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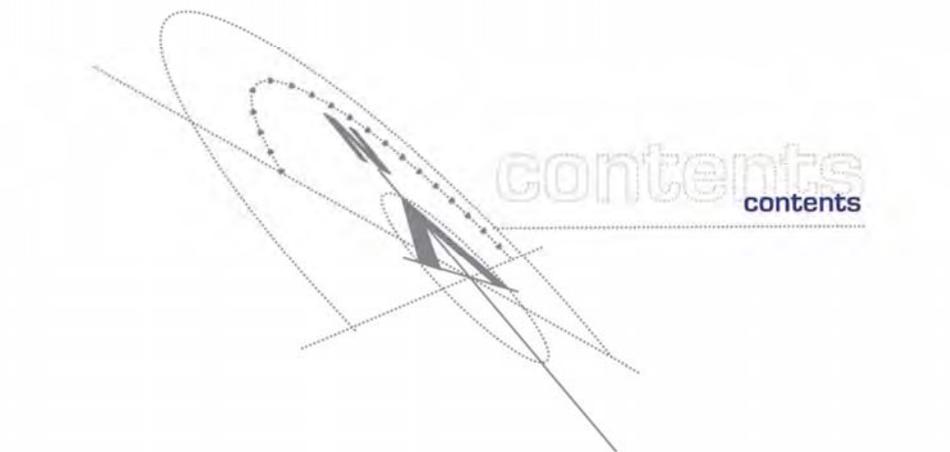


Site: Crawford Road, Military Road
& Skyline Road, East Lismore

Our Ref: 08/609
Date: August 2011



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Attachments

- Attachment 1 - Engineering Services Discussion Paper
- Attachment 2 - TTM Group
Transport Generation Assessment
- Attachment 3 - Worley Parsons
Flood Impact Assessment
- Attachment 4 - BCA Check
Bushfire Assessment
- Attachment 5 - EAL Consulting Services
Contaminated Lands Assessment
- Attachment 6 - Widjabul Aboriginal People on behalf of Ngulingah Aboriginal
Land Council Site Assessment
- Attachment 7 - Crawford Structure Plan
- Attachment 8 - Community Consultation Flyer



EXECUTIVE SUMMARY

1. Background

Newton Denny Chapelle has been engaged by *Norsearch Limited* to prepare a planning proposal for land identified in **Table 1**, Military Road, East Lismore. The purpose of the planning proposal is to rezone land presently zoned 5(b) Special Use (Technology Park) to 2(a) Residential, 3(b) Neighbourhood Business, 5(a) Special Use (University) and 7(b) Environmental Protection (Habitat) in accordance with the provisions of the Lismore Local Environmental Plan (2000).

Table 1: Lands Subject to the Planning Proposal

Property Address	Property Description
144 Military Road	Lot 3 DP 365665
146 Military Road	Lot 4 DP 365665
138 Military Road	Lot 21 DP 1124244
15 Crawford Road	Lot 474 DP 755718
32 Crawford Road	Lot 473 DP 755718
30 Crawford Road	Lot 471 DP 755718
30A Crawford Road	Lot 472 DP 755718
31 Crawford Road	Lot 2 DP 1027540
26 Crawford Road	Lot 1 DP 1027540
50 Skyline Road	Lot 1 DP 118533
52 Skyline Road	Lot 1 DP 772605

The rezoning of the abovementioned land was subject to a report to Council's Ordinary Meeting of 9 December 2009 at which it was resolved:

230/09 RESOLVED that Council:

1. *Endorse the zoning of the residential/mixed use land release areas included in the draft LEP 2009, namely the subject **Crawford land**, Invercauld Road land and Chilcotts Grass land subject to recommendation (2) below for the reasons outlined in the report.*
2. *Allocate highest priority to the investigation and construction of the Southern Trunk Main to facilitate (1) above, including access to Federal or State Government grant funding.*
3. *Note subject to (2) above that subdivision applications for existing residential zoned land in Lismore is deemed to have sufficient main trunk sewerage capacity.*
4. *Endorse in principle the inclusion of the subject land at Trinity Drive in a residential zone as a future amendment to the draft LEP 2009, subject to the satisfactory resolution of mitigation of impacts on the thorny pea and the matter being reported in detail back to Council.*

5. Not proceed with draft LEP amendment 36 and prepare an amendment to the Lismore Urban Strategy to allow the land in Pineapple Road as per Attachment 1 to be considered for inclusion in an urban residential zone.
6. Prepare as part of a housing strategy a study into the best means and most appropriate areas to achieve increased densities in existing urban areas.
7. Include planning controls to achieve greater housing diversity and density in the development control plans prepared for new Greenfield land release areas and achieve this objective by agreement in existing Greenfields residentially zoned areas where possible.
8. Prepare a Growth Management Strategy that determines the staging of the remaining land releases not included in the draft LEP 2009 over the next 25-30 years.
9. Adopt a more proactive approach through the delivery plan to ensuring the northern bypass road is constructed in a timely manner given its citywide benefit in terms of investigation, design and acquiring the road corridor.
10. Develop an integrated transport plan for the City that particularly gives priority to [9] above and the longer term need for a third bridge crossing.

(Councillors Chant/Clough)

Section 375A Voting Record

Voting for: Councillors Dowell, Houston, Meineke, Clough, Chant, Graham, Yarnall, Marks and Smith.

Voting against: Councillor Battista.

The sites as referred to as the Crawford land within the above Council resolution are identified in **Plate 1**.

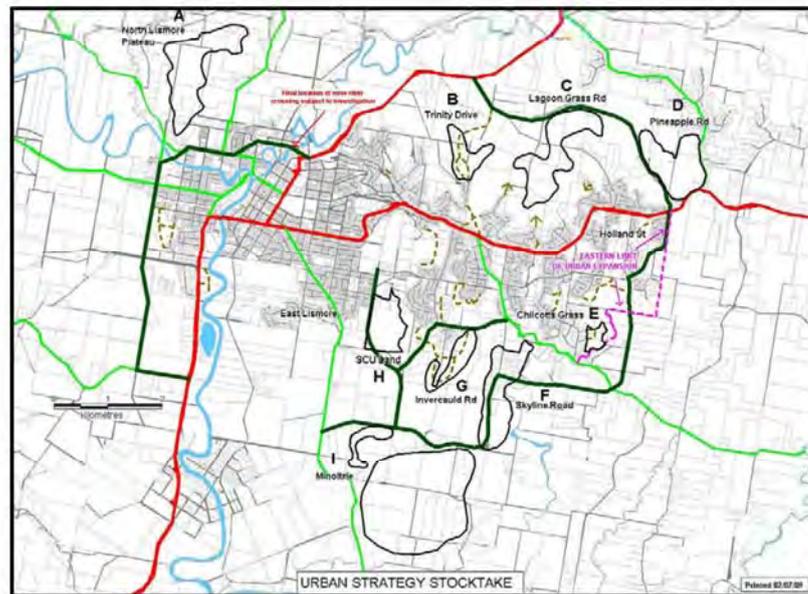
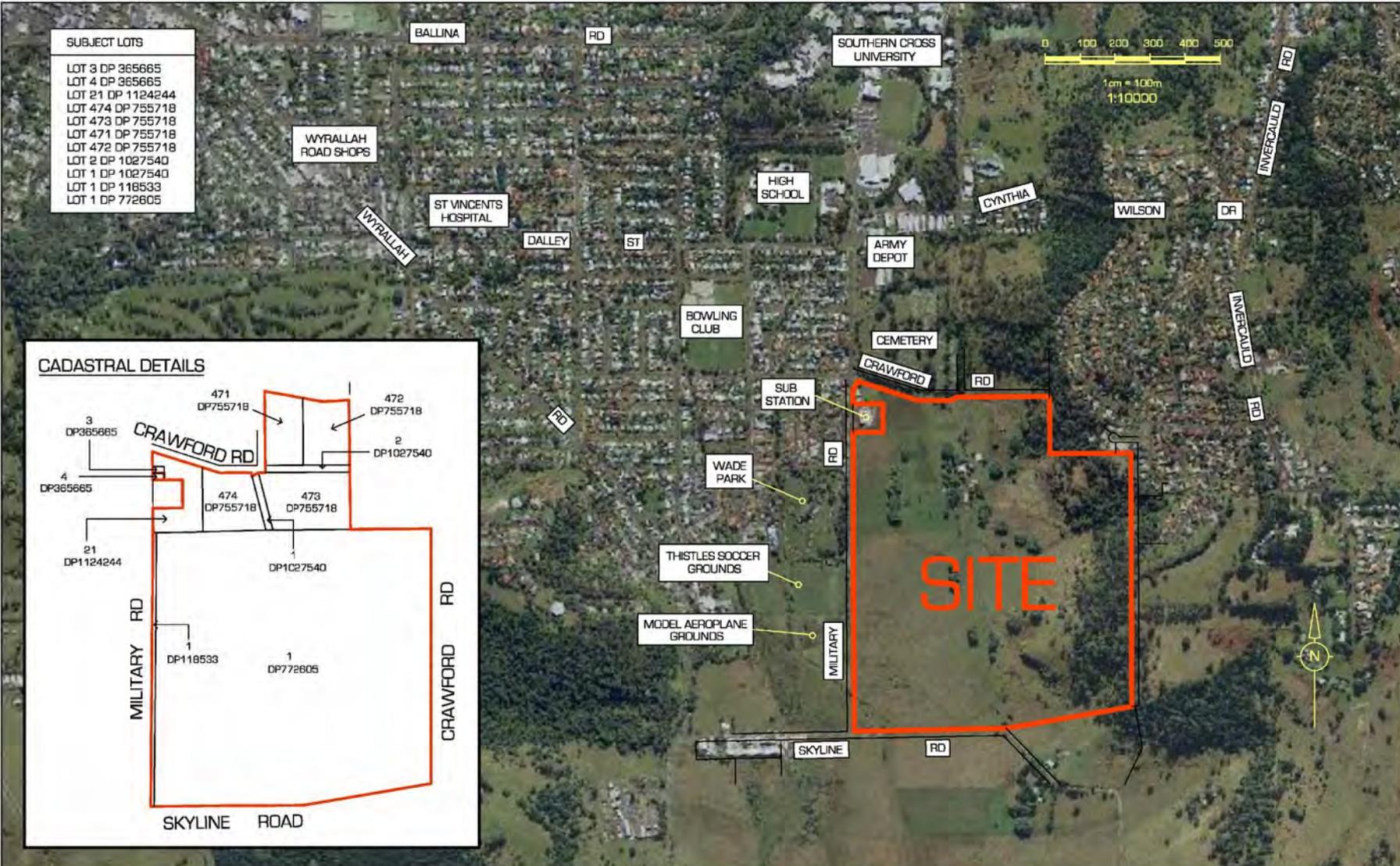
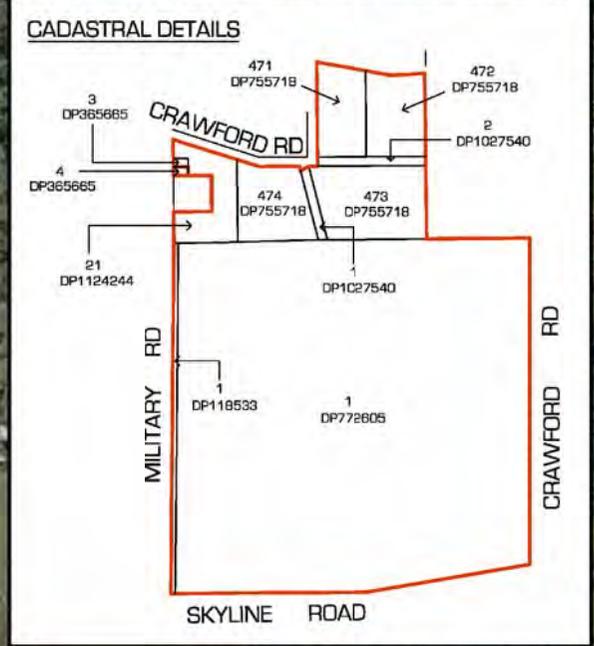


