

23 September 2020

**The Chief Executive Officer  
Barcaldine Regional Council  
PO Box 191  
BARCOLDINE QLD 4725**

Attention: Mr Brett Walsh  
Deputy Chief Executive Officer

Dear Mr Walsh

**MATERIAL CHANGE OF USE FOR A PROPOSED PUBLIC UTILITY  
(POWER STATION AND ASSOCIATED INFRASTRUCTURE),  
ENVIRONMENTALLY RELEVANT ACTIVITIES AND HAZARDOUS  
CHEMICAL FACILITY AT MONKLANDS ROAD, HOBARTVILLE  
(COUNCIL REFERENCE: DA221920) –RESPONSE TO THE  
INFORMATION REQUEST**

We refer to Council's Information Request letter dated 2 April 2020 and Further Issues letter dated 31 August 2020 pertaining to the proposed Material Change of Use. We have considered the Information Requested by Council and provide the following information in response to Council's letters.

**INFORMATION REQUEST DATED 2 APRIL 2020**

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

**Construction and Operation Workforce**

The Galilee Power Project will consist of two units sized up to 700 MW each (pending final design, network studies and market demand). The Project output will not total more than 1,400 MW. The impacts assessment has been undertaken assuming 2 x 700 MW so as to allow assessment of the 'worst case' scale of intensity.

The two units will be staged to match market demand. The current program is that construction on the first unit will commence in 2021, with commercial operations to commence in 2025. The second unit will commence construction in 2025, with commercial operations to commence in 2029. This schedule is subject to change depending upon approvals timeframes, network connection timeframes, the financing program and market demand.

The construction and operations timeframes are set out below in Figure 1 (we acknowledge that these timeframes have been refined since submission of the planning report).

	20	21	22	23	24	25	26	27	28	29	30+
Airport upgrade		■	■								
Road upgrades		■									
Camp construction		■									
Distribution upgrade <sup>1</sup>		■									
Approvals	■	■									
Unit 1 Design		■	■								
Unit 1 Procurement		■	■	■							
Unit 1 Construction			■	■	■						
Unit 1 Commissioning					■	■					
Unit 1 Operations						■	■	■	■	■	■
Unit 2 Design						■	■				
Unit 2 Procurement						■	■	■			
Unit 2 Construction							■	■	■		
Unit 2 Commissioning									■	■	
Unit 2 Operations										■	■
Transmission construction				■	■						
Construction workforce			■	■	■	■	■	■	■	■	
Operations workforce					■	■	■	■	■	■	■

Figure 1 - Construction timeframe

Both the construction and operations workforces will be present on site during construction of Unit 2. The construction team will predominantly be housed in construction camp/s, and the operations workforce will be encouraged to live locally and contribute to the community. It is envisaged that ongoing operations will require a workforce of approximately 90 personnel.

The social impact assessment prepared by Square Peg Social Performance (**Attachment 1**) has investigated in detail the demand and availability of housing for the permanent workforce and has made recommendations as to the level of new housing required to accommodate both the construction and operations workforce.

Using the refined construction timeframes, a revised construction staffing forecast has been developed and is shown in Figure 2. The workforce forecast reflects the staged construction of the power project and reflects a peak of around 400 workers; given the preliminary nature of execution planning, it is prudent to add a margin to these forecasts and consider a peak range of workers in the order of 400-500 people. This estimate is consistent with the planning report’s 1,000 workers, which was based upon a ‘worst case’ scenario of concurrent construction of the two units. The forecast assumes financial investment decision (FID) of Unit 1 in early 2021 and FID of Unit 2 in early 2025.

<sup>1</sup> Sufficient for camp operation.

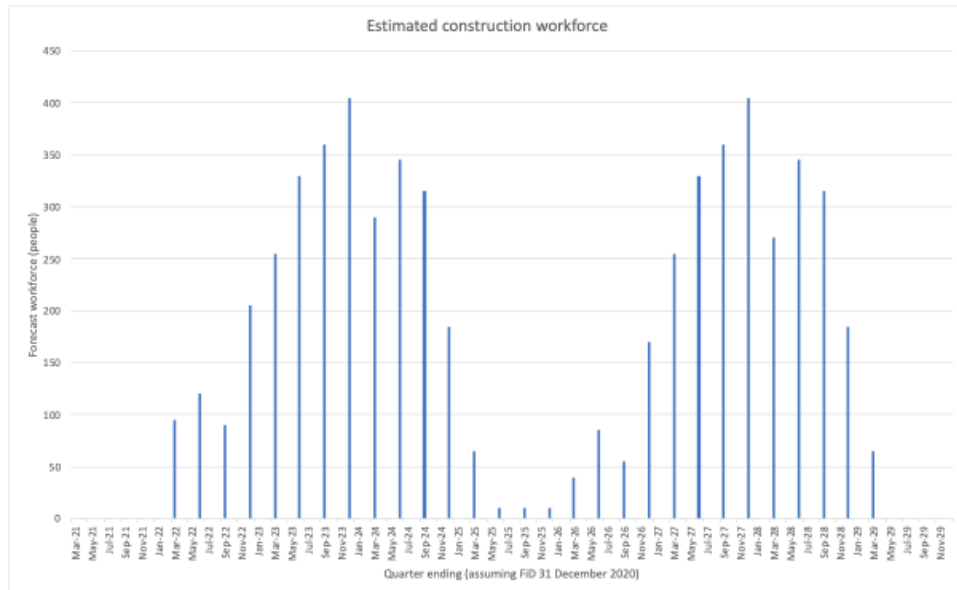


Figure 2 - Estimated construction workforce numbers

Waratah Coal acknowledge that significant infrastructure upgrades will be required to accommodate the construction activities. These upgrades will be coordinated between the mine and the power station and will form part of an Infrastructure Agreement between the applicant and Council.

