New South Wales Government
Independent Planning Commission

TRANSCRIPT OF PROCEEDINGS

RE: MARTINS CREEK QUARRY PROJECT (SSD-6612)

APPLICANT MEETING

COMMISSION PANEL:	MR CHRIS WILSON (Chair) PROFESSOR SNOW BARLOW MS CLARE SYKES
OFFICE OF THE IPC:	PHOEBE JARVIS
APPLICANT REPRESENTATIVES:	ADAM KELLY JOHN CANNON LUKE ROBINSON LOUISE NEVILLE BARBARA CROSSLY KIRSTY DAVIES BRIDIE McWHIRTER
LOCATION:	VIA VIDEO CONFERENCE
DATE:	9.30AM, WEDNESDAY, 19 OCTOBER 2022

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MR WILSON: Before we begin I would like to acknowledge the traditional owners of all the country from which we virtually meet today and pay my respects to Elders past and present. Welcome to the meeting today to discuss the Martins Creek Quarry Project currently before the Commission for determination. Martins Creek Quarry is an existing hard rock quarry located in the Upper Hunter region of New South Wales. The applicant, Buttai Gravel Pty Limited, part of the Daracon Group is seeking approval for the expansion to extract, process and transport up to 1.1 million tonnes per annum of quarry material from Martins Creek Quarry over a 25-year period.

My name is Chris Wilson, I'm the Chair of this Commission panel. I am joined by my fellow Commissioners Professor Snow Barlow and Clare Sykes. We're also joined by Phoebe Jarvis from the Office of the Independent Planning Commission. In the interests of openness and transparency and to ensure the full capture of information today's meeting is being recorded and a complete transcript will be produced and made available on the Commission's website. This meeting is one part of the Commission's consideration of this matter and will form one of several sources of information upon which the Commission will base its determination.

It is important for the Commissioners to ask questions of attendees and to clarify issues whenever it is considered appropriate. If you're asked and are not in a position to answer, please feel free to take the question on notice and provide any additional information in writing which we will then put on our website. As you're aware, on Monday we undertook a site inspection as a panel, we met community groups along the transport route and we met the applicant on site at the quarry. This is the first part of the process. We will ask questions today but we haven't - it's only just started, there will be questions that will arise throughout the process as we undertake a deep dive into the information and obviously subsequent to or following the public hearing usually there will be questions that come out of public meetings, so usually there are questions that come out of that process that we will forward to the applicant but this is the start of that process.

Today I request that all members here today introduce themselves before speaking for the first time and for all members to ensure they do not speak over the top of each other to ensure accuracy of the transcript. We will now begin. Now, I understand you have a presentation. Who's taking the lead? Adam, is it you?

MR KELLY: Barbara Crossly was going to start that.

MR WILSON: Okay. Over to you then, Barbara.

MR KELLY: I'm happy to jump in if Barbara's not available just yet. So do you want to bring the presentation up, Bridie?

PROF. BARLOW: Barbara is muted at present.

MS DAVIES: Can everyone see that presentation?

MR WILSON: Yes.

MR KELLY: We welcome the opportunity to present. Thank you to everyone, to the Commission, the Independent Planning Commission. Go to the next slide. Quick agenda today. We do have a lot of information to get through so quick introduction and overview of the amended applications and impacts, overview of the key issues, project timeframes and then the draft recommended conditions. So I was going to start with that and run through the overview of the amended applications and impacts.

As you mentioned we did do a site visit with the Commissioners at Martins Creek Quarry on Monday and there was also the opportunity to understand - for you to have a look at the haul road so we probably don't need to go through anymore information on that slide. We have slides of brief history of the recent operations at the quarry. The quarry was commenced operating in 1914 and established by New South Wales governments and in their various iterations of that they continually quarry and operated that site until 2012. Daracon then secured a long term licence and started its operations in December 2012 at that time.

Development application for the original project, this project was submitted in September 2014 and Dungog Shire Council took action against Daracon in 2015 in relation to the 1991 development consent. The EIS was then publicly exhibited in late 2016 and from there we ask Umwelt to come on board and engaged them in 2017 to review our submission and advise us on any project design and further stakeholder engagement and assessment requirements.

MR WILSON: Can I just confirm before you proceed, the DA, the original project was that submitted to the state or was it Dungog Council because my understanding the final SEARs weren't issued till 2015.

MR KELLY: I can clarify that for you if you like.

MR WILSON: Okay. Thank you.

MR KELLY: Yes, it always through the state, that's correct, but I'll confirm the timing. On the next slide that's the project time. There's a lot of detail on there so I won't read through all of that today but it indicates the amount of work that we've done since 2017 with Umwelt. It shows the comprehensive engagement and the assessment process that's lead to the multiple iterations of the project to get to where we are today. The next slide please, Kirsty. As an outcome of the court proceedings from October 2018 to September 2019 we operated in accordance with the interim environment management plan on site and that included agreed parameters with Dungog Council from February '19 onwards.

As we went through on Monday, on the 24th of September, 2019 the quarry then was placed into limited operations and that was as a result of the Court of Appeal deeming the following conditions as approved and that effectively meant that we could, with material primarily for railway ballast from a limited area in the west pit, there was a total production through the plant that we saw in the east pit of no more than 449,000 tonnes per annum, and we are not greatly permitted to do more than 30 per cent of that total production out of the gate by road, the rest has to go by rail. So consequently, as an example, there for the last couple of calendar years in 2020 we did 22,164 tonne and in 2021, 20,581 tonne and that is a combination of both rail and road.

If we just take a second as well, and we did touch it on the Monday, who Daracon is. It's a family business that was established in 1983 and it was established as a small civil contractor. Over time that's had a lot of businesses bolted onto that so we're now an integrated civil construction service. So we've got 800 employees as part of that service that we provide and we've consistently seen needs and expectations of our clientele and some of those services we talked about, the quarry's plant hire, concreting, landscaping, site remediation, poly welding and minefield grouting, they're all the businesses much like the quarries that bolt onto the civil construction business that is our core business.

We provide an end-to-end service, including the production and consumption of quarry materials. So I guess we have the knowledge of not only making them but using them on site and it's probably worth noting that we have contract quarrying and crushing teams that run around the state, and because of our ability to adhere to environmental and legislative requirements we do a lot of crushing major businesses such as Boral and Hanson to top-up their production needs in their major quarries. We work in a lot of mines creating, stemming and road base materials in their pits and we also have run quarries for wind farm operations and we've had multiples of those in New South Wales in order to supply those renewable projects with materials as well.

Next slide. The project needs, and I did touch on this again on Monday, is that we're supporting them with high quality material products used in rail, concrete, asphalt and general civil construction products to meet specifications for Transport for New South Wales, ARTC and Sydney Trains as well as many others. We do produce the material for supply to all sectors including products to the highest specified requirements, and I did note on Monday that at the peak we were producing over 40 different products to supply to the greater civil construction industry. It's the very important difference that Martins Creek has between other hard rock quarries in the Hunter region.

That demonstrates our sustained market demand for a range of quarry products and that continues, and as well Martins Creek Quarry is the only quarry in the Lower Hunter with direct rail access. So the revised project seeks the capacity for ongoing supply for local and regional and Sydney markets. It's a regionally significant resource with physical material properties conducive to the production of concrete aggregates and construction materials to very stringent specifications. The proposed development and the resource would make a significant contribution to the easing and security of future constructions materials supply constraints, and we consider it an orderly and economical use of the land because we're optimising use of an existing quarry and processing facility. It's a proven and high quality product and we have access to both road and rail transport.