Plate 1: Crawford Land adopted by Lismore City Council for rezoning (marked as Areas H)



SUBJECT LOTS

- LOT 3 DP 365665
- LOT 4 DP 365665
- LOT 21 DP 1124244
- LOT 474 DP 755718
- LOT 473 DP 755718
- LOT 471 DP 755718
- LOT 472 DP 755718
- LOT 2 DP 1027540
- LOT 1 DP 1027540
- LOT 1 DP 118533
- LOT 1 DP 772605



Client : SOUTHERN CROSS UNIVERSITY

Location :
MILITARY ROAD
EAST LISMORE

Amendments :

Date	Changes
B	
C	
E	
F	

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LOCATION PLAN

Drawn: CD

Date: 21.06.10 Scale 1:10000 @ A3 Ref No. 08/609

Plate 2 illustrates the subject land and immediate surrounds within an aerial photo.



Plate 2: Aerial photo of Crawford Land

This planning proposal should be read in conjunction with the accompanying technical reports from the following project team members:

Discipline	Consultant
Town Planning Civil Engineering	Newton Denny Chapelle
Contaminated Lands Assessment	EAL Services
Flood Impact	Worley Parsons
Bushfire	BCA Check
Traffic	TTM Group
Cultural Heritage	Widjabul Aboriginal People on behalf of Ngulingah Aboriginal Land Council.

Part 1 Proposal Objective

To rezone the Crawford Land Site to a mixed use comprising 2(a) Residential, 3(b) Neighbourhood Business, 5(a) Special Use (University) and 7(b) Environmental Protection (Habitat) zones in accordance with the provisions of the Lismore Local Environmental Plan (2000).

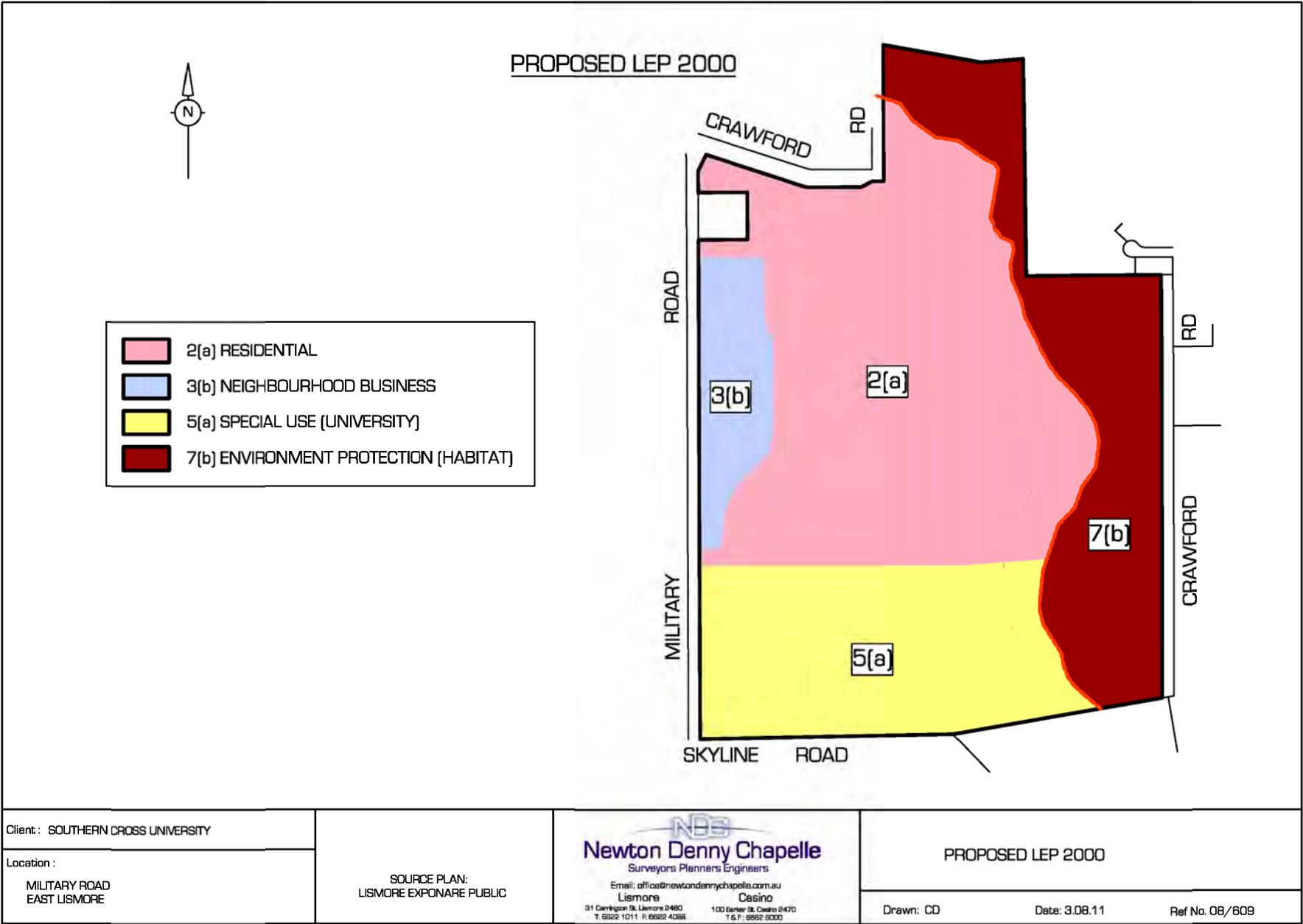
The rezoning of the land to provide for the introduction of the aforementioned zones permits the following development options.

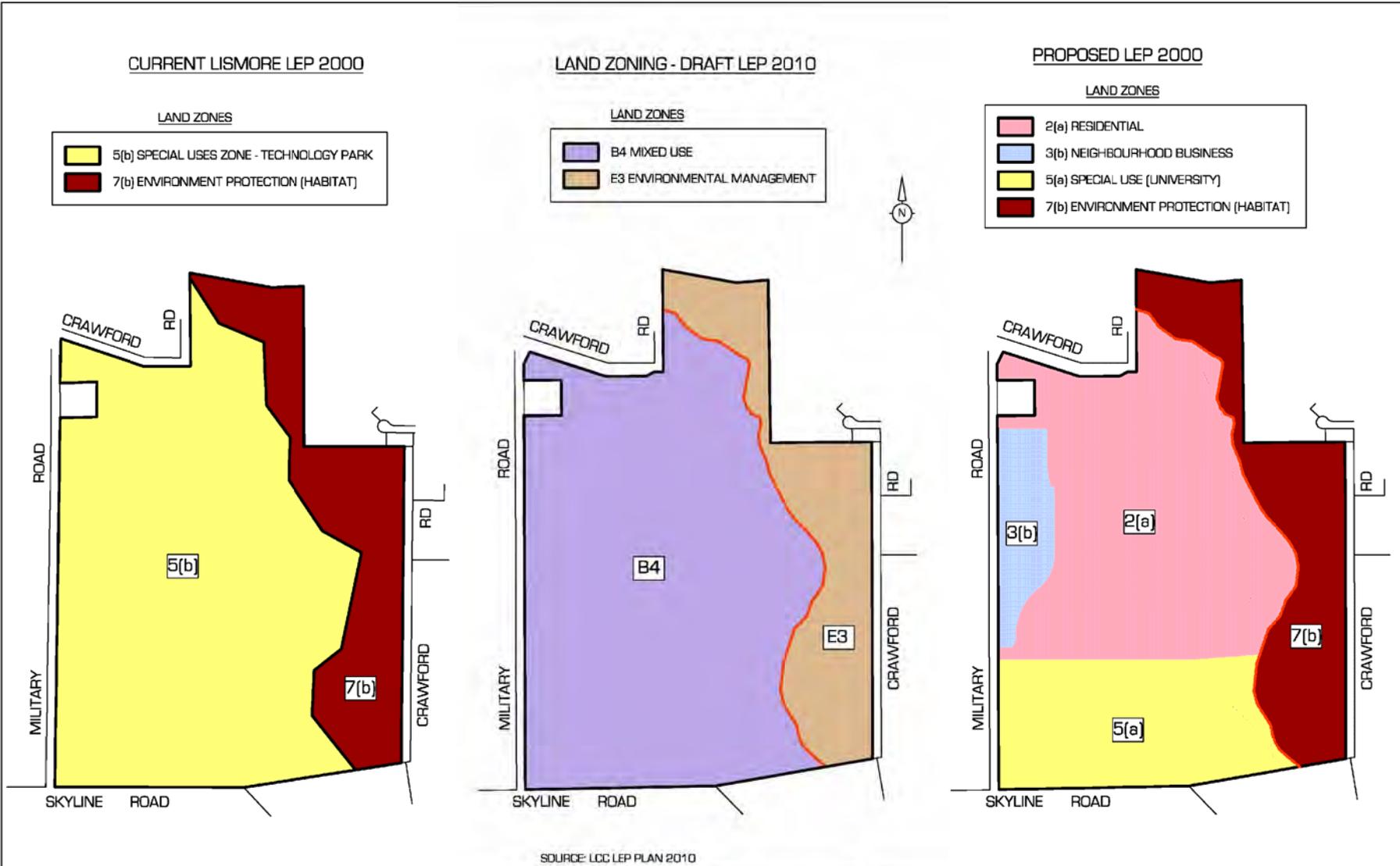
- 1. A subdivision creating a mixture of densities (400-1,500m²) Torrens Title lot residential estate with an expected yield of 198 lots (268 dwellings).*
- 2. A neighbourhood business precinct permitting 2,000m² of commercial floor space (neighbourhood shopping facility, childcare facility, medical centre and open space/community building) with integrated housing for 40 dwellings.*
- 3. The formalisation of the existing environmental attributes of the elevated eastern portion of the site within an environmental protection zoning.*
- 4. The formalisation of the Asia Pacific Football Institute within the special use zoning.*

The above options are contained in a preliminary Structure Plan within **Attachment 2** of this report.