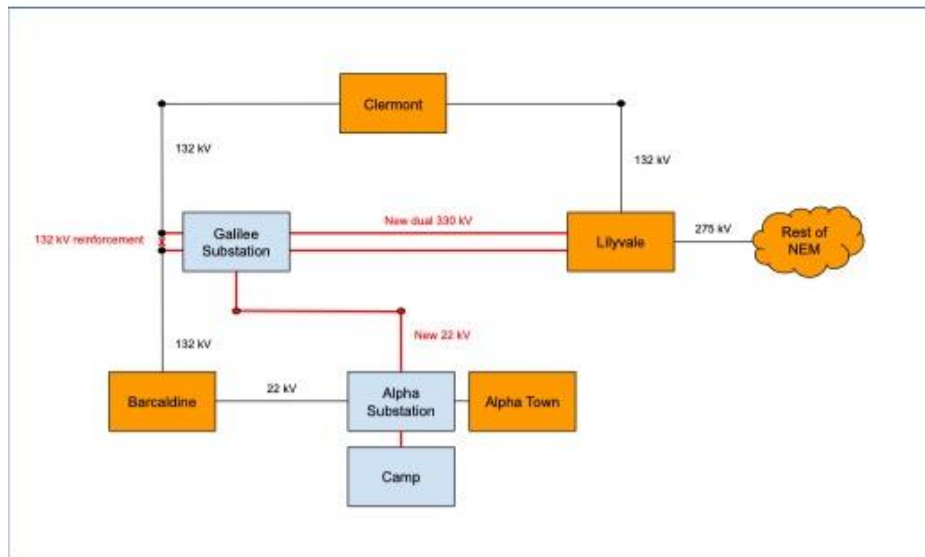
#### Power supply reliability to Alpha

One of the key objectives in developing the Project is to improve reliability of power in Queensland. Waratah Coal agrees that Alpha, more so than any community, should benefit from improved reliability of power supply.

Arche Energy has completed a report setting out a proposed augmentation of the distribution system that will improve reliability of supply and increase available capacity in Alpha (**Attachment 2**). The augmentations will also improve reliability of supply to Barcardine and communities connected to the Barcardine system including Clermont, Longreach and Blackall.

Waratah Coal proposes a new sub-transmission connection (e.g. 66 kV or 22 kV) between the power station substation (Galilee Substation), which will be connected to the Powerlink transmission system with two new 330 kV feeders, and a new 22 kV zone substation at Alpha. Waratah Coal also proposes a cut into the existing Clermont to Barcardine 132 kV feeder at the Galilee Substation to allow access to the transmission system at the Galilee Substation (thereby providing three paths of supply between the Powerlink System and Galilee Basin communities).

Waratah Coal will work with Ergon and other stakeholders to develop these connections.



*Figure 3: Waratah Coal's proposed connection and augmentation concept*

The proposed distribution system augmentation scope (detailed above) represents a substantial financial investment, and will bring substantial benefits to the local community.

Waratah Coal will continue to work with Ergon to ensure that the Project has an overall positive impact on the reliability and availability of power supply to the local community. If these connections are to proceed, Waratah Coal's intention is that they would proceed as soon as possible so as to provide construction power and power to the camp as construction commences.

If the augmentation of supply to Alpha is not achievable prior to the construction camp commencing operation, Waratah Coal will ensure that the power demand from the construction camp does not have a negative impact on the reliability of supply to Alpha. This may be achieved through the use of dedicated diesel generators or other temporary solutions.

### Provision of External Infrastructure

#### (a) Water

The proposed mine and power station are inextricably linked in that the power station relies upon the coal from the mine and the dewatering process that is part of the mine development. Should the mine not proceed the power station project would also not proceed. Accordingly, the commencement of mining activities will pre-date the operation of the power station which will allow for the provision of water and coal.

(b) Airport

The use of an airport is required for Fly-In and Fly-Out workforce in the construction phase of the project. Typical FIFO Aircrafts in Queensland are approximately 100 seats (eg. Fokker 100, Dash8-Q400, ATR-72, Embraer E-190) and as the information request acknowledges the existing Alpha Airport is not designed for the size of aircraft proposed. The requirement to safely transport works to and from Alpha (and the project site) has been considered and addressed in the attached Social Impact Assessment.

There are two options currently being explored by the applicant;

*Option 1 – Upgrade existing Airport*

We have attached preliminary concept designs which illustrate the ability for the existing airport to be upgraded to accommodate larger aircraft and offer terminal and carpark facilities consistent with a regional commercial airfield (**Attachment 3**). The applicant has entered into discussions with an entity to design, construct and operate this airport and a more detailed feasibility assessment is being undertaken.

*Option 2 – Utilise Existing Regional Airport*

Either as an initial option whilst Option 1 is completed or as an alternative to Option 1, it may be possible to utilise Emerald Airport as a base for the FIFO Operations given the ability to use existing services to augment dedicated FIFO services. Buses will be provided to transport workers from Emerald to Alpha (2 hours approx).

