

# **Gatton Correctional Precinct**

PROPOSED MINISTERIAL DESIGNATION KRUGERS ROAD, SPRING CREEK LOT238 CA31519 LOT240 CA31519 LOT242 CA31612 LOT244 CA31710

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# **Initial Assessment Report** for Public Notification

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#### 1.0 INTRODUCTION

In accordance with the requirements of the *Integrated Planning Act 1997* (IPA), it is proposed to undertake a Ministerial designation of land at within the Shire of Gatton to facilitate the construction and operation of the proposed Gatton Correctional Precinct.

The proposed designation applies to land located in the Spring Creek area, approximately 10km from the Gatton Township. Project Services' Town Planning Unit has prepared this Initial Assessment Report for Public Notification to provide information in the assessment of the proposed Ministerial Designation for community infrastructure, Gatton Correctional Precinct.

In addition to this report the following documentation is included:

- Attachment 1 Flowchart environmental assessment and Consultation;
- Attachment 2 Location Plan;
- Attachment 3 Aerial Photograph;
- Attachment 4 Smart Maps;
- Attachment 5 SEQ Regional Plan Mapping & Regulations;
- Attachment 6 Natural Solutions Ecological Assessment;
- Attachment 7 Cardno Preliminary Ecological Survey;
- Attachment 8 DNWR Correspondence;
- Attachment 9 Preliminary Geotechnical Investigation;
- Attachment 10 Bushfire Hazard Assessment; and
- Attachment 11 Traffic Assessment
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- Attachment 15 Cardno Response to Consultation

#### 2.0 LEGISLATIVE CONTEXT

The designation must be undertaken in accordance with the *Integrated Planning Act* 1997 (IPA), in particular Part 2.6 and Schedule 5, the Integrated Planning Regulation 1998, and the *Guidelines About Environmental Assessment and Public Consultation Procedures for Designating Land for Community Infrastructure.* 

IPA Part 2.6 prescribes the way in which Ministerial designations can be undertaken, with section 2.6.7 prescribing that before proceeding to designate land for community infrastructure, a Minister must be satisfied that for development, the subject of the proposed designation,:

- adequate environmental assessment has been carried out;
- in carrying out such environmental assessment there was adequate public consultation; and
- adequate account has been taken of issues raised during the public consultation.

One way in which the requirements for adequate environmental assessment and public consultation may be met is for the assessment of the proposed development to be carried out in accordance with the *Guidelines About Environmental Assessment and Public Consultation Procedures for Designating Land for Community Infrastructure* made by the chief executive under the IPA. It is these guidelines that have guided the preparation of this Initial Assessment Report for Public Notification.

The preparation of this Initial Assessment Report for Public Notification is identified as Step 3 by the guidelines (see Attachment 1 – flowchart summarising steps for environmental assessment and consultation). The effect of the designation is that the development of the site for the designated community infrastructure and ancillary service will be exempt from the local government's planning scheme.

#### 3.0 BACKGROUND

# 3.1 Existing Site

The Gatton Correctional Precinct site encompasses four parcels of land situated in the Spring Creek area, approximately 10km outside of the Gatton Township, and more accurately described as:

- Lot 238 CA31519
- Lot 240 CA31519
- Lot 242 CA31612
- Lot 244 CA31710

The site is 683.615 ha in area, and is irregular in shape. The site is typically flat with frontage to Millers Road and Krugers Road. The lots noted above are bisected by an unformed gazetted road (Spring Creek Road). QCS has requested that the Department of Natural Resources and Water (DNRW) seek a road closure as part of the project work. QCS has not yet sought the road closure but it is intended to do so.

Rural lands generally surround the site to the north, west and south and some utility and rural uses are located to the east. Refer to Attachment 2 Location Plan and Attachment 3 Aerial Photograph for further detail of the site location and context. Current land uses on all allotments are believed to be predominantly grazing and other farming activities.

# 4.0 PROPOSED DESIGNATION

It is proposed to designate the site at Gatton as follows:

Gatton Correctional Precinct

Lot 238 CA31519 Lot 240 CA31519 Lot 242 CA31612 Lot 244 CA31710

Located at Millers Road and Krugers Road, Gatton designated under the IPA Section 2.6.1 for the purpose of Community Infrastructure as:

- (e) correctional facilities;
- (f) educational facilities;
- (k) operating works under the Electricity Act 1994;
- (r) storage and works depots and the like including administrative facilities associated with the provision or maintenance of the community infrastructure mentioned in paragraphs (a) to (q);

#### 5.0 SUBJECT SITE

# 5.1 Property Snapshot

Street Address	Millers Road and Krugers Road, Spring Creek
	(Gatton)
Real Property Description	Lot 238 CA31519
	Lot 240 CA31519
	Lot 242 CA31612
	Lot 244 CA31710
Local Government	Gatton Shire Council
Site Area	683.615 ha
Current Zoning	Rural Zone
Strategic Plan	Rural
Designation	
Community Infrastructure	Currently not designated for Community
Designation	Infrastructure

# 5.2 Site Description

The property is located within the locality of Spring Creek, approximately 10 kilometres north east of the Gatton Township. The property fronts Millers Road and Krugers Road.