Part 2 Explanation of Provisions

Amend the Lismore Local Environmental Plan 2000 Zoning Map in accordance with the proposed Zoning Map (**Plan 2**) to 2(a) Residential, 3(b) Neighbourhood Business, 5(a) Special Use (University) and 7(b) Environmental Protection (Habitat). Land within the nominated site is currently zoned 5(b) Special Use (Technology Park).





SOURCE: LCC LEP PLAN 2010

Client : SOUTHERN CROSS UNIVERSITY
 Location :
 MILITARY ROAD
 EAST LISMORE

Amendments :	
Date	Changes
B	
C	
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PROPOSED LAND ZONING

Drawn: CD

Date: 26.07.11 Scale 1:8000 @ A4 Ref No. 08/609

Part 3 Justification

Section A – Need for the Planning Proposal

1. Is the Planning Proposal a result of any strategic study or report?

The planning proposal is a result of the Lismore Local Environmental Study 2008, and reports to Council dated 12 August 2008 and 8 December 2009 dealing with the Draft Lismore Local Environmental Plan 2010 in which it is proposed to rezone the subject Site further to other landholdings identified for urban release.

12 August 2008 Meeting

The report to Council’s Ordinary Meeting of 12 August 2008 recommended Council forward the draft Lismore Local Environmental Plan and Local Environmental Study (LES) to the Department of Planning with a request that the Director General issue a certificate certifying that the draft plan may be publicly exhibited in accordance with Section 66 of the EP&A Act.

The August report stated the Lismore Urban Strategy (LUS) identifies land with potential for new residential development. The Department of Planning agreed to increase the lot allocation for the "greenfield" sites identified in the LUS so that Council could comply with the Director-General's requirements to zone sufficient residential land to meet Lismore's requirements for the next 10 years. Council subsequently invited land owners whose properties were identified in the strategy to submit rezoning applications that could be considered as part of the draft LEP.

The draft LEP provides for significant urban residential land release in the following locations:

<i>Site</i>	<i>Developable area</i>	<i>Estimated Lot/Dwelling Yield</i>
<i>Invercauld Road</i>	<i>29ha</i>	<i>265 lots</i>
<i>Chilcotts Grass</i>	<i>19ha</i>	<i>113 lots</i>
<i>Holland Street</i>	<i>4ha</i>	<i>25 lots</i>
<i>Crawford Land</i>	<i>15ha</i>	<i>180 dwellings</i>

8 December 2009

The December 2009 report provided the following commentary relating to the subject site:

Southern Cross University land currently included in the 5(b) Special Use (Technology Park) zone was also included in the draft LEP in a mixed-use zone following advice from the Department of Planning (DoP) that the 5(b) zone would no longer exist and that a residential only zone would not be supported.

Council endorsed the draft LEP 2009 in August 2008 to obtain a public exhibition certificate from the DoP. Since then, the following has occurred:

- A new Council with a focus on sustainable development was elected. The subsequent adoption of the Community Strategic Plan raises the question of whether the strategy as included in the draft LEP is consistent with the principles of sustainable development;*
- New information has been obtained about traffic movement in the region;*
- There have been requests from landowners to consider the inclusion of alternative sites in the draft LEP; and*
- Evidence has emerged about the lack of capacity in Goonellabah's sewerage system to service existing land zoned for residential development.*

These factors led to a number of reviews as follows:

- Staff from Integrated Planning (strategic land use planning, environmental strategies and community services), Development and Strategic Engineering have undertaken a desktop strategic review of the strategy on sustainability principles. This did not extend to detailed studies of sites not previously investigated through the rezoning process, or to the infill site at 20 Holland Street, Goonellabah;*
- Three (3) separate detailed analyses of the capacity of the Goonellabah sewerage system occurred; and*
- Consultants were engaged to review strategic costs of infrastructure external to each site, that is, roads, water and sewer.*

These reviews resulted in a number of conclusions and suggested policy direction for the growth of Lismore in the next 10 years. This information was presented to a Council workshop on 19 October 2009.

As previously outlined, Council resolved at the December 2009 Ordinary Meeting to *endorse the zoning of the residential/mixed use land release areas included in the draft LEP 2009, namely the subject **Crawford land**, Invercauld Road land and Chilcotts Grass land subject to recommendation (2) below for the reasons outlined in the report.*

Local Environmental Study 2008

The Site is included within the Local Environmental Study (2008) with Section 2.1 dealing with Residential Zones nominating Crawford Land for 180 dwellings as part of a mixed use land zoning.

It is noted the LES provided for the inclusion of an industrial land zoning within the south-eastern portion of the Site, however as a result of a further submission by the landowner highlighting fundamental land use conflict issues with the industrial and mixed use zoning, the current Draft Lismore LEP provides for the adoption of the B4 Mixed Use zone over the formally identified IN1 land area.

Far North Coast Regional Strategy

The Far North Coast Regional Strategy (FNCRS) *Town and Village Growth Boundary Map Sheet 4 - Lismore*, identifies the Site as "Committed Urban Land" further to "Employment Lands".

2. Is the Planning Proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

The proposed planning proposal is considered to be the best means of achieving the objectives and intended outcomes. Accordingly, amending the Lismore Local Environmental Plan 2000 Zoning Map so the Site, is zoned 2(a) Residential, 3(b) Neighbourhood Business, 5(a) Special Use (University) and 7(b) Environmental Protection (Habitat) is the best and neatest way of achieving the mixed land use for the land in a manner consistent with the overarching strategic planning framework.

3. Is there a community benefit?

The community benefit associated with the development lies in the provision of additional housing options/affordability in a manner that minimises environment, social and economic impacts.

The identification of the Crawford Site for the underlying mixed land uses incorporating residential, employment generation and environmental protection will have a number of benefits for the wider Lismore community, including:

- An opportunity to provide a diversity of residential product not currently available within the Lismore LGA. The proposal provides for the introduction of integrated urban design principles not broadly adopted in Lismore which will promote greater housing affordability further to an increased diversity of lot and housing type.
- Rezoning of the Site would provide a net community benefit as the rezoning will contribute to Council's housing targets as set by the Far North Coast Regional Strategy.
- The current function of Lismore as a Major Regional Centre (FNCRS) supports and requires a larger population base. Accordingly, this proposal will contribute to satisfying the objective of the FNCRS of consolidating Lismore as a Major Regional Centre.
- The provision of additional residential land supply will contribute positively to the current and future demand for residential land and the ability for Lismore to accommodate higher levels of population growth.
- The proposal will formalise the development of the Asia Pacific Football Institute which is to be developed through the collaboration between Southern Cross University, TAFE and a prominent European Football Club. The Institute will operate primarily as a skill's based centre of excellence and cater its skills development programs to locals and visiting groups both domestic and international.
- The Site encompasses a primary vegetation corridor within the eastern escarpment. The proposal will result in the long-term preservation and management of the habitat areas which will be achieved with the subsequent development and rehabilitation management plans for the Site.

Section B – Relationship to Strategic Planning Framework

4. Is the Planning Proposal consistent with the objectives and actions contained within the applicable regional or sub-regional strategy?

The Far North Coast Regional Strategy (FNCRS) 2006-2031 was prepared by the New South Wales Department of Planning and pertains to the LGAs of Ballina, Byron, Kyogle, Lismore, Richmond Valley and Tweed.

Critical components of the FNCRS which relate to this planning proposal include:

- A projected population growth of 60,400 people between 2006 and 2031.
- Plans for 51,000 new homes to be built by 2031 to accommodate population growth projections.
- Allocation of 35% of future housing to the regional centres of Tweed, Lismore and Ballina, with encouragement for growth of non-coastal centres.

Lismore is identified as a Major Regional Centre under the FNCRS. The FNCRS states that "Lismore will continue as a regional hub for creative industry and cultural activities, education, health, employment and retail." The FNCRS allocates 8,000 dwellings in Lismore between 2006 and 2031, which equates to 363 additional dwellings per year. Based on regional population growth projections of 60,400 people and a dwellings target of 51,000, there is a planned rate of provision of 1.2 people per dwelling. Therefore, the provision of 8,000 additional dwellings within Lismore will accommodate population growth of approximately 9,500 people.

The planning proposal is deemed to be consistent with the Far North Coast Regional Strategy (FNCRS). The planning proposal represents a minor adjustment within the *Town and Village Growth Boundary* to incorporate land that is effectively residential in terms of its land use and characteristics within the area mapped as "Employment Lands". There is provision for this to occur with the FNCRS.

5. Is the Planning Proposal consistent with the local council's Community Strategic Plan, or other local strategic plan?

The Planning Proposal is consistent with Lismore Regional City Plan 2005 and objectives of the Lismore Urban Strategy.

Lismore Regional City Plan 2005

The Lismore Regional City Plan 2005 was prepared by Lismore City Council and provides an overview of short, medium and long term priorities for further developing Lismore as a Regional Centre. The Regional City Plan identifies land that may have potential to meet Lismore's future requirements for residential, commercial, industrial and recreational purposes.

