MARTINS CREEK QUARRY EXPANSION SUBMISSION July 2021:

The time allowed for public submission to be lodged is brief to allow for effective and considered study of the extremely large volume of documents the proponent is required to and has submitted for their application.

I challenge the level of effort the proponent has afforded to engaging with the wider community and businesses and property owners along or near the haul routes. Being located along the haul route on Tocal Road, we received very little advice or information regarding the martins Creek Quarry expansion. While we did receive one update from the proponent, information was provided from the Paterson community groups and friends within the various groups opposed to the Quarry expansion. At no time were we alerted by the proponent (voluntarily) to any meetings organised by the proponent as part of their responsibility as part of the application process. Once alerted to the Quarry issues, we did join the various communication processes offered by the groups including NSW Department of Planning and Environment to keep informed. We have not been directly approached to discuss the proposal by any representative of the proponent, however once we attended the Social Collaborative Assessment Forum (CAF) in February 2021 organised by the proponent, we were provided, in March 2021, opportunity to complete a Social Impact Assessment (SIA) survey for the Martins Creek project (delivered electronically). We did not receive the presentation from the Social Collaborative Assessment Forum (CAF) held in February 2021 until May 2021 (of which not all the information presented at the meeting was provided). This is the only interaction we have been afforded throughout this process.

None the less I make the following comments and objections.

The proponent implies that the current state of quarry product resources is limited in the Hunter region and that the Martins Creek Quarry is of significant importance. The proponent seems to have changed the critical need of expanding Martins Creek Quarry output, claiming in their original application, the quarry material is critical for the Central Coast and Sydney regions growth and construction needs. The revised application now claims the quarry to be a significant state project.

I believe the current number of quarries in the region, have enough capacity to provide quarry products, in particular road base material necessary for the construction of major road construction projects. The major quarries in the region include Brandy Hill, Seaham, Karuah, Teralba, and Allendale all sited directly near major road networks (Highways) with little or no impact on urban and minor residential road networks, in particular small rural village roadways such as in Paterson Village. Martins Creek has by far the greatest impact on public and community amenity because of significant trucking volume increases on a road network unable to and not designed for adapting to additional large trucking volumes.

Additionally, the submission estimates 20,000 tonnes each year of blending agents will be brought to the quarry via powder tankers for use in the pugmill, this equates to an additional 606 laden semi-trailer trucks operating on the roads (1,212 total trips) an additional 25 large truck trips travelling through the Villages of Paterson and martins Creek each week.

There are a number of hard rock quarries in the Hunter area quite capable of satisfying demand, adding Martins Creek Quarry as a high-volume quarry material supplier will stress to environmental and social impact on an already overextended infrastructure network system with very little to no community improvement or gain.

The additional constant volume of trucking movements will ensure increased noise levels, increased pedestrian hazard, increased road deterioration and pavement failures, increased

traffic interactions producing higher likelihood of traffic incidents and increased social amenity disturbance.

Report by SMEC providing an assessment of the effect additional trucking will have on the existing road pavement (noted that the assessment was conducted in 2018 condition and not present day) suggests the pavements of the proposed haul route located in the Dungog Local Government Area (LGA) will require a higher amount of maintenance than the section of road pavement located in the Maitland Local Government Area (LGA). While I, in principle, agree with the report outcome identifying a large road capability difference across the two LGAs and hence suggesting the road conditions will need a variety of additional and significant scheduled maintenance, I would suggest the reports' conclusion is plainly contributable to the age and construction of the various roads along the haul route. A major section of the Haul Route in the Maitland LGA is along Flat Road which is the most recently constructed section of road along the entire haul route and was constructed to strict RMS design requirements. This enables this section of the haul route to provide capacity to structurally withstand the increased axle loads and frequency imposed by the additional proposed heavy trucking. On the other hand, the pavement in the section of the haul route primarily within the Dungog LGA (and to a lesser extent the outlying Maitland LGA) is constructed to a lower standard that belonging to rural standards of road construction. It is therefore sensible to predict this section of the haul route in particular leading into, through and out of the Paterson Village and the greater part of Tocal Road will fail and deteriorate at a much greater rate with the increased wheel loading and frequency delivered by the high trucking volumes.