This is just a quick excerpt from a presentation that was done from the Public Works Advisory earlier this year and it shows the continued high demand in the market and as a civil contractor we can support this information both with the work that we're doing as a civil contractor and the quarry supplies going into those jobs. The next slide runs through the current regional work coming up with the infrastructure boom in the Hunter region. Those first three are on hand now, the Inner-City Bypass, Hexham Straights and the M1 to Raymond Terrace. The Inner-City Bypass has started and the other two jobs will commence.

MR WILSON: Adam, just on this. Would these be considered local or regional markets?

MR KELLY: Regional.

MR WILSON: Regional. Thank you.

MR KELLY: From the quarry to those jobs would be approximately 20 to 30 kilometres. Obviously other points in there is the housing boom and land availability which has been ongoing in the Hunter for sometime. The council funding spend, the drought-proofing works in the water industry and also the solar and wind renewables

with more and more of those consents extended to come through and jobs being built in the coming years. I did touch on this the other day but as a summary in our region Hanson Red Hill, (not transcribable) on the Central Coast and Boral Peats Ridge are closed for general use. This has resulted in limit pressures on remaining quarries for local and regional quarries. So not only are the jobs in (not transcribable) affected but available product is also going to Sydney to top up the Sydney market because of the closure and availability of products from the Central Coast market.

Next slide please, Kirsty. Daracon are currently investigating and/or resourcing aggregates from Wollongong, Kuri, Gunnedah and the Liverpool Ranges to meet construction project requirements and it's not only us that's doing that, it's many, many civil contractors in the greater area in the Hunter in order to supply the jobs. (not transcribable) supply is, is very limited across New South Wales and that's also causing delays with trucks and other materials in there. The other point to make there is in some cases there's limited (not transcribable) for recycled materials so we're unable to utilise those products as well to top up some of the products like the select material, (not transcribable) and road base products that we've talked about in our slide.

I've mentioned before those first three jobs, the big jobs that are coming to the Hunter, the Inner-City Bypass, the Hexham Straights and the M1 that's been split into two sub-jobs we're actively priced those jobs as a civil contractor and/or as a supplier and there is three and a half million tonnes over and above the existing shortage of construction materials market and as I've pointed out before, the Inner-City Bypass has already commenced and the Hexham Straights and the M1 are both being priced at the moment and those jobs should commence next year.

MR WILSON: Just on that, sorry, just in terms of the need for those projects and the - over what time? Because, you know, I'm just interested in terms of the - the Inner-City Bypass, for example, requires 500,000 tonnes, is it over a month, six months, a year, year and a half?

MR KELLY: I'm not across that detail, Chris, but I'm happy to find out and come back to you.

MR WILSON: It might be useful because it gives us an idea - a better idea of demand.

MS SYKES: Adam. Just a question on that as well. Do the projects normally take multiple, you know, supplies in terms of the material source or is it normally single supply?

MR KELLY: Yeah, no, they have to take multiple sources. You'll find most of the quarries, if not all of them will supply all of those projects - - -

MS SYKES: Yes, okay.

MR KELLY: - - - depending on availability they had and what products they can make.

MS SYKES: Yes, okay.

PROF. BARLOW: So it's just a question, Adam, there. So the specification of individual products is tight, so that means they can have multiple sources, is that the way it works?

MR KELLY: That's correct, but quite often you have to specify one source in order to run into a project as well. So you may not always be able to take multiple sources depending on the product and not all quarries may meet that specification but that is correct, from time to time you can take from multiple quarries, that's right.

MS SYKES: Yes.

PROF. BARLOW: Thank you.

MR KELLY: Can I just point out too the timing on these because these are design and construct, those initial quantities we've got are from when we bid the job. The final, I guess, company that wins that will take these tonnages and then change their design somewhat from the initial concept so from hereon in they'll only be estimates on timing when those products will go if we're not involved in the actual final construction of these projects.

MS CROSSLY: Thanks, Adam. Can you hear me now?

PROF. BARLOW: Yes, I can, Barbara.

MS CROSSLY: Thank you. As Adam mentioned earlier, Umwelt got engaged in late 2017 to review the community submissions which were extensive based on the original project EIS to prepare updated technical studies and to - as part of that to work with Daracon to refine the project design and a very important part of that process was they launching a comprehensive stakeholder engagement process to work through and understand the key issues. I won't go through all of the detail on the slide but you can

see the process to identify relevant stakeholders and the relevant stakeholders that were engaged during the process, which went over a number of years, and we were very thankful for the amount of time that the MCQAG group spent with us as well in that process.

Next slide please. So the various mechanisms that were used to engage with stakeholders to inform the SIA, and as I said, an important part of that process was to inform the issues that were further investigated and the project refinements to come up with a revised project. Many, many group interviews and surveys conducted with a range of stakeholders. The collaborative assessment forums was a process that the community requested, which were terrific forums where there was specific detailed presentation of draft technical studies and understanding of relevant guidance and feedback from the community on issues that did help us inform and refine impact mitigation measures as well.

During Covid there was ongoing engagement and we launched the Social Pinpoint website from August 2020 and it's still in - available onsite - online that provided us a platform to continue to inform the community on the progress of studies and mitigation measures. The net of engagement was very extensive, important engaging with the local residents around the quarry site itself but also those proximate to the haulage route from the quarry site down to the fringes of the Bolwarra suburb as well. So there were 3,700 residents and businesses on the stakeholder engagement database who received four information sheets during the period of engagement.

Obviously there was ongoing email, telephone conversations with our team and with Daracon and Louise Neville, who you've met, was engaged as the Daracon's Community Liaison Officer and brought considerable experience to that process and continues to engage with local residents as well. Thanks, Kirsty. The scoping of issues and engagement activities are listed there. I won't go through all of them but it was really important that we understood people's awareness and knowledge of the project, what their views were about positive and negative impacts, what the broader local challenges, needs and aspirations were and the suggestions for and issues in progress to contribute to the community.

All of that process was used as we progressed through the project design and the assessment process, and we'll talk more about this shortly but was pivotal in informing the project design was reduced road transportation volumes, reduced peak hourly truck movements, refined operational hours, reduced footprint on site, which resulted in the reduced quarry operational term in terms of there being a lower level of resource available and extensive further mitigation for site operations and project haulage,

which we'll talk through in the following segments of the presentation. Thanks, Adam. I now hand back to Adam to talk to the revised project overview.

MR KELLY: The key features of the revised project included an extraction of 1.1 million tonnes over 25 years and transporting of the 500,000 tonne by road and the remainder by rail. There's a 16.8 hectare reduction in the proposed disturbance footprint, including avoiding approximately 15.3 hectares of native vegetation in the former east pit. We pointed that out from the site on the haul road on Monday. Revised product transport. We've reduced our peak laden trucks to 140 laden per day or 208 movements for only 50 days a year to cater for that peak required for the construction of the roads (not transcribable) or 200 movements with a peak of 20 laden trucks per hour, 15 laden trucks between 3.00 and 6.00 to cater for the busier time in the Paterson village. There's no road haulage of quarry products on Saturday or Sunday or on public holidays between the 24th of December and the 1st of January. There's no trucks through Paterson (not transcribable) there's increased quarry product transport by road.

