MATERIAL CHANGE OF USE (CODE) PUBLIC UTILITIES & FACILITIES (ELECTRICAL SUBSTATION) – 69R CASSOWARY ROAD, CASSOWARY – DIVISION 10

Steve Graham : 8/7/2737 SEDA : #4006699

PROPOSAL: PUBLIC UTILITIES & FACILITIES (ELECTRICAL SUBSTATION)

APPLICANT: ERGON ENERGY CORPORATION LIMITED
C/- ADAMS + SPARKES TOWN PLANNING
PO BOX 1000
BUDDINA QLD 4575

LOCATION: 69R CASSOWARY ROAD, CASSOWARY

PROPERTY: LOT 1 ON RP717215
LOT 3 ON RP899478
LOT 4 ON RP899478

PLANNING DISTRICT: RURAL AREAS AND RURAL SETTLEMENTS

PLANNING AREA: PART RURAL / PART RURAL SETTLEMENT

PLANNING SCHEME: DOUGLAS SHIRE PLANNING SCHEME 2008

REFERRAL AGENCIES: NONE

NUMBER OF SUBMITTERS: N/A

STATUTORY ASSESSMENT DEADLINE: 1 NOVEMBER 2013

APPLICATION DATE: 14 JUNE 2013

DIVISION: 10

APPENDIX:
1. EXECUTIVE PLAN
2. APPROVED PLAN(S) & DOCUMENT(S)
3. ACCESS CROSSOVER DRAWING
LOCALITY PLAN

RECOMMENDATION:

That Council approves the Development Application for Public Utilities & Facilities (Electrical Substation) over land described as Lot 1 on RP717215, Lot 3 on RP899478 and Lot 4 on RP899478, located at 69R Cassowary Road, Cassowary, subject to the following:

APPROVED DRAWING(S) AND / OR DOCUMENT(S)
The term ‘approved drawing(s) and / or document(s)’ or other similar expressions means:

<table>
<thead>
<tr>
<th>Drawing or Document</th>
<th>Reference</th>
<th>Date</th>
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<tbody>
<tr>
<td>132/22kV Switchyard Ultimate Site Plan</td>
<td>Drawing No. 1037530-01 Revision 0B (Council Ref No 4115288)</td>
<td>31 July 2013</td>
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<tr>
<td>Mossman (Cassowary) Substation Control Building - Sections</td>
<td>Revision 0A (Council Ref No 4115288)</td>
<td>Received 2 September 2013</td>
</tr>
<tr>
<td>Mossman (Cassowary) Switchgear Building - Section</td>
<td>Revision 0A (Council Ref No 4115288)</td>
<td>Received 2 September 2013</td>
</tr>
<tr>
<td>Mossman (Cassowary) Typical Bay - Section</td>
<td>Revision 0A (Council Ref No 4115288)</td>
<td>Received 2 September 2013</td>
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ASSESSMENT MANAGER CONDITIONS

1. Carry out the approved development generally in accordance with the approved drawing(s) and/or document(s), and in accordance with:-
   a. The specifications, facts and circumstances as set out in the application submitted to Council;
   b. The following conditions of approval and the requirements of Council’s Planning Scheme and the FNQROC Development Manual.

   Except where modified by these conditions of approval

Timing of Effect

2. The conditions of the Development Permit must be effected prior to Commencement of Use, except where specified otherwise in these conditions of approval.

Elevation Plan

3. An Elevation Plan of the Switchgear Building and Control Building must be endorsed by the Chief Executive Officer prior to the Commencement of Building Work and must be designed such that the buildings are compatible with the rural character of the area.

Building Colours

4. The exterior finishes and colours of buildings must be non-reflective and blend with the natural colours of the surrounding environment. Roofs and structures (including water tanks) must be of moderately dark to darker shades of green, grey, blue and brown.

   The colour schedule for the Switchgear Building and Control Building must be endorsed by the Chief Executive Officer prior to the Commencement of Building Work.

Fencing

5. A screen fence must be provided to the southern boundary of the subject land adjoining the playing fields, to the satisfaction of the Chief Executive Officer. The fencing must be consistent in terms of design and materials with the existing fence along the southern boundary. The fencing must be completed prior to the Commencement of Use.

6. The vehicular access gates shall be setback from the front property boundary to enable a Medium Rigid Vehicle (MRV) to stand between the gates and the road pavement without interfering with the flow of traffic along Cassowary Road.
Lawful Point of Discharge

7. The flow of all external stormwater from the property must be directed to a lawful point of discharge such that it does not adversely affect surrounding properties or properties downstream from the development.