The City Plan nominates the opportunities for the Crawford Site to accommodate a mixed use of residential, recreational and industrial land uses as demonstrated within **Plate 3**.

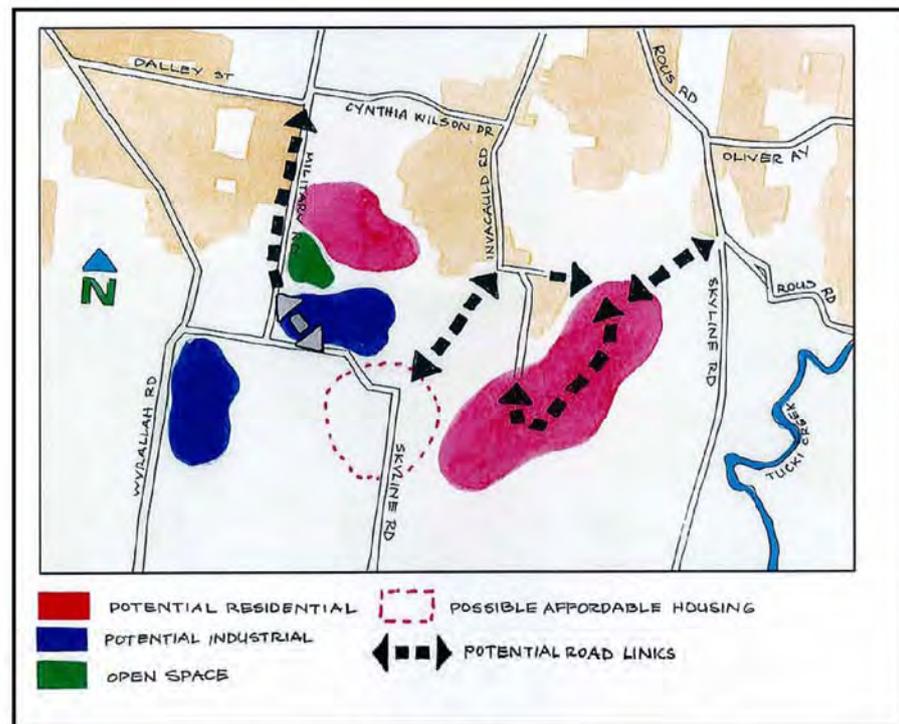


Plate 3: Lismore City Plan - East Lismore

The plan identified actions for the East Lismore Area which this proposal meets with respect to affordable housing, transport connections and the provision of recreational areas. The planning proposal is consistent with the aims and objectives of the Lismore Regional City Plan 2005 in addition to the specific actions for East Lismore which identifies the potential for the Crawford Land Site to be utilised for the proposed land uses.

6. Is the Planning Proposal consistent with applicable State Environmental Planning Policies?

The planning proposal is considered to be consistent with relevant State Environmental Planning Policies (SEPPs), including the following:

SEPP 44 Koala Habitat Protection

State Environmental Planning Policy No. 44 (SEPP 44) encourages the conservation and management of natural vegetation areas that provide habitat for Koalas to ensure permanent free-living populations will be maintained over their present range. The policy applies to 107 local government areas. Local councils cannot approve development in an area affected by the policy without an investigation of core Koala habitat. The policy provides the statewide approach needed to enable appropriate development to continue, while ensuring there is ongoing protection of Koalas and their habitat.

The identified Koala habitat area along the ridgeline to the east of the Site, which was found to be actively utilised by Koalas in previous studies, will be retained and enhanced. This large area of Forest Red Gum forest adjacent to the Site (ie. the Environmental Protection Zone) is proposed to cater for two dwellings and potentially a public walkway and will not adversely affect the proposal and will therefore continue to provide core Koala habitat for the majority of animals in the local population. Part of the overall proposal will involve the restoration and enhancement of the Koala habitat/corridor running along the eastern portion of the Crawford Land (ie. within the Environmental Protection Zone).

It is envisioned that supplementary Koala feed trees will be planted along the ridgeline along with weed control and fencing to exclude dogs intrusions. This will result in a net gain in consolidated Koala habitat. The extensive areas of adjacent Forest Red Gum forest will continue to provide movement opportunities for

Koalas in the locality and the proposal will not interrupt or provide barriers to local Koala movements.

The Crawford Land development has been designed so that no public roads will traverse the area of Koala habitat (and Koala movement) to east of the land (ie. the Environmental Protection Zone). Accordingly, the proposal will not result in the fragmentation of habitat for any threatened species with Koala habitat retained along the eastern boundary of the Crawford Land such that connectivity with adjacent habitat areas is maintained.

SEPP 55 Remediation of Land

A preliminary contaminated lands investigation has been undertaken by EAL Consulting Services of the subject Site. The objective of this preliminary investigation was to determine if land contamination has occurred from historical and current land use activities.

Based upon surrounding land use and anecdotal information provided by the landowner and Lismore City Council records, it is apparent the Site has been predominantly utilised for cattle grazing with two residential houses (now offices).

In accordance with relevant guidelines, a systematic-sampling regime combined with targeted sampling has been undertaken by EAL of surface soils within the proposed development area to determine if contaminants of concern (such as heavy metals petroleum hydrocarbons, hazardous building materials and organochlorine pesticides), associated with current and previous land uses are present onsite and if such contaminants represented a significant risk of harm to end users (and nearby sensitive receptors).

The broad scale sampling regime involved the collection of 74 individual soil samples; which were homogenised into twenty composite samples for chemical analysis. A further twenty samples were taken in the vicinity of buildings and thirty samples taken in the vicinity of a decommissioned cattle dip site. Subsequent additional sampling and follow-up analyses were also undertaken.

Analysis results indicated that contaminant levels for the various parameters do not represent a significant risk of harm to end users. Some precaution is

warranted in the vicinity of the decommissioned Maize Grove dip site depending on the requirement for the area to be utilised for an industrial/commercial purpose and subsequent footprint. Therefore, EAL concluded that in general a detailed investigation is not warranted for the majority of the Site, however a further validation sampling and/or site remediation/management options may be required in the vicinity of the decommissioned dip site.

SEPP Major Development

This SEPP consolidates criteria and identifies development, which are 'State Significant'. The development of the Site post rezoning would not be categorised within this SEPP as a project to which Part 3A of the Act applies, nor would it be categorised as Regional Development.

SEPP Rural Lands

This SEPP provides for the protection of agricultural land that is of State or Regional significance. The Site proposed to be rezoned is mapped as "Committed Urban & Employment Lands".

The SEPP contains specific provisions that relate to the assessment of Development Applications over rural land. While no specific provisions apply to the rezoning of land, it is considered that the proposed zoning of the land is generally consistent with the rural planning principles identified in the SEPP, and that given the location of the subject land the proposal is unlikely to result in significant impacts on existing agricultural land use in the locality.

SEPP Infrastructure

Pending the initial Gateway process determination, consultation with public authorities and further planning is required in accordance with planning requirements provided within Section 104 of the SEPP. Specifically, referral of any future development application to the Roads & Traffic Authority will be required should the development provide for the creation of 200 or more lots.

State Environmental Planning Policy (North Coast Regional Environmental Plan) (NCREP SEPP)

The North Coast Regional Environmental Plan is now a deemed SEPP. The NCREP SEPP contains a number of provisions relevant to the proposed development. The relevant provisions are addressed in the following table:

Clause	Provision	Consideration
Clause 38 – Plan preparation – Urban land release strategy	<p>Clause 38 requires that council should not prepare a draft local environmental plan which permits development that, in the opinion of the council, constitutes significant urban growth unless it has adopted an urban land release strategy for the whole of its local government area.</p> <p>The clause also states that a draft LEP should be generally consistent.</p>	<p>Lismore City Council at its Ordinary Meeting of 12 August 2008 and 8 December 2009 resolved to incorporate Crawford Land as part of the Urban Land Release for Lismore.</p> <p>This position is further reinforced through the Local Environmental Study prepared in association with the draft Lismore LEP 2010 which includes the Site for a B4 – Mixed Use and E3 – Environmental Management zoning.</p>
Clause 40 – Plan preparation – principles for urban zones	<p>Clause 40 provides as follows:</p> <p>A draft local environmental plan applying to urban areas should adopt the following principles:</p> <ul style="list-style-type: none"> (a) zoning should be simple and flexible, (b) provisions for flexible zone boundaries may apply to any zones except environmental protection zones, (c) detailed guidelines within the broad zone parameters should be identified in a development control plan, and. (d) the principle of minimising energy use, in particular in the design of buildings and effective transport systems. 	<p>The proposed amendment to Lismore LEP 2000 is consistent with the principles provided in Clause 40.</p> <p>A Development Control Plan will be prepared for the Land which encompasses detailed design guidelines which optimises the residential density whilst still achieving sound energy efficiency outcomes,</p>
Clause 42 – Plan preparation – principles for housing	<p>Clause 42 provides that a draft LEP to permit dwellings in urban areas should incorporate provisions that:</p> <ul style="list-style-type: none"> (a) allow the alteration or addition of a dwelling so as to create 2 dwellings in either attached or detached form, (b) allow a wide range of housing types and densities, (c) separate residential development from other incompatible development, including agricultural activity on adjoining land, d) require that development for residential purposes should not take place until the council is satisfied that the land on which any dwellings are to be erected is adequately serviced with water and sewage disposal facilities, 	<p>The proposed amendment to Lismore LEP 2000 is consistent with the provision of Clause 42.</p> <p>The subject land is able to be adequately serviced with current infrastructure for 68 ET's, whilst Lismore City Council is developing the Southern Trunk Main and associated rising main to the Land. The STM is due for completion in August 2012, whilst the rising main will be developed when 80% of the 68ET's are utilised.</p>