MS SYKES: Adam, could I just ask a quick question on the previous slide. Just to be clear on the numbers, do you - that reduced peak daily laden trucks of 140 per day for 50 days per year, do the figures below the 20 and the 15 relate to the peak daily rate for those 50 days?

MR KELLY: Yeah. I guess it will be for both the 140-day peaks and for the hundred days, otherwise, the 20 and the 15 will be our hourly peak no matter what.

MS SYKES: Right. Okay.

MR KELLY: Yes. Does that answer your question?

PROF. BARLOW: I suppose, Adam, what Clare has picked up, and I was wondering about as well is if it's 140 laden trucks a day and in that eight-hour period between 7.00am and 3.00pm and you have 20 per hour, that's already 160 plus 45 that you might get in the three hours in the afternoon, so that's over 200. So how do those numbers - - -

MR KELLY: The daily - sorry, Snow. Yes, the daily peak limits the amount going out for the day. So if we were to take 20 laden trucks every hour, after seven hours we would stop at 140.

MS SYKES: I see.

PROF. BARLOW: I see. Okay.

MR WILSON: And that's managed - I guess in terms of regulating that, is that managed through your weighbridge?

MR KELLY: Through the weighbridge. We successfully did that. We had similar conditions in our interim environmental management plan that was in place during the court proceedings and we successfully showed that we could do daily limits and hourly limits during that period and we would do the same.

MR WILSON: Okay. Thank you.

MR KELLY: Revised operating hours from 7.00am to 6.00pm Monday to Saturday with the exception of road haulage which I said before we won't be doing on Saturday. There's no evening or night operation within the quarry apart from rail loading, transportation and any necessary maintenance activities for environmental works that need doing. We removed haul route 2 as a primary haul route and the construction and use of the new access road and the bridge from Dungog Road, which we had a look at on Monday, improvements of Dungog Road and Gresford Road intersection and the King and Duke Street intersection in the village of Paterson and the upgrade to the approach of the Gosford bridge.

We went through the extension of the rail spur on site, that will facilitate longer trains and allow access to rail markets and the establishment of noise bunds, noise attenuation of the existing fixed processing plants with further upgrades and replacements to reduce noise and air quality impacts, and there's the progressive rehabilitation of the quarry. That there's a summary and I won't go through that now but that's a takeaway from the environment impacts shown and the key features in 2016, the original EIS and then the amended development application on the right-hand side.

The quarry staging which we did run through somewhat on Monday but that's there over the different stages that were presented in the ADA showing full utilisation of the east pit and also the west pit. The resource optimisation, that allows for optimising the use of existing resource with the proposed staging design provided for clearing of native vegetation in the additional disturbance area to be undertaken incrementally over a period of 15 to 20 years and site rehab further progressed incrementally for the initial two years of the revised project.

We're well shielded from the quarry operations with no views in most of the quarry pit due to the nature of the adjoining land form, especially not going into that area in the

old lot 21 and relocation of quarry mobile material in noise-enhancing weather conditions to lower more shielded benches for periods of time and that's not mobile crushers, that's the actual - the loading equipment like the loaders, the diggers and the dump trucks and continuation of current blast practices with well designed target blasting to meet the needs of quarry operations while minimising impacts on the local community.

MS CROSSLY: Thanks, Adam. I will now walk us through the transport and - transport issues and the other key issues as it relates to the environmental impact assessment and the socioeconomic impacts as per the agenda. So as Adam mentioned haul route 2 was originally proposed as part of the project and you can see that on the dark blue line on the plan on the right-hand side of your screen. This option was subject to considerable feedback from the community in relation to primarily potential cumulative impacts as it relates to Brandy Hill Quarry and it was resolved by Daracon not to proceed with that haul route and to focus on that primary haul route that we've previously discussed.

Previously there's been through the engagement process an extensive enquiry about alternative options to travelling through the Paterson village. Unfortunately there was a bypass at Paterson mooted some years ago but the Dungog Shire Council advised Daracon in 2014 that it was no longer in their local planning provisions and the land has been developed for other purposes. Another haulage option was considered using Martins Creek Road, which is a local road of relatively low quality and there's some quite significant and difficult engineering constraints and it was resolved it's not deemed feasible to use that road. Next, Kirsty.

MR WILSON: Can we just - sorry, Barbara, can we just go back to that slide for one - - -

MS CROSSLY: Yes.

MR WILSON: So I'm just trying to understand once you've now not using haul road 2, so when that was on - when that was part of the proposal what was the split of traffic? How much traffic was going through - was proposed to go through Paterson then as opposed to now under this amended project?

MS CROSSLY: So both haul route 1 and haul route 2 didn't avoid going through Paterson.

MR WILSON: Okay.

MS CROSSLY: So - - -

MR WILSON: I got you. It's just to the north.

MS CROSSLY: Yeah, yeah.

MR WILSON: Okay. All right. Thank you.

MS SYKES: Could I just ask a question again on the haul route 2. So is there - if it's a secondary haulage route but extend local deliveries only, could it be used in the future for some quarry material?

MS CROSSLY: Yes. So that's the clarification around local deliveries only. So whether it be haul route 2 or whether it be through to Dungog or into parts of Vacy or other areas of the local community the commitment from Daracon is that the primary haul road that we can see in the light blue is the haul road that will be used for the majority of production that is going to be transported by the main road system. There may be, indeed, either local Dungog Council requirements or local civil contract works on properties in the immediate vicinity that might be accessed by local roads only in order to get to those specific local jobs. They're generally of lower quantum, but Daracon, you know, obviously it's an important part of minimising overall impacts for a local quarry to supply those projects where they can.

MS SYKES: Thanks, Barbara.

PROF. BARLOW: For the record, Adam and Barbara, what maybe - back to that last slide, where did the - you know, now abandoned but proposed Paterson bypass go? Did it go to the west of Paterson?

MS CROSSLY: My recollection, Adam, was that it did go to the west.

MR KELLY: That is correct. It went to the west of Paterson.

PROF. BARLOW: You know, it sort of has to because the river's to the east so you'd only get through to the west.

MR KELLY: That's correct.

PROF. BARLOW: Thank you.

MS CROSSLY: Adam spoke to the road haulage parameters and we spoke briefly onsite in relation to the fact that despite extensive investigation there's no current feasible option to use rail logistics to supply the local and regional markets and you'll see in the ADA material that there's a report that addresses that issue and those options that were considered during that process and that's due to the lack of suitable unloading facilities, the large number and variety of product destinations and types, the short haulage distances and the fact that a number of the current quarries use the road system is a more commercially-viable and flexible supply to service the same markets, but pivotable there isn't a current regional facility that could be used centrally for a rail distribution for local and regional markets and we spoke to the revised truck movement parameters, importantly a 25 per cent reduction in truck movements per hour and a 35 per cent reduction in peak truck movements per day from what that was originally proposed and we'll talk more about the mitigation measures in terms of road haulage shortly.

MR WILSON: And that's - - -

MS CROSSLY: Next, Kirsty.

MR WILSON: Just in terms, that's a 35 per cent reduction in total laden truck - - -

MS CROSSLY: Laden.

MR WILSON: - - - trucks but it's not movement, movements is still 280 isn't it?

