

Our Ref: DA221920  
Enquire to: Brett Walsh  
Telephone: (07) 4651 5600

2 April 2020

Waratah Coal Pty Ltd  
GPO Box 1538  
BRISBANE QLD 4001

Sent via email: [info@waratahcoal.com](mailto:info@waratahcoal.com)

Dear Sir / Madam,

### Information Request

*SECTION 68(1) OF THE PLANNING Act 2016*  
Given under section 12 of the Development Assessment Rules

The Barcaldine Regional Council has carried out a further review of your development application for the following premises.

#### Applicant details

Applicant Number:	DA221920
Approval sought:	Development Permit for a Material Change of Use
Description of the development proposed:	Public utility (1,400MW power station and associated infrastructure including access roads and substation); Environmentally relevant activities (ERA14 – electricity generation, ERA16 – extractive and screening activities, ERA50 – mineral and bulk material handling, ERA 60 – waste disposal and ERA63 – sewerage treatment; and Hazardous chemical facility.

#### Location details

Street address:	3260 Monklands Road, Alpha QLD 4724
Real property description:	part of Lot 2 on SP136836

#### Information requested

The Barcaldine Regional Council has determined that the following additional information is needed to assess the application:

**1. Scale, intensity and sequencing of the proposed development**

The application material does not provide a clear and concise understanding of all aspects of the development for the full lifecycle of the project (i.e. from construction, to operation and decommissioning).

For example during the construction phase, internal to the site, the town planning report discusses a staged approach to the construction of the 1400MW power station, with the first 700MW thermal generator being constructed within thirty-six (36) months with a lead time of approximately 6 months until the completion of the second 700MW thermal generator. Please confirm if this will result in an overlap period of construction and operational workforce at the site in the context of the below items.

It is also understood that the Alpha township will not be connected to the power plant until the second generator is constructed. The electricity supply to the Alpha township is at capacity, with new developments (i.e. workers accommodation) unable to connect to the network and the town experiences unreliable power supply with frequent blackouts. Please include the connection of the power plant to the township as part of the construction of the first generator, considering the issues that are expected to arise as outlined below.

It is understood that the proposed development relies upon external infrastructure that is either in the pipeline of approvals or is currently inadequate to support the project. For example,

- the adjoining proposed Mine project and its operations are integrated with the running of the power station for the supply of coal and water through dewatering practices at the Mine. Confirm if the mine will be established prior to construction of the power station. If not, how will dewatering practices be conducted.
- the Alpha Airport will be relied upon for the fly in, fly out (FIFO) workforce in the construction phase of the project. The local airport infrastructure is likely to be inadequate in catering for the influx of FIFO workers.
- the lack of available accommodation within the nearby towns to support the anticipated workforce associated with the construction and operational stages of the proposed development.
- the lack of available infrastructure (electricity and town water supply) to support the workforce of the proposed development.

In light of the above items, provide for Council assessment and consideration further details on the scale and intensity of the proposed development. Associated management and mitigation measures must be provided at all stages of the project life incorporating the sequencing (or staging) of essential infrastructure and services internal and external to the site and associated timeframes for the project.

Additionally, provide confirmation on the staggered arrangement for the construction of the two 700MW power stations. This information is required to demonstrate that the proposed development can be undertaken in an orderly and logical sequence to achieve efficient provision of infrastructure, as well as, ensuring any impacts from the proposed development do not adversely impact on infrastructure. The details of the sequencing of the development could be shown on staging plans.

## 2. Rural Zone Code

The town planning report does not completely address all relevant matters of the assessment benchmark within the *Jericho Shire Planning Scheme 2006*. The scale of the proposed development will have significant impacts on the

rural amenity and provisioning of infrastructure across the lifecycle of the proposed development (i.e. from construction, to operation and decommissioning).

Provide for Council assessment and consideration further details on how the proposed development complies with Overall outcome 4 of the Rural Zone Code.

### 3. State-controlled Transport Infrastructure

Third party advice has been requested from the Department of Transport and Main Roads (TMR) and in consultation with Queensland Rail (QR) on the Traffic Impact Assessment (TIA) prepared by GTA Consultants (QLD) Pty Ltd dated 16 January 2020. Overall, TMR found the TIA has not been completed in accordance with the department's *Guide to Traffic Impact Assessments* (GTIA) as it lacked specific details and analysis to demonstrate the project impacts and how these impacts will be appropriately managed or mitigated.