The Infrastructure Agreement with Council will include the need for the applicant to finalise a FIFO Strategy and agree that the costs of providing either Option 1 or 2 would not have any cost implications to Council.

(c) Accommodation

The proposed construction workforce and operation workforce for the power station and the associated coal mine would be largely sourced from outside the region and cannot be accommodated within the existing housing stock in Alpha and Jericho.

- Construction

The impact on the proposed construction workforce has been addressed in detail in the attached Social Impact Assessment. A workforce accommodation village would be required catering for approximately 530 workers for phase 1 and 560 for Phase 2 (based on Scenario C1 in the Social Impact Assessment Report (Section 6.1.1)). An existing approval for an accommodation village in Alpha would provide a total of approximately 660 beds. This facility along with the use of existing vacant housing stock, existing vacant land and the ability to develop some additional land will accommodate the anticipated demand for the Power Station Construction and the initial stage of the open cut coal mine. It should be noted that the existing accommodation village masterplan is scalable and changeable and can be modified at the detailed design stage to ensure that the room configurations meet the required demand. The requirement for the applicant to enter into an arrangement with the proponent of the accommodation village to have suitable accommodation available prior to the commencement of construction will form part of the proposed conditions of approval and the infrastructure agreement with Council.

- Operation

The operation of the Power Station and the open cut mine will require a permanent workforce of around 180 (90 for the power station and 90 for the open cut mine). The first stages of the open cut coal mine will be to supply the Power Station with the further stages of the mine to be underground commencing after 2028, which have not been considered within the scope of this application.

The Social Impact Assessment has assumed that an additional 45 houses would be required increasing to 67 across Alpha and Jericho. The Social Impact Management Plan which has been prepared as part of the Social Impact Assessment includes Actions required to be completed by the applicant to manage the future impacts on housing supply. One of the recommendations of the report is a future detailed Housing Management Strategy which would assess the requirements in detail prior to construction commencing.

(d) Infrastructure

- Water Supply

We have undertaken discussions with the relevant Council Officers to understand the current water supply and the likely future requirements to augment this supply to meet the demand resulting indirectly from the proposed power station and open cut mine. The power station and open cut mine do not require town water as water will be available from the mine dewatering process. The demand for town water would be a consequence of increased accommodation demand and indirectly the increase in the number of people within the catchment.

Currently the town is serviced by bore water which, we understand, has adequate future capacity. The existing treatment plant runs at 17l/sec and plans are to duplicate to 34l/sec.

We understand that The Council is currently investigating a State Government loan (not grant) to replace the SCADA/telemetry that will have the capacity to control a duplicate system. This system would be adequate to cater for increased demand. Existing trunk infrastructure may be required to be augmented to service the proposed accommodation village. This would form part of the conditions of approval for the accommodation village.

- Sewer

The township of Alpha currently does not have a sewerage network or a sewage treatment plant. Waratah Coal will enter into an infrastructure agreement with Barcardine Regional Council to either install or provide an agreed contribution amount towards a new treatment plant.

## 2. Rural Zone Code

Council's Information Request specifically requests further details relating to Overall Outcome 4 of the Rural Zone Code. The table below includes the points raised within Overall Outcome 4 of the relevant response.

<i>(4) Within the Rural "Zone", "development":</i>	Response
<i>(a) maintains the environment, including soil, air and water, compatible with healthy natural systems and ensures public health and safety;</i>	Detailed Investigations have been undertaken by the applicant investigating and addressing the potential impacts of the use on the surrounding natural environment. This includes Air Quality Assessments, Stormwater Management Planning, Dust Mitigation Strategies and Rehabilitation measures. The subject site has been selected as it requires no clearing of Remnant Vegetation and will not impact on existing natural watercourses.
<i>(b) protects Good Quality Agricultural Land (GQAL) from fragmentation, alienation or encroachment of incompatible land "uses" in accordance with State Planning Policy 1/92 – Development and Conservation of Agricultural Land;</i>	The land proposed for the Power Station is not considered Good Quality Agricultural Land. It is currently used for low intensity grazing.
<i>(c) is located, designed and operated in a manner that protects and enhances the predominant rural scale, intensity, form and character;</i>	The subject site is over 30km from major roads and the nearest township. There are no dwellings within proximity of the power station and a noise assessment has confirmed that no surrounding dwellings will be impacted.
<i>(d) maintains the rural amenity;</i>	The use of rural land for mining and other ancillary uses is not considered to be unreasonable expected. It is appropriate to locate these uses in rural areas with a low population density. The proposed use will not significantly impact the rural amenity of the Barcaldine Region.
<i>(e) does not prejudice or impact adversely on other "uses" including those within other "Zones";</i>	The use is located in an area which will not impact or prejudice other uses.
<i>(f) does not prejudice extractive or mining resources;</i>	The use will co-exist with the surrounding proposed mining activities.
<i>(g) has an appropriately designed access to the road network, and traffic generated by the development does not impact adversely on the local road network;</i>	A full traffic impact assessment has been completed. This report concludes that with an appropriate intersection upgrade and local road upgrade, the use will operate safely.
<i>(h) protects areas and sites of conservation importance,</i>	No parts of the MCU area are