MS CROSSLY: True, yes, sorry, exactly.

MR WILSON: Okay.

MS CROSSLY: Yep. We went to the intersection, the new site access road with Dungog Road on the site visit on Monday. This new site access road will effectively bypass Martins Creek village for any road haulage or site access. It does involve a bridge crossing over the North Coast rail line and it's planned to be completed by the end of year 2 of the project subject to the timing of the secondary approvals with ARTC and council that will influence the timing of that construction. From that time the current Station Street access would only be used for emergency access if required, if some reason that access road wasn't accessible.

Next, Kirsty. There are a number of other road upgrades proposed as part of the project. The proposed Gosford bridge upgrade is shown on this slide. Essentially it incorporates a series of curves to raise driver awareness as they approach the bridge

and associated line markings. There's also a commitment to vehicle activated signage alerting drivers as they approach the bridge to reduce speed and various signate in that regard as well and some minor modifications to some property accesses on either side of Dungog Road. There's been extensive work done - - -

MS SYKES: Excuse me, Barbara.

MS CROSSLY: Yes.

MS SYKES: Just on the previous - could you outline the timing of that upgrade?

MS CROSSLY: So there's a - the proposed upgrades were all road upgrades proposed to be completed within the first 18 months of development and you will see in the DPE recommended conditions that the movement of the road haulage limit from 250,000 tonnes to the maximum of 500,000 tonnes is dependent on the resolution of the road upgrades.

MS SYKES: Okay.

MR WILSON: And while we're looking at the Gosford bridge. Has any engineering assessment been undertaken of the bridge in terms of its ability to sustain the 25 years - the tonnage numbers?

MS CROSSLY: Yes. The very detailed engineering assessment was conducted at the request of Transport for New South Wales in maintaining the bridge and that report was made available Transport for New South Wales and it looked at the structural integrity of the bridge and its ability to - the capacity to actually convey that level of truck haulage and it also looked at the maintenance schedule for the bridge and the works that would be required over the life of the bridge in terms of maintaining its structural integrity in that regard, and Transport for New South Wales was satisfied with that investigation.

MR WILSON: And, Barbara, who pays for those works?

MS CROSSLY: Adam, my recollection is that the - Daracon's contribution to those works was the very expensive engineering assessment report and that the quarry traffic didn't influence it - that schedule significantly.

MR WILSON: Okay.

MR KELLY: (not transcribable) Transport for New South Wales have also asked for some upgrades to the bridge deck itself which we're committed to do with Transport for New South Wales.

PROF. BARLOW: Just a question regarding Gosford bridge. Has any consideration been given to a - you know, a traffic light system on that bridge? Because clearly with a big truck it's really only a one-lane bridge so how does that work?

MR KELLY: We can give you some more information on that but we did consult with both Dungog Council and Transport for New South Wales and lights were actually recommended at the start by us as the proponent but the feedback was that they'd prefer this particular solution.

PROF. BARLOW: Okay. Thanks, Adam.

MS CROSSLY: So further road intersection works are shown here on the intersection of Dungog and Gresford Road and essentially it's a channelised right turn intersection from Gresford Road onto Dungog Road incorporating the storage length of three design vehicles turning right into Dungog Road eastbound and the associated line marking and then a storage length for those turning onto Gresford Road, one design vehicle and the various tapering and acceleration lanes associated with those works.

MR WILSON: Barbara, the timing of these works obviously would seem to be imperative, I would've thought. When's this occurring?

MS CROSSLY: These - all of these works are proposed to occur, or these intersectional upgrades are proposed to occur - on the public road system are proposed to occur within 18 months of development. As we said earlier, the access road and its bridge access is two years due to the access over the rail line.

MR WILSON: Okay. Thank you.

MS CROSSLY: Now, obviously the intersection works are subject to council's secondary section 138 approvals as well. There was further and quite detailed consideration in relation to the King and Duke Street intersection in Paterson village itself and managing both the traffic impacts and the social impacts of the truck passage through the village. A number of options were presented to the community as part of the traffic collaboration assessment forum and some of those options were - whilst referred by Daracon weren't considered preferable by the community and weren't taken up and one of those, for example, if you can see that red dot there that's the vacant land beside the café in Paterson village and that's owned by Daracon, and

Daracon did suggest that one mitigation measure in terms of impact on car parking would be to establish an offsite, off road car parking area there as well. That wasn't considered to be preferred from the community's point of view.

So what we have here is a - the mark-up of the proposed works as it relates to this intersection. That block of land that we both spoke about a moment ago, existing driveway on that land would be moved so that it accommodates the provision of additional car parking space to compensate for the car park that would be lost on the southern part of the road there as it relates to the line markings and the work that would be done in terms of minor realignment of the footpath and the kerb ramp and kerb gutter on that south-western corner of the intersection.

So the primary works here relate to line markings, compensation of a lost car park and very importantly, Daracon's commitment to reducing speed limits for their trucks and their subcontractor trucks to 20 to 25 kilometres an hour when traversing that intersection monitored by a camera system that Daracon would establish on that intersection.

PROF. BARLOW: Barbara, just there is the footpath, that is the minor (not transcribable) there. Is that still a full width footpath and, you know, a safe distance from the road?

MS CROSSLY: Yes, all of those things have been considered in the design, Snow. We can come back with further detail and confirm that for you.

PROF. BARLOW: Okay.

MR WILSON: And while we're there, I mean, we actually - this is one of the spots we stopped obviously with the community representatives. I mean, I personally felt it was difficult to cross the road at that point. Was there any talk of - I mean, I understand you don't want trucks stopping and starting but was there any talk of pedestrian crossings or that like?

MS CROSSLY: Yes. The alternative options included considerations of pedestrian crossings in that regard as well.

MR WILSON: Okay. Thanks.

MS CROSSLY: So obviously traffic and transport issues are of key concern to the community. We spoke about truck movements and transportation hours. We'll talk more about road safety, road capacity and noise emissions and social amenity impacts

in the following slides. SECA completed a comprehensive traffic impact assessment which is in the material, completed in accordance with the relevant guidelines, and in summary, the results show that the traffic volumes generated by the project would not result in any change to the existing level of service of the roads along the primary haul route.

There are two traffic intersections with traffic lights at the southern end of the haul route as it joins the Pacific Highway and the one just up from that that are predicted to deteriorate from the current levels of service to overall services of FF, which is the worst performance level by 2028 but this occurs without the project, it's driven by general background traffic growth in that area. On the next slide it's important to understand when we're considering the traffic impact assessment that all assessments were completed for baseline scenarios with and without existing road - quarry road haulage as a worst case scenario.

The traffic impact assessment did consider a traffic growth rate of two per cent up to the year 2030 which was the data available and it did consider the cumulative impacts with the Brandy Hill Quarry for the relevant road section on the primary haul road and the - with the proposed upgrades and mitigation measures the impact assessment concludes that the traffic associated with the revised project would have an acceptable impact on the operation of the intersections along the primary haul route and it is not expected to have an adverse impact on the safety of the road network.

Moving on, it's really important to recognise that the now proposed road haulage limits, 500,000 tonnes per annum are materially different to what was originally proposed and you can see from this slide the history of road haulage from this quarry. As we've spoken about before it's a quarry that's been operating for a hundred years. This data goes back to 1993 and you can see on the light blue on this data is the records of sales by road, by RailCorp and its predecessors and then the record of road haulage by Daracon in dark blue from when it took over the operation of the quarry in 2012. The red line shows the revised project transport limits, so 500,000 tonnes per annum and you can see that that proposed road haulage volume is not inconsistent with previous volumes including those over an almost 10-year period by RailCorp.