The early and continual failure of these minor rural roads will require consistent maintenance more than is ordinarily scheduled by Councils to maintain a safe road network. This not only add significant cost resulting from direct road maintenance but creates indirect costs through constant disruption to daily commuter traffic, increased travel times during the more frequent road works, adds to an increased road traffic safety risk and diverts Councils resources away from other community maintenance commitments. It is noted from the proponent's submission that "Other local roads may be used as required to service local projects on a campaign basis". How will this be delineated and managed from the haulage limits proposed?

It is claimed by the proponent from a commissioned report considering impact of the proposal on areas of public and private infrastructure resulting from the increase of continual trucking such as, Paterson Village, or the Gostwick Bridge will not be detrimentally damaged or adversely affected. Paterson Village was an early settlement in colonial NSW and contains many early and important buildings which will inevitably suffer damage from the proposed 25 years of continual and sustained vibration of large trucks (full and empty) passing at proximity on a road structure not designed or maintained to mitigate such damaging vibrational impacts. How is this a benefit to the local community and residents who will need to increase maintenance expenditure of their homes and other structures.

Claims the changes at the intersection and the King Street and Duke Street intersection within the village of Paterson are improvements only relate to improving the function of this intersection to accommodate the large trucks that will be operating along the route. The intersection provides no benefit to the Village only serves to divide the main street. Turning right into King Street from Duke Street (currently functioning) will be disrupted and contribute to unsafe intersection. In addition, the possibility of several trucks queuing at the rail gates creates obstructions from several business affected along the short stretch of road from the intersection to the rail gates.

Upgrades to the road infrastructure in the village of Paterson are not “improvements” as the proponent claims but rather a necessity of the quarry expansion and beneficial only to the heavy transport operations. The current village road network is conducive to the village amenity and road use. No benefit to the residents, visitors, or business operators.

The proponent states in their application that their preferred intersection ‘upgrade’ option is for raised concrete separation barriers, off street parking and a pedestrian crossing on King Street (presumably on the western end) to provide pedestrian linkage at the intersection. This, the proponent claims during the Traffic CAF meeting this option was “not desired”. This severely changes the amenity of the Village and would need substantial road safety design evaluation and does equate to acceptance of a large volume of heavy trucks travelling through Paterson. It does not also connect the either side of Duke Street, in fact there is still very much a risk of school children entering onto the road from the various school bus stops along Duke Street.

It is noted that the proponents’ submission does not include the proposed capital works to be implemented immediately rather to be constructed over a considered period, adding to the unsafe and disruptive operations imposed on the community. There does not seem to be a committed time frame to execute these works.

Surely the tranquillity of the village with large frequently passing trucks on single lane rural thoroughfare will be disrupted. This will have the effect of deterring visitors to the village areas, residents who will consider vacating the area and property valuations falling.

Other public structures such as the Gostwick Bridge built in 1928 has heritage significance as one of the few remaining representative examples of a steel Pratt truss. This bridge, with its timber platform and girders will be subject to repeated heavy axle loads from the large volume of trucks crossing it. It is assumed this will create a higher frequency of maintenance which it is assumed will be paid from government purse. On those occasions the Gostwick Bridge is maintained is it either completely closed or severely restricted which causes traffic to be diverted through Vacy Village. There is no mention of this by the proponent in their application. In addition, the bridge is in such a position that heavy and light vehicle interaction will inevitably cause conflict and prose large risks. The current “Code of Conduct” provided by the proponent does not identify the Gostwick bridge as part of the haulage route. It is noted that the Dungog Council in relation to bridges states “Existing timber and concrete structures built prior to 1976 are therefore likely to have design loads of 33.0t or less”.

The cumulative impact of Brandy Hill quarry expansion is not addressed. It is not good enough for the proponent to exclude this very important issue from the EIS. An informed assessment can’t be made.