Provide for Council assessment and consideration an amended TIA that addresses the following matters:

- (a) Section 3.3 of the TIA shows the 10-year historical growth rates for various sections of the Gladstone – Mt Larcom Road (Road 181), Bruce Highway (Road 10E) and the Capricorn Highway (Road 16A, 16B, 16C and 16D). These growth rates vary significantly from -4.36% on the Gladstone – Mt Larcom Road to 11.37% on the Capricorn Highway (16B). The TIA has adopted a 3% linear growth rate for all sections of all roads. Whilst the determination of accurate future growth rates is not a simple task, the approach of adopting a single growth rate across such a wide range of historic growth rates and over a number of State-controlled Road (SCR) that clearly exhibit significantly different traffic patterns is considered too simplistic and is not adequately justified. TMR would typically expect separate growth rates to be determined for each section of each SCR or at a minimum a single growth rate for each SCR rather than a single growth rate across the entire network. The adopted growth rates for each section of the SCR network should be reviewed and any growth rate adopted adequately justified.
- (b) The proponent has proposed that the pavement impact contribution be confirmed after the relevant technology and limestone sourcing contract have been finalised. These details have the potential to cause a significant impact on the pavement (varies between \$1,515,979.00 and \$3,894,609.00 depending on the technology selected) and may affect the performance of the intersection between Saltbush Road and the Capricorn Highway. These details should be finalised and included within the TIA to be assessed.  
As any condition issued for a Development Permit, the approval must be final and certain. Please note, there is very limited opportunity (if any) to carry out further assessments post-approval to determine the costs associated with the pavement impacts.
- (c) The section documenting additional impact considerations states that a Road-Use Management Plan (RMP) will be required as the project progresses, and potential strategies may include adjusting shift times and heavy vehicle movement so that project traffic peaks do not

coincide with road peaks. This RMP and the potential strategies should be finalised and included within the TIA as these assumptions may fundamentally change the operation of the Saltbush Road/Capricorn Highway intersection. TMR may need to consider whether they are comfortable with this development moving forward without these items finalised.

- (d) Although an ALCAM assessment did not form part of the TIA, Queensland Rail did provide the following to TMR:
- *"The railway manager (Queensland Rail) has reviewed the submitted traffic data, conducted ALCAM assessments (Australian Level Crossing Assessment Model) and advised that the Saltbush Road level crossing should be upgraded to include flashing lights, applicable advance warning signage, 'Keep Clear' signage, yellow box marking, 'Rail-X' road marking and lighting."*

With the above mentioned in mind, further consideration / confirmation needs to be given to the effect of the level crossing being shut for a duration while a train passes and the queuing that may occur on the Capricorn Highway during this time. This scenario should be closely examined to ensure the CHR(s) has sufficient storage length to prevent queuing onto the Capricorn Highway travelling lanes.

- (e) In Section 3.5 Intersection & Network Performance it states "...current traffic volumes on Capricorn Highway proximate to the Project are quite low which is consistent with on-site observation during GTA's inspection (undertaken on 14 November 2018). As such, the current network and intersection performance on Capricorn Highway, proximate to the Project is expected to be within capacity". While these assumptions may be the case, it may not be sufficient to state this without documented evidence that these statements are correct. Therefore, please include modelling of the relevant affected intersections in proximity to the development to confirm that this statement is correct. The TIA does not include any SIDRA Intersection modelling or other modelling to provide a justified basis for this statement. Of particular concern is the queuing lengths that may be experienced at the Saltbush Road / Capricorn Highway Intersection during peak hours with consideration given to the operation of the level crossing, as noted above.
- (f) In Section 5.3 Heavy vehicle Traffic Generation, the project has assumed that vehicles predominately used for construction will be rigid trucks and not semi-trailers or B-Double / Oversized trucks. The TIA states that during the construction period the daily project heavy vehicle movements will include 48 rigid trucks, 2 semi-trailers, 2 B-doubles and 2 oversized vehicles. If the methodology was revised to include additional semi-trailers this would likely have a worsening effect on the performance and arrangement of the intersection. Please confirm the methodology that the vast majority of trucking traffic will be that of rigid trucks. This does not appear to be typical of a regional construction project of this scale.
- (g) In Section 7.1 Capricorn Highway/Saltbush Road Intersection turn warrant assessments have been undertaken and suggest that the

concluded turn warrants are acceptable. While the turn treatments may be correct, no modelling has been undertaken to understand the level of service of the intersection or potential queue lengths during peak hours. In addition to this, the intersection with the Capricorn Highway features a level crossing within close proximity on Saltbush Road.