Sediment and Erosion Control

8. Soil and water management measures must be installed/implemented prior to discharge of water from the site, such that no external stormwater flow from the site adversely affects surrounding or downstream properties (in accordance with the requirements of the Environmental Protection Act 1994, and the FNQROC Development Manual).

On-site Effluent Disposal

9. The method of on-site effluent disposal must be in accordance with the Plumbing and Drainage Act 2002. Details of the wastewater treatment system to be installed must be approved by the Chief Executive Officer prior to the Commencement of Building Work.

External Works

10. Undertake the following works external to the land at no cost to Council:

   a. Provision of two (2) concrete crossover(s) and apron(s) in accordance with FNQROC Development Manual Standard Drawing S1015 and in the location as identified on the approved plans.

Damage to Council Infrastructure

11. In the event that any part of Council’s existing sewer / water or road infrastructure is damaged as a result of construction activities occurring on the site, including but not limited to mobilisation of heavy construction equipment, stripping and grubbing, the applicant/owner must notify Cairns Regional Council immediately of the affected infrastructure and have it repaired or replaced at the developer’s/owners/builders cost, prior to the Commencement of Use.

Noise

12. Noise from generators, air-conditioning units, service equipment or other mechanical equipment, must not emanate from the subject land to a degree that would create an environmental nuisance having regard to the provisions of Chapter 8 Part 3B of the Environmental Protection Act 1994.
FURTHER ADVICE

1. This approval, granted under the provisions of the Sustainable Planning Act 2009, shall lapse six (6) years from the day the approval takes effect in accordance with the provisions of Section 339 of the Sustainable Planning Act 2009.

2. All building site managers must take all action necessary to ensure building materials and/or machinery on construction sites are secured immediately following the first cyclone watch and that relevant emergency telephone contacts are provided to Council Officers, prior to commencement of works.

3. This approval does not negate the requirement for compliance with all other relevant Local Laws and other statutory requirements.


LAND USE DEFINITIONS

In accordance with Douglas Shire Planning Scheme the approved land use of ‘Public Utilities and Facilities’ is defined as:

“Public Utilities and Facilities

Means the use of premises for the provision of public facilities and services such as water, sewerage, electricity, gas, telecommunications, transport, drainage and refuse collection and disposal by Local Government or State Government.

The use includes emergency services such as:

- ambulance;
- fire (urban or rural);
- police services; and

- State Emergency Services.”

*This definition is provided for convenience only. This Development Permit is limited to the specifications, facts and circumstances as set out in the application submitted to Council and is subject to the abovementioned conditions of approval and the requirements of Council’s Planning Scheme and the FNQROC Development Manual.
EXECUTIVE SUMMARY:

Council is in receipt of a Development Application from Ergon Energy Corporation Limited seeking approval for an upgrade to the existing Mossman Electrical Zone Substation at 69R Cassowary Road, Cassowary, from a 66/22 kilovolt (kV) to a 132/22kV Zone Substation. The proposed infrastructure is part of Ergon’s plans to improve supply to the Far North Queensland region. The proposed development is adjacent to the Douglas United Soccer Club’s playing fields and will be accessed from Cassowary Road in generally the same location as the existing accesses. The Executive Plan is attached at Appendix 1.

The primary issues associated with the proposed development relate to character and amenity of the locality and have been adequately addressed in the assessment or by way of conditions. The proposal is Code Assessable and public notification was not required.

The proposed development is recommended for approval, subject to conditions.

PLANNING CONSIDERATIONS:

Background

The subject land is located at 69R Cassowary Road, Cassowary, and is legally described as Lot 1 on RP717215 and Lots 3 & 4 on RP899478. The land is 2.081 hectares in area and contains the existing Mossman Electrical Zone Substation. Access to the site is from Cassowary Road.

The Douglas United Football Club playing fields and clubhouse adjoin the southern boundary of the subject land. The cleared rear portion of the subject land is utilised by Douglas United for playing fields, although this land is in the ownership of the Applicant, Ergon Energy Corporation Limited.

Other surrounding land uses predominantly comprise large rural allotments which are used for cropping and rural residences.

Proposal

The Development Application before Council seeks a Development Permit for Material Change of Use for Public Utilities and Utilities (Electrical Substation) on the subject land.

The proposal is for refurbishment of the existing Mossman Electrical Zone Substation from a 66/22 kilovolt (kV) to a 132/22kV Zone Substation. In summary, the proposed development consists of:
- Two 132/22kV 32MVA transformers;
- 132kV outdoor switchyard comprising four feeder bays, two transformer bays and one bus tie bay;
- New control building housing an indoor 22kV switchboard comprising five feeder bays, two transformer bays, one bus tie bay and one future capacitor bank bay;
- One 22kV switchgear building;
- One 132kV feeder bay (from Turkinje station); and
- Four 22kV feeder bays (from Stewarts Creek, Daintree, Mossman and Cassowary stations).