Current land uses on all allotments are believed to be predominantly grazing and other farming activities. Limited areas of cultivation may be present on Lots 240 and 244. All allotments except Lot 242 appear to contain substantially vegetated areas, including both remnant and regrowth vegetation. It is noted that these comments are based on interpretation of low resolution aerial photography (Attachment 3) and land uses have not been confirmed with a site visit.

The site forms part of a significant land holding (683.615 ha) which has recently been transferred to ownership by the Queensland Government, represented by Queensland Corrective Services.

# 5.3 Site Access & Parking

# Description of site

Lots 244, 240 and 242 make up a land parcel which is bounded by Nature Reserve to the west, Krugers Road to the north, Spring Hill Road to the east and an unnamed road to the south. Lot 238 is bounded by Spring Hill Road to the west, Millers Road to the south, and Krugers Road to the north. Access to the site from Gatton-Esk Road is expected to be via Millers or Krugers Road.

#### State government interests

The closest state-controlled road to the site is the Gatton-Esk Road which lies approximately 1.5 kms to the east of Spring Creek Road. The main access route to the site from Brisbane is expected to be via the Warrego Highway, which is also a State Controlled Road. Access to the Gatton-Esk Road is available from the highway and the site is located approximately 8-10km north of this intersection.

#### 5.4 Services

There are currently no municipal services connected to the site or surrounding properties.

The extent of infrastructure and services proximal to the site are explained in more detail section 10.2 and 10.3 of this report.

#### 5.5 Easements & Encumbrances

Lot 238 on CA31519 contains an easement in gross burdening the land. Allgas Pipelines Operations Pty Ltd has the interest over Easement I on SP124818, which intersects the north-western corner of Lot 238 (refer SmartMaps in Attachment 4).

#### 6.0 GATTON SHIRE COUNCIL PLANNING PROVISIONS

As the site has not been designated for community infrastructure, any development involving a material change of use of premises must be in accordance with the requirements of the Gatton Shire Council Planning Scheme.

# 6.1 Strategic Plan

The planning scheme's Strategic Plan identifies the site with the 'Natural Resource Area' and 'Good Quality Agricultural Land' element of the city.

#### 6.2 Area Classification

The site is included within the 'Rural General' and 'Rural Agriculture' zones under the Gatton Shire Council IPA Planning Scheme.

The IPA Planning Scheme outlines the intent or 'overall outcomes' sought for the Rural General and Rural Agriculture area classification as follows:

#### Rural General

- (a) The zone is to provide for agricultural production, other rural activities and the maintenance of the Shire's landscape quality that is important to the overall character of the Shire.
- (b) Closer settlement, particularly urban and rural residential development, is not consistent with the zone, in accordance with the SEQ Regional Plan.

# Rural Agriculture

- (a) Good quality agricultural land is preserved for sustainable agricultural purposes.
- (b) The ongoing use of good quality agricultural land for agricultural purposes is not prevented or constrained by:
  - (i) use of the land for other purposes;
  - (ii) non-rural development on nearby land which restricts agricultural practices;
  - (iii) fragmentation of holdings as a result of reconfiguration; and
  - (iv) land degradation resulting from development.

#### 6.4 Use Definition

Under the IPA Planning Scheme the proposed use of a Correctional Precinct is not specifically defined, as such the use would generally default to impact assessable development. The planning scheme does include a 'Special Purpose' definition; however given the scale of the development it is unlikely that Council would consider this an appropriate definition.

The Special Purpose definition is described as follows:

# Special Purpose

'Special Purpose': means any premises or use of land by a local, state or commonwealth government or its corporation or agency or a community service organization. The term includes:

- Ambulance station
- Cemetery
- Crematorium [where provided by an organization listed above]
- Community hall and centre
- Fire brigade
- Government purposes
- Hospital
- Public utility
- Statutory authority purposes

#### 6.3 Level of Assessment

As indicated above, as the use is not specifically defined, the level of assessment would default to impact. A 'special purpose' is identified as self assessable development within the Rural General and Rural Agriculture area classifications, however, as indicated above, it would be unlikely given the scale of the proposal that Council would consider this an appropriate definition and level of assessment for this use.

As impact assessable development, an application would need to be lodged with Council for assessment and approval. In addition, the proposal would need to be publicly notified (letters to adjoining owners, sign on site, advertisement in the newspaper) for a period of no less than 15 business days (up to 30 business days if three or more referral agencies are triggered). Further, a decision made in regard to an impact assessable development application can be appealed through the Planning and Environment Court.

# 7.0 PROPOSED COMMUNITY INFRASTRUCTURE

# 7.1 Intent of Designation

The proposed Ministerial Designation will facilitate the future development and growth of the site as Queensland's premier correctional precinct.

#### 7.2 Overview

Queensland is experiencing unprecedented growth in prisoner numbers with a 142 per cent increase in prisoner numbers since 1993. The prisoner population is expected to grow by another 90 per cent by 2015. This growth has been driven by a combination of factors including: a general population increase; more effective policing; changed sentencing practices; and the increase in the average length of jail terms.

Recognising this growth, the State Government is implementing a range of strategies to manage the growth in prisoner population. In particular, Queensland Corrective Services is planning for future infrastructure needs to meet this growth.

Gatton Shire Council was one of 17 South-East Queensland council's invited to submit an Expression of Interest in the correctional precinct project and has recently been announced by the State Government as the preferred location for a new correctional precinct within South East Queensland.