<i>including cultural and high landscape values;</i>	identified as having particular conservation importance or character value.
<i>(i) protects and maintains the integrity of the Lake Eyre Basin;</i>	A full stormwater management plan has been prepared. This report demonstrates that the use will not impact on the quality of the receiving waters.
<i>(j) is undertaken in an orderly and logical sequence to achieve an efficient provision of infrastructure;</i>	The proposed use will significantly impact on the infrastructure in the Barcaldine Region, specifically around Alpha and Jericho. Preliminary Investigations into the impacts on this infrastructure have been undertaken and recommendations have been made for this infrastructure to be augmented as required. This will be at the full costs of the applicant and would form part of an infrastructure agreement with Barcaldine Regional Council. A Draft of this agreement has been prepared and discussed with Council.
<i>(k) is located and designed in ways that minimise the need for flood, bushfire and landslide mitigation, and to protect people and premises from such natural events;</i>	The Power Station has been located in an area which is not prone to flooding, bushfire and landslides.
<i>(l) has water supply, stormwater disposal, sustainable effluent and waste disposal and power, to appropriate standards, adequate for the “use”; and</i>	The application includes detailed reports on water provision (through the dewatering of the mine) as well as stormwater disposal and on-site treatment of wastewater. The Power station will not directly impact on any of the Barcaldine Regional Council services.
<i>(m) does not impact adversely on infrastructure</i>	The proposed power station will indirectly impact on the infrastructure in the town of Alpha. This is discussed in this letter and the attached Social Impact Assessment. The Social Impact Assessment includes Management strategies to address these impacts and these strategies will form part of an infrastructure agreement with the Council.

In summary, it is considered that the proposed use does not conflict with the Overall Outcomes of the Rural Zone Code.

### **3. State Controlled Infrastructure**

An updated Traffic Impact Assessment has been prepared and is attached to this Information Request Response (**Attachment 4**). We have addressed below the particular issues raised in the Information Request.



(a) Growth Rates for State Controlled Roads

Section 3.3 of the Traffic Impact Assessment report has been updated to include individual growth rates of each road section individually as requested.

(b) Pavement Impact Assessment

Unfortunately, the project will not be in a position to select the optimal emissions reduction technology until substantial design, optimisation and commercial negotiations have been completed. Prematurely locking into a technology during the concept phase will needlessly constrain the project's cost and emissions performance.

Waratah Coal would also like to explore better use of rail freight to further reduce reliance on the road network and minimise pavement impact.

To lock in a pavement impact contribution at this stage would be unfair to either the State or the Project and would result in sub-optimal outcomes for both the project and the road network.

We suggest that the requirement to undertake a pavement impact assessment and enter into an agreement with DTMR prior to construction of the power station commencing would be a reasonable condition. Waratah Coal is willing to enter into a binding agreement with DTMR to achieve this outcome.

(c) RMP References

The references to a Road-Use Management Plan have been removed from this report as it is not considered relevant or necessary given the extent of impact on the road network.

(d) Storage Lengths/Rail Crossing

Additional Information was sought from Queensland Rail regarding indicative closure durations at the Saltbush Road crossing. This information has been incorporated into the intersection assessment to determine the expected queuing during closures at peak times.

(e) Intersection Modelling

The Saltbush Road/Capricorn Highway Intersection has been modelled as part of the revised report and the intersection design has been amended accordingly. The SIDRA Assessment is included as Appendix H of the Traffic Report. SIDRA files are available to DTMR and will be transmitted electronically.

(f) Traffic forecasts

The traffic forecast was based upon an estimate of the resources required for each of the phases of construction. The original profile is set out below. The profile was provided as a typical day during the peak of construction.

A total of 106 vehicle movements per day were forecast, of which 48 are expected to be articulated and 58 are rigid. Of the 106 movements, 54 are local movements between site and Alpha (predominantly rigid trucks) and 52 movements are from further afield (Gladstone, Brisbane, interstate) of these, 81% are forecast to be articulated semi-trailers or larger.

Table 1 - Traffic forecast - typical day during the peak of construction

Project Phase	Vehicle Type	Origin/ Destination					
		Alpha	Gladstone	Mackay	Brisbane	Northern Territory	Southern States
Construction (2021 – 2023)	Rigid	48	2	2	2	2	2
	Semi-Trailer	2	6	2	2	2	2
	B-Double	2	6	2	2	2	2
	Oversized	2	6	2	2	2	2
	<b>Sub-Total</b>	<b>54</b>	<b>20</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>
Operations (2023 – 2076)	Rigid	2	2	2	2	2	2
	Semi-Trailer	2	8	2	2	2	2
	B-Double	2	2	2	2	2	2
	Oversized	2	2	2	2	2	2
	<b>Sub-Total</b>	<b>8</b>	<b>14</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>
Option 1 FGD (2023 – 2076)	Road Train (Type 1)	-	12	-	-	-	-
	Semi-Trailer	-	16	-	-	-	-
Option 2 FGD (2023 – 2076)	Road Train (Type 1)	-	22	-	-	-	-
	Semi-Trailer	-	28	-	-	-	-
Option 3 FGD (2023 – 2076)	Semi-Trailer	26	-	-	-	-	-

Waratah Coal anticipates that the bulk of the materials coming to site would come through the Port of Gladstone and that a smaller number of deliveries would be made from alternative ports such as the Port of Brisbane or be trucked from interstate. The fleet of vehicles delivering materials to site is expected to be a mix of Semi-trailers, B-Doubles, B-Triples, Type 1 Road Trains and oversized/over mass vehicles.

The category labelled ‘Oversized’ should have been labelled ‘Other (including B-Triple, Type 1 Road Trains and oversize/over mass)’ in the original report and has been subsequently corrected in the amended Traffic Impact Assessment Report attached.