	<p>(e) retain existing provisions to enable a dwelling to be erected on an existing allotment, and</p> <p>(f) permit the use of manufactured home estates for permanent occupation</p> <p>(2) A draft local environmental plan that will permit dwellings to be erected in urban areas should not require development consent for a dwelling house in a residential zone, except where there are special environmental or hazard considerations, or specify a minimum allotment size for residential zones.</p>	
<p>Clause 45 - Plan preparation - hazards</p>	<p>Clause 45 contains the following provisions in relation to the preparation of an LEP permitting housing on land subject to hazards.</p> <p>A draft Local Environmental Plan should not permit development for tourism, rural housing or urban purposes on land subject to the following hazards, namely:</p> <ul style="list-style-type: none"> i. coastal processes, ii. flooding or poor drainage, iii. dangers arising from potential or actual acid sulphate soils, dangers arising from contaminated land, geological or soil instability, iv. bushfire, v. aircraft noise at levels of more than 25 (measured according to the Australian Noise Exposure Forecast), vi. air or water pollution, or airborne pollution, within 400 metres of sewage treatment works, vii. disposal of septic effluent, viii. existing offensive or hazardous industries, and ix. high tension electrical power lines, unless the council has made an assessment of the extent of the hazard and included provisions in the plan to minimise adverse impact, <p>Subclause (3) provides:</p> <p>(3) In the event of a bush fire hazard being identified for land on which dwellings are proposed to be permitted, the Council shall not permit development unless it is satisfied that arrangements where appropriate have been made to:</p>	<p>The land proposed to be rezoned to 2(a) Residential Zone is subject to a flood inundation and bushfire hazard.</p> <p>Mapping held by Lismore City Council identifies the land as being subject to localized flood inundation. An assessment of the development of the land and associated filling to the 1 in 100 year flood event has been completed by Worley Parsons as provided within Attachment 3 of this report.</p> <p>Mapping held by Lismore City Council identifies the land as being bushfire prone. Attachment 4 of this report provides the preliminary Bushfire Assessment for the Land. The assessment by BCA Check identifies the proposal is capable of managing the hazard through the implementation of specific design measures.</p> <p>As previously outlined, the Site is embellished with a former dip site and as such has been assessed for potentially contaminated soils. Reference should be made to the preliminary contaminated assessment by EAL Consulting Services as provided within Attachment 5.</p>

	<ul style="list-style-type: none"> (a) require the creation of a perimeter road or reserve which circumscribes the hazard side of the land intended for that development, (b) require the creation of a fire radiation zone located on the bushland side of the perimeter road, (c) specify minimum building setbacks for buildings that will be erected on allotments adjoining the perimeter road, (d) set standards for the use of fire retardant materials for buildings and building construction, and (e) provide fire trails which link with individual access roads or a through road. 	
<p>Clause 45A – Plan Preparation – Flood Prone Land</p>	<p>Clause 45A relates to flood liable land and provides as follows.</p> <ul style="list-style-type: none"> (1) This Clause applies to flood liable land within the meaning of the Floodplain Development Manual. (2) A draft local environmental Plan should: <ul style="list-style-type: none"> (a) not alter the zoning of flood liable land the zoning of which is described as special use—flood liable, rural, open space, scenic protection, conservation, environment protection, water catchment or coastal lands protection, or similarly described, to a zone described as residential, business, industrial, special use, village or similarly described, and (b) not contain provisions which apply to flood liable land and which: <ul style="list-style-type: none"> (i) permit an intensification of development on that land, or (ii) are likely to result in an increase in the need for flood mitigation measures (including emergency measures), infrastructure or services, or (iii) permit development to be carried out without development consent, except development for the purpose of agriculture which does not include landfill, drainage canals, fences, buildings or structures in the following places: 	<p>Mapping held by Lismore City Council identifies the land as being subject to localized flood inundation, being classified as “flood fringe”. The area of the Site nominated as flood liable is restricted to the lower western portion of the Site below RL 11.2m (1 in 100 year flood height).</p> <p>An assessment of the development of the land and associated filling to the 1 in 100 year flood event has been completed by Worley Parsons as provided within Attachment 3 of this report.</p>

	<ul style="list-style-type: none"> • floodways, • high hazard flood fringe, • high hazard flood storage areas, <p>as defined in the Floodplain Development Manual, unless Justified by a floodplain management plan prepared by the council in accordance with the Floodplain Development Manual.</p> <p>(3) A draft local environmental plan should:</p> <p>(a) zone land identified in accordance with the principles contained in the Floodplain Development Manual as high hazard flood liable or as floodway so as to reflect its potential for flooding, and</p> <p>(b) provide that the erection of new buildings on any such land be restricted.</p>	
<p>Clause 56A – Plan Preparation – Bus Services</p>	<p>Clause 56A provides:</p> <p>In the preparation of a draft local alteration to the zoning of land which could give rise to the need for bus services or the revision of existing bus services, the council should take into consideration the guidelines in <i>Technical Bulletin 19—Planning for Bus Services</i> (published in 1989 by the Department of Planning and the Ministry of Transport at that time) to ensure that the draft plan allows for the provision of an adequate and efficient bus route system.</p>	<p>The proposal has been designed so as to cater for a bus route through the estate. Regard should be made to Attachment 1 of this planning proposal.</p>
<p>Clause 58 – Plan Preparation – Servicing Urban Areas</p>	<p>Clause 58 provides:</p> <p>A draft Local Environmental Plan should not permit development for urban purposes unless the council is satisfied that:</p> <p>(a) the proposed development will make the most economic use of existing services,</p> <p>(b) where the proposed development is adjacent to an existing urban area and that urban area will be substantially increased, the provision of a reticulated water and sewer system will be provided at reasonable cost to each lot,</p>	<p>The proposed development is able to be adequately serviced in accordance with the provisions of Clause 58. Regard should be made to Attachment 1 of this report.</p> <p>Council at its Ordinary Council Meeting in April 2011 dealt with a report specifically dealing with servicing the proposed Crawford Land proposal and specifically sewer services.</p> <p>The report provided the following commentary:</p>

	<p>(c) the proposed development is located in an area which is consistent with the findings of any urban land release strategy prepared for the local government area or, where no such strategy has been prepared, the proposed development is located in the area to which services can be provided most readily,</p> <p>(d) consideration has been given to the identification of effluent disposal and discharge points,</p> <p>(e) domestic water catchment areas and water storage areas are not likely to be polluted as a result of the proposed development, and</p> <p>(f) consideration has been given to the provision of public transport facilities, pedestrian and cycleways.</p>	<p>"This is a very sound proposal. It will facilitate the development of a mixed housing precinct and Asia Pacific Football Institute on Southern Cross University's Crawford Land. It will also increase usage of the soon to be completed southern trunk sewer main and free up wastewater capacity for future development of the land releases to the north of Goonellabah. This has been achieved as a result of Council actively working with the developer (Norsearch Limited) and doing so in a way that integrates its strategic land use and asset development/management objectives."</p> <p>Council ultimately adopted the following recommendation.</p> <ol style="list-style-type: none"> 1. Council commit to funding the construction of the rising main servicing the Crawford development, extending from the proposed Crawford sewage pump station to its connection with the Southern Trunk Main. 2. Any future expenditure by Council shall be subject to the agreed funding of wastewater infrastructure by Norsearch Limited and Council being confirmed within a planning agreement for the land. 3. Construction of the above rising main be included within the revision of Council's Strategic Business Plan for Water Supply and Wastewater Services being undertaken as part of the preparation of Council's 2011/12 Operational Plan. 4. The General Manager write to Norsearch Limited confirming
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		Council's commitment to funding of this infrastructure.
Clause 61 - Plan preparation - health and education facilities	<p>Clause 61 provides:</p> <p>A draft local environmental plan should not zone land for residential purposes on either urban or rural land unless:</p> <p>(a) the council is satisfied that:</p> <p>(i) there is adequate access available from the proposed development to both health and education facilities, and</p> <p>(ii) the proposed development is so located as to make the best use of existing health and education facilities, and</p> <p>(b) where the expected future population is unable to be accommodated by the existing health and educational facilities in the region, the council:</p> <p>(i) has identified, in a draft local environmental plan, sites for the location of health and education facilities, or</p> <p>(ii) identifies such sites in a subsequent development control plan.</p>	<p>The subject Site is located within close proximity to existing services in Lismore which contain retail, essential commercial services, health facilities (St Vincents & Lismore Base Hospital) and educational establishments (eg. Southern Cross University, primary and secondary schooling).</p>
Clause 65 - Plan Preparation - Provision of community, welfare and child care services	<p>Clause 65 provides:</p> <p>(1) A draft local environmental plan should:</p> <p>(a) note zone land for residential purposes (including rural residential) unless the council has made an assessment of the need for additional community and welfare services and is satisfied that the plan contains adequate provisions to enable the provision of those services, and</p> <p>(b) include child care centres as a land use which is permissible with the council's consent in all rural, residential and business zones.</p>	<p>The proposed rezoning of the subject land is not considered to trigger the need for additional community services in the context of the Lismore land release strategy as a whole.</p> <p>Notwithstanding this position, land has been identified for a neighbourhood centre which provides scope for such land uses as a child care facility, community building and local scale retail facilities.</p>
Clause 78 - Plan Preparation - Public Recreation Areas	<p>The provisions of Clause 78 are provided as follows:</p> <p>(1) A draft local environmental plan should include provisions which:</p>	<p>Reference is made to Lismore City Council's Draft Sport & Recreation Plan 2011-2021.</p> <p>With specific regard to the Site and adjoining East Lismore locality, the Draft Plan</p>

	<ul style="list-style-type: none"> (a) identify areas of potential active or passive recreational use in both urban and rural areas, (b) identify a range of recreational environments located in the vicinity of existing and proposed residential development, (c) permit recreational uses in a wide range of zones and not only in open space zones, (d) identify land for use by the general public to gain access to water bodies and foreshores, and (e) manage access to water bodies or foreshores where the environmental features of the area are likely to be damaged by increased public access. 	<p>provides the following comments.</p> <p><i>“Facilitate an access agreement with Southern Cross University and Football Australia to assist peak sporting bodies to gain access to playing fields and high performance facilities and services at the Asia Pacific Football Institute (Crawford Land) for high level training and/ or competition.</i></p> <p><i>“It is understood there is no synthetic athletics track in NSW north of Newcastle. Future provision would be consistent with the goal of positioning Lismore as the sporting hub for northern NSW. Should demand for a synthetic athletics track be identified in the future, rather than develop this facility on public parkland, its collocation with the East Lismore campus of Southern Cross University would be a more effective model from a capital and operating cost perspective.</i></p> <p>This planning proposal provides for the provision of passive and active recreational areas with a specific focus on the development of the Asia Pacific Football Institute.</p> <p>As previously outlined, areas of environmental value (eastern escarpment and primary gullies) have been clearly identified for future rehabilitation and management as part of this proposal.</p>
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7. Is the Planning Proposal consistent with applicable Ministerial Directions (s. 117 directions)?