MS SYKES: Barbara, is it possible - what is the portion of sales by rail?

MS CROSSLY: We can certainly provide that to you as additional information.

MS SYKES: Okay.

MS CROSSLY: It will be - my expectation it will be significantly less over that period.

PROF. BARLOW: And just to be clear here, the Land and Environment Court action was against Daracon after you took over in 2012, is that correct?

MS CROSSLY: Correct.

PROF. BARLOW: Thank you.

MS CROSSLY: So we've spoken about the road improvement works and the hourly limits and the peak of daily - maximum daily truck movements only occurring on 50 days per year. The feedback from the community informed those reduced truck movements in the afternoon in that higher traffic time of school pick-up and bus time in the village, in particular and along the haul route. In addition to the no haulage or produce on weekends, public holidays Daracon's committed to no haulage in that Christmas period and revising haulage around days where there's extra traffic in Paterson and again this is specific response to concerns from the communities around there when there's busy times like Tocal Field Days and funerals at the Baptist church, et cetera. There will be engagement and a commitment to revising haulage in considerable of those events.

Variable message of signs for road speed along the route. We've talked about the camera monitoring station at Paterson village. The transport by subcontractors was of considerable enquiry by the community and positively the feedback from the community was that Daracon owned and operated trucks were perceived to be operating more considerately on the road in terms of abiding by the code of conduct and, hence, Daracon is committed to a rigorous assessment and prequalification process prior to engagement of any transport subcontractors and further to that on the next slide both Daracon and contractors to have appropriate signage on their trucks for identification for any follow-up on any incidents or complaints.

A rigorous driver code of conduct which was revised and updated during this period and is committing to being reviewed and updated annually. Regular audits of the subcontractors and, indeed, regular monitoring of all truck haulage, a comprehensive process of investigation for complaints, potential breaches and again in response to a community suggestion Daracon have committed to including updated fleet management technologies as they become available but importantly have also committed to GPS monitoring not only for the Daracon vehicles but also for contract vehicles that are allowed to transport from the site.

MR WILSON: Barbara - sorry, Clare, you go first.

MS SYKES: I was just going to just ask a question that is it envisaged that subcontractors or the contracted vehicles is part of normal and sustained operations?

MS CROSSLY: Yes, they are, they are part of the suite of vehicles. Adam, I don't know whether you want to comment on that further.

MR KELLY: Daracon does have a fleet of trucks but we do intend to supplement that with contractor vehicles. At 500,000 tonne there will be a limited amount we would envisage at this point in time but it will happening.

MR WILSON: My question was, just while we're on this slide, it would be useful to understand what percentage of Daracon vehicles, haulage vehicles - what per cent that would be of total heavy vehicles?

MS CROSSLY: We can come back to you on that.

MR WILSON: I note - I think it's in the department's report but it would've been useful just to understand the implementation of these mitigation measures in relation to the percentage of heavy vehicles of Daracon through Paterson.

MS CROSSLY: Sure.

MR WILSON: Thanks.

MS CROSSLY: Okay. Thank you. We're going to move now to site-specific assessments but I'll also touch on how these relate to road haulage as relevant as well. So noise was a key issue for the local community, particularly in relation to the historical operations remembering that this is a quarry site that's been operating for a very long time. The detailed noise impact assessment was prepared in accordance with the relevant guidance, and I won't go through all of those, and importantly as an existing industrial noise source it did take account of the historical operation aspects of the quarry and considered that in setting the limits as those guidelines provide for as well as the more stringent limits that apply to new projects as it relates to, in particular, the west pit operations.

The noise impact assessment was conducted on an iterative basis and informed the project design and particularly the process in plant upgrades and the rail loading system and we've spoken about the noise bunds and walls and the extension of the rail spur when we were out on site. We firmly believe that all reasonable and feasible

physical noise control measures have been proposed for this project and the EPA advised that they felt that that was the case as well. I won't talk to all these key features of the project design to reduce noise impacts because we've spoken to most of them. It's important though to recognise that the loading of trains during daytime will only extend to evening train loading operations after the rail spur extension is implemented and after the noise controls are validated as having been effective for daytime operations. Similarly in the movement from evening to night-time train loading, remembering that there would only be one in each of those periods.

MR WILSON: Can we just stop there for a minute, Barbara. I'm just mindful of the time and I don't want to push you to finish this in a hurry. So I'm just going to ask people if anyone's got any time constraints. As a panel I don't think we do and we're happy - we feel the need to continue. Is there anyone who is unable to continue past the scheduled time of 10.30? Okay. All good. All right. Let's continue. Thank you.

MS CROSSLY: Thank you. Well, we've spoken to these noise mitigation measures but they're there for the record in relation to the bunding system and barriers on site and the noise barrier along Station Street. Moving to the next slide. The upshot of all of the noise assessment outcomes which were very complex modelling and assessment, and as I've spoken about previously best practice for extractive industries and mining in terms of the level of rigour that was accounted for in this process. It will - the key measures will reduce the operational noise levels experienced by the residents in close proximity to the existing quarry. In particular, the Station Street residents will have a materially lower noise level than what they've experiencing during previous operations as a result of this revised project.

That said, there are a number of close residents that will experience daytime noise levels that are marginally to moderately above contemporary limits in accordance with the current modern guidelines. The residents that are predicted to be marginally and moderately impacted as listed there, R1, R2, R3 are predicted to experience significant impacts during night-time rail-loading activities and you'll note that those residents are singled out in the DPE's draft consent conditions as having voluntary acquisition rights. R1 would also experience moderate impacts during the evening period and R2 and R3 moderate impacts during the evening shoulder period until the new access road's constructed.

R25, which is the closest receiver to the new access road, would experience moderate impacts during the daytime period once that new access road is commissioned and you'll recall that we stood at that residence when we inspected the new access road. There are marginal residual impacts predicted to occur at 20 receptor locations occasions during the daytime, and you can see also some locations are predicted to

have marginal exceedances during the evening shoulder period as well. Thank you. With the addition of the formative barrier on Station Street no receivers will experience noise levels greater than 5dBa above the PTN into the relevant criteria during the daytime.

The commitments within the ADA and the draft consent recognises the relevant provisions of the voluntary land acquisition and mitigation policy requiring proactive noise management monitoring for those identified residences and, indeed, Daracon have been liaising with those relevant residents and offered the opportunity to get a briefing from the noise consultant and then Daracon and to discuss and liaise around mitigation measures for those that have been identified. In relation to road haulage a noise assessment was conducted for the entire route focusing on those residents who's closest to the haulage route where there's just the one residence that was predicted to have an exceedance of criteria where it was not already calculated to exceed the criteria with baseline traffic levels and that exceedance is predicted to be less than 2dB and that policy states that that noise level increase is considered to be barely perceptible to the average person. So in summary, the proposed road haulage meets the relevant policy guidelines.

MR WILSON: So that was done for the full length, was it, of the haulage route?

MS CROSSLY: Yeah, so - - -

MR WILSON: Down - yeah.