The precinct may ultimately contain a maximum of five correctional centres providing a variety of accommodation levels ranging from cells to residential and hospice style accommodation. The infrastructure provided on the new precinct will be required to accommodate all the growth in the general prisoner population in south-east Queensland for the foreseeable future.

The initial stage of the development is expected to include a 300 bed women's correctional centre and approximately 1004 bed men's correctional centre. The ultimate capacity of the precinct is proposed to be approximately 3,000 beds.

The precinct would be similar to the existing precinct at Wacol, Brisbane, which has Arthur Gorrie Correctional Centre with accommodation for 890; Sir David Longland Correctional Centre, currently closed for refurbishment, and reopening with a capacity of 540; Brisbane Women's Correctional Centre with a capacity of 258; and Wolston Correctional Centre with a capacity of 600.

Indications are that there is a need for the first stage of this development to be complete by the end of 2010.

The correctional precinct will bring significant economic benefits create employment opportunities during both the construction phase and its operation.

The precinct will mean employment for 370 staff upon completion of stage one scheduled for 2010. This staffing number is expected to increase to 1750 when the precinct is fully commissioned in 2015. Employment will be across the full range of corrections including custodial officers, administration staff, programs and education staff and trade instructors.

# 7.3 Master Planning & Schematic Design

A schematic proposal has been completed for the which followed on from a master planning exercise for the site which was conducted to consider development options for the site in the context of the proposed staging of works and functional requirements of the facility. The outcomes of specialist studies undertaken, especially site constraints and opportunities, have been considered in the master planning and schematic design of the correctional precinct.

Key objectives for the project were identified by QCS. These objectives have been achieved through the comprehensive master planning process and carried through to the schematic proposal.

A concept is included in Attachment 12 which identifies the indicative site layout of the proposal.

# Key Client Objectives

- To develop a Correctional precinct required to accommodate all growth in the general prisoner population in south east Queensland for the foreseeable future:
- Purchase a 700 ha (approx) parcel of land at Spring Creek in the Shire of Gatton;
- The development will occur over a 4 stage process;
- Stage One to include for approximately 1004 bed male and a 300 bed female centre while ultimately the precinct will house over 3000 prisoners;
- A needs analysis has indicated that Stage One is required by the end of 2010;
- All prisoners will be accommodated and work within the secure perimeters that each stand alone centre will include;
- Gatton Shire Council to work closely with QCS and will undertake as much work as possible including services and roads to the site;
- Ratio of accommodation will be 1/3 cells to 2/3 residential;
- A special care unit or hospice for elderly and infirm prisoners will be provided in the first stage of the male centre;
- The current correctional centre design is considered both contemporary and suitable as the basis of new centres on the precinct;
- ESD issues will be a focus in the briefing and on-going stages and:
- To provide a highly cost effective low maintenance facility.

# 8.0 STATE REQUIREMENTS AND COMMONWEALTH LEGISLATION

In terms of development under the IPA the designation will be undertaken in accordance with Section 2.6 and Schedule 5 of the Act, the Integrated Planning Regulation 1998, and the Guidelines About Environmental Assessment and Public Consultation Procedures for Designating Land for Community Infrastructure. The effect of the designation is that the development of the site for the designated community infrastructure and service will be exempt from the local government's planning scheme.

In relation to building works, these will be self-assessable development in accordance with Schedule 8, Part 2, Table 1, item 1 of the IPA.

# 8.1 State & Commonwealth Legislation

Ministerial Designation is being sought for the site, hence this will exempt the State from any development approval requirements triggered under the local planning scheme (Gatton Planning Scheme).

However, it is noted that this does not exempt the State from obtaining approvals/licences and meeting statutory obligations under other pieces of Federal and State legislation.

Any development on the site shall be carries out in a manner that avoids significant adverse impacts to the onsite and surrounding environment and which gives appropriate regard to the provisions of all relevant Commonwealth and State legislation and associated policies, as described below:

LEGISLATION	PURPOSE & REQUIREMENTS			
Commonwealth				
Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act)	The Environmental Protection and Biodiversity Conservation Act 1999 serves to protect the environment, particularly Matters of National Environmental Significance. The EPBC Act is intended to streamline National environmental assessments and approvals processes, providing for the identification of key threatening processes, protection of critical habitat, preparation of management plans and issuing of conservation orders and regulation of wildlife import/export.			
Queensland				
Aboriginal Cultural Heritage Act 2003 (ACH Act)	Where places and objects of cultural, historical or archaeological significance are known to exist, the Proponent shall exercise their cultural heritage duty of care under Section 23(2) of the Aboriginal Cultural Heritage Act 2003 (ACH Act). The duty of			