The 48 rigid vehicles travelling between Alpha and the site on a daily basis are work vehicles, couriers and other general service vehicles that will move between Alpha and the site conveying smaller items or equipment (e.g. welding trucks, courier vans, catering trucks, flatbed trucks delivering small items equipment such as work platforms, fibre optic work trucks, small cranes).

(g) Intersection Modelling and Design

A SIDRA Analysis has been prepared for the Capricorn Highway/Saltbush Road intersection which includes an assumption on expected queue lengths required for times when a train is travelling over the open level crossing.

The intersection has been redesigned to accommodate Type 2 (53.5 m) Road Trains.

(h) Risk Assessment to include train at Crossing

The Risk Assessment (Section 9) has been updated to include the risks and mitigation measures of traffic queuing onto the Capricorn Highway as a Train passes the level crossing. The intersection design has been modified accordingly.

- (i) Risk Assessment to consider Queuing onto Highway

The Risk Assessment (Section 9) has been updated to include the risks and mitigation measures of traffic queuing onto the Capricorn Highway as a Train passes the level crossing. The intersection design has been modified accordingly.

- (j) ALCAM Assessment requires Safety Upgrades at Level Crossing

Advice provided within BRC's Information Request indicated that QR had completed an ALCAM assessment for the Saltbush Road rail level crossing located adjacent to the Capricorn Highway / Saltbush Road intersection on the basis of the forecast traffic volumes provided in GTA's Transport Impact Assessment (Revision B, dated 16/10/2019). QR indicated that the rail 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.

Additional advice provided by TMR (email correspondence dated 29/05/20) indicated that the design and separation of the rail level crossing with the Capricorn Highway / Saltbush Road intersection should consider the requirements set out within *AS1742.7:2016 Manual of Uniform Traffic Control Devices, Part 7: Railway*.

The concept design of the Capricorn Highway / Saltbush Road intersection has considered the requirements set out within *AS1742.7:2016 Part 7* and the expected 95th percentile queue lengths as calculated using SIDRA Intersection. The concept design is provided at Appendix E, in particular Sheet 3 which details the rail crossing treatments.

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

Figure 4 sets out the proposed local road upgrades and closures associated with the mine and power station.