The proposed substation is to be located in the rear half of the subject land with vehicular access from Cassowary Road. The existing 132kV feeders from the existing Turkinje Substation will continue to enter the site from the Cassowary Road frontage (western boundary) and exit to the existing Craiglie Substation from the rear (eastern boundary) of the site.

The proposed development will be largely unmanned and restricted to access by authorised personnel only. Intermittent vehicle access will occur on an as-needs basis for maintenance or emergency works (expected to be approximately one (1) vehicle per fortnight).

Plans of the proposed development are attached at Appendices 1 and 2.

The Applicant advises the new substation will deliver significant improvement in supply, reliability and performance to Mossman customers. Ergon further advises that the proposed upgrade aligns with its Strategic Plan for network development in Far North Queensland and complies with the public undertaking given by the Far North Queensland Electricity Board (FNQEB) in 1995 to acquire the 132kV line route to Craiglie Zone Substation.

**Douglas Shire Planning Scheme Assessment**

The subject land is located in the Rural Areas and Rural Settlements Locality under the *Douglas Shire Planning Scheme 2008*. Lot 1 on RP717215 is located within the Rural Settlement Planning Area and Lots 3 & 4 on RP899478 are located within the Rural Planning Area.
The proposed development is defined ‘Public Utilities and Facilities’ and is Code Assessable in the Rural Areas and Rural Settlements Locality.

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<th>Douglas Shire Rural Areas and Rural Settlements Planning Locality</th>
<th>Code Applicability</th>
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<td>Rural Areas and Rural Settlements Locality Code</td>
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<td>Complies – refer below</td>
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<tr>
<td>Rural Planning Area Code</td>
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<td>Complies – refer below</td>
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<tr>
<td>Rural Settlement Planning Area Code</td>
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<th>Overlay Codes</th>
<th>Code Applicability</th>
<th>Compliance</th>
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<tr>
<td>Natural Hazards Code (Medium Bushfire Risk)</td>
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<td>Complies – site is cleared and contains existing electrical substation</td>
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<th>General Codes</th>
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<tr>
<td>Landscaping Code</td>
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<td>Natural Areas and Scenic Amenity Code</td>
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<td>Complies</td>
</tr>
<tr>
<td>Vehicle Parking and Access Code</td>
<td>✓</td>
<td>Complies – development will be largely unmanned and no need for dedicated spaces</td>
</tr>
<tr>
<td>Sustainable Development Code</td>
<td>✓</td>
<td>Complies</td>
</tr>
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</table>

**Rural Character and Amenity**

The proposed switchgear and control buildings comply with the maximum 6.5m building height (4.8m proposed) under Acceptable Solution A1.1 of the Rural Areas and Rural Settlement Code. These buildings also comply with the minimum 6m side setback requirement under Acceptable Solution A4.1 of the Rural Planning Area Code.

The front setback for the proposed switchgear building does not comply with Acceptable Solution A4.1 of the Rural Planning Area Code which suggests a 20m setback for buildings / structures. The proposed switchgear building will be setback approximately 15m from Cassowary Road with the main substation setback approximately 70m from the road. The proposed building is approximately 5m wide when viewed from the road and the nearest building across Cassowary Road is approximately 200m from the subject land. The proposal is therefore considered to maintain adequate separation for the intended use of the land and thus satisfies Performance Criteria P4 of the Rural Planning Area Code.

The architectural design of the proposed buildings is also required to contribute to the rural character of the area pursuant to Performance Criteria P6 of the Rural Planning Area Code. Conditions of approval are recommended requiring submission of a building elevation plan and proposed colour scheme.

The existing electrical substation has been located on the site for many years and forms part of the established character of the area. Whilst surrounding uses consist of rural and rural settlement land uses, there is already an expectation that the substation use will continue on the land.

Having regard to the design of the proposed substation and established character of the area, which includes the existing substation, the proposed development is considered to be appropriate in its location and satisfies the relevant Performance Criteria of the Rural Areas and Rural Settlements Locality Code, Rural Planning Area Code and Rural Settlement Planning Area Code.
Landscaping Code

The Landscaping Code requires submission of a Landscaping Plan as part of the MCU application. Ergon Energy has requested an exemption from application of the Landscaping Code on the basis of safety concerns associated with vegetation in close proximity to electrical assets.

