speedway activities at the Showground generate a high level of noise which can be heard throughout Lismore.

Servicing and Infrastructure

The development of the North Lismore Plateau site will require the extension and up-grading of utility services to provide water, sewerage, onsite waste disposal, telephone, electrical, and i road infrastructure to support residential development onsite. There were no identified contraints arising out of the general requirements for servicing and infrastructure provisioning.

Recommendations

The Dunoon Road Planning Study identifies two development options for the Study Area:

- Urban Residential The preliminary concept plan supports the development of 1,520 lots and would accommodate a residential population of approximately 4,000 people. This option also allows for open space, community facilities and commercial facilities within the Study Area.
- Rural Residential The Planning Study states that significant constraints exist for the development of rural residential uses within the Study Area. These include the inability to provide efficient waste disposal services to the site, that it would be uneconomic to develop rural residential when considering the cost associated with the provision of infrastructure and services, and rural residential uses would be an inefficient use of the site considering its location (in proximity to the Lismore City Centre).

The Dunoon Road Planning Study therefore recommended urban residential development as the most appropriate use within the Study Area, and recommended that rural residential be discounted as an option.

The following positive aspects for urban residential development within the Study Area are identified in the Planning Study:

- Economical and logical use of the land compared to other uses;
- Proposal would assist in maintaining the centrality of the Central Business District by encouraging west of the city centre;
- Attractive land of high amenity with opportunities for superb views and creative use of bushland

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regeneration areas, access to breezes and good microclimate;

- Ready accessibility to the Lismore Central Business District and existing local and regional facilities (within 3 kms); and
- Minimal impact on agricultural landuses and other conflicting landuses.

Negative impacts include:

- Relatively high costs of providing initial road and service infrastructure;
- Multiple land owners and therefore more complex development management;
- Existence of quarry having major effect on staging; and
- Potential conflicts arising from speedway, go-car racing and saleyard activities in the valley below.

Implications

The Planning Study identifies that there are minimal critical constraints within the Study Area therefore easing development potential of the site as an entirety. The site requires service connections such as water, sewerage, electricity, and telecommunications. This therefore makes the infrastructure costs higher for the earlier stages of development, but will be mitigated over the long term due to the scale of development which could be supported within the Study Area (1,520 lots proposed within the Planning Study).

The Planning Study identifies urban residential as the most appropriate use for the site, with a small mix of rural residential lots. A medium density satellite suburb is suggested which also provides on-site convenience and amenity to address other factors of need (with retail and open space in particular). Urban residential would be the highest and best use for the study area as it would provide not only a mass of residential product, but also enhances the centrality and function of the Lismore CBD by expanding urban development to the north and west.

Dunoon Road Planning Study was prepared in 1992 and therefore the data contained within the study will need to be updated following the gateway determination to ensure overall relevance to the site.

B.5 CONCLUSION

The planning documentation, as overviewed above, provides a three-tiered argument in support of the development of the North Lismore Plateau for residential and other urban uses. Firstly, Lismore City is a designated as a Major Regional Centre under the Far North Coast Regional Strategy. Lismore City is well serviced by social and economic infrastructure and therefore has the established services and facilities required to function as a Major Regional Centre. However, what Lismore does require is a larger population base to enhance its role and function within the region, but this is not currently possible as population growth levels has recently fluctuated between negative growth and low growth levels.

Secondly, Lismore City does not currently have the level of residential land supply required to support higher population growth levels due particularly to issues of slope and flooding. The supply of developable residential land is insufficient to meet the level of demand which currently exists, and is therefore also not capable of supporting higher levels of population growth. Due to the limited supply of residential land, the land which is available and easily developable is highly priced, which further limits the potential for increases in population as Lismore is no longer considered to be a more affordable residential area within the region.

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Higher levels of population growth are being experienced in the other major regional centres of the Far North Coast (Ballina and Tweed) that offer the coastal lifestyle to migrating residents as well as ensuring an adequate residential land stock.

Thirdly, the North Lismore Plateau provides a significant land holding of over 335 Ha which can be developed for a mix of residential types, including urban residential, rural residential, age care facilities and retirement homes. The location of the NLP provides easy access to the Lismore City Centre and as the area is not an established / recognised residential community it will provide lower residential sales prices for current and potential Lismore residents looking for more affordable housing options within Lismore. In addition, the significant scale of the NLP will allow for the site to accommodate a significant resident population therefore catering for a proportion of the additional people allocated to Lismore under the FNCRS.

North Lismore Plateau has consistently been identified as a potential and appropriate location for urban residential development. The NLP site offers residential land supply which differs significantly from the residential land currently available, as the current release pattern for residential land is extending the urban boundary of Lismore to the east. The expansion of Lismore to the North, by allowing for the rezoning of the North Lismore Plateau, will enhance the centrality of the CBD and provide easier access for future residents to the services and facilities provided within the city centre.

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Appendix C – Detailed Discussion

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C.1 Introduction

This section will identify the planning argument for the re-zoning of the North Lismore Plateau to allow urban residential and other urban development uses onsite.

The utilisation of the North Lismore Plateau for residential and other urban development is recommended for the following reasons:

- The current function of Lismore as a Major Regional Centre requires a larger population base
- The lack of residential land supply in relation to the current and future demand for residential land will limit the potential for Lismore to accommodate higher levels of population growth
- The location of the North Lismore Plateau in relation to the Lismore City Centre will enhance the
 centrality of the Lismore City Centre and will also limit the need for additional services and facilities to
 be developed onsite to meet the needs of the resident population.