	care will ensure that all reasonable and practical measures are taken to prevent damage to cultural heritage. The ACH Act requires that any activity likely to cause damage to areas or objects of known cultural heritage significance necessitates the preparation and implementation of a Cultural Heritage Management Plan that has been developed in consultation and with agreement of the relevant Indigenous Party to the area.
Environmental Protection (Air) Policy 1997 (EPP Air)	The Environmental Protection (Air) Policy 1997 (EPP Air) ensures the protection of ambient air quality and in particular, prescribes indicators and air quality goals for the control of the release of airborne contaminants. Sensitive receptors within the site locality and control measures to be implemented to prevent environmental and public health impacts will be identified as required by the EPP Air.
Environmental Protection (Noise) Policy 1997 (EPP Noise)	The Environmental Protection (Noise) Policy 1997 (EPP Noise) specifies an acoustic quality objective for the protection of the well-being and amenity of individuals and the community in residential areas. Planning noise levels are also specified for the development of beneficial assets. Pursuant to the requirements of the EPP Noise, sensitive places within the vicinity of the project shall be identified and noise control measures to be implemented to prevent nuisance and residential amenity impacts shall be described.
Environmental Protection (Waste Management) Policy 2000 (EPP Waste)	The Environmental Protection (Waste Management) Policy 2000 (EPP Waste) promotes the efficient use of non-renewable resources and the use of waste as a resource. The hierarchy of waste management is outlines in the EPP Waste and waste management practices in the preferred order of adoption are also described. In accordance with the requirements of the EPP Waste, management options such as waste avoidance, re-use and recycling shall be discussed.
Environmental Protection (Waste Management) Regulation 2000	The Environmental Protection (Waste Management) Regulation 2000 defines best practice waste management strategies in Queensland and provides improved environmental safeguards. This legislation serves to implement safer disposal practices and cost savings for improved planning and management of waste services.
Environmental Protection (Water) Policy 1997 (EPP Water)	The Environmental Protection (Water) Policy 1997 (EPP Water) ensures protection of environmental values from activities that may result in the release of contaminants to waterways or stormwater drains. Environmental values of waterways surrounding the site will be identified and water quality control measures shall be described as required under the EPP Water.
Environmental Protection Act 1994 (EP Act)	The primary environmental legislation relevant to the proposed development is the <i>Environmental Protection Act 1994 (EP Act)</i> . The <i>EP Act</i> protects environmental values through development and implementation of environmental protection policies and regulates environmentally relevant activities prescribed in the <i>Environmental Protection Regulation 1998</i> .
Land Protection (Pest and Stock Route Management) Act 2002	The Land Protection (Pest and Stock Route Management) Act 2002 provides for the management of pests on land through declaration of pest plants and animals and application of controls and restrictions on declared pests. Declared pest

	species occurring in the site area and proposed management measures to prevent the spread of pest species to or from the site shall be identified.
Nature Conservation Act 1992 (NC Act)	The Nature Conservation Act 1992 (NC Act) provides for the declaration or dedication of protected areas. The NC Act outlines the principles by which areas are to be managed and provides for the sustainable use of protected wildlife and areas by the application of management and conservation plans.
Vegetation Management Act 1999 (VM Act)	The Vegetation Management Act 1999 (VM Act) regulates the clearing of vegetation to conserve remnant 'endangered', 'of concern' and 'not of concern' regional ecosystems, and further serves to protect land from degrading in ecological value. The VM Act requires the identification of vegetation values applicable to the site and requires effective integrated management schemes which are consistent with ecologically sustainable development.
Water Act 2000	The Water Act 2000 provides the legislative basis for the sustainable planning and management of the State's water resources.

Other legislation and policies relevant to the site include:

- Integrated Planning Act 1997;
- Transport Infrastructure Act 1994;
- State Planning Policy 1/03 Mitigating the Adverse Impacts of Flood, Bushfire and Landslide.

# 8.2 South-East Queensland Regional Plan

The site is identified within the Regional Landscape and Rural Production Area in the South East Queensland Regional Plan. The proposed use of the site is classified as an 'Urban Activity' under the SEQ Regional Plan and is not consistent with this classification. Part 2.5 of the Regulatory Provisions indicate when an urban activity in the Regional Landscape and Rural Production Area complies with these regulatory provisions. The proposal falls into the category (h) of this part - where paragraphs (a) to (g) do not apply –

- (i) the location requirements or environmental impacts of the material change of use necessitate its location outside the Urban Footprint; and
- (ii) there is an overriding need for the material change of use in the public interest.

A copy of the Regulatory Provisions applying to lands in the Regional Landscape and Rural Production Area are included in Attachment 5.

# 9.0 SMART STATE STRATEGY

The Smart State Strategy is the centrepiece of the Queensland Government's broader economic development strategy and provides a dynamic stimulus to the stability provided by the Queensland Government's:

- investment in infrastructure;
- track record of providing a sound fiscal environment; and
- low-cost tax and regulatory framework.

At its simplest, the Smart State Strategy is about investing in skills and innovation to increase our productivity so that Queenslanders can enjoy the benefits of a strong, prosperous economy and a better quality of life.

The designation positively contributes to the vision of the Smart State Strategy by reflecting a significant contribution towards the development and maintenance of state of the art facilities and community infrastructure for South East Queensland.

# 10.0 ENVIRONMENTAL EFFECTS AND PROPOSED MANAGEMENT

# 10.1 Historical & Cultural Heritage & Native Title

# Aboriginal Cultural Heritage

Aboriginal cultural heritage requirements are covered under the provisions of the *Aboriginal Cultural Heritage Act 2003* (ACHA), administered by DNRW. "Duty of Care Guidelines" which "identify reasonable and practicable measures for ensuring that activities are managed to avoid or minimise harm to Aboriginal cultural heritage in a way that meets the duty of care requirements under section 23 of the *Aboriginal Cultural Heritage Act 2003*" have been gazetted under the ACHA. The Duty of Care Guidelines indicates the circumstances in which different levels of assessment of potential impacts to Aboriginal cultural heritage are required to meet legislative obligations.