If the Quarry was positioned adjacent to or have dedicated access to the greater road network such as highways and freeway designed with trucking as a necessity, the volume of trucking proposed would have a much lower impact as the operation of Martins Creek Quarry does in its present location. Adding a large volume of trucks competing with other local traffic along 28kilometres of single lane rural roads will create constrictions, frustrations, higher risks of property damage and the danger of traffic accidents resulting from higher incidents of truck/light vehicle interactions.

We access the proposed Haul Route at Tocal Road in an area that is designated at a speed of 100km/h at the bottom of a hill. The speed of empty trucks returning to and coming from the Quarry at 100km/h down grade at a peak frequency of 1 truck each 1.5 minutes has the potential for higher risk of interactions leading to accidents, at this speed potentially fatal. We

have experienced the speeds and unfettered volume of the Quarry trucks during the previous Quarry unlawful and unrestrained operations.

Consideration for alternative haulage routes while mentioned in the proponent's application were considered, there is no detail for not progressing these.

The proponent's application commits that as part of the quarry expansion major roads (the New England Highway) will be accessed via Flat Rd and Melbourne St, rather than Belmore Rd, Lorn as has been done for the current life of the Quarry. However, given that the Quarry expansion proposal includes supplying aggregate material to other business such as concrete plants and asphalt plants the reality is that most trucks in this instance to and from the quarry will be operated by independent contractors recovering materials for their own use who are not under the direction and control of the proponent's code of conduct or commitments. They are individual operators/contractors who will take whatever route suits them. The residents along the haul route cannot gain comfort from the proposals put by the proponent as it cannot guarantee control of the routes taken by other haulage operators.

The consequence of the cumulative effect of the expansion of both Brandy Hill and the Martins Creek quarries I believe is not fully disclosed or explored. This issue can only exacerbate the effect and negative issues resulting from an increase in large trucking operations combining along a heavily used section of single lane urban roadways.

It is acknowledged transporting coal throughout the Hunter Valley by road was and is a high-risk operation grossly affecting the safety and amenity for the public and small towns. Coal is now transported by train by-passing small towns and villages and expanded urban areas. The volume of the quarry material proposed to be transported on the inadequate local road network is in this instance no different.

Because the Quarry was developed as a source of rail ballast it is serviced by an existing rail network with direct access onto the main option is explored – a report commissioned for Buttai Gravel Pty Ltd (ownership of the proponent) titled "Rail Logistics Options for Martins Creek Quarry" was conducted by a company, Plateway Pty Ltd in 2015.

The report in states (among other things)

- "The current layout at Martins Creek is suitable for loading the ballast trains operated by ARTC in the Hunter Valley but is too short for the operation of longer trains and aggregate trains serving non railway markets. These would typically operate at up to 1000m in length".
- "The North Coast line, to which Martins Creek Quarry is connected, has sufficient network capacity to support the current and increased use of rail transport of ballast and aggregates from Martins Creek Quarry".
- "Were Martins Creek to be used to load aggregate for the general construction industry then evening and night time loading would be essential to produce a cost advantage for the rail logistics chain".
- "To enable a rail based logistics option to be competitive in the current market against the road based logistics chains associated with other sources of aggregates suitable for construction purposes, the market share and size would have to allow a throughput of over 1.2 million tonnes per annum".

The report does provide details of the operation of the existing rail capacity of Martins Creek Quarry, however the proponent states in their application they propose to extend the existing rail spur to accommodate longer trains which are typically 400 to 600m in length – a vast difference to the above report length of trains being typically 1,000m in length.

It would seem the proponent considers it is easier and far less expensive to develop the existing rail infrastructure to suit the Quarry into a functional rail operated delivery process. This is driven in part by economic, the proponents core business and access to road transport assets and the desire to sell a variety of Quarry products created at the Martins Creek Quarry.

The cost of road transport from the quarry some 28km to meet with major road networks (highways) traveling at abnormally lower road speeds (through Paterson at 20km/h, through Bolwarra at 60km/h and less, stopping at intersections, roundabouts, and lights) must calculate in additional cost to transport and deliver Quarry products to external customers, including the proponents own construction projects.