Please include SIDRA modelling as part of the analysis within the TIA to ensure that the intersections operate within acceptable performance criteria and to identify the potential queue lengths during peak hours and while a train is travelling over the open level crossing (OLC). In addition, please note, the turn volumes for the right turn into Saltbush Road in the AM peak hour for the 2022, 2023 and 2032 scenarios all exceed the upper limits of the turn warrants charts, which may result in a CHR(S) not being suitable. SIDRA analysis is therefore required to confirm the queue length that will need to be provided at this intersection.

- (h) In Section 9 Road Safety Risk Assessment a project related Road Safety Risk Assessment has been completed. This risk assessment provides sufficient documentation on without / with development risk items, mitigation measure and conclusions. Council / TMR may need to consider whether a risk item should be included that examines the risk of vehicles queuing onto the Capricorn Highway travelling lanes while a train is passing on the level crossing in close proximity on Saltbush Road. While this scenario may be unlikely, it has not been addressed within the TIA and the impacts are not well documented or understood.
- (i) Although a Road Safety Assessment has been completed (as per item h above), it should be amended to ensure the risk of vehicles queuing on and onto the Capricorn Highway is assessed and adequately managed / mitigated.
- (j) It is acknowledged that within Section 10.2 of the TIA it is recommended that the existing level crossing be upgraded to boom gates for road user safety. However, as mentioned within item d above, Queensland Rail has conducted an ALCAM assessments and advised that the Saltbush Road level crossing should be upgraded to include flashing lights, applicable advance warning signage, 'Keep Clear' signage, yellow box marking, 'Rail-X' road marking and lighting. Furthermore, an assessment of the potential queue lengths on Saltbush Road during a train crossing should also be carried out to ensure adequate storage capacity existing between the Capricorn Highway and the OLC.

#### **4. Local Roads**

The application material provides insufficient information on the impacts to the local road network across the lifespan of the proposed development. For instance, the integration of the future mine project with the proposed development will significantly impact the local road network in the vicinity of the site and will result in the closure of Monklands Road, removing a road link to the north. The proposal plans only detail Saltbush Road being constructed to the access of the Power Station, situated at the south eastern part of Lot 2. To compensate for the loss of Monklands Road it is considered appropriate in this instance to require Salt Bush Road to be constructed to the intersection with Degulla Road.

The assessment has not considered the existing arrangements for the road network as declared road train type 2 routes, which commence at Alpha.

The TIA has not considered the pavement impacts to Saltbush Road through the sequencing of the proposed development from the staggered construction, to operational to decommissioning. It is expected that Saltbush Road will be used by the wider community over the lifespan of the proposed development as it will replace the Monklands Road link.

Provide for Council assessment and consideration an amended Traffic Impact Assessment that addresses the impacts to the local road network across the lifecycle of the project, acknowledges the declared road train type 2 routes, details haulage routes for the lifecycle of the project and identify upgrades to Saltbush Road to address connectivity of the local road network.

#### **5. Vehicle Parking and Service Vehicle Provision**

The proposal plans do not show any car parking arrangements, manoeuvring areas or service vehicle parking arrangements.

Provide to Council for assessment and consideration amended proposal plans including car parking layout, service vehicle parking and vehicle manoeuvring areas at all stages of the proposed development.

#### **6. Social Impact Assessment**

The Town Planning report includes high-level details of the workforce arrangements, which is expected to be predominantly a FIFO workforce during the construction phase and moving to a residential based operational workforce. The projected workforce numbers for the proposed development are substantial in comparison to the population of the nearby and surrounding townships. The application material has not provided details on any direct or indirect social impacts of the proposed development on the Barcaldine Region communities.

It is acknowledged that a development of this scale has not been anticipated by the *Jericho Shire Planning Scheme 2006*. The site of the project is located outside of the townships of Jericho and Alpha, however the daily operations of the project are likely to impact these nearby townships. The planning assumptions under the Priority Infrastructure Plan contained within the Planning Scheme predicts low growth in population, housing, jobs and non-residential floor space across the former Shire. Accordingly, council has not planned to provide additional infrastructure and services to support the expected demand and population growth generated by the proposed development on existing infrastructure and services.

Provide for Council assessment and consideration a Social Impact Assessment (SIA) prepared generally in accordance with the Department of State Development, Manufacturing, Infrastructure and Planning (DSDMIP) *Social Impact Assessment Guideline* dated March 2018. The SIA must address the following key matters:

- a. The full lifecycle of the project (i.e. all stages of the project life);
- b. Community and stakeholder engagement to:
  - i. Understand who is likely to be impacted and how
  - ii. Understand the effects on communities
  - iii. Identify and assess potential social impacts

- iv. Develop management measures to mitigate adverse impacts and enhance benefits
- v. Support monitoring and reporting.
- c. Workforce management;
- d. Housing and accommodation strategy;
- e. Local business and industry procurement;
- f. Health and community wellbeing.