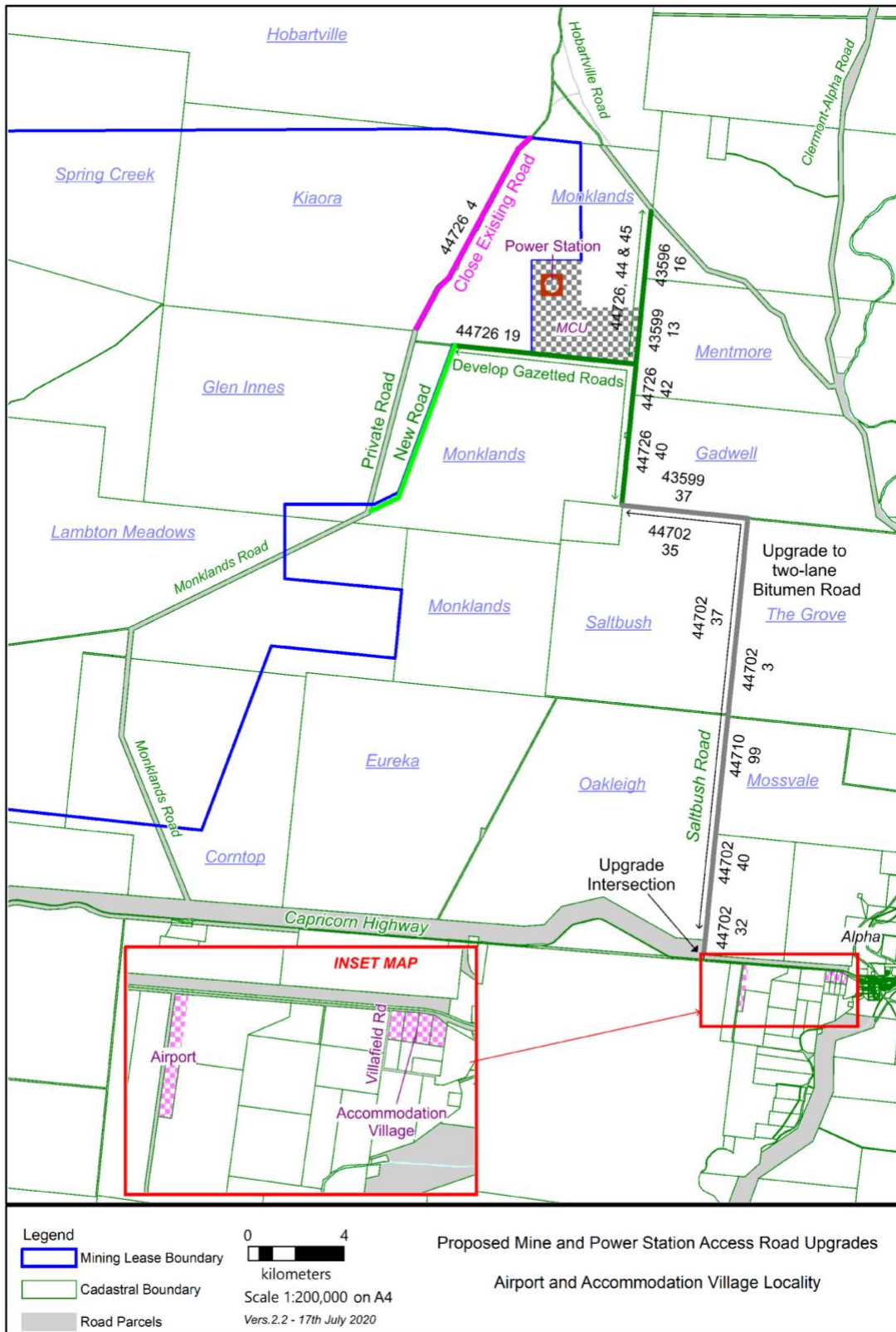


Figure 4 - Proposed road closures and upgrades

Saltbush Road (also known as Eureka Road in some databases) and un-named road reserves running between Saltbush Road and Horbartville Road will be upgraded into a two lane, all weather sealed road. The upgrade of Saltbush Road will extend from the Capricorn Highway in the South (at approximately 23.64°S, 146.57°E) to Horbartville Road in the North (at approximately 23.36°S, 146.55°E).

Monklands Road will be deviated to the east from a point at approximately 23.47°S, 146.43°E and will run north-north-east until it meets an un-named road reserve at approximately 23.42°S, 146.47°E. Monklands Road will be closed north of the deviation but will be maintained as a private road.

The un-named road reserve running between Monklands Road (at approximately 23.41°S, 146.45°E) and the Eureka Road extension (at approximately 23.42°S, 146.54°E) will also be upgraded to a two lane, all weather, sealed road. This road will provide access to the mine and power station and provide a link from the northern end of Monklands Road up to Horbartville Road in the North.

All road upgrades will meet Council's technical requirements. The roads will be classified as Class 3 Rural Arterial Road under the Barcaldine Road Classification Policy I009 (Appendix A). In the event that Council does not have existing, published technical standards, Austroads standards will be used. The roads, culverts and intersection designs will be suitable for Type 2 Road Trains. The designs will be certified by a Registered Professional Engineer of Queensland (RPEQ) and will have a flood immunity of at least Q100.

The road upgrades will commence at the start of the project as enabling infrastructure. The roads will be designed and constructed with sufficient pavement strength to meet the anticipated traffic flows over the life of the project. We propose that the maintenance of the new road network be addressed in the proposed infrastructure agreement.

The closure of Monklands Road is triggered by the mine rather than the power station; nevertheless, we appreciate that Council must consider the impacts of the combined projects. The closure will have the following impacts:

1. Transit times between the northern section of Monklands Road (e.g. Monklands Station) and Alpha (for travel into Alpha and towards Emerald) are expected to improve due to the new, higher speed sealed roads providing superior, all weather access.
2. Transit times between the northern section of Monklands Road (e.g. Monklands Station) and the Capricorn Highway intersection at Monklands Road (for travel towards Barcaldine) remains unchanged.
3. Transit times between the northern section of Monklands Road (e.g. Monklands Station) and the Alpha-Clermont Road (for travel towards Clermont) are expected to improve due to the sealed, all weather, higher speed new connection to Hobartville Road.
4. Transit times between the middle and southern section of Monklands Road (e.g. areas south of Bimblebox Nature Refuge) and the existing Monklands Road and Horbartville Road intersection (for travel northwards on Horbartville Road) will increase marginally due to the additional distance. The transit distance will increase from approximately 21 km to 29 km, of which approximately 21.5 km will be new, sealed higher speed road,
5. Transit times from Horbartville Road (north and west of the Saltbush Road extension) into Alpha (for travel into Alpha and towards Emerald) are expected

to improve due to the sealed, all weather, higher speed new connection between Hobartville Road and the Capricorn Highway.

## **5. Parking**

Vehicle Parking, access roads and manoeuvring areas are identified in the Galilee Power Station Concept Design Plant Plan (Drawing 144-2-GA-DWG-0003 Rev C) (**Attachment 5**).

A designated vehicular access road services the Administration buildings, with a total of 176 carpark spaces being available for Operations/Maintenance/Administration personnel. These carpark spaces are located in the designated large carpark (Item 35), and to the west of the Admin Building (Item 33) and Amenities (Item 34).

During Operations, personnel are expected to live in town, and this carparking will be available to them for their commute.

Two designated heavy haulage access roads are included in the plan:

- one road entering the site from the western side to access the coal stockpile infrastructure, and
- one road entering the site from the southern side to access the Ash Silo / Pug Mill area.

Ash trucks will have dedicated truck loading facilities (identified as Item 26 on the drawing), and a vehicular turnaround facility. A significant onsite access road network is identified to service the various areas within the plant.

During construction, buses will typically transport construction personnel to/from site from the Construction camp. Construction vehicles will have multiple areas/opportunities for parking during the plant construction phase, including in:

- “Laydown Area South” (Item 14 - approx. 270m x 135m), or on the adjacent vacant land to the east and south
- “Laydown Area North” (Item 13 – approx. 360m x 120m), or on the adjacent vacant land to the east
- Temporarily designated Parking laybys alongside the haul roads (if needed)

## **6. Social Impact Assessment**

A Social Impact Assessment report has been prepared addressing the potential impacts from the proposed power station and open cut coal mine on the surrounding communities. This includes the cumulative impacts from both projects from FIFO and permanent operational staff and makes recommendations and action plans for the applicant to undertake with the Council as part of an Infrastructure Agreement.