While searches of DNRW's database did not reveal any records of Aboriginal cultural heritage on the property, preliminary investigations indicated that the site was considered to comprise of some areas which have been subject to "significant ground disturbance2" (Category 4) and some which may be largely undisturbed and any proposed development would cause additional surface disturbance3 (Category 5).

For areas subject to "significant ground disturbance", such as cleared areas evident on aerial photographs, the Duty of Care Guideline indicates that it is unlikely that development activities will harm Aboriginal cultural heritage.

Where activities causing additional "surface disturbance" are proposed in areas which have not previously been disturbed (such as waterway corridors and undisturbed regional ecosystems), there is "generally a high risk that it could harm Aboriginal cultural heritage" and "in these circumstances, the activity should not proceed without cultural heritage assessment".

For this reason, an Aboriginal cultural heritage assessment was undertaken to identify matters which may need to be addressed by the project. A site visit was undertaken with representatives of Jagera Daran Pty Ltd and a preliminary report was compiled by archaeologist Angela D. Holden (May 2007). The outcomes of this report are briefly described below:

- The proposed development is within a well documented Aboriginal archaeological and historical landscape that was likely to have been utilised by Aboriginal people.
- No Aboriginal archaeological features, such as scarred trees and artefacts, were identified during the site visit.

- Stage 1 of development is considered to have a low likelihood of surface archaeological material remaining; however it is still possible due to the level of use of the area by Aboriginal people.
- A Cultural Heritage Management Plan (CHMP) is recommended to be developed in association with Jagera Daran Pty Ltd.
- A cultural heritage induction program is recommended to be developed and delivered to all site staff and contractors involved in construction works.

#### Native Title

The subject site is wholly located on freehold tenures. In accordance with the *NT Act*, the location of the proposed development on freehold tenures extinguishes the Proponent's obligations to the *NT Act*. Native title status has been confirmed by the consultant commissioned to undertake the initial Aboriginal cultural heritage assessment.

# State and National Heritage Registers

Searches of the EPA's Queensland Heritage Register showed no records of historical heritage for the subject properties, however the land to the west of the precinct (Helidon Hills) is listed on the Australian Heritage Register due to the presence of fossils.

#### Conclusion

A Cultural Heritage Management Plan will be developed in association with Jagera Daran Pty Ltd prior to commencement of works on the site. As no records of historical heritage were recorded in the State or Federal heritage registers, no further actions are required to address this.

# 10.2 Municipal Infrastructure & Public Utility Servicing

The development is to be serviced by reticulated water, power (including gas), and telecommunications infrastructure. This will necessitate extensions and/or upgrades to municipal infrastructure and public utilities to service the site.

The proposal is likely to incorporate development of on-site sewerage treatment plant which is an Environmentally Relevant Activity (ERA No.15) pursuant to the *Environmental Protection Act 1994.* 

#### 10.3 Flora and Fauna

#### Ecological Assessment

Due to the remnant vegetation communities and threatened species of plants and animals which have been recorded on the site, a flora and fauna assessment has been undertaken by Natural Solutions Environmental Consultants Pty Ltd. The report was also to investigate the potential development opportunities and

constraints in regard to ecological values for the proposed site. The outcomes of this investigation are briefly outlined below.

- Due to previous land use the majority of vegetation is regrowth non-remnant open forest dominated by various eucalypt species. Large areas are also dominated by grasslands with isolated trees.
- There are a number of weed and pest species on the site which may require ongoing management.
- Two areas of remnant vegetation mapped as "not of concern" on Regional Ecosystem mapping under the *Vegetation Management Act 1999* are now considered to be of 'endangered' status due to the findings of the ecological assessment. One of these areas is located in the central portion of the eastern side of the site to the north of the waterway and the other is an area in the centre of the southern boundary of Lot 240 on CA31519. The *Vegetation Management Act 1999* prohibits the clearing of Endangered remnant vegetation and approvals may need to be sought from Department of Natural Resources and Water if these will be disturbed by the project.
- Two ecological communities classified as Critically Endangered Threatened Ecological Communities under the *Environment Protection and Biodiversity Conservation Act 1999* are located within the south-western corner of Lot 238 on CA31519. Referral of the project to the Australia Government's Department of Environment and Water Resources may be required if this area is directly or indirectly impacted by the project.
- Koala habitat areas are present along the waterway through Lot 240 on CA31519 and consideration should be given to their presence and movement around the site in project designs.
- Figure 7 of the assessment contains a constraints map of the site based on ecological considerations, i.e. all portions of the site are classified as being subject to either very low, low, medium or high constraints.
- Cleared areas have low environmental constraints and could potentially be used for development. Area of 'endangered' and 'of concern' areas are prohibited from clearing activities.
- Retention of mature trees and provision of vegetation linkages should be incorporated into the design.

The report *Ecological Assessment Spring Creek, Gatton* by Natural Solutions Environmental Consultants Pty Ltd (May 2007), including a complete list of findings and recommendations, is provided in Attachment 6.