The management measures identified through the SIA process must be documented in a Social Impact Management Plan (SIMP), which will provide a practical basis for their implementation. The SIMP is to include detail on the proposed management measures, timeframes for implementation, roles and responsibilities, stakeholders, and potential partnerships. The SIMP must also incorporate processes to ensure that throughout the project lifecycle management measures are effectively monitored and allow for updates and review where amendments can be made to any ineffective management measures.

#### **7. Water Usage and Supply**

The application material provides insufficient information on the provision of water for all aspects of the proposed development and across the lifespan of the proposed development (i.e. construction, operation and decommission). It also does not provide information of contingency measures that may be required where dewatering is unavailable, or where town water supply is not available to service the workers associated with the proposed development. A copy of third party advice provided by the Department of Natural Resources, Mines and Energy is appended in Attachment 1.

Provide for Council assessment and consideration further details on water supply management measures to ensure the proposed development is provided with a sustainable water supply.

#### **8. Alpha Airport**

The town planning report states an expected peak construction workforce of 1,000 persons maintained for 4 to 5 months, with the first thermal generator completed 36 months after commencement of the construction. It is anticipated that most of the construction workforce will be on a FIFO arrangement with a service offered between Alpha and Rockhampton (e.g. fifty (50) seat turbo-prop aircraft). Major upgrades will be required to the Alpha Airport.

Provide for Council assessment and consideration an Alpha Airport Redevelopment Plan that considers the upgrades required to the Alpha Airport to support the proposed development's workforce. The master plan should consider both operational airside infrastructure upgrades (i.e. runway, communications, security, hangars, storage facilities, etc) and public access areas (i.e. terminal, car parking arrangements, access to the Capricorn Highway, pick-up / drop-off arrangements, vehicle manoeuvring).

#### **9. Infrastructure Agreement**

As discussed in item 6 above, council has prepared a Priority Infrastructure Plan (PIP) in accordance with the *Integrated Planning Act 1997* which forms part of the *Jericho Shire Planning Scheme 2006*. Under the PIP, the proposed development is located outside of the Priority Infrastructure Area and will require major upgrades to Council infrastructure and facilities to cater for the additional demand generated by the proposed development. Council has also

prepared a draft Local Government Infrastructure Plan in accordance with the *Planning Act 2016* and it does not change the outcomes of the current PIP.

Item 1 above has requested further details on the impacts to infrastructure in relation to the sequencing of the development. To ensure that the development is carried out in an orderly and logical manner it is recommended that an Infrastructure Agreement may be entered into between the developer and the Barcaldine Regional Council for works required by this proposed development and remuneration appropriate to be paid to the council for additional demand generated by the proposed development on infrastructure (such as, the Alpha Airport, road infrastructure, town infrastructure, social infrastructure, etc.).

Provide for Council consideration and assessment a draft Infrastructure Agreement.

### **Further details**

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The due date for providing the requested information is 3 months from the date of this request.

In accordance with section 13.2 of the Development Assessment Rules, you may respond by giving:

- (a) all of the information requested; or
- (b) part of the information requested; or
- (c) a notice that none of the information will be provided.

As Barcaldine Regional Council's assessment of your application will be based on the information provided, it is recommended that you provide all the information requested. In accordance with section 14.2 of the Development Assessment Rules, if you do not provide a response before the above due date (or a further agreed period), it will be taken as if you have decided not to respond to the information request and the Barcaldine Regional Council will continue the assessment of your application without the information requested.

Please note that Council may request further advice any time before the application is decided.

If you have any queries please do not hesitate to contact Deputy Chief Executive Officer Brett Walsh at the Executive Office on (07) 4651 5621.

Yours sincerely,



for  
**Steven Boxall**  
**Chief Executive Officer**

**Attachment 1**

Third Party Advice from the Department of Natural Resources, Mines and Energy (DNRME)





Queensland  
Government  
Department of  
Natural Resources,  
Mines and Energy

26 March 2020

Michaela Huelin  
Reel Planning Pty Ltd  
138 East St  
ROCKHAMPTON QLD 4700

[michaela@reelplanning.com](mailto:michaela@reelplanning.com)

Dear Michaela,

Thank you for your email dated 24 March 2020 concerning third party referral for the Development Application for a Material Change of Use (Galilee Power Station).

The supply of water for the proposed power station project will require appropriate approvals under the *Water Act 2000*.