In addition, the proponent is suggesting the construction of a new access, including a bridge over the existing rail lines, multiple intersection reconstructions, carparking developments, sound proofing road corridors at the Quarry among others which must contribute a significant capital cost to the Quarry to provide a road transport option. This does not include a proposed road maintenance contribution cost to Maitland and Dungog Councils.

Surely the cost proposed to develop these works for the road transport option would be better served creating a more rial efficient option which takes the heavy truck numbers from 28km of rural roads and towns as currently proposed.

The report identifies emergency access to the Quarry stating “For instance, were NSW to be subjected to a major flooding event such as the 1955 flood, then the rail network may become the main source of supply for a large part of NSW until road rebuilding could occur. This situation could occur again, recently in the aftermath of the 2011 Christchurch earthquake in New Zealand, rail services were restored to the city several days earlier than alternative transport options became available and rail logistics played a major role in keeping the city supplied”.

It goes without saying that in times of national disasters such as those mentioned above governments of the day can and will intervene for the betterment of the community they serve. The communities within the affected areas of the Quarry would also be affected by such catastrophic events and would agree that materials necessary for the immediate recovery will need to be removed from the quarry in the best and quickest way possible. However, this is not a justification to operate the product delivery function from the Quarry by road for the next 25 years. The likelihood of a Christchurch style earthquake is considerably less than in New Zealand, floods are less frequent and infrastructure work to reduce the damage caused by flooding in very much advanced throughout the state.

Further the report notes that “The railway quarries have historically provided a 24 / 7 source of emergency materials for the rail network to repair tracks following derailments, floods and landslips. This function is of vital importance in timely restoration of rail services following natural disasters and removes significant traffic from the road network during these periods. Were the rail distribution of ballast and aggregate unavailable, it would potentially create an added source of community disruption in periods of civil emergency as the road network would have to be used to transport ballast and aggregate required to restore services” – the report seems to agree that road network system would create “added source of community disruption”.

The opportunity for the Martins Creek Quarry to operate a rail delivery system has been proven, with several other hard rock quarries operating in this manner – it can be done. The quarry is connected to a fully functioning rail network joined directly to major rail networks such as the Lower Hunter Freight Corridor and Northern Sydney Freight Corridor. The Lower

Hunter has a number of locations serviced by current rail networks that could be utilised as a stockpile and distribution centres in industrial areas. This could include consideration to establishing a dump and pug mill at a transport hub on land near major/arterial roads which could then be supplied by rail from Martins Creek.

Of concern with the proposed trucking operation is how real the proponent's claims of strict control and management it will have and exercise over a trucking fleet combined of the proponents own branded trucks and that of contractors. Most of the controls proposed to alleviate safety and risk issues presented by operating the truck fleet on narrow rural road networks seem to be administrative, that is relying on training, procedure, policy, shifting designs that lessen the threat of a hazard to an individual, typically targeting changing the behaviour of people rather than removing the actual hazard.

The application claims a capped maximum total quarry production of 1.1 Mtpa. The application states approximately 600,000tpa will be transported by rail. The application however states "Subject to market demands, Daracon may increase the amount transported by rail, on a campaign basis, within the 1.1 Mtpa of total quarry product". Assuming this to be the case, does this mean a corresponding reduction in road transport, and if so, how is this monitored and managed. If the proponent can adjust the volumes transported by rail (increased volume) why doe the application claim rail transport is not an option?

The proponent claims that the expansion will generate additional employment, anticipating that the revised project will employ additional labour to conduct operations and require 'supervisor, administration officer and safety officer roles'. I submit the greater proportion of employment roles are not sourced from or reside in the immediate areas of Martins Creek, Paterson, or Bolwarra.

The proponent's submission identifies much of the demand for quarry products (presumably manufactured at Martins Creek Quarry) is outside of both Maitland and Dungog LGA. This would seem to reduce any economic benefit to the area.