A further preliminary survey of part of Lot 240 CA31519 and Lot 238 CA31519 was completed in August 2007 by Cardo (Qld) Pty Ltd. The purpose of this further survey was to confirm the accuracy of vegetation community mapping documented by Natural Solutions. The survey focussed on:

The presence of the two patches of *Melaleuca irbyana*, which are identified by Natural Solutions as being analogous to an Endangered Ecological Community

pursuant to the Commonwealth's *Environmental Protection and Biodiversity Act* 1999 and an Endangered Regional Ecosystem pursuant to the *Vegetation Management Act* 1999; and

The accuracy or otherwise of the vegetation community mapping produced by Natural Solutions in Figure 5 of the Ecological Assessment, with specific attention given to the classification of Communities 7 and 8 as remnant *Endangered* vegetation, when these communities are both currently identified on the Certified RE Map as remnant *Not of Concern* vegetation.

A copy of Cardno (Qld) Pty Ltd findings and recommendations in included in Attachment 7.

#### Conclusion

Cardno completed an inspection of the two patches of vegetation and concur that this vegetation is analogous to the *Critically Endangered Ecological Community (CEEC)* listed under the provisions of the *EPBC Act*. The project will therefore need to be referred to the Commonwealth Department of the Environment and Water Resources (DEWR) for determination as to whether the project requires assessment under the provisions of the *EPBC Act*. This will occur once the project layout has been finalised and consideration has been given to the management of those factors which have the potential to significantly impact on the *CEEC*.

Cardno held a site meeting with the Senior Vegetation Management Officer (VMO) and a technical officer with geological expertise from DNRW's Ipswich Office for the purposes of confirming the status, pursuant to the *VM Act*, of the vegetation within 'Community 8'. DNRW is the agency responsible for assessing applications for vegetation clearing against the provisions and policies of the *VM Act*. Subsequent to this meeting Cardno received written confirmation from the Senior VMO that vegetation within 'Community 8' is "best described as regional ecosystem type 12.5.1". RE 12.5.1 is described as an open forest complex with *Corymbia citriodora* on subcoastal remnant Tertiary surfaces and has a *Not of Concern* status pursuant to the *VM Act*. DNRW confirmation on this matter is referenced in Attachment 8.

Where relevant, the recommendations of ecological assessments undertaken by both Natural Solutions and Cardno will be actioned. This will include obtaining any required permits and approvals as necessitated under any State of Commonwealth legislation and/or policies.

The proposal will include a number of measures to mitigate impact on surrounding flora and fauna communities and to protect the ecological values of nearby waterways. These measures will include buffer zones and rehabilitation/compensatory planting where required.

Attachment 15 provides some further information with respect to buffer zones and vegetation removal in response to issues raised by the Environmental Protection Agency as part of the initial round of consultation identified as Step 2 of Attachment 1 – flowchart summarising steps for environmental assessment and consultation.

## 10.4 Hydrology and Flooding

The site is situated between the Redbank Creek (west) and Spring Creek (north and east). These creeks flow off a watershed in the eastern section of the Helidon Hills and drain into Lockyer Creek to the east. Two unnamed tributaries border the northern and southern boundaries of the site area. The tributaries flow from west to east and discharge downstream of the site into Spring Creek.

These tributaries will be protected throughout the life of the construction and operational phases of the project via implementation of a protection buffer zone. Construction and operational activities associated with this project will be prohibited within this buffer zone, the principal function of which will be the protection of the tributaries' riparian values.

The development has the potential to adversely impact on water quality in downstream areas. To manage these impacts, a number of stormwater control measures will be implemented during construction phases.

The proposed site is located on the lower slopes of hills that are contained within the Lockyer State Forest. The precinct is therefore susceptible to high levels of runoff from the State Forest during storm events.

Preliminary assessments of the site indicate that the proposed development is not expected to significantly increase the existing flooding risk of the area. Despite this, the proposed schematic design will ensure floor levels are 500m above the calculated Q100 flood event. This is considered to be adequate to maintain surface stormwater flows without internal ponding and to ensure the structural stability of the building.

The schematic design will incorporate drainage systems and two retention basins to offset the increase in peak flows from the site during storm event. The drainage systems will be suitably designed to control erosion potential and flow rates. The basins will effectively combine a grass or vegetated swale with an infiltration trench which will remain dry between rainfalls. The basins will be appropriately sized to manage peak flows and velocities during Q100 storm events. These basins will therefore ensure that runoff discharging from the site area will not increase existing 'pre-development' discharge rates into the tributaries. Furthermore, the basins will reduce the likelihood of impacts upon the water quality of the bordering tributaries.

The defined stormwater control measures will be described in a Stormwater Management Plan. This plan will be designed to reduce flow velocities and direct overland flow away from buildings towards inlet basins via spoon drains. The Plan will be developed in accordance with the *Queensland Water Quality Guidelines* 2006 to ensure the protection of the existing environmental values of the site's aquatic ecosystems.

Pursuant to the *Water Act 2000*, any required permits and/or approvals will be sought for undertaking works in close proximity or within the existing watercourses.

# 10.5 Geo-technical & Topographical Characteristics

The construction of the correctional precinct will involve considerable earthworks in order to create the relatively flat levels needed to satisfy correctional standards. The excavation of soil and subsequent alterations to the existing landform will need to be appropriately managed to prevent soil erosion and mobilisation of sediments in stormwater runoff.