C.2 Lismore as a Major Regional Centre

Lismore City is identified as a Major Regional Centre under the FNCRS and has been allocated a level of population growth equivalent to 8,000 additional households in the LGA. The FNCRS allocates a provision of 1.1 people per household, whereas the current household characteristics of Lismore indicate approximately 2.5 people per household within the LGA. Therefore the provision of 8,000 households will allow for between 9,500 and 20,000 additional people to be accommodated within the Lismore LGA. The FNCRS, through the allocation of a significant amount of additional households within Lismore, identifies that the current role and function of the Lismore City Centre will allow it to support a significantly larger population.

Lismore City Centre is the administrative centre for the Far North Coast Region, and is also currently well serviced by social and economic infrastructure facilities. The Lismore City Centre provides a range of services and facilities that has ensured that the residents of Lismore have been well-serviced by the social and economic infrastructure facilities. Based on the level and quality of medical and educational facilities provided, and its already diversified economic base, Lismore should be experiencing high levels of population growth instead of the fluctuating population growth levels which have occurred over the past fen years. In addition, there is significant potential to enhance the role and function of the Lismore regional centre, but this will require a larger population base to allow for the provision of higher order services and facilities.

Population growth within Lismore should be driven by the high provision of social and economic infrastructure provided, the rural characteristics of the surrounding area, and that Lismore provides an alternative to moving to the Coastal area. The facilities and services offered within the Lismore City Centre offer the same role and function of the other regional centre in the Far North Coast, which are located on the coast (Ballina and Tweed). The advantage of Lismore, however, is that it also offers a lower cost of living than the coastal areas. The coastal areas are experiencing significant levels of population growth as people are attracted by the amenity of coastal living. These high levels of population growth should be distributed across the region so as to limit negative impacts of population growth on the coastal centres.

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The diversified economic base of the Lismore regional centre, which includes the commercial and administrative uses within the City Centre and the rural and agricultural uses within the majority of the LGA, provide a significant mix and mass of employment opportunities within Lismore. Any significant increases in the population base would only enhance the scale of the economy and continue to provide a diverse range of employment opportunities for the growing population. Significant levels of population growth, such as that which is allocated under the FNCRS, will allow for the Lismore economy to grow in scale and function in line with population requirements for employment opportunities and services provided. High levels of population growth within Lismore will therefore allow for a further diversified economic base which will increase employment opportunities, therefore also ensuring prolonged population growth over the long term.

C.3 Current Supply Limits Potential for Population Growth

The reports discussed in Appendix B provide a general consensus that the current supply of residentially zoned land in Lismore is not sufficient to meet demand. There is considered to be a lack of residential land supply due to the development potential of land which was previously zoned residential. Whilst there is a high provision of residential zoned land under the Lismore Planning Scheme, the majority of this land is actually not considered developable or appropriate for development, due to site constraints or the current characteristics of market demand. Limited supply of residential land ready for development will limit potential for population growth by reducing the capability of Lismore to meet population growth expectations and increasing land values.

The lack of developable residential land in Lismore is having a significant impact on residential land prices, making the area more costly not only for the current population base who are looking to relocate within Lismore but for those who are looking to move to Lismore from other areas. The Lismore residential market is supply constrained, and therefore any good quality residential land which does enter the market not only has a high asking price but is also bought very quickly. The supply and demand assessments contained within previous planning and assessment documents provide commentary on the impact of the current supply of residential land supply, stating that the limited supply has in part been responsible for the limited level of population growth occurring in Lismore over the past ten years. As residential land supply has been limited, potential residents that are looking to migrate and are considering a tree-change would be apprehensive given the higher land prices in comparison to other rural localities within the Far North Coast region. In addition, whilst Lismore's residential prices would be lower than those of the coastal towns, for a slightly higher price those potential residents would be provided within the added amenity of a sea-side location with associated beach lifestyle. The lack of supply therefore further increases the push – pull towards the coastal centres.

Significant residential supply is also required across the Lismore LGA to provide for the 8,000 dwellings which are allocated to the area under the FNCRS.

The North Lismore Plateau, based on preliminary planning and design outcomes, would be capable of accommodating in excess of 1,200 residential dwellings over the medium to long term. This accounts for approximately 15% of the total residential dwellings allocated to Lismore to 2031, with the potential for the NLP to accommodate even a higher number of dwellings if a higher provision of medium density residential units and aged care facilities / retirement villages are included in the master plan.

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C.4 Current and Future Demand For Residential Land

The reports discussed in Appendix B provide a general consensus that there is significant demand for residential land and that the fluctuating population growth levels can be attributed to a lack of supply which is not capable of meeting internal (current Lismore residents) and external (potential Lismore residents) demand for residential product. The current supply within Lismore is not capable of meeting the current demand for residential land, and therefore significant supply needs to be identified to meet demand for residential land over the medium to long term. Previous fluctuations in population growth levels can be explained by demand for residential uses not being met and therefore people are leaving Lismore for alternative locations with mix and mass of residential uses, which are more affordable. There are limited opportunities for good residential product at reasonable prices (considering that Lismore is located away from the coast, and could be considered more isolated than other major centres) and therefore people are not locating to the area

The FNCRS outlines that the 8,000 additional dwellings will be required over the timeframe of the plan (2006-2031), and therefore over the 25 year period Lismore will require 320 additional dwellings per year. This will accommodate an additional population of between 352 and 800. Such levels of population growth are significantly higher than what has been occurring within Lismore over the past 10 years, and therefore demand for residential land will require significantly more residential land to be brought to the market every year.