The next 4 year 'infrastructure pipeline' of $107B budget is mostly projects outside of the Hunter Region, again bring little to no benefits with the Hunter Region work spread over the next 5 years. The real economic beneficiaries are outside of the Hunter Region, namely Sydney. The proponent's submission highlights a critical need for quarry material, in particular competent aggregates for the growing Sydney market due to the depleting resources within the Sydney basin. Trucking materials from martins Creek into Sydney surely is a very costly and time-consuming exercise. Bulk transport to central hubs by rail and distributed by trucks to local destinations would be more cost efficient and safe.

The proponent's submission claims the expanded quarry operations will generate potential direct benefits of:

- Corporate taxes of $11.5 million in NPV terms for Australia, of which $3.7 million is attributed to NSW.
- Royalties, payroll tax and Council rates of $1.5 million in NPV terms.
- Net producer surplus attributed to NSW of $13.5 million in NPV terms.
- NSW worker benefits are $12.8 million in NPV terms.

Any economic value derived from the quarry operations, particularly in terms of taxes and royalties will not guarantee any derived benefit to the areas adversely affected by this expansion proposal.

There is no mention of the economic effect of the potential for Paterson Village land, housing and business valuations, investments, and financial opportunities to be negatively impacted because of the increase in heavy vehicle movement and noise lowering social amenity of a 25-year period.

The economic impact reports, 2022-2046 Average NSW wage ($ per annum) is $67,983 providing the basis of a calculating the NSW worker benefits. The ABS claims $91,104 ($ per annum) is the amount for the Average NSW wage. This significantly reduces the estimated NSW worker benefit from the reported value of $1,175,276 per annum to $759,096 per annum. Of interest this calculation is based on NSW worker benefit and does not necessarily convert to benefit of true local workers.

Interestingly, very few of the employees engaged by the quarry live in the local area. Similarly, a small proportion of truck drivers and other service providers are drawn form or are available in the immediate area.

Claims that the proponents' employees' jobs will be a significant risk should the quarry expansion not be given approval can at best relate to the direct employment of quarry employees. Apart from a few direct employees the remainder of the operating equipment that will be engaged should the expansion be approved are fully engaged in other work. I doubt the proponent is relying solely on the expansion of the quarry to satisfy procuring continued work in the civil construction industry. Project workers are generally itinerant and will gain employment with the successful contractor of any large local infrastructure project that the proponent does not procure.

Should the output from the quarry remain in accordance with the current approval (lower volumes) any claimed shortfall in supply of product to service new infrastructure projects would be taken up by the other quarries in the Lower Hunter region. The resultant increase in production from other quarries in the area would surely provide a similar economic benefit as that forecast from increasing the extraction of the Martins Creek Quarry.

Even though the NSW Government identifies infrastructure projects for the Hunter, it does not follow that the proponent will necessarily deliver such projects nor should it assume that the quarry would become either the sole source or any source of quarry product for these projects. There is no justification or evidence to support the declarations that Hunter infrastructure projects will likely increase demand more than the volume currently available. It is identified that that the Lower Hunter region has at least five major hard rock quarries considered to have the capacity to survive the demand for production of concrete/asphalt and high-quality road base and subbase materials for RMS applications.

Increasing extraction and manufacture of various quarry products and therefore the need for increased road truck transport to service infrastructure projects in Sydney and elsewhere in the state can be sourced (one assumes at a cheaper rate) from quarries closer to those areas. The 2016 annual report of Boral Limited noted in relation to its quarrying operations: - "External sales in NSW continue to be impacted by an abundance of excavated materials from tunnel projects in the market".

Recycling of materials and treatment of such products to produce compliant road base materials, manufactured sands and the like is no different to that of the proposed quarry operation. The quarry material requires secondary treatment to comply with the standards of materials required by most levels of large government funded infrastructure projects.

The social economic survey and report does not consider in detail the population of the wider, and more affected areas, (such as Paterson, Lorn, Bolwarra and others along the haul routes).