MS CROSSLY: Yeah, so the haulage route was assessed for its full length down to - into the Maitland urban area and it was the newest residents on the haulage route were assessed specifically and triaged to be sure that there were representative locations that represented the nearest residents to that haul route.

MR WILSON: Thanks.

PROF. BARLOW: Barbara, I question which - I don't have a lot of knowledge in this area but are there, you know, significant variations between the noise emissions from various road haulage trucks - so really what I'm thinking about is would it be possible that the contractor trucks maybe not be as quiet as Daracon. So presumably you modelled that with the average noise from a truck of that size but what's the variation in those trucks?

MS CROSSLY: Look, certainly different ages of trucks and different maintenance schedules on trucks does influence an individual truck noise level but all trucks are

required to have a certain level of integrity and maintenance to be on the road. So I'll come back to you with some more detail on that, Snow.

PROF. BARLOW: Thank you.

MS CROSSLY: But essentially it looks to average those considerations effectively.

PROF. BARLOW: Yes.

MS CROSSLY: All right. This slide just has a very brief summary of the key noise mitigation measures. As we spoke about on site there was a previously in-pit mobile crushing in the west pit that will no longer occur as part of the development due to noise considerations. Daracon's committed to a small - some - a different truck fleet operating in the west pit with new smaller quieter trucks and that provides for both flexibility as we spoke about in terms of moving those trucks from high to low in the pit and also obviously the modern technology in terms of noise attenuation. Loading trains at the northern end of the east pit processing area had a significant influence on noise impacts, relocating that equipment in adverse weather conditions is important and loading trucks in that evening shoulder period when you'll see there's a provision for trucks to - for one hour in the evening to come back onto the site, be parked on the site and loaded in preparation for dispatch the following morning and that also reduces noise levels in that early morning period as well and they'll be committing to parking trains north of the existing Station Street exit and entrance and the strategic use of the southern stockpile for product storage and I'll come back to that in the next moment.

Next slide, please. Importantly for this quarry which is reasonably - it's not often that you will see a quarry that is managed to this level of control and this is reflective of the context within which it is operating now, and what's proposed going forward is to have a predictive weather forecast system to identify the potential for adverse operating conditions so that Daracon can plan their activities accordingly and also react. The continuous real-time noise monitors to report on the noise level generated by the quarry and an alarm's generated by that process to trigger changes in operation. This is a very comprehensive suite of controls for a quarry and is an important part of the management suite.

Moving on to air quality. Similar to the noise, very detailed modelling conducted for the air quality in accordance with the relevant guidelines. The headline message here is that there is predicted compliance with the EPA criteria at all surrounding properties for project specific, that's from the project alone, for PM10, PM2.5, TSP, all the parameters that are listed there it meets, the quarry's predicted to meet the relevant criteria. In relation to cumulative 24-hour average PM10 concentrations there was the

potential for an exceedance at R1 in year 20 of operations and that was further investigated in response to a query from the EPA, and Daracon has demonstrated to the satisfaction of the EPA and the department that with the implementation of the proposed proactive and reactive air quality management system - a similar process to the noise - this exceedance could be avoided. That said, there is a commitment from Daracon and it's reflected in the draft conditions of consent that that model would be revisited prior to work in the east pit in that final stage of operations to confirm that, not just for R1 but as it relates to the other residents that we spoke about earlier.

Diesel exhaust emissions in relation to onsite and also for road haulage are confirmed as being below the relevant criteria and there was also investigation in relation to the transmission of potential crystalline silica from the site and that was confirmed to be less than the relevant considerations which is three micrograms per metre cubed. Thank you. The department commissioned an independent peer review and there was an exchange of information in that regard which you'll see in the background material and the peer reviewers found that the air quality assessment appropriately assessed the matters against the relevant standards as has the EPA.

In terms of air quality mitigation and monitoring measures we've spoken about many of those and the reduction in the area but further in relation to in-quarry dust emissions minimising the number of internal routes is feasible - is important and where feasible that will be implemented. Further work was done on progressive rehabilitation where possible and you can see that reflected in these stage plan and very substantial processing plant upgrades are proposed to minimise air quality impacts and those are listed there.

Automated water sprays. Essentially contemporary air quality controls applied to that has been a historical processing plant operation, real time monitoring of - real time being hourly, monitoring of PM10 near Station Street and an alert system as well and weather forecast system are all an important part of the pack or mitigation measures for air quality.

MS SYKES: Barbara, is this - is the mitigation measures here, are there any specific elements here that are upgrades or are they current - this is currently in operation already?

MS CROSSLY: There's quite a suite that are upgrades, Clare. The enclosure or the processing plant, the additions of further automated sprays, the real time monitoring, the alert system, they're all additional mitigation measures - - -

MS SYKES: Okay. Thank you.

MS CROSSLY: - - - what's currently in place. So it's a belts and braces approach to air quality, frankly. I won't dwell on the greenhouse gas assessment apart from to say that again it was done in consultation with relevant guidelines and scope 1, 2 and 3 emissions have been estimated and Daracon are committed to relevant energy efficiency initiatives. Obviously maintaining, optimising productivity in terms of the way the plant is operated is important for minimising greenhouse emissions and effective maintenance and considering new technologies that become available and we spoke earlier about the new trucks will also come with a different emission rating. Thank you.

Biodiversity. In overview, a very comprehensive biodiversity assessment was conducted, detailed surveys on site over a number of seasons and considered very thoroughly against the principles of avoiding mitigating offsetting biodiversity impacts. No longer proceeding with the extension to the east pit avoids clearing 15.3 hectares of native vegetation, including a piece of vulnerable EEC in that context but there is a residual impact to 22 hectares of native vegetation over the life of the quarry that will be disturbed if this project is approved. Those biodiversity impacts are documented extensively in the background material. There are four communities that will be affected in the proposed disturbance area, one of those 2.2 hectares of the whalebone tree, red camellia, dry subtropical rainforest will be impacted by the proposed development.

Species credits would also be required for the species that are listed there down the bottom of the page with the slaty red gum and the koala both being relevant EPBC species and there's been on considerable work done in terms of the proposed mitigation measures for those species as well. The offset strategy is proposed and are documented in the draft conditions by DPE and it provides for Daracon's commitment to a suite of potential offsets including the options for land-based offsets purchasing credit from the market or paying into the Biodiversity Conversation Fund and there are very detailed commitments and requirements in the consent conditions for that biodiversity and rehabilitation management plan with specific requirements as it relates to those key species and communities. Sorry, bit of a croaky voice. Moving through to water resources.

MR WILSON: Just before - sorry, sorry, Barbara. Just in relation to the NEPM or the Commonwealth legislation in relation to - is it the koala? I understand that it's been done under the bilateral agreement between the Commonwealth and the state.

MS CROSSLY: Yes.

MR WILSON: Does it have the same flexibility in terms of does it enable the New South Wales legislation to deal with those matters in relation to mitigation and offsetting, like - or does it - or does the Commonwealth require a stewardship site as opposed to being able to either be - you know, other mitigating matters?

MS CROSSLY: Certainly the integrated approval provisions are, as you say, are quite rightly there, Chris, and certainly there's been dialogue and correspondence in terms of the offset processes. It is expected there will be an element of stewardship sites proposed as part of this offset strategy.

MR WILSON: So in other words, there basically has to be because of the requirements of the Commonwealth?

MS CROSSLY: It's a consideration as part of the process and we'll come back to you with specifics on that.