The future characteristics of residential land supply will not only be shaped by the amount of land required to meet dwelling allocations, but also by the changing demographic characteristics of the Lismore population base. The demography of Lismore's population base is indicative of an ageing population, with a high proportion of lower income households. The future allocation of residential supply within Lismore will need to address demand for more affordable housing options, with a high proportion of smaller size residential product in close proximity to services and facilities (with medical services in particular). Future demand for residential land will also include those looking for a tree-change, and therefore future supply of residential land will also need to include standard and larger tot residential lots which provide the view and aspect which is a significant characteristics of the Lismore area.

The North Lismore Plateau is capable of meeting demand requirements for future residential supply in Lismore. With a site area of over 335Ha, preliminary planning of the NLP identifies potential for an excess of 1,200 dwellings to be developed on the site. The NLP is intended to be developed with a mix and mass of residential types, which would potentially include a retirement village or aged care facilities. Planning and design of the NLP will also ensure that residential product not only meets the needs of an ageing population, but also provides a range of residential densities allowing for smaller dwellings that are more affordable for the local population.

C.S. Location of the North Lismore Plateau

From a planning perspective, the North Lismore Plateau is well located for large scale residential development as residential development on the site will not only benefit the Lismore City Centre but also provides a good location for residential uses from the purchasers' and residents' perspective.

Large scale residential development, which is the intended purpose of the NLP, will enhance the centrality of the Lismore City Centre by naturally expanding the urban area of Lismore to the north. NLP will have a significant role in supporting the Lismore City Centre. The NLP will have a resident population of

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approximately 2,000 people, and potentially higher. A population of this size will require a wide range of retail and professional services to support the population and such services are currently located within the City Centre. Given the proximity of the City Centre from the NLP it is not necessary for higher order retail and professional services to be located within the development, which will further emphasise the centrality and function of the Lismore City Centre. Therefore, a significant amount of population growth will occur on the NLP which will support and maximise the value of the existing centre and facilities rather than require additional facilities to be developed. It is also considered that the unprecedented development of a large scale residential area in North Lismore will act as a catalyst for more residential development north and west of the City Centre where rural land can be converted.

The North Lismore Plateau also offers potential residents with quick and easy access to the Lismore City Centre and other medical, educational, and community facilities within the surrounding area. Whilst the NLP is still located within 5 - 10 minutes of the Lismore City Centre it offers an alternative to the current residential areas, and will also offer lower priced residential land than East Lismore and Goonellabah which is where the majority of residential development has occurred over previous years. Demand for residential land in Lismore also comprises a desire for land with views and aspect. The North Lismore Plateau site provides such amenity due to its elevated position making it a desirable future residential area.

C.6 Traffic and River Crossing Capacity

Council's design workshop identified the impacts of the NLP development on the existing river crossings as an important issue to be assessed as part of the Planning Proposal considerations.

There have been a number of traffic studies completed on behalf of Lismore City Council. The most recent being the "Lismore CBD Traffic Study", reported to Council on 10 June 2008. This report has as its basis a traffic and parking study of Lismore's Commercial Business District undertaken by TTM Consulting.

The study identified future traffic requirements in the CBD in the context of traffic management and parking. One of the key findings of the study is the need for a third river crossing. Three potential crossing options were identified - option 1, the preferred option, is located just to the north of the existing Woodlark Street Bridge.

That study prioritised the intersection upgrades and gave a recommended timeline for the works to be carried out. Stage 3 (10 years and beyond) provided for a third river crossing in the vicinity of Terania Street – Orion Street.

The focus group on 'roads and traffic' issues at Council's design workshop discussed at length the underutilization of the existing 'third' river crossing on Winterton Parade. It was agreed that this bridge showed a degree of saturation of less than 20%. This bridge provides a single lane of travel in both directions with a separate footpath on the eastern side of the road. This bridge has the capacity to cater for some 900 vehicles per hour in a single direction based on normal capacity thresholds.

The charette found that this bridge is well placed to provide access to the North Lismore Plateau- the site links well to Alexander Parade that then connects with Winterton Parade for access to the CBD. It was also

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recognised that an up-graded and sign-posted intersection at Dunoon Road and Alexander Parade, together with a re-aligned. Alexander Parade, would greatly enhance the use of this link to the CBD thus minimising impacts on the Woodlark Street Bridge from the development.

To specifically analyse the likely traffic impacts of these up-grades on the existing bridge crossings, Better Transport Futures (Mark Waugh Pty Ltd) has been engaged by Winten and their report is annexed to this Planning Proposal (Appendix G).

C.7 Showground

The noise associated with some of the showground uses is a consideration for the design and development of urban uses on the NLP. It is understood that Council have resolved to put in place a noise management plan that will set emission levels, monitoring programs and use schedules.

C.8 Water Supply

The North Lismore Plateau has the ability to be serviced with reticulated town water.

The water supply can be staged utilizing existing facilities to allow initial staged development with ultimate supply dependent upon additional new infrastructure provided by the proponents.

The 1994 North Lismore Planning Study prepared for Lismore City Council by Northern Rivers Engineers Planners and Scientists considered the provision of water supply to the North Lismore Plateau. The preferred option was to supply water from the Tullera Reservoir.

In September 2006 and June 2010 ACM Landmark Pty ltd undertook water investigation reports to determine the following:-

- Determine to what extent Tullera Reservoir has additional capacity to provide for some first stage development of the plateau.
- Determine what level within the plateau can be developed with and without a booster pump and storage.
- Determine the size of trunk main from Tullera Reservoir to service both the first stage and ultimate stages of development.
- Determine the trunk main upgrade requirements from Howard Grass to Tullera Reservoir.