#### Geological mapping

The Geological Survey of Queensland's 1:100,000 Series 'Esk' Geological Sheet indicates that the site is underlain by the Triassic to Jurassic age Helidon Sandstone from the Bundamba Group.

The Helidon Sandstone is indicated as typically comprising "quartzose sandstone, minor conglomerate, shale and siltstone".

The residual sandy soils and weathered sandstone encountered during the field work (refer Section 5.0 below) are considered typical of the Helidon Sandstone.

Laboratory testing of numerous soil samples across the site were undertaken to confirm the dispersion potential, classification and compaction potential of soils.

# **Topography**

The topography around the site tends to slope gently down towards the south-east away from the ridge line to the west. Site levels range from RL 166m AHD at the western boundary of the Stage 1 development site to RL 123m AHD at the south-eastern boundary of the site. The ground surface slopes gently away to the east and south-east at approximately 2 degrees.

Some dry watercourses (re-entrants between localised spur lines) were observed to slope towards the south-east through the centre of the Stage 1 site and through the Stage 2 site. Localised height variations of up to 2m were observed between the base of the watercourse and the adjacent bank with near vertical to 1H:1V batter slopes.

#### Geological Investigation

A geotechnical investigation (refer Attachment 9) has been undertaken by Douglas Partner Pty Ltd to assess ground conditions across the site. The geotechnical investigation addresses matters including:

- subsurface conditions including groundwater (if encountered);
- excavation conditions, earthworks and site preparation, unsuitable soils, reuse of cut for fill, and workability;
- stable temporary and permanent slope batters;

- shrink-swell movements, settlements, site reactivity/classification to AS2870-19961:
- geotechnical retaining wall design parameters;
- suitable upper level footing options and allowable bearing pressures;
- ultimate end bearing and shaft adhesion pressures for bored piles;
- subgrade California bearing ratio (CBR) values for pavement thickness design;
   and
- topsoil suitability.

#### 10.6 Contaminated Land

Searches of the Environmental Protection Agency's Contaminated Sites Register indicated that none of the subject sites are listed on the Environmental Management Register (EMR) or the Contaminated Land Register (CLR).

Should any areas of potential contamination be identified, an appropriately qualified consultant will be engaged to undertake further investigation works in accordance with the *Draft Guidelines for the Assessment and Management of Contaminated Land in Queensland* (May 1998) and the *Environmental Protection Act 1994* and associated legislation.

#### 10.7 Water Storage & Harvesting

There are currently no municipal services for potable water supply connected to the precinct or surrounding properties. As a result, water storage reservoirs will need to be incorporated into the schematic design of the precinct. Works that 'take' water from overland flows are regulated by a Water Resource Plan under the *Water Act 2000*. The subject site is regulated by the *Water Resource (Moreton) Plan 2007 (WRM Plan)*.

An assessment of the predicted water requirements during the construction phase has identified the need to construct two retention basins capable of storing a total volume of 30ML. Recent discussions with DNRW, the agency responsible for administering the WRM Plan, have confirmed that the construction of the proposed 30ML basins may be authorised under a water permit on the provisos that these basins will be utilised:

- for a specified short term during the construction phase; and
- only to satisfy the projected water needs of and during the construction phase.

It is recognised that the use and storage of overland flow within these basins will also be required during the project's operational phase. Any such use during the operational phase will not comply with the WRM Plan and, as such will require specific approval from DNRW.

Rainwater tanks may be used for the collection and storage of rainfall from the precinct roofs for beneficial use. Water re-use, recycling and other Environmentally Sustainable Design (ESD) principles will be investigated further and will be incorporated where appropriate.

## 10.8 Natural Hazard Management

State Planning Policy 1/03 Mitigating the Adverse Impacts of Flood, Bushfire and Landslide is applicable to this site due to the presence of dense vegetation surrounding the site, including Lockyer State Forest; and due to the presence of tributaries bordering the site boundaries and the precinct's location at the lower slopes of the Helidon Hills.

The Guideline to the policy indicates that it is a requirement that the Minister designating and/or developing community infrastructure "has regard to the SPP to ensure the outcomes of the SPP are achieved in relation to the specified types of community infrastructure" (Section 8.12).

A Natural Hazard Risk assessment has been undertaken as required under SPP1/03 to evaluate the vegetation, slopes and aspects of the site to determine the risk of natural hazards impacting on the site and mitigation measures required. Natural Solutions Environmental Consultants Pty Ltd was commissioned to undertake this assessment in conjunction with the ecological assessment. The outcomes of this are briefly outlined below:

- Twelve vegetation communities are mapped across the site, as per the ecological assessment.
- Observations were made of fire scars on a number of trees, and some aged Acacias and other understorey plants indicating a fire history.
- The site can be divided into twelve zones with differing fire risk hazard characteristics based on vegetation, aspect and slope.
- All areas of the site were classified as having a Low or Medium Bushfire Hazard rating.
- Hazard reduction measures will need to be implemented within each phase of the development (i.e. pre-development, during development and post development).

The report *Bushfire Hazard Assessment Spring Creek, Gatton* by Natural Solutions Environmental Consultants Pty Ltd (June 2007) is contained in Attachment 10.