MR WILSON: That's all right. Okay. Thanks.

PROF. BARLOW: Barbara, there's a question about the surface water run-off, you know, from the quarry. I think we saw yesterday that there is a dam clearly on the Daracon property below the rail loader where excess water from the run-off would go in addition to what went into the west pit. Does that - you know, is there any release of run-off water from the quarry into the local streams?

MS CROSSLY: So the water management system for the quarry, as we spoke about on site, is primarily designed around reuse and recycling of water as the primary objective but the dam system has the provision under the State Government requirements and the environment protection licence for discharge from the site and that's managed discharge under specific conditions and provisions. So it's not uncontrolled, it's a controlled release of water through that process.

PROF. BARLOW: Is the monitoring of the quality of the water that might be released, you know, what's in that water?

MS CROSSLY: There's very detailed monitoring of those releases and we can provide you some more specific detail on that in accordance with the EPA conditions, and you'll see in the background material that in response to requests from the relevant government agency there's also been further work done downstream to assess the health of the downstream streams from the release points and the conditions of those streams both as it relates - primarily as it relates to their capacity to receive discharges and are not to impact on the geomorphology and the quality of those streams, and it's

been confirmed that those streams' health won't be materially impacted by the continuation of discharge downstream, and it is a continuation of discharge downstream, it's not a new activity in that regard. But those streams down - those portions of streams downstream from these discharge points are healthy and stable, and the largest one, one reach that is a potentially - may potentially be unstable and that is proposed for regular monitoring as part of the commitments in this process.

MS SYKES: And, Barbara, is the reuse of water primarily - so the water source for dust suppression, et cetera, from the existing water source or is potable water also used for those purposes?

MS CROSSLY: So the - the water from - recycled water from the site, from the pit is prioritised to dust control for water carts and for water sprays. As we spoke about on the site visit there's a portion of the current processing plant that currently uses potable water and there's a commitment in the ADA for Daracon to work on a potable water reduction strategy, which is essentially is looking at further water treatment of that site water such that more of that water can be recycled through the processing plant. I guess ideally the objective is that it would only be genuine potable water site amenities over time that would be used from the potable water supply.

MS SYKES: Thank you.

PROF. BARLOW: Barbara, with regard to rehabilitation, I noticed on the map that you have on the screen at present there are areas to be rehabilitated but what happens to the rest of the west pit and, indeed, the sort of central pit? Is there a plan to rehabilitate the site or what happens at the end of the site, does it just become a big void?

MS CROSSLY: So I'll move to that. If we're happy to move off the water issues we'll move to site rehabilitation.

PROF. BARLOW: Sorry.

MS CROSSLY: I'll address that in a moment if that's okay. I'll deal briefly with blasting and vibration impacts, we've spoken about it both onsite and as part of the operations the blasting practices will continue but there has been very detailed monitoring over the years to confirm that the blast vibration pressure levels meet the relevant blast emission criteria at more sensitive locations including an independent audit that was done a few years ago without the knowledge of Daracon. That audit was done by the EPA. Next slide, please. Those are the blast management and mitigation measures. A reduced blasting window has been committed to as part of the

revised project. So only blasting between 11.00 and 3.00pm with no blasts fired on weekends or public holidays.

There's detailed blast design processes and considered to ensure that the blasting meets relevant criteria and independent blast monitoring is proposed for the first three blasts within the first year and then on an ongoing basis three times per year every five years thereafter just to verify that those blast management controls are on track. There's ongoing implementation for every blast at three locations as established on the current environment protection licence and that will continue.

MR WILSON: Where are those - sorry, Barbara, where are those located - locations?

MS CROSSLY: We'll send you through a plan of those but they're, you know, in different locations around the site including Station Street over towards Vacy and in the - towards the east.

MR WILSON: Okay.

MS CROSSLY: The letterbox drops are done for local residents to inform them of blast time as well as an SMS or an email to confirm the time of the day the blast is to occur and there's processes in place to refresh those notifications regularly. Culture heritage has been comprehensively assessed. The quarry's located on the traditional lands of the Wonnarua and the Worimi people. The assessment was conducted in consultation with the registered Aboriginal parties and revised project is confirmed as unlikely to harm any known Aboriginal objects or cultural heritage values. The draft consent includes a provision for some further survey on the detailed environment of the haul route prior to construction. The historical heritage work has been comprehensively assessed, including the two conservation areas relating to Paterson village and Bolwarra, and it's found that the revised project that relates to road haulage is unlikely to result in any adverse visual or physical effects to the heritage significance of those areas.

So moving back onto rehabilitation and title land use. This is the final rehabilitation plan. You can see that over time, and that's over a period of some considerable time, that the west pit void would fill to a certain level, and all of that is documented in terms of the level of which the pit would fill to, and you can see that the remainder of the pit area is proposed to be rehabilitated to a mix of woodland species on the benches and the slopes where available and then some native grassland or exotic pastures in lower lying areas and that work relates to both the east pit and the west pit, and that work includes the decommissioning of the processing plant on the site and we spoke about - previously about the final stage of quarrying would be in that - what is

now the current processing plant area and effectively that would create a void as well and that's documented on that plan.

There is a provision in the draft consent conditions that requires the detailed closure plan to be revisited five years prior to closure and there are several title land use options that are available for the quarry and that will be resolved based on the context and the considerations of land uses at that time.

The social impact assessment. The impacts on social amenity were a very key issue for the community considering the range of impacts and particularly as it related to road haulage but also our operational impacts and we've prepared a very comprehensive SIA that the internal experts at DPE acknowledges as leading practice in SIA, and importantly that SIA identified a range of actual perceived social issues that were considered as part of the design of the revised project and the mitigation measures to be implemented if the project is approved.

Very detailed documentation of all of that in the background material but the summary of key negative social impacts are shown there and these were addressed through the process. The positive impacts include potential economic benefits, employment procurement and business opportunities and there's also obviously the availability of construction materials. As I said, the feedback in relation to potential social impacts was a very strong influence on the proposed haulage parameters and the proposed monitoring and management techniques. Whilst it's in combination it's expected that these measures will minimise the social impacts that will - may be felt and experienced by the local community. It's also acknowledged that the outcome of the revised project will be experienced differently throughout the community.

The process of consideration of the social impacts is documented here with the refinements, the technical solutions that we've spoken to in relation to noise and other matters, the investment in community projects and enhancement activities that are committed to as part of the process and obviously the provisions that are actually found into the draft consent conditions in relation to commitments that Daracon have made in relation to voluntary planning agreements and the ongoing mitigation monitoring and adaptive management measures are important. It's not a set and forget in terms of social impacts and on the next slide there's the commitment to the social impact management plan - process and the ongoing dialogue with the community consultative committee as the primary consulting body and under modern consent going forward but also the requirements to engage with relevant locally affected interested parties on an ongoing basis.

We've spoken through most of these measures that have been an outcome of that social impact assessment and engagement process. A formal and a detailed community engagement strategy is a commitment and a requirement as part of that process going forward. There's a refocus community contributions program that is recognised in the - and captured as a requirement in the draft consent. There's a commitment from Daracon to implement a local employment and procurement policy that encourages supporting businesses and local recruitment where possible and there's relevant provisions for road maintenance and upgrades that relate to Dungog Shire Council and Maitland City Council.