Investigations into the feasibility and costs associated with the water supply provision for both a first stage and ultimate development are included within the full report shown in Appendix H. This report shows the possible reticulation routes for carrier mains to the North Lismore Plateau.

The Investigation revealed that an initial stage of approximately 200 lots within the plateau can be serviced by the existing Tullera Reservoir.

The Tullera Reservoir is operating at generally half of its capacity.

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The first stage lots can occur in numerous locations on the plateau with the appropriate sizing of internal watermains.

The provision of a 300mm trunk main from Tullera Reservoir to the site approximately 1840m will serve both the first stage and ultimate development of the plateau.

Beyond 200 first stage lots a new 2.5ML reservoir adjacent to the Tullera Reservoir would be required together with the upgrading of the carrier main from Howards Grass to the new Tullera Reservoir via a 250mm trunk main 2620m in length.

For the first stage development a booster pump station at McLeay Road will be provided to ensure sufficient pressure. Further assessment has disclosed that an elevated reservoir or standpipe is impractical due to excessive height and adverse viability.

The booster pump station whilst not being the most favoured option by Council will ensure that a continual pressure to the plateau was available to meet Councils static head requirements. The plateau can be serviced by gravity from the proposed Tullera Reservoir to the highest points in the subdivision in times of emergency.

Some booster pumping of the system is inevitable and this would either need to be at the reservoir or as proposed at McLeay Road location.

Accordingly the site can be sufficiently serviced.

The North Lismore plateau can be provided with water supply to allow development immediately for 200 lots utilizing predominantly existing infrastructure. The remainder of the plateau beyond 200 lots can be provided with water supply with the provision of additional infrastructure comprising reservoir and carrier mains funded by the proponents.

C.9 Sewer

The Plateau area proposed for redevelopment has the capability to be served by reticulated sewer.

The reticulated sewer can comprise of standard gravity reticulation with local pump stations transporting sewage to the existing South Lismore Sewer Treatment Works or the possibility of a package on-site treatment system. Current investigations have shown the standard gravity transport system to be the most effective to service the plateau, however further consideration of alternative systems may be given by Council.

The 1994 Dunoon Road planning study prepared for Lismore City Council by Northern Rivers Engineering Planners and Scientists disclosed that the future provision of sewer services to the site is dependent on

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transporting the sewage to South Lismore Treatment Works with the possible upgrade of the South Lismore Treatment Works to accept capacity of the plateau.

An assessment of the possible route of the sewer connection to the site together with an agreement of the available capacity of the South Lismore Treatment Works was undertaken in 2010 by ACM Landmark Pty Ltd. The route of the sewer connection comprising of gravity and rising main and pump station and the assessment of treatment works capacity can be seen in full in the report titled "Brief Assessment of South Lismore Sewer Treatment Works Capacity" as Appendix I.

In summary, it was found that the South Lismore Treatment Works has capacity to accept at least 600 ET (equivalent and tenements). A further review of the ACM Landmark report was undertaken by RPS to verify the voracity of the ACM report. That report concluded that the 600 ET was conservative and that there could be up to 2290 ET capacity based upon average dry weather flows (ADWF). However the report also advises a conservative approach for wastewater treatment.

Accordingly there is determined to be a minimum capacity of 600 ET and a maximum capacity of possibly greater than 2000 ET. This capacity provides the ability for the entire plateau to be serviced within the South Lismore Treatment plant together with capacity within the existing catchment for future commercial/ light industrial expansion.

The benefits of a common localised treatment plant at South Lismore provides the opportunity to provide recycled water to proximate existing industrial and commercial precincts together with proposed industrial expansion in the Dunoon Road area.

It is understood that Lismore Council is in the process of briefing a consultant to undertake a review of the upgrading requirements for the South Lismore Sewer Treatment Works. That upgrade has been necessitated as a result of the current standard of the treatment works rather than specifically a capacity investigation.

The South Lismore Treatment works has been determined to have available capacity to accept the development of the North Lismore plateau from at least 600 ET to 2000 ET. Clearly therefore the provision of sewer to the North Lismore Plateau is not an impediment to the rezoning or development of the land.

C.9 Design Workshop - Lismore City Council

The Council design workshop supported in principle the urban development of the NLP in the form of a master planned residential community. Key findings from the workshop included:

- The 1,500 households on the NLP are proximate to the Lismore CBD and their patronage and expenditure would help revitalise this precinct that presently has an estimated 10% vacancy rate of retail floorspace.
- The establishment of the NLP community would create significant employment opportunities for the local construction industry.
- * The NLP community will benefit from advanced communication technology that will make the area

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attractive for people wishing to work from/at home.

- 1,500 new homes on the NLP will help move the urban centre of gravity back towards the Lismore CBD.
- The establishment of a new community of this scale provides the opportunity to explore new technologies and techniques for the provision of services (water, power, sewer) and urban design.
- The NLP provides the opportunity to provide a range of housing options that is a match for the needs of the Lismore community including affordable housing and seniors living.
- A high level of connectivity is desired with pedestrian, cycle and green links.

C.10 Conclusion

There is an intrinsic link between residential supply, residential demand and the limited population growth of Lismore. There is a need for additional residential supply required to meet current demand and significant levels of supply required over the long term to meet dwelling targets outlined by the FNCRS.