The following site specific issues are noted with respect to landscaping matters:

- Extensive hardstand areas to facilitate the proposed development prevent opportunities for landscaping;
- The majority of the proposed substation infrastructure is situated to the rear of the block so it is setback from passing traffic;
- The surrounding cane paddocks to the north and east provide some form of visual buffering for a large portion of the calendar year;
- It is proposed to extend the wooden fence on the southern boundary adjacent to the soccer field to reduce visual and noise impacts to adjacent users of the sporting fields; and,
- The character of the locality is already established and includes an existing un-landscaped substation.

In consideration of the above, the proposed development will have a ‘no worsening’ effect in terms of landscaping when compared to the existing situation and maintains the established character and amenity of the locality. Therefore exemption from compliance with the Landscaping Code is supported in this instance.

Noise

The Applicant submitted a Noise Study in support of the proposed development. In summary, the Study concluded that the proposed development will comply with all relevant legislative requirements, will not increase existing background noise levels during operation and does not require the inclusion of any noise mitigation measures.

The closest residence is approximately 200m from the subject site and as such the proposed development is unlikely to adversely impact on the amenity of residential uses by way of noise generation.

Conditions of approval are recommended with respect to noise attenuation.

Electro Magnetic Fields (EMF)

The Applicant undertook an EMF Study to assess the level of electromagnetic fields emitted by the proposed development. The assessment assumed a ‘worst case scenario’ and concluded that the EMF levels emitted from the proposed will not exceed Ergon Energy’s EMF reference levels and therefore does not require any EMF mitigation measures.
Currency Period

The Applicant has requested an extended currency period of six (6) years, as opposed to the four (4) year timeframe that is typically applied to MCU approvals, in order to provide a more reasonable and practical timeframe to deliver essential infrastructure. The proposed development will provide significant public benefit for the long term supply of electricity to the region and in this instance the request for an extended currency period is supported.

Other Matters

The rear cleared portion of the subject land is currently accommodates playing fields utilised by the Douglas United Football Club. These playing fields will be removed to make way for the proposed substation upgrade. The subject land is held in freehold ownership by the Applicant and future use of the playing field area on the land is not a planning matter and instead a private issue between the two parties.

For the purposes of clarity, the Applicant has advised that to date an on-site meeting has been held with a representative of the Football Club where the current request for MCU approval was discussed, including removal of the playing fields from the subject land. The Applicant also advised consultations with the Football Club will continue regarding progress of the redevelopment of the subject land.

Public Notification / Submissions

The proposed development is Code Assessable and public notification was not required.

INFRASTRUCTURE CHARGES

The proposed development is for an upgrade to an existing public utility undertaking (electrical substation) and will not create increased demand on Council’s infrastructure. Accordingly, the proposed development does not trigger Developer’s Infrastructure Charges.

S Graham
Planning Officer
Action Officer

Neil Beck
Acting Manager Development & Regulatory Services
APPENDIX 3 - ACCESS CROSSOVER DRAWING S1015

Concrete footpath, where required shall be reconditioned to match neatly to driveway slab (1:14 minimum grade)

Property boundary

Variable footpath width

Residential Vehicle Crossing

Variable footpath width

Commercial & Industrial Vehicle Crossing

NOTES

1. All items to existing kerbs shall be sawn prior to breaking out concrete kerbs removed.
2. Concrete to be a VS mix in accordance with AS 2322 and AS 2327.
3. All concrete to be smooth finished.
4. Where a concrete footpath slab is crossing an expansion joint shall be installed.
5. Expansion joint to be 30mm thick, closed ended with foam polyethylene foam (S/W 50g/m^2).
6. Depth of concrete and reinforcing steel shown are minimum requirements for good finishes and adequate load-bearing structures, where this does not apply, depth of concrete and reinforcing steel shall be increased to suit specific conditions.
7. Where an existing footpath is present it is to be sawn and an extension joint provided.
8. Subgrade to be compacted to 96% standard.
9. All drainage to be level finished.
10. Most destinations to be single dwelling complexes. All other crossings as per commercial/industrial details.

DISCLAIMER

The data and graphics presented should be treated as preliminary notes and should not be used as definitive construction drawings. The information should be used as a guide to site layout, dimensions, and general layout only. It is recommended that all site-specific information is obtained from the relevant authorities. This document is for the guidance of FNCROC and is subject to change without notice.

ACCESS CROSSES

Standard Drawing

S1015

A | B | C

NOTE: All measurements are in metres (m), unless otherwise stated.

Table:

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<tr>
<th>Note</th>
<th>Description</th>
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<tbody>
<tr>
<td>A1</td>
<td>Original Issue</td>
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<td>A2</td>
<td>Amendment 1</td>
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Date: 9 October 2013

Agenda – Planning and Economic Committee 9 October 2013 - #4129567