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

We note DNRMEs advice relating to water supply for the power station and have discussed this concern directly with the relevant officer. The proposed power station and mine are intrinsically linked as the power station relies not only on water from the dewatering process but the coal reserves from the mine. The power station would not be developed without the adjoining mine infrastructure due to this reliance. The power

station will not impact on any other source for water during the construction, operation and decommissioning stages.

## **8. Alpha Airport**

The Alpha Airport will be upgraded as part of the combined mine and power station project. We propose that the upgrade of the airport form part of the scope of the proposed Infrastructure Agreement. The detail of the scope for the airport upgrade will be agreed between Council and a preliminary concept design is attached demonstrating how the airport upgrade could be achieved. We note that the proposal plan shows this airport on private land. Preliminary discussions have been held with the landowner and a letter of support has been provided (**Attachment 6**).

## **9. Infrastructure Agreement**

Waratah Coal agrees that an infrastructure agreement is an appropriate mechanism to deal with the necessary infrastructure upgrades. Waratah Coal proposes that the agreement be negotiated with Council as the project develops. The outline scope for the agreement would be:

1. Upgrades to local roads,
2. Upgrades to the Alpha Airport,
3. Upgrades to sewage treatment plant to treat sewage from construction site;
4. Construction of sub-transmission infrastructure to augment power supply to the town of Alpha, and
5. Contribution towards community infrastructure upgrades.

A draft of this agreement has been previously provided to Council for consideration and a copy of this draft is attached for your record. The applicant will continue to work with Council to finalise the terms of this agreement.

## **FURTHER ADVICE LETTER DATED 31 AUGUST 2020**

### **1. Local Roads – Project**

- (a) The road descriptions have been updated as per Figure 5 above.
- (b) Preliminary investigations suggest that none of the local access roads are subject to significant flooding. Given that a power station would be considered essential infrastructure we will apply a flood immunity of, at least, Q100. The final levels will be addressed at the detailed design stage.
- (c) All road upgrades will meet Council's technical requirements. The roads will be classified as Class 3 Rural Arterial Road under the Barcaldine Road Classification Policy I009 (Appendix A). In the event that Council does not have existing, published technical standards, Austroads standards will be used. The roads, culverts and intersection designs will be suitable for Type 2 Road Trains. The designs will be certified by a Registered Professional Engineer of Queensland (RPEQ).
- (d) A maintenance agreement will be entered into with Council as part of the Infrastructure Agreement. It is anticipated that a total maintenance cost for Saltbush Road will be calculated over a nominal period of 50 Years and this will be paid to Council as an annual roads contribution.

## **2. Local Roads – Accommodation**

Council's advice is noted.

## **3. State Controlled Road Infrastructure**

The advice from DTMR and Queensland Rail is noted. These items have been addressed in the attached, updated, Traffic Impact Assessment Report (Version D).

## **4. Airport Upgrade**

As noted above in the Information Request Response the intent is to upgrade Alpha Airport as the first option. Supplementary to this, if an alternative airport is required, then Emerald would be the preferred location as it can accommodate the larger planes required for the construction workforce without upgrade.

## **5. Accommodation facility**

It is not proposed to create any additional housing at Aramac and Muttaborra. The Social Impact Assessment states that workers may come from these locations, and that Waratah Coal would facilitate employment from these communities; however, these employees would be existing residents engaged on a BIBO basis. The only accommodation directly contemplated for the project would be the proposed accommodation facility at Alpha.

## **6. Permanent Power Connection to Alpha**

A detailed memo is attached which explains the proposed method for providing power to Alpha from the proposed power station. The construction of the infrastructure will form part of the Infrastructure Agreement.

Waratah Coal intends to construct this infrastructure as soon as possible in order to provide secure power for construction and to the camp.

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

Noted. There will be no demand on Council's water supply for the proposed use.

## **8. Construction Sewage**

We understand that Council is currently committed to an upgrade of the current sewage treatment plant at Barcaldine. An estimate of sewage production during the construction stage has been undertaken and is included as **Attachment 7**. The sewage production estimate peaks at 22 kl/day in Quarter 12 and again in Quarter 28 of the project.