Lismore is a regional centre for the Far North Coast region, which is well serviced by social and economic infrastructure. Based on the amenity of the area, and the current high provision of medical, educational, and retail services, Lismore should be experiencing high levels of population growth. Demand for residential land, both from internal and external sources, exists however the current level of residential land supply is not meeting this level of demand. With a dwelling target of 320 dwellings required per annum to 2031, Lismore requires significantly more areas to be re-zoned for residential development. The North Lismore Plateau, with an area of over 335 Ha, would not only be capable of meeting a large proportion of the residential dwellings required, but would also provide a diverse range of residential product in immediate proximity to the established central business district.

These points were expanded in Councils design workshop, which produced a draft structure plan for the NLP. The design and output from the design workshop have been used as a key input for the Draft Structure Plan included in Appendix J. This plan represents a possible option and will be refined on the basis of further inputs from the detailed planning studies and other related work that will be completed after the initial gateway process determination.

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Appendix D – North Lismore Plateau Planning Study Area

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D.I Introduction

The North Lismore Plateau study area boundary was initially based on the area defined as Proposed Future Urban Refease area in the Far North Coast Regional Strategy. This Planning proposal is based on a revised area that was defined during the Design Workshop hosted in December by Lismore City Council. The two day workshop considered a number of issues in detail including:

- landform and slope
- vegetation, topography, creeks and drainage
- connectivity to the existing urban areas of Lismore, including the CBD (traffic, pedestrian, cycle)
- water, stormwater and sewerage
- community building and engagement

This provided a detailed justification for the study area boundary that is defined by topographic features and cadastral boundaries.

The proposed study area boundary is detailed in Figure D.1 with the boundary of the Proposed Urban Release area in the Far North Coast Regional Strategy provided for reference.

The justification for this boundary is as follows:

- The study area boundary is the 70m contour for the western, north western and part of the south eastern boundaries. This contour line generally defines the shoulder of the escarpment below which urban development is inappropriate.
- At the north of the study area the boundary is based on property boundaries as these abut the R5 zoning to the north. This will create a contiguous urban area.
- The north portion of the eastern boundary generally follows Dunoon Road.
- The southern potion of the eastern boundary is based on property boundaries and includes land at the foot of the escarpment. This land will be used for stormwater features that can not be accommodated on the plateau.

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Figure D.1 North Lismore Plateau Study Area

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Appendix E – State Environmental Planning Policies

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Table E.1
Consideration of State Environmental Planning Policies (SEPPs

Consideration of State Environmental Planning Policies		ter transferance	
Tille of SEPP	Applicable	Consiste	nt Reasoning
SEPP No. 1 - Development Standards	No	n/a	
SEPP No. 4 - Development without consent and	No	n/a	
miscellaneous complying development			
SEPP No. 6 - Number of storeys in a building	No	n/a	
SEPP No. 19 - Bushland in urban areas	No	n/a	
SEPP No. 21 - Movable Dwellings	No	n/a	
SEPP No. 21 - Caravan Parks	No	n/a	
SEPP No. 22 - Shops and commercial premises	No	n/a	
SEPP No. 30 - Intensive Agriculture	No	n/a	
SEPP No. 32 - Urban consolidation (re development of	No	n/a	
urban land)			
SEPP No. 33 - Offensive and hazardous development	No	n/a	
SEPP No. 36 - Manufactures Home Estates	No	n/a	
SEPP No. 41 - Casino / Entertainment Complex	No	n/a	
SEPP No. 44 - Koala Habitat Protection	Yes	-	Pending the initial gateway process determination, consultation with public authorities and further planning is required in accordance with planning requirements.
SEPP No. 49 - Tourism Accommodation in Private	No	n/a	
Homes	NO	illa	
			Pending the initial gateway process determination, consultation with
SEPP No. 55 - Remediation of Land	Yes	-	public authorities and further planning is required in accordance with planning requirements.
SEPP No. 60 - Exempt and complying development	Nο	n/a	
SEPP No. 62 - Sustainable Aquaculture	No	n/a	
SEPP No. 64 - Advertising and signage	Νo	n/a	
SEPP No. 65 - Design quality of residential flat levelopment	No	n/a	
SEPP No. 72 - Linear Telecommunications Development	M-	_/_	
Broadband	No	n/a	
SEPP (Housing Sustainability Index: BASIX) 2004	Yes		BASIX is applicable to the planning proposal, pending the initial gateway process determination, consultation with public authorities and further planning of the community.
SEPP (Housing for Seniors or People with a Disability) 2004 - formerly Seniors Living			
SEPP (Major Development) 2005 - formerly Major	No	n/a	
rojects & State Significant Development	NO	1 l/d	
EPP (Infrastructure) 2007	Yes	-	Pending the initial gateway process determination, consultation with public authorities and further planning is required in accordance with planning requirements.
EPP (Temporary Structures and Places of Public	No	n/a	
intertainment) 2007 EPP (Affordable Rental Housing) 2009	No	n/a	
SEPP (Mining, Petroleum production and Extractive	INO	IVa	
ndustries) 2007	No	n/a	
EPP (Temporary Structures) 2007	No	n/a	
EPP (Rural Lands) 2008	Yes	-	The planning proposal will limit the rural potential of the site, however the intended use of the site will have a greater economic and social benefit to the comparist that the limited and leaves are the site.
SEPP (Exempt and Complying Development Codes)	No	n/a	the community than the limited rural uses on the site.