Australian Standard AS3959-1999 Construction of Buildings in Bushfire-prone Areas will be consulted and adhered to.

Refer 10.5 Hydrology & Flooding regarding adverse impacts of flooding.

# 10.9 Noise & Air Quality

Noise generated during construction works is expected to arise from the operation of power tools and heavy machinery such as excavators and trucks during clearing and building works. Control strategies will be implemented during these phases to mitigate these impacts.

Noise generation as a result of the operation of the precinct is expected to be minimal.

A noise impact assessment is currently being prepared by Hyder Consulting Pty Ltd.

The proposed construction activities will involve the use of powered machinery for excavation and movement of earthen material to achieve the required landform. Dust nuisance may impact surrounding properties during construction however, it is expected that such impacts can be controlled by implementation of best management measures for dust control.

# 10.10 Road Infrastructure, Site Access & Traffic

A traffic consultant was engaged to consider site access and other traffic management matters relevant to the project. Lambert and Rehbein Pty Ltd were commissioned to undertake an assessment of upgrade requirements for Millers Road and treatment required for the intersection of Millers Road and Gatton-Esk Road. Preliminary advice indicated that:

- Millers Road is required to be upgraded to a sealed two-way road with a 3.5m carriageway; and
- Intersection widening is required to accommodate left and right turns into Millers Road from Gatton-Esk Road.

An additional assessment of possible treatment requirements for three other intersections along Gatton-Esk Road to the south of the site which may be impacted by increased traffic volumes was commissioned in May 2007. This assessment indicated that:

- Physical improvement works may need to be undertaken on the Gatton Esk Road, south of Millers Road at the opening of Stage 1 of the development due to increased traffic generation;
- Discussions with Main Roads Officers have highlighted the potential need in the future to undertake repair work to Gatton Esk Road to mitigate the potential impact of the prison precinct traffic volumes.
- There are currently three floodways on Gatton Esk Road between the Warrego Highway and

- Millers Road which appear to have low flood immunity. Main Roads Officers have advised that the subject development would not be required to upgrade these floodways, as there is an alternative access to / from the site via Gatton Esk Road to the north, via the Brisbane Valley Highway.
- GSC has raised some concerns in relation to the sight distance provisions at the Orchard Road, Redland Creek Road and Tallaringa Drive intersections with Gatton Esk Road. Further detailed assessment of these intersections may be necessary as the development progresses.
- As the proposal will not be having any physical impact on these locations it would not be reasonable for the full costs of any upgrades to be a requirement of the subject development. Some form of appropriate costs sharing would be a reasonable approach to any necessary upgrade works.

Reporting on both assessments is contained in the traffic report prepared by Lambert and Rehbein Pty Ltd, included in Appendix 11.

# 11.0 MATTERS LIKELY TO BE OF CONCERN TO OTHER PARTIES

#### 11.1 Gatton Shire Council

To date, there have been initial discussions held with the Gatton Shire Council (and also with Esk Shire Council and Laidley Shire Council) with regards to the redevelopment. Issues raised by Council during preliminary phases have primarily been with regard to infrastructure and services to the site. In addition to previous discussions with Council, they will also be included within the formal consultation periods that are identified within Attachment 1 – flowchart summarising steps for environmental assessment and consultation.

Informal advice provided by GSC representatives during a meeting on 24 January 2007 was that while Gatton Shire Council was generally supportive of the facility, the following planning matters should be considered in designs:

- Water efficiency devices/water conservation measures to be incorporated in project designs;
- Road upgrades and intersection treatments which may be required;
- Water supply, possible onsite reservoir required. Municipal reticulation system likely to require upgrading to service the site;
- Sewage treatment preference is for site sewage to be treated at local authority sewage treatment plant, however upgrading of the plant may be required. Municipal reticulation system likely to require upgrading to service the site:
- Consultation with relevant contact in GSC is required with respect to capacity and capability of local landfill to receive solid waste from the facility.

#### 11.2 Land Owner

The four land parcels which will comprise the correctional precinct are all freehold tenure and have recently been negotiation for sale to the State of Queensland, represented by Queensland Corrective Services.

It is the Minister through this department who will be proposing the designation. As a result, it will be the objective of Queensland Corrective Services that the designation process is efficient, open and effective.

#### 11.3 Adjoining Land Owners and other parties

Matters likely to be of interest to adjoining land owners and other parties include (but are not limited to):

- built form, height and bulk;
- design, including architectural and landscape treatments;
- intended site population;
- vehicular and pedestrian access and circulation;
- hours of operation;
- management of stormwater discharge;
- potential future implications for the ongoing and viable development of adjacent lands; and
- impacts during construction.

Parties likely to be interested in the redevelopment include (but are not limited to):

## Council and Government Departments

- Gatton Shire Council;
- Esk Shire Council;
- Laidley Shire Council;
- Environmental Protection Agency;
- Department of State Development and Innovation;
- Department of Natural Resources and Water;
- Department of Main Roads;
- Queensland Transport;
- Office of Urban Management:
- Department of Communities; and
- Queensland Health.

#### Elected Representatives

- Mr. Ian Rickuss, State Electorate of Lockyer; and
- MP Federal Electorate of Blair
   (Polls have not yet been declared for this electorate)