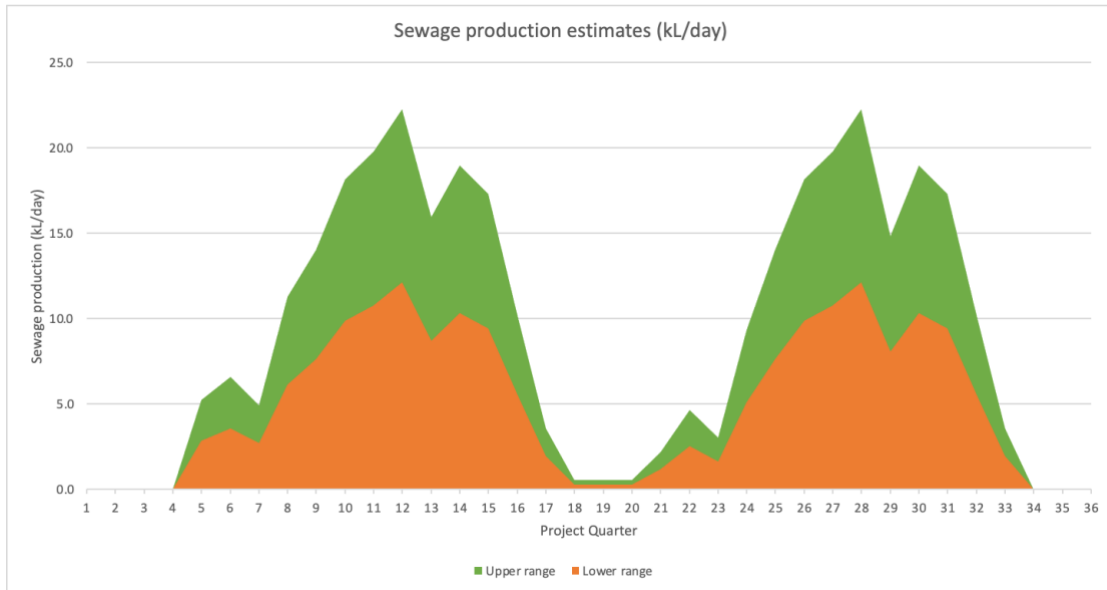


Figure 3: Construction sewage production estimates

## 9. Construction and Operational Waste

An estimate of waste production requiring disposal to landfill has been made and is included as **Attachment 8**. The estimate predicts that the construction phase will produce 1,373 tonnes of landfill waste consisting of general office and workshop waste, food and meal waste and incorrectly classified recyclable material.

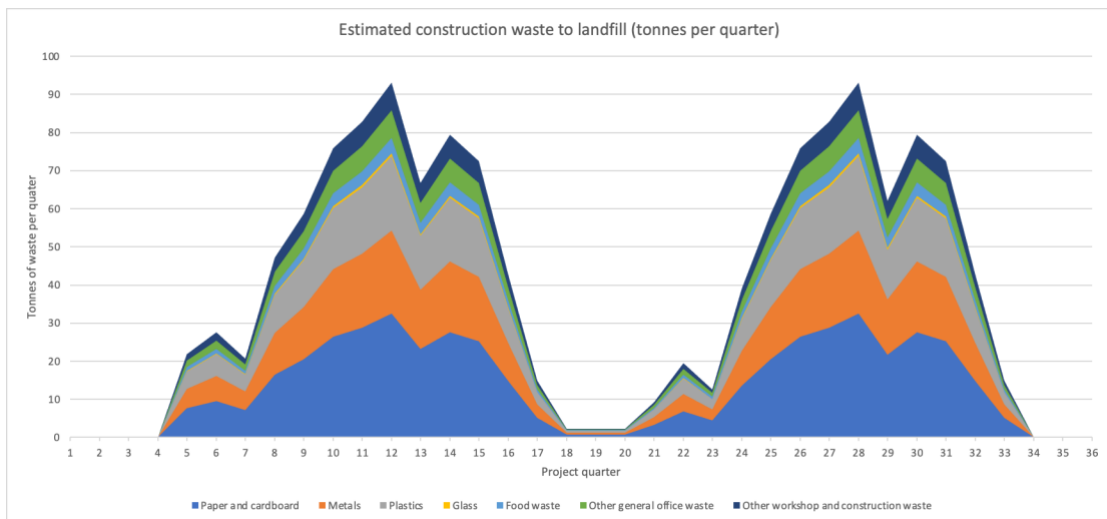


Figure 6: Estimated construction waste to landfill by waste type and by quarter

The estimate predicts that the operational phase will produce 48 tonnes per annum of waste requiring disposal to landfill. This waste consists of general office and workshop waste, food and meal waste and incorrectly classified recyclable material.

Table 2: Operations phase estimated annual landfill demand

Operational phase	Tonnes per annum
Paper and cardboard	14.4
Metals	7.7
Plastics	8.7

<b>Glass</b>	0.6
<b>Food waste</b>	3.7
<b>Other general office waste</b>	6.5
<b>Other workshop and maintenance waste</b>	6.5
<b>Total</b>	48.1

#### 10. Alpha Town Water

Following discussions with Council Officers it is now agreed that the proposed Power Station will have no direct impact on the town water. Any upgrades required will be addressed as part of the Accommodation application and/or the application for the Alpha Airport upgrade.

#### 11. Alpha Town Sewerage System

Following discussions with Council Officers it is now agreed that the proposed Power Station will have no direct impact on the town sewerage system other than as discussed in point 8 above. Any upgrades required will be addressed as part of the Accommodation application and/or the application for the Alpha Airport upgrade.

#### 12. Community Infrastructure

Waratah Coal acknowledges and accepts that the proposed use will have a direct and indirect impact on community infrastructure. Accordingly, it would make a financial contribution as part of the Infrastructure Agreement towards community projects either directly or indirectly. It is suggested that a further meeting be proposed to discuss existing projects that have been identified by the Council as important for the needs of the Alpha community.

#### 13. Obligations

This is noted.

#### 14. Development Application and Timing

The applicant accepts that the Infrastructure Agreement would be finalised prior to Council issuing a development permit for the application. This agreement would detail the agreed contributions and works and the relevant timing.

We look forward to progressing this application further with Council. Please do not hesitate to contact the undersigned to discuss any details on 0400 585 937.

Yours faithfully



**Cameron Feltham**  
Director

**Attachments:**

- 1: Social Impact Assessment Report, Square Peg Consulting.
- 2: Alpha Town Reinforcement Report, Arche Energy.
- 3: Alpha airport upgrade concept design, Phronis Consulting.
- 4: Transport Impact Assessment (Revision D), GTA Consultants.
- 5: Galilee Power Station Concept Design Plant Plan
- 6: Letter of Support, Proposed Airport Construction.
- 7: Construction Sewage Production Estimate.
- 8: Landfill Demand Estimate.