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Appendix $F-Section\ I\ I\ T$ Directions

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Table F.1
Consistency with Section 117 Directions

Consistency with Section 117 Directions			
Programme and the second secon	oplicable	Consisten	t Reason for Consistency
1. Employment and Resources			
1.1 Business and Industrial Zones	No	n/a	
1.2 Rural Zones			
protect the agricultural prodcution			The planning proposal will not adversely effect
value of rural land.	Yes	Yes	agreicultural production as the site is not utilised for
4.2 Mining Detrolous Deaduction and			agricultural uses.
Mining, Petroleum Production and Extractive Industries	No	n/a	
1.4 Oyster Aquaculture	No	n/a	
1.5 Rural Lands	110	1,110	
protect the agricultural production			The planning proposal will not adversely effect
value of rural land	Yes	Yes	agreicultural production as the site is not utilised for
			agricultural uses.
facilitate the orderly and economic	V	V	
development of rural lands for rural and related purposes	Yes	Yes	
2. Environment and Heritage			
2.1 Environment Protection Zones	No	n/a	
2.2 Coastal Protection	No	n/a	
2.3 Heritage Conservation			
planes of environmental heritage			heriatge significance will not be effected. This needs to
significance and indigenous heritage	Yes	Yes	be re-addressed following the initial gateway process
significance.			determination.
2.4 Recreation Vehicle Areas	No	n/a	
3. Housing, Infrastructure and Urban Deve	elopment		
3.1 Residential Zones			The planning proposed proposed to provide a range of
to encourage a variety and choice of housing types to provide for existing	Yes	Yes	The planning proposal proposes to provide a range of residential types and densities within the 130 Ha site,
and future housing needs;	100	100	offering a mix and mass of residential options.
to make efficient use of existing			
infrastructure and services and ensure			The planning proposal will ensure that the site will be
that new housing has appropriate	Yes	Pending	efficiently serviced by infrastructure and services. The
access to infrastructure and services;			provision of infrastructure to the site needs to be re-
and			addressed through consultation with public authorities following the initial gateway process determination.
to minimise the impact of residential			
development on the environment and	Yes	Yes	The planning proposal will have minimal impact on the
resource lands.			surrounding environment and resource lands.
3.2 Caravan Parks and Manufactures	No	n/a	
Home Estates			
3.3 Home Occupations	No	n/a	
3.4 Integrated Land Use and Transport	No	n/a	
improving access to housing, jobs and			The second section and section and section as a section of
services by walking, cycling and public	Yes	Pending	This will need to be addressed following the initial gateway process determination.
transport, and			- -, -, -, -, -, -, -, -, -, -, -, -, -,
increasing the choice of available	Yes	Pending	This will need to be addressed following the initial
transport and reducing dependence on			gateway process determination.
reducing travel demand including the number of trips generated by			This will need to be addressed following the initial
development and the distances	Yes	Pending	gateway process determination.
travelled, especially by car, and			gatoway process dotormination.
supporting the efficient and viable	Yes	Donding	This will need to be addressed following the initial
operation of public transport services,	162	Pending	gateway process determination.
providing for the efficient movement of	Yes	Pending	This will need to be addressed following the initial
freight. 3.5 Development near License			gateway process determination.
Aerodromes	No	n/a	

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Table F.1 (cont.)
Consistency with Section 117 Directions

Consistency with Section 117 Directions			
Direction 4. Hazard and Risk	Applicable	Consisten	t Reason for Consistency
4.1 Acid Sulfate Soils	No	n/a	
4.2 Mine Subsidence and Unstable Land	No	n/a	
4.3 Flood Prone Land	No	n/a	
4.4 Planning for Bushfire Protection to protect life, property and the environment from bush fire hazards, by discouraging the establishment of incompatible land uses in bush fire prone areas, and to encourage sound management of	Yes	Pending	This will need to be addressed following the Initial gateway process determination, with consultation to occur between the RPA and the Commissioner of the NSW Rural Fire Service. The Final Planning Proposal will require an Asset Protection Zone. This will need to be addressed following the initial
bush fire prone areas.	Yes	Pending	gateway process determination, with consultation to occur between the RPA and the Commissioner of the NSW Rural Fire Service. The Final Planning Proposal will require an Asset Protection Zone.
5. Regional Planning			
5.1 Implementation of Regional Strategies			
give legal effect to the vision, land use strategy, policies, outcomes and actions contained in regional	Yes	Yes	The planning proposal is in keeping with the vision, land use strategies, policies, outcomes and actions contained within the Far North Coast Regional Strategy
strategies. 5.2 Sydney Drinking Water Catchments	No	n/a	Within the Fai North Coast Negonal Strategy
5.3 Farmland of State and Regional Significnat on the NSW Far North Coast	Yes	Yes	Sections of the study area are mapped as regionally significant farmland. As the plateau area is identified for future urban development under the Far North Coast Regional Strategy the proposal to rezone regionally significant farmland is consistent with the Direction. As identified above the planned rezoning is consistent with all relevant objectives and provisions of the Far North Coasty Regional Strategy including projected population growth predictions, servicing and sustainability criteria.
5.4 Commercial and Retail Development along the Pacific Highway, North Coast	No	n/a	
5.5 Developent in the vicinity of Ellalong, Paxton and Millfield (Cessnock LGA)	No	n/a	
5.6 Sydney to Canberra Corridor	No	n/a	
5.7 Central Coast 5.8 Second Sydney Airport:Badgerys	No	n/a	
Creek	No	n/a	
Cocal Plan Making Approval and Referral Requirements to ensure that LEP provisions encourage the efficient and appropriate assessment of	Yes	Yes	The planning proposal does not alter provision relating to approval and referral requirements.
development. 6.2 Reserving Land for Public Purposes 6.3 Site Specific Provisions	No	n/a	to approvar and relessarrequirements.
to discourage unnecessarily restrictive site specific planning controls.	Yes	Yes	The planning proposal is not unneccessarily restrictive at ot proposes meeting the development potential of the site.
7. Metropolitan Planning 7.1 Implementation of the Metropolitan Strategy	No	n/a	