On the next slide please, Kirsty. You can see the economic benefits of the project to the state and the region described on this slide. In summary the revised project is estimated to provide a net benefit of $58 million to New South Wales in net present value terms and this was determined by detailed economic assessment by EY. And so in summary, the revised project is - will supply and deliver high quality materials and products for use in rail, concrete, asphalt and civil construction. It plays a vital role in terms of delivering heavy construction materials for the infrastructure program to support population, economic growth in the Hunter region and more broadly, New South Wales, employment of approximately 22 fulltime equivalent employees. You can see the net benefit of $58 million to New South Wales in MPV terms and there will be contributions to both the road upgrades and the ongoing maintenance of road infrastructure. Just moving onto project timeframes unless there's any further questions.

MR WILSON: We'll ask them at the end, I think. I'll just ask my colleagues. Snow, Clare, have you got any questions at this stage?

MS SYKES: No, no further questions at this point, thanks, Chris.

PROF. BARLOW: Thank you, Chris. No further questions from me either. We've asked questions on the way through which was excellent.

MR WILSON: Over to you, Barbara.

MS CROSSLY: Thank you. Just handing over to Adam to talk about project timeframes and draft conditions.

MR KELLY: I guess the major timeframes, once we commence the development we expect that to be within the three months of a development consent once we've got ourselves ready to go. As we've discussed, the access road, the commitment is to build that within two years from the development consent pending ARTC and Dungog

Shire Council approvals. The 18 months for the public roads which we discussed earlier, so the public roads in conjunction with approval from Dungog Council as well and the rail spur extension is planned from within the first four years from development consent and that was based on an initial 500,000 tonne production or sales by road into the market.

Leads onto the draft recommendations. Daracon's happy with the draft recommendations and conditions. We believe what's written there that the road must operate in criterion requirements to manage and mitigate the impacts to ensure that that will work. The rail spur extension requires extraction of 800,000 tonnes which we went through on Monday at the site visit and limiting the actual production from the quarry will actually delay the ability to extract the resource and as a result may delay the rail spur extension and the rail spur extension is required to allow greater access to the rail market and obviously because of that particular point we prefer a higher initial production level to meet current and future demand in the transition period so making the rail spur extension will be done within the initial in the four years but we also understand the deponent's position in relation to the need for the upgrade of the roads and limiting that initial tonnage by road to the 250,000 tonne and that's outlined in the A11 condition.

I guess we just wanted to make clear that the reduced production will make the planned four year timeframe difficult to achieve because we have to extract that material before able to put the rail line down and we did go through that, I think, in some detail on Monday.

MR WILSON: Okay.

MS SYKES: Sorry, Adam.

MR WILSON: Sorry, Clare.

MS SYKES: On that, when you say it will be difficult to achieve the four-year timeframe, when would you expect that timeframe would be achieved with the current condition or proposal?

MR KELLY: As an estimate probably one to two years after that.

MS SYKES: Okay.

MR KELLY: Just due to the tonnage that needs to come out of that hole which we intended to process and the original project did propose a 500,000 tonne first year and second year which (not transcribable) all of that.

MS SYKES: Yes.

MR KELLY: That (not transcribable) so, and then build the rail line up with that.

PROF. BARLOW: What - Adam, when that spur is - you know, is completed what sort of decrease in tonnage, you know, assuming that more goes by rail might occur in the road haulage after that?

MR KELLY: Well, as Barbara explained previously there's currently no regional or local areas to discharge material from rail, and the rail reports that have been done extensively for the ADA also show that the short-haul in rail doesn't work at the moment, it's not reasonable and feasible, so we would expect that the 500,000 tonne by road continue in order to supply the local and regional market and the increase in rail tonnage with more supply than the Sydney market and our reports back up the fact that long-term haulage for long distance - I'm sorry, long distance haulage is more relevant for rail rather than short-term haulage at this point in time but it is a 25-year consent and that may change over time.

PROF. BARLOW: Thank you.

MR WILSON: I've just got one question in relation to social impacts. I understand substantial work's been done, Barbara, I just - I mean, I haven't read the SIA yet but was it able to - I understand it listened to everyone's concerns but was it able to, I guess, identify what the impacts might be on the villages of say Paterson and Bolwarra in terms of social impacts and what the physical representation of those social impacts might be?

MS CROSSLY: The SIA, as you work your way through it, you'll find that it identifies all the relevant issues or the potential impacts that may arise as identified by the community and the specialists and then it does a comprehensive risk assessment process in accordance with the relevant guidelines against every one of those impact parameters as it relates to different parts of the quarry operation whether they be operational or haulage and as it relates to different parts of the community in terms of where they may reside in relation to those operations. So those social impact risks are identified and the connection of those risks to the mitigation measures identified in the SIA and certainly happy to answer further questions on that at a later time once you've

- - -

MR WILSON: Yes. There's a lot for us to consume so - information so there will be a flow of questions and obviously this will probably be - and there'll be likely, highly likely to be questions flowing from the public meeting but, look, unless my colleagues have any further questions I thank you very much. Clare, Snow, have you got any further questions?

MS SYKES: I actually just had one question that, you know, as Chris mentioned there is a lot of absorb but just to help direct me to this information. Just in relation to the blasting, you know, in terms of the, you know, continuation of sort of weekly blasting practice, I assume that the blasting will occur in sort of different locations, especially in the early years in terms of build out of the rail spur and in relation to some future operations in the west pit, could I get a feel for sort of the context around the change in blasting, the size of the blast or, you know, any other, you know, information in terms of the mine plan and schedule.

MS CROSSLY: So in terms of the blasting regime there's a blast impact assessment report in the documentation.

MS SYKES: Okay.

MS CROSSLY: But it envisages - it deals with the worst case scenarios where it envisages, you know, what might be the maximum instantaneous charge used, where might be the most proximate locations of that blast to surrounding sensitive receivers and so it does predictions based on that and it uses the detailed design processes that have been tested over years in terms of - you might be familiar with the fact that if you don't have an existing operation you use just generic site rules to calculate those blast impacts at the receivers. For this quarry, because it's been operating for a long period and Daracon have had independent blast monitors and measurements for some years, they're site-specific site rules which actually make those predictions more rigorous because they've been confirmed by monitoring.

MS SYKES: Yes. Thanks, Catherine.

MR WILSON: Okay. I think - that is, Snow?

PROF. BARLOW: I'm fine, thank you.

MR WILSON: All right. Look, I really appreciate what is a very comprehensive presentation today. We will put that up on our web, that's correct, Phoebe, yes?

MS JARVIS: Yep.

MR WILSON: And just for your information we have further meetings this week with the department, Maitland Council and Dungog Council. Beyond that we will - if we - we will compile a list of questions where necessary but otherwise we will see you at the public meeting, is that correct, Phoebe?

MS JARVIS: Yep.

MR WILSON: Is it the 7th and 8th?

MS JARVIS: It's the 7th and 8th, yeah.

MR WILSON: Yes. Okay.

MS JARVIS: So, Kirsty, I'll get in touch with you just at a later point just to sort of let you know how that will go.

MS DAVIES: Not a problem.

MR WILSON: Thank you all for your contributions today, I appreciate it.

MS CROSSLY: Thank you for the opportunity to walk through the details today. Very much appreciated.

MR WILSON: Thank you.

MEETING CONCLUDED **[11.05am]**