The Town Planning Report provided indicates that the operation of the power station will require an estimated 1374 ML/annum. The project intends to source water from dewatering water from the proposed nearby Galilee Coal Project. The documentation estimates that dewatering will produce 3740ML/annum.

#### ***Associated water licence***

Dewatering activities associated with the Galilee Coal Project will first require authorisation in the form of an associated water licence. While water that has been dewatered can be used for any purpose, it is to be noted that an associated water licence only authorises the taking of or interference with underground water in the area of a mining tenure if the taking or interference happens during the course of, or results from, the carrying out of an authorised activity for the tenure.

Should an associated water licence be issued for the dewatering activities associated with the Galilee Coal Project, the currency of the associated water licence will only be for the currency of the authorised activity; i.e. the taking of underground water cannot continue for the power station once dewatering (to allow the safe operating environment to mine the resource) ceases.

Therefore alternative water supply options and subsequent approvals will be required for water requirements before and/or after mining dewatering operations, or where the power station water supply requirements exceed that which is taken through an associated water licence (dewatering).

Section 2.3 (f) page 45 of the Town Planning Report indicates that underground water is intended to be sourced as the proposed source of water requirements pre-commencement and post closure of the Galilee Coal Project.

Therefore the following advice is provided in a broad sense, noting that at the time of potential cessation of dewatering of the mine and the need for alternate water supply, legislation requirements may have changed.

### **Alternative water supply**

Depending on the aquifers proposed to be accessed, underground water in the area of the proposed power station is either managed under the *Water Plan (Great Artesian Basin and Other Regional Aquifers) 2017* or the Highlands Declared Underground Water Area or the Greater Western Declared Underground Water Area.

#### **Water Plan (Great Artesian Basin and Other Regional Aquifers) 2017. (GABORA Water Plan)**

The major water beds in the area, the Clematis Sandstone and Betts Creek Beds are managed under the GABORA Water Plan. The GABORA Water Plan sets aside volumes of unallocated water in a General Reserve and a State Reserve as shown below:

<b>Groundwater unit</b>	<b>General Reserve (Megalitres)</b>	<b>State Reserve (Megalitres)</b>
Betts Creek Beds	0	1500
Clematis Sandstone	455	

An electricity generation project is eligible to express an interest in the State Reserve. Any water granted from the State Reserve is granted only for the life of the project and returns to the State when the project ends.

Typically if water is released, the proponent would need to address criteria set out in a Terms of Sale including a price for the water. The assessment criteria is listed in section 23 of the GABORA Water Plan and includes efficiency of use and alternative water supplies as well as assessment of impacts on surrounding water users and cumulative impacts on springs, therefore any volume offered to be granted may not necessarily meet the full volume required by a project.

#### **Highlands declared Underground Water Management Area and Greater Western Underground water Management Area.**

These two underground water management areas manage underground water that is not otherwise managed under the GABORA Water Plan. Typically this would include shallower tertiary aquifers. A water licence would be required to take water from these aquifers for power station operations. Any Water Licence application would be assessed against criteria in section 113 of the *Water Act 2000* including impacts on other water users and effects on natural ecosystems.

#### **Water Plan (Burdekin Basin) 2007 (Burdekin Water Plan)**

As surface water has not been indicated as being a preference for supply for the power station, information is provided in a broad sense and further detailed information can be obtained from DNRME as required.

The proposed power station is located within the Burdekin Basin surface water catchment. The Burdekin Water Plan manages the take of surface water (watercourse water and/or overland flow water). The Burdekin Water Plan allows for taking of overland flow without a water licence for works up to a capacity of 250 Megalitres and allows for the take of overland flow of not more than necessary to satisfy requirements on and environmental authority issued under the *Environmental Protection Act 1994*.

The Burdekin Water Plan also sets aside reserves of unallocated surface water in a General Reserve and Strategic Reserve. To be eligible for the Strategic reserve, the project would need to be either a coordinated project under the *State Development and Public Works Organisation*

Act 1971 or be determined as a project of regional significance. Any applications would be assessed a Terms of Sale consistent against criteria in the Burdekin Water Plan.

***Watercourse determination***

The documentation has identified a feature that has not been determined as to whether it is a watercourse under the *Water Act 2000*. The proponent may wish to formally request a water course determination by contacting DNRME on [centralwaterservices@dnrme.qld.gov.au](mailto:centralwaterservices@dnrme.qld.gov.au).

Should you have any further enquiries, please contact myself in the first instance on telephone 07 4536 8360.

Yours sincerely

A handwritten signature in black ink, appearing to read 'DL', followed by a horizontal line extending to the right.

Daniel Larsen  
**Principal Project Officer (Hydrology)**  
**Water Services, Central Region**