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 $Appendix \ G-Traffic \ Report$

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Appendix H – Water Report

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Appendix I – Sewer Report

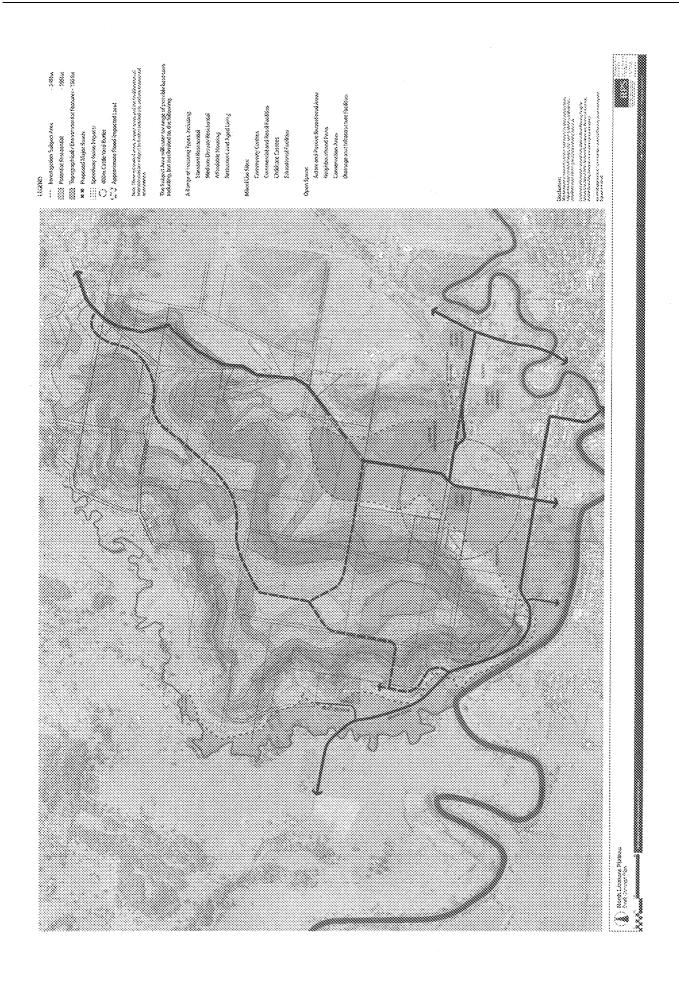
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Appendix J – Draft Structure Plan

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Appendix K - North Lismore Plateau Design Workshop

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K.1 Introduction

The North Lismore Plateau design workshop was organised by Lismore City Council and held on the 16 and 17 of December 2010. The workshop was attended by approximately 20 council officers and landholder representatives. The agenda (including attendees) is attached for reference.

The workshop considered in detail the range of relevant social, infrastructure, environmental and urban design issues that will need to be addressed by the urban development of the NLP. This process was professionally facilitated by an experienced urban design professional from New Zealand (Mr Kobus Mentz).

The workshop proceeded in accordance with the agenda with a key resolution being to prepare a Planning Proposal for consideration by Council. The workshop also produced a detailed timeline for the submission and assessment of the Planning Proposal. This timeline is attached for reference.

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Agenda

2 day design workshop - North Lismore Plateau

16 and 17 December 2010

Lismore City Council Corporate Centre, 43 Oliver Ave, Goonellabah

Agenda for DAY 1 - Thursday 16 December

8.00am SITE VISIT - meet at Bounty Motel, 241 Keen St, Lismore

Kobus Mentz, Jim Punch, Tony Riordan, Brent McAllister, Steve Denize only

(other workshop participants will have visited the site previously)

9.30am WORKSHOP START

Welcome

Objectives for the day:

- Briefing/ sharing of technical information
- Address the 3 key issues (roading, speedway, sewerage treatment)
- Prepare masterplan (Day 2)
- Ensure Council's senior management and elected members are fully aware of the agreed way forward for the key issues associated with NLP

Brent McAllister

9.35am The day's agenda

Kobus Mentz

9.45am Landholder introductions (10 mins each)

> Winten Property Group Jim Punch (Project Manager, Winten Property Group)

Riordans Consulting Surveyors

Tony Riordan

9.45am Council staff briefing presentations (5mins each)

Social context

Christine Minkov (Social Planner) Planning context

Paula Newman (Coordinator Strategic Planning)

Lismore speedway

Matt Kelly (Environmental Health Compliance Coordinator) **Environmental context**

Nick Stephens / Vanessa Tallon (Environmental Strategy Officers)

Economic development

Steve Denize (Manager Integrated Planning)

Mark Batten (Business Facilitator)

Roads

Mike Perkins (Development Engineers)

Water & sewer

Rod Haig (Strategic Engineer - Water & Sewer)

10.40am Design workshop

Facilitated by Kobus Mentz

12.30pm Lunch break

Key issues & design options workshop 1.00pm

Facilitated by Kobus Mentz

3.30pm Gain consensus

Summary of progress so far

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· Where to from here?

Kobus Mentz

4.00pm to 5.00pm

Briefing for Council General Manager, Executive Managers, elected

Councillors, Staff and Landowners

Kobus Mentz

Agenda for DAY 2 - Friday 17 December

9.30am Worksop Start

Objectives for the day
Prepare masterplan

Brent McAllister

9.35am Masterplan design workshop

Facilitated by Kobus Mentz

12.30pm to Lunch break

1.00pm Masterplan design workshop continues

Facilitated by Kobus Mentz

3.00pm Overview & where to from here?