Directions made under Section 117 of the *Environmental Planning and Assessment Act 1979*, issued on 1 July 2009, which are relevant to the Site, are identified and addressed in **Table 1**, below.

Direction No.	Objective	Consideration
No. 3.1 - Residential Zones	<p>When this direction applies</p> <p>(2) This direction applies when a relevant planning authority prepares a planning proposal that will affect land within:</p> <p>(a) an existing or proposed residential zone (including the alteration of any existing residential zone boundary),</p> <p>(b) any other zone in which significant residential development is permitted or proposed to be permitted.</p> <p>What a relevant planning authority must do if this direction applies</p> <p>(3) A planning proposal must include provisions that encourage the provision of housing that will:</p> <p>(a) broaden the choice of building types and locations available in the housing market, and</p> <p>(b) make more efficient use of existing infrastructure and services, and</p> <p>(c) reduce the consumption of land for housing and associated urban development on the urban fringe, and</p> <p>(d) be of good design.</p> <p>(4) A planning proposal must, in relation to land to which this direction applies:</p> <p>(a) contain a requirement that residential development is to ensure the orderly and economic use or development of residential land.</p>	<p>The proposal will provide for an increase in the choice of housing available in the locality. Importantly, the intended subdivision layout seeks to promote housing affordability through the sought density and integrated design elements.</p> <p>It is noted the existing 2(a) zone within the Lismore LEP addresses the matters provided within Sub-section (3) and the rezoning of the Site to 2(a) will be consistent with the requirements of this direction.</p> <p>Similarly, the provisions of the proposed Draft Lismore LEP, and the proposed B4 - Mixed Use zone, would also provide appropriate provisions.</p>
Direction No. 3.4 - Integrating Land Use and Transport	To ensure that urban structures, building forms, land use locations, development designs, subdivision and street layouts achieve the following planning objectives	The Site is located on the fringe of the existing urban area of East Lismore which is serviced by public transport and pedestrian system. (main road hierarchy).

	<ul style="list-style-type: none"> improving access to housing, jobs and services by walking, cycling and public transport increasing the choice of available transport and reducing dependence on cars reducing travel demand including the number of trips generated by development and the distances travelled, especially by car supporting the efficient and viable operation of public transport services providing for the efficient movement of freight. 	<p>The proposed development will allow for an extension to these services through the implementation of a pedestrian and cycleway network within the estate. The internal road design will cater for public transport.</p> <p>The structure plan for the estate provides for the siting of local neighbourhood commercial and community uses. The objective of the structure plan is to provide accessibility to essential retail and community (child care etc) land uses which are accessible by residents walking within the Estate together with existing residents adjoining the Site.</p> <p>Detailed planning will be undertaken post the initial gateway process.</p>
No. 4.3 - Flood Prone Land	<p>To ensure that development of flood prone land is consistent with the NSW Government's Flood Prone Land Policy and the principles of the Floodplain Development Manual, 2005.</p> <p>To ensure that the provisions of an LEP on flood prone land is commensurate with flood hazard and includes consideration of the potential flood impacts both on and off the subject land.</p>	<p>A detailed flood study has been prepared for the subject Site (see Attachment 3). The 1% flood level, as identified within this flood study, has been adopted as the appropriate flood planning level for the development of the Site. The study identifies the ability to fill the lower areas of the Site and therefore all housing will satisfy the nominated flood planning levels.</p>
No. 4.4 - Planning for Bushfire Protection	<p>To protect life, property and the environment from bushfire hazards, by discouraging the establishment of incompatible land uses in bush fire prone areas.</p> <p>To encourage sound management of bushfire prone areas.</p>	<p>The subject Site is mapped as bushfire prone land. Regard should be made to the commentary on bushfire within Part C of this Planning Proposal together with Attachment 4.</p>
No. 5.1 - Implementation of Regional Strategies	<p>Planning Proposals must be consistent with a regional strategy released by the Minister for Planning.</p>	<p>The Strategy includes the subject Site as a "Committed Urban & Employment Lands". Rezoning of the subject Site is therefore consistent with the Far North Coast Regional Strategy.</p>

Section C – Environmental, Social and Economic Impact

8. Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

A search of the NPWS Atlas in April 2011 for threatened flora species listed under the TSC Act identified 7 flora species recorded within a five km radius of the Site (refer Table 1). Six of these species are also listed as threatened under the EPBC Act.

A review of Schedule 1 of the TSC Act indicates that up to seven endangered ecological communities may occur within the Lismore Local Government Area (LGA):

- Coastal Saltmarsh in the NSW North Coast and Sydney Basin Bioregions;
- Lowland rainforest in the NSW North Coast and Sydney Basin Bioregions;
- Subtropical coastal floodplain forest of the NSW North Coast bioregion;
- Swamp oak floodplain forest of the NSW North Coast, Sydney Basin and South East Corner Bioregions;
- Swamp sclerophyll forest on coastal floodplains of the NSW North Coast, Sydney Basin and South East Corner Bioregions;
- Freshwater wetlands on coastal floodplains of the NSW North Coast, Sydney Basin and South East Corner Bioregions; and
- Lowland rainforest on floodplain in the New South Wales North Coast Bioregion.

According to Vegetation mapping undertaken by Ecograph (Turnbull & Boulton 2000) for Lismore City Council, 2 main vegetation type at the Site, namely:

- Forest Red Gum/Tallowwood +/- Pink Bloodwood Open Forest to Woodland along the higher eastern ridge; and
- Urban Bushland patches scattered across the land

The proposal seeks to retain the primary corridor found within the elevated eastern ridge. The land will be encompassed within the 7(b) Environmental Protection (Habitat) zone under this planning proposal. Post the initiation of the Gateway, more detailed study addressing the rehabilitation measures to be adopted within a management plan for the area will be developed.

As part of the development application process for the Asia Pacific Football Institute (APFI), the Ecological Assessment identified the presence of the threatened species, namely Hairy Jointgrass (*Arthraxon hispidus*) (HJG) within the footprint of the proposal. HJG specimens have been detected within portions of the Crawford Land from approximately the 10m elevation contour to the western boundary and to the east of the land.

HJG is listed as a vulnerable species pursuant to the NSW *Threatened Species Conservation Act 1995* (TSC Act). It is also listed as vulnerable species pursuant to the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The assessment completed by EAL Consulting Services demonstrate that the proposed works for the APFI are not likely to result in a significant effect (as described in Section 5A of the EP&A Act) on a threatened species, population or ecological communities (as listed in the TSC Act). Therefore, EAL have concluded a Species Impact Statement is not required. Similarly, EAL have concluded the proposed development will not have a significant impact on matters of NES as described in the EPBC Act; therefore, it does not need to be referred to the Minister.

Notably a proposal to delist the HJG is currently underway at the Commonwealth level because of the observed wide distribution of this species.

(<http://www.environment.gov.au/biodiversity/threatened/listing-assessments-non-fpal.html>).

9. Are there any other likely environmental effects as a result of the Planning Proposal and how are they proposed to be managed?

a. Contamination

EAL Consulting Services was engaged in 2009 to complete a preliminary contaminated lands assessment for the Site as part of the rezoning submission lodged under the draft Lismore LEP 2010. The objective of the investigation by EAL was to determine if land contamination had occurred from past land usage.

To determine the type of contaminants that may be present in the soil profile, a basic history search was undertaken by EAL. The soil-sampling regime was based on a systematic sampling pattern combined with targeted sampling around buildings on the Site and a decommissioned dip site. The initial soil analysis confirmed the Site generally is not contaminated on a broadscale basis but further investigation in isolated areas was warranted.

It is noted since the preparation of the preliminary assessment by EAL, the Structure Plan for the Site has located the APFI development within the southern portion of the Site with no disturbance proposed to the dip site, thereby permitting the area to be excluded from development.

The Contaminated Lands Assessment is provided within **Attachment 5**.

b. Bushfire

Bushfire prone lands mapping provided by Lismore City Council indicates the Site is mapped as bushfire prone land [see **Plate 4**]. Notwithstanding the bushfire mapping, the majority of the land area is located free of any vegetation hazard or associated hazard buffer.

The bushfire hazard impacting the land to be rezoned is open forest vegetation located in the eastern precinct of the study area.

A preliminary bushfire hazard assessment has been completed by *BCA Check* as provided within **Attachment 4** of this report.

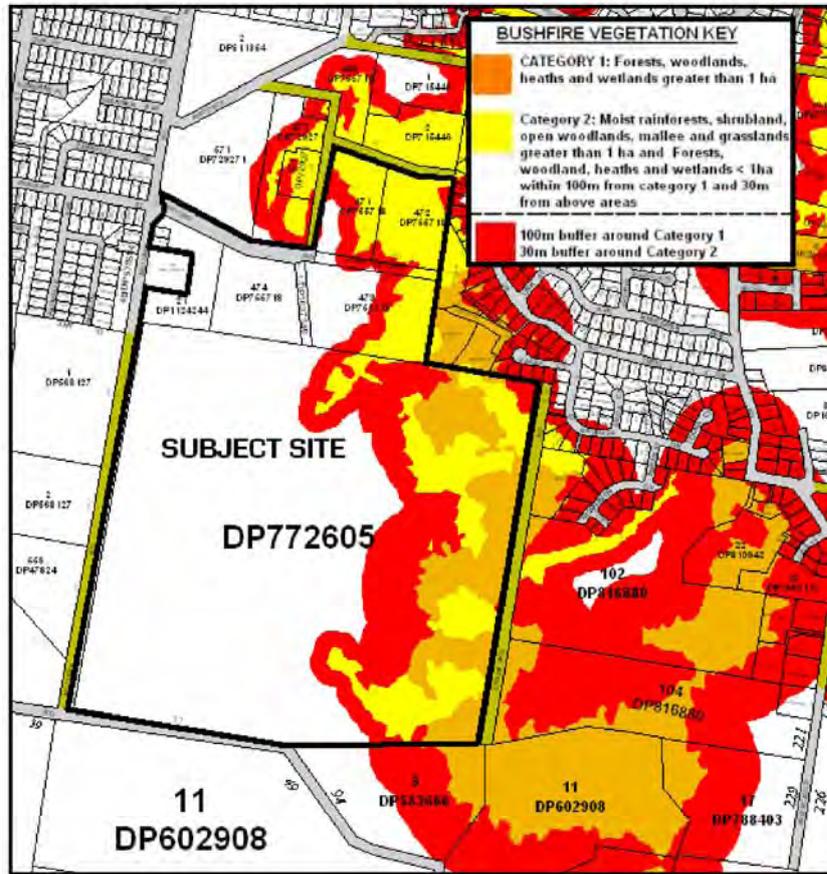


Plate 3: Lismore City Council Bushfire Mapping & Nominated Land Areas

Asset Protection Zone

A minimum 21m asset protection zone [APZ] that will allow future dwellings to be located outside the flame zone pursuant to AS 3959-2009. The APZ can be located over the road reserve and any cycle ways provided there is a mechanism to maintain grass verges etc.