There is little or no economic benefit to the local community.

The main areas for complaint about the quarry expansion and resultant level of operation arise from:

- Unsafe and not fit for purpose road transport;
- Quarry operation and road transport attributable noise;
- Quarry operation and road transport attributable vibration;
- Quarry operation and road transport attributable Dust; and
- Environmental damage (including Paterson River water quality) and resultant ineffective and unusable rehabilitation.
- Little to no economic benefit to the areas and residents immediately affected by the effects of the expanded quarry operations

The proponents' application states they intend to use coal ash as a blending material to produce compliant quality road base materials. They also state they intend to store the coal ask on site. The application does not detail how the storage will be achieved. Research identified methods of storage for coal ash, typically in large silo/iso containers or in in ponds. Of concern is the effect of the ash contaminants (in particular heavy metals) should the ask be exposed to the creek and river systems. There is a long-term risk (over a 25-year period).

Many residents affected by quarry truck movements are people who have relocated from the city and suburbs. They have come to the area to enjoy a lifestyle of tranquillity with larger land areas, a greater sense of community among others. The constant disruption and intrusion caused by truck movement such as, traffic chaos, road safety, noise, vibration, and air pollution are not what people should suffer in a rural amenity particularly a village setting such as Paterson.

There is a considered argument for maintaining quarry resource for future regional economic growth by considered extraction volumes. From the wider community and regional point of view, there is good reason not to deplete the resource at a great rate. The quarry resource is not going to deteriorate providing a measured approach to extraction for future ongoing requirements and benefits.

Because the Martins Creek quarry is impeded by the proximity of long-term residences, ill equipped and inadequate road network, small rural communities, and historic villages, it should be recognised that the location of this resource is poorly situated and therefore cannot expect to operate as a large hard rock extraction enterprise.

I believe the proponent has failed to clearly identify any benefits to the affected areas including that of Paterson and Martins Creek villages and residents along the proposed haul routes in any means economically, socially, or safety. In particular, the hidden cost borne by the tax paying community in the form of damaged roads, bridges, private property, depreciated property and the amenity of the villages and wider community.

The submission claims, “Daracon will develop a Social Impact Management Plan (SIMP) that defines and guides the monitoring and evaluation activities for the quarry”.

The SIMP will be developed in accordance with the SIA Guideline and will:

- identify opportunities to enhance positive and mitigate negative social and economic impacts of the Revised Project on affected communities
- detail adaptive management and mitigation strategies to address potential impacts of the Revised Project identify appropriate stakeholder responsibilities
- identify appropriate monitoring, reporting and review mechanisms, including the purpose of monitoring and the parameters that will be monitored and how and when monitoring data will be collected
- outline a process to engage with relevant stakeholders and communities, with a focus on practical mechanisms for the community to collaborate and record their observations and experiences of social impacts and any proposed community participation in monitoring
- include an incident notification and reporting process, including providing applicable information to the community
- develop a process for reviewing the above elements to assess whether they are still appropriate, and whether any new issues have emerged that should be included in ongoing monitoring
- develop a process for making monitoring results and associated information publicly available, including any revisions to the monitoring and management framework.

This does not however address or commit the proponent to make changes or proactively manage community issues. This allows the proponent to be a self-regulating body. There is little to no opportunity for the community to affect real change or highlight deficiencies in the operation of the Quarry and trucking.

Of concern is how the operation of the quarry to maintain the approved operational requirements will be managed. The quarry (not all attributable to the proponent) has operated illegally outside of its current licence for a period of almost 30 years.

There are many other compliance and prospects that have no boundary once the application to expand the quarry is approved such as the proponent applying for change in the licence conditions, extended haulage times, volumes and routes, extended blasting times, change to operating times “to suit operational needs”, increase in extraction volumes and the like.

While the negative impact of expanding the Martins Creek Quarry is recognised within the community and greater groups, it seems that the impact is commensurate against the number of people it reportedly affects, nonetheless a community lost may be the result for providing benefit to those who do not their community amenity disrupted indefinitely.