Kobus Mentz

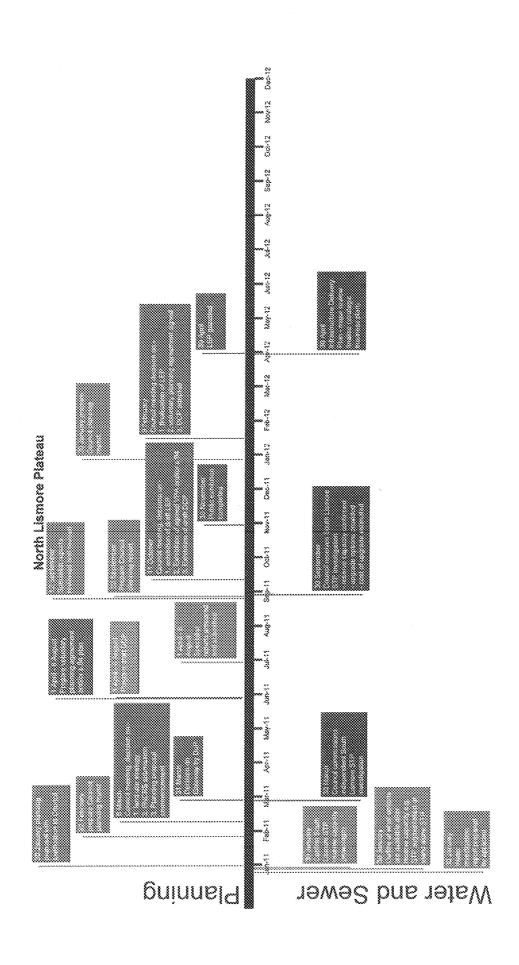
4.00pm to Briefing for Council General Manager, Executive Managers, elected

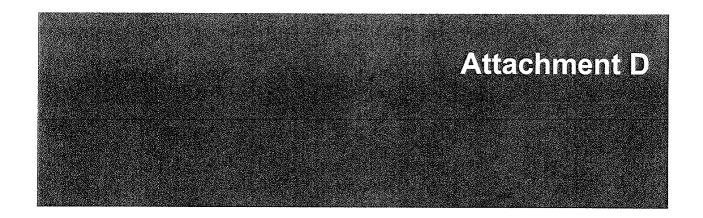
5.00pm Councillors, Staff and Landowners

Kobus Mentz

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CIVIL DESIGN SERVICES PTY LTD

NORTH LISMORE PLATEAU DEVELOPMENT WATER SUPPLY INVESTIGATION

REPORT FOR ACM LANDMARK PTY LTD

June 2010

NORTH LISMORE PLATEAU DEVELOPMENT WATER INVESTIGATION REPORT FOR ACM LANDMARK PTY LTD

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1. INTRODUCTION1
2. EXECUTIVE SUMMARY
3. INVESTIGATION APPROACH
4. DESIGN ASSUMPTIONS
5. ALTERNATIVE METHODS OF SUPPLYING BOTH STAGE 1 AND FINAL DEVELOPMENT
6. NETWORK ANALYSIS
7. COST ESTIMATES
APPENDICES
APPENDIX A – NETWORK AND PRESSURE DIAGRAMS
APPENDIX B – CORRESPONDENCE SUPPLIED BY DAVID STEWART CONSULTING
APPENDIX C - COSTING INFORMATION PREPARED BY DAVID STEWART CONSULTING

NORTH LISMORE PLATEAU DEVELOPMENT WATER INVESTIGATION REPORT FOR ACM LANDMARK PTY LTD

1. INTRODUCTION

The proposed North Lismore Plateau Development is located on an area of approximately 100 hectares of land along the ridge above Dunoon Road, North Lismore. It is ultimately proposed to develop approximately 1000 lots on the site.

A water investigation report for the development was prepared for ACM Landmark Pty Ltd in September 2006 by Civil Design Services Pty Ltd. At that time the purpose of the report was to clarify previous costings that had been prepared by Lismore City Council for servicing the development as well as investigate various proposals for providing water supply to both the full development and the first stage of the project.

When commissioning the 2006 Report ACM Landmark requested that the following matters be investigated:

- Determine to what extent Tullera Reservoir has additional capacity to provide for some first stage development of the Plateau.
- Determine what level within the Plateau can be developed without a booster pump or the provision of alternative reservoirs.
- Determine what level can be adequately serviced with the provision of a pumping station and/or storage.
- 4. Determine the size of the trunk main required to be constructed from Tullera Reservoir to service the proposed first stage development and ultimate development. Also determine the most appropriate route for such a trunk main.
- 5. Determine the cost of the above trunk main and any other associated works.
- Give consideration to providing a connection to the existing 100 mm main in Dunoon Road.
- Examine other water supply options/solutions should the Council subsequently
 advise that they consider that Tullera Reservoir no longer has the capacity to
 service a first stage development.

Various recommendations were made in the 2006 Report regarding the most suitable methods of servicing the development.

These recommendations have been revisited in the current report with costs being updated to June 2010.

2. EXECUTIVE SUMMARY

Investigations into the feasibility and costs associated with the provision of water supply to a proposed initial stage and the projected full development of a subdivision of North Lismore Plateau have concluded that it is possible to provide a practical and reasonably economical water supply to serve the development.