Grassland is found in the southern precinct with open space and residential development to the west and north respectively. A complete bushfire assessment will be provided as part of the Development Application process.

Water Services

The subdivision is to be serviced with street hydrants in accordance with Australian Standard 2419.1.

Public Roads

As part of the structure plan design process, the following key attributes of the Planning for Bushfire Guidelines (2006) were incorporated into the design.

- The public road is designed to promote the effectiveness of fire fighting vehicles and crews.
- The road network appears to be capable of complying with Planning for Bushfire Protection 2006 with further detail to be provided as the design develops.
- Public roads have a cross fall not exceeding 3 degrees
- Dead end roads are not more than 200m in length, incorporate a minimum 12m outer radius turning circle and are clearly signed posted as a dead end and direct traffic away from the hazard
- Public roads to have curves with a minimum inner radius of 6m.
- Minimum distance between inner and outer curves is 6m
- Maximum grade for sealed roads do not exceed 15 degrees and an average grade of not more than 10 degrees or other gradient specified by road design standards, whichever is the lesser gradient.
- Minimum vertical clearance to a height of four metres above the road at all times.

Electricity Services

Electrical transmission lines shall be placed underground pursuant to the Planning for Bushfire Guidelines (2006).

c. Buffer Areas

The introduction of residential land uses within a rural area interface may contribute to the creation of conflicting land use issues. Issues commonly raised include offensive noise from farm machinery and cattle, hours of farm activities and spray drift associated with intensive horticulture. Conversely, issues are also

raised from rural landowners concerning the increase in residential orientated land uses being created in rural areas and the likely increase in scrutiny of farming activities.

Agricultural zoned land is located south of Skyline Road. The land is not utilised for any intensive cropping with low-scale cattle grazing occurring onsite. The planning proposal provides for the placement of the 5(a) Special Use (University) to occupy the southern portion of the Site in association with the proposed development of the Asia Pacific Football Institute.

Table C3 provides the minimum buffer area design requirements applicable for residential lots as contained within the Lismore Development Control Plan – Chapter 11; Buffer Areas.

Table C3 – Buffer Setbacks

Land Use	Separation Distance	Landscaping
Cattle Grazing	30 metres	5 metres within nominated separation distance.
Intensive Horticulture	150 metres or 80 metres with a 30 metre biological buffer.	30 metre biological buffer when 80 metre dwelling setback is adopted.

All above listed buffers have been considered within the Structure Plan within **Attachment 7** of this report and therefore can be adequately catered for within the final subdivision layout.

d. Archaeology

A full archaeological survey was carried out on the Site, by Murray Roberts (Widjabul Aboriginal People Native Title Claimant: And on behalf of Ngulingah Aboriginal Land Council Sites Officer).

A copy of the Site survey assessment is provided within **Attachment 6**. The survey identified two artefacts upon the subject land, however in locations not reflective of the historical use of the location. The survey states:

"I found two artefacts one crossing the drain to go onto that flat, and the other up at the top gate, going into the first small quarry with the big waterhole in it the artefact was dropped there in the drain in the middle of the old swamp no road work that end somebody needed to make another blade out of it, it was uncovered when the tractor was cleaning the drain, that's not the place to find an artefact".

The final assessment of the Site by Murray Roberts (Widjabul Aboriginal People Native Title Claimant: And on behalf of Ngulingah Aboriginal Land Council Sites Officer), *"identifies no reason why all works should not go ahead"*.

e. Sub-station

A sub-station operated by Essential Energy is located fronting Military Road and adjoins the north-eastern corner of the Site. The sub-station was approved by Lismore City Council under Development Application 2007/92. The sub-station adjoins existing residential dwellings with the closest dwelling sharing a common boundary. This proposal does not seek to locate housing in closer proximity to the existing housing and in fact provides a 20 metre buffer to the cadastral boundary of the sub-station on the eastern and southern boundaries.

The Development Application was accompanied by an assessment on Electric and Magnetic Fields. The report was prepared by LandPartners (dated 3/11/2006). The LandPartners report identified in general the strongest EMF emissions associated with substations comes from the powerlines entering and leaving the substation. EMFs within the substation are generated by transformers, reactors and capacitors banks. EMFs decrease rapidly with distance in the same way as is the case with powerlines. The EMF levels beyond substation fences are typically indistinguishable from background levels (NEIHS, 1999).

The switching station is to consist of 5 x 66 kV circuit breakers, which do not produce any additional EMF's to that generated by the power lines.

The works approved by Council consist of:

1. The construction of an indoor substation within portion of Lot 1 DP 772604 on Military Road;

2. The construction of an outdoor switching station within portion of Lot 2 DP587430 on Skyline Road; and
3. The placement of 2 x 11kV underground cables, 2 x 66kV underground power subtransmission lines from the substation site along Military Road and Skyline Road to the switching station site.

The assessment report identifies the closest distance of the substation, switching station and proposed underground cables and subtransmission lines from residential boundary lines are given in Table 3.7 along with an upper estimate of EMF exposure based upon data for 132kV powerlines lines operating at 1200A.

Table 3.7. EMF Exposure Levels from the Nearest Residential Property to All Sources for 132kV powerlines lines operating at 1200A.

Item	Distance from nearest residential boundary (m)	Magnetic flux* (µT) will be less than	Voltage flux# (kV/m) will be less than
Substation	Common boundary	Data indistinguishable from background	
Underground power lines at 1.0m depth	18.5 (to centre of cables)	>5µT *	NIL
Switching station	Common boundary	Data indistinguishable from background	

Source: derived from National Grid, 2004

*Maximum recommended continuous exposure limit is 100 µT

#Maximum recommended continuous exposure limit is 5 kV/m

The LandPartners assessment concludes:

The NHMRC sets out recommended interim guidelines for exposure to EMFs. There is a paucity of data on EMF emissions from 66kV powerlines due to its limited use. As a substitute, this report has used data from 132kV powerlines operating at 1200A for comparison purposes. These powerlines produce higher EMFs than the proposed line, yet still easily meet the NHMRC criteria as shown on Table 3.7. The study concludes that the setback distance of residential property from the underground cables, the substation and switching station is more than sufficient to meet NHMRC recommended

With respect to noise emissions from the sub-station, Condition 7 of the development consent notice nominates maximum noise limits.

10. How has the Planning Proposal adequately addressed any social and economic effects?

In association with the draft Lismore LEP 2010, extensive community consultation has occurred (see community flyer as contained within **Attachment 8**). In the first instance, community consultation about the above development proposal, was held at the East Lismore Bowling Club on Wednesday, 17 November 2010.

The information night was attended by 85 people together with a jointly appointed (Norsearch Limited and LCC) facilitator. The information night comprised of a Question and Answer forum. Information boards were exhibited prior to the forum and residents directed questions through to the facilitators and were also minuted.

The forum was dominated by local traffic concerns relating to existing under-performing road and drainage infrastructure and partly a concern for the safety and amenity impacts from additional vehicles moving to the proposed new estate.

Residents have called for a district level traffic management plan with actions to solve both existing and future problems. The residents would like to be consulted in its development and actions. It is noted a resident traffic committee has been formed by Lismore City Council in response to this request.

Flooding and drainage were other resident concerns again with existing localised problems being highlighted.

A second community information access was held on Saturday, 20 November 2010. The open day saw over 50 people attend the Thistles Soccer Club. The community consultation took on a one-to-one discussion format between residents, Lismore City Council and project team members) and presented a much broader spectrum of community ideas and concerns.

Primary issues which were raised during the consultation process included:

- Traffic
- Flooding/Drainage
- Vegetation

- Housing
- Walking/biking
- Open Space
- Transport
- Infrastructure

Several of the above listed community issues are matters which will be considered/developed with more finality post the Gateway process. To this end, issues concerning Traffic, Flood/Drainage, Infrastructure and Vegetation are matters which analysis has been undertaken in the preparation of the planning proposal and are therefore able to be addressed within this report.

a. Traffic

TTM Group has completed a transport generation assessment for the proposed development of the Crawford Land. The report covers traffic generated only by the residential use of the development.

Based on the development model for the Site, TTM has identified peak hour generated trips from the development will equate to 336 trips (am) and 395 trips (pm). Traffic generation based upon following table – allowed for 60% normal home lots and 40% duplex lots. The commercial precinct has some 2000m² GFA with a further 40 shop top units.

Table C4 – Traffic Generation

Land Use	Peak Hour Trip Generation Rate	Unit	Internal Trips Reduction	Peak Hour Generated Trips	Authority
Single Family Homes (Detached Homes)	AM: 0.75 PM: 1.01 Trips Per Dwelling	132 Dwellings	0%	AM: 99.0 Trips PM: 133.3 Trips	ITE (2008)
Apartments (Duplexes)	AM: 0.51 PM: 0.62 Trips Per Unit	176 Units	0%	AM: 89.8 Trips PM: 109.1 Trips	ITE (2008)
Apartments (Shop Top Housing)	AM: 0.51 PM: 0.62 Trips Per Unit	40 Units	0%	AM: 20.4 Trips PM: 24.8 Trips	ITE (2008)
Dwelling Houses (Display Village)	AM: 0.75 PM: 1.01 Trips Per Dwelling	4 Dwellings	0%	AM: 3.0 Trips PM: 4.04 Trips	ITE (2008)
Mixed-Use Neighbourhood Commercial	2.5 Trips per 100 m ² GFA	2000 m ² GFA	50%	25 Trips	Assumed (based on ITE (2008) and RTA (2002) rates)
Soccer Complex (APSI)	20.67 Trips per Field	6 Fields 3 Half Fields 1 Futsal Court	50%	98.2 Trips	ITE (2008)
Total Trips				AM: 336 Trips PM: 395 Trips	

Potential impacts from the development have been assessed for each intersection using SIDRA Intersection 5.0. The 3 intersections analysed for this report are:

- Military Road/Dalley Street
- Invercauld Road/Cynthia Wilson Drive
- Dalley Street/Wyrallah Road

Traffic splits assign approximately 33% (ie 74 trips) of morning outbound traffic heading east out to Invercauld/Ballina Road intersection. This is in the Year 2025 assuming the subdivision is fully developed.



Based on the assessment by TTM, traffic generated by the residential portion of the development has a minor impact on the Invercauld Road/Cynthia Wilson Drive and Military Road/Dalley Street intersections, but the performance on these intersections remains acceptable.

TTM has advised the practical absorption capacity of right turn movement, calculated from Austroads' formula, is vastly greater than the expected right turn movements. No ameliorative works would be required of these two intersections within the 10 year design horizon.

The Dalley Street right turn movement on the existing Wyrallah Road/Dalley Street intersection has its capacity exceeded by 2015, regardless of the site being developed. Council has existing plans for the intersection to be upgraded to a roundabout. The proposed roundabout upgrade has sufficient capacity to service the traffic generated by the development Site during the 10 year design horizon, and hence no further ameliorative works would be required.

TTM Group believes that the cost of the roundabout upgrade should be entirely borne by the Council due to the existing issue of capacity in the intersection. The timing of the upgrade is currently uncertain, but it is likely that the upgrades will be performed well before any development on the Site opens.

Reference may also be made to the Engineering Services Discussion Paper with respect to internal traffic matters.

b. Flood/Drainage

Flood

The Site is identified as 'flood liable' and as per the *'Lismore Flood Plain Management Advice to Council'* prepared by the Public Works Department (PWD) of NSW, March 1983.

Council prepared the *'Lismore Floodplain Management Plan [Oct. 2002]'*: The *Lismore Floodplain Management Plan (LFMP)* was prepared using modelling by Patterson Britton & Partners in 2001 to define floodways and areas of differing flood hazard. From this flood modelling it is determined that a nominal flood level of RL11.2m AHD is applicable to the land, subject to more specific detailed assessment. Newton Denny Chapelle area calculation of the Site likely to be affected upon the Site was that 14ha is flood liable land.

Further detailed modelling assessment was undertaken in April 2011 by Worley Parsons whom undertook a regional flood impact review for both the 10yr and 100yr ARI. The findings from this assessment were that as the Site is affected by flooding in a backwater manner, the main impact upon flood levels would be resulting loss in storage by filling of flood prone lands. This lead to the conclusion that subsequent filling of the Site would result in less than a 0.1% impact upon

flood storage and as such a negligible impact on the regional flood levels, both in the vicinity of the Site and throughout the floodplain would occur.

Details of the Worley Parsons *Crawford Site Flood Impact Assessment (April 2011)* is contained within **Attachment 7** of this Planning Proposal.

Stormwater

The Site totals some 74 hectares to which provision is able to be made for incorporation of stormwater controls in the following manner:

- (a) Dwellings and mixed use developments to incorporate water reuse (rainwater tanks) where possible to reduce quantity of runoff.
- (b) Provision of swales along the western collector road (that will run in a north to south direction) to which opportunity for over 500 linear metres (0.5ha) is available.
- (c) Stabilisation of the steeper major gully flow paths that run east to west that will lessen impacts of urbanisation from the existing external upstream residential areas. Some 550 linear metres (0.55ha) of sbilisation/rehabilitation would be anticipated.
- (d) Sufficient space exists for a 1.2ha stormwater treatment area (at the south end of the lands) to enhance the removal of pollutants from the proposed urban stormwater runoff generated by the development Site prior to discharge to Monaltrie Creek drainage channel.
- (e) It is noted that open space/vegetation areas of the development which do not contribute pollutant loads represent approximately 32% of Site.

It has been raised during public meetings that the stormwater flows currently discharging from the Site in a westerly direction, make their way across and down Military Road impacting upon the lower lands at Wade Park. Opportunities exist within the development of the Crawford lands to formalise the drainage flow paths for those catchment areas that currently discharge to Military Road to be diverted in a more southerly direction so as to improve local inundation issues at Wade Park. This re-direction is able to be jointly served by the use of open swales as proposed adjacent to the western collector road that performs the link between Skyline Road with Dalley Street. Reference is to be made to the

Engineering Services Discussion Paper with respect to the sizing of the stormwater areas.

c. Infrastructure

Regard should be made to Section D11 in addition to the Engineering Services Discussion Paper provided within **Attachment 1** of this planning proposal in regard to infrastructure services.

d. Vegetation

Regard should be made to Section C8 of this planning proposal with respect to vegetation existing on the subject Site together with preliminary management regimes for the future development.

Section D – State and Commonwealth Interests

11. Is there adequate public infrastructure for the Planning Proposal?

a. Sewer

The proposed Crawford Land subdivision and development on the eastern side of Military Road is located in close proximity to Council's existing Sewage Pump Station No. 16 (SPS 16) which is on the western side of Military Road at Wade Park. A small part of the proposed development, located on the north-western portion of the Site, is able to connect to this pump station by a gravity sewer connection.

The majority of the Site will drain to the south and will be served by a new pump station to be constructed to serve this development (Crawford pump station). The new Crawford pump station will be located near the southern boundary of the development. A plan of the Site showing the location of existing and proposed pump stations and related connections is included.

Given the close proximity of the development to the existing SPS 16, the normal preferred option would be for the new Crawford pump station to pump to SPS 16. Furthermore, following construction of the Southern Trunk Main (STM) and the diversion of load from the existing Goonellabah sewerage system to the STM, SPS 16 will have reserve capacity to cater for this additional load.

However, in order to meet longer term strategic objectives, it is necessary to require that the Crawford pump station pump to a connection point with the STM. This decision forms part of Council's overall strategy for the servicing of new urban land releases in the vicinity of Goonellabah, whereby the reserve capacity in the Northern Trunk Main and SPS 16 created by diversion of load to the STM is to be held in reserve to allow servicing of future urban releases located to the north of Goonellabah (i.e. Trinity, Pineapple Road and Lagoons Grass urban release areas).

Given that the Crawford pump station only serves land within the subject development Site, the developer would normally be responsible for the full cost of constructing this pump station and the associated rising main.

However, given the circumstances of this case, Council is requiring that the Crawford pump station connect with the STM rather than the nearer SPS 16. This leads to a significant increase in the cost of providing this infrastructure and this cost is being incurred in order to facilitate other future development to the north. Consequently, it can be construed that construction of the Crawford pump station and rising main does benefit other development. Therefore, some sharing of the costs of this pump station and rising main is warranted.

Cost sharing could be achieved through a variety of means. However, following negotiations, Norsesearch Limited has committed to funding the construction of the Crawford pump station, subject to Council committing to the construction of the associated rising main. Council has resolved to construct the Crawford rising main with construction not be required until 2013/14 or later. This agreement will need to be formalised through a Planning Agreement advertised concurrently with any future Development Application.

b. Water

Given the urban use of the land reticulated water supply is available to service the Site. Detailed modelling will be required to be completed as part of the development application process in order to determine augmentation timing.

Reference should be made to the Engineering Services Report within **Attachment 1**.

c. Roads

Reference should be made to Section 10 of this report which addresses the traffic generation for the Site and local network.

12. *What are the views of State and Commonwealth public authorities consulted in accordance with the Gateway Determination?*

This section of the Planning Proposal will be completed following consultation with the State and Commonwealth Public Authorities identified in the Gateway Determination.

Part 4 – Community Consultation

In accordance with *A Guide to Preparing Local Environmental Plans* (Department of Planning, 2009) the Gateway Determination will specify the community consultation that must be undertaken on the Planning Proposal.

It is considered that community consultation for the planning proposal should comprise an exhibition period of 14 days, being for Low Impact Proposals. This preferred exhibition period is proposed having regard to the fact the proposal has been part of the exhibition of the draft Lismore LEP 2010 (nil submissions received), further to extensive community consultation undertaken for the project (see Section C10).

Community consultation is commenced by giving notice of the public exhibition of the planning proposal:

- in a newspaper that circulates in the area affected by the planning proposal;
- on the web-site of the RPA; and
- in writing to adjoining landowners, unless the planning authority is of the opinion that the number of landowners makes it impractical to notify them.

The written notice must:

- Give a brief description of the objectives or intended outcomes of the planning proposal;
- Indicate the land affected by the planning proposal;
- State where and when the planning proposal can be inspected;
- Give the name and address of the RPA for the receipt of submissions; and
- Indicate the last date for submissions.

During the exhibition period, the following material must be made available for inspection:

- The planning proposal, in the form approved for community consultation by the Director General of Planning;
- The gateway determination; and
- Any studies relied upon by the planning proposal.

Conclusion and Recommendations

Newton Denny Chapelle has been engaged by *Norsearch Limited* to prepare a planning proposal for land identified as the Crawford Site at Military Road, East Lismore. The purpose of the planning proposal is to rezone land presently zoned 5(b) Special Use (Technology Park) to a mixed land use comprising 2(a) Residential, 3(b) Neighbourhood Business, 5(a) Special Use (University) and 7(b) Environmental Protection (Habitat) in accordance with the provisions of the Lismore Local Environmental Plan (2000).

The suitability of the Crawford Site for urban mixed land uses purposes is clearly demonstrated in Lismore City Council's inclusion of the Site in the draft Lismore Local Environmental Plan 2010 and resolution of the elected Council to support the rezoning of the land.

An analysis of potential environmental constraints, including bushfire, contamination and ecology has been carried out over the majority of the Crawford Land, whilst external matters associated with traffic and infrastructure services (water/sewer/stormwater) have also been assessed. The results of this analysis have been used to determine the suitability of the land within this planning proposal.

It is recommended that the Lismore Local Environmental Plan 2000 be amended so that the land is zoned 2(a) Residential, 3(b) Neighbourhood Business, 5(a) Special Use (University) and 7(b) Environmental Protection (Habitat) in accordance with the provisions of the Lismore Local Environmental Plan (2000).



DAMIAN CHAPELLE

Town Planner. BTP CPP

Date: 4th August 2011

USAGE NOTE

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