



# Aggregate News

AGGREGATE & QUARRY ASSOCIATION OF NZ

## Reasons to be cheerful

You may be long enough in the tooth to recall a song from the late 70s called *Reasons to Be Cheerful* by Ian Drury and The Blockheads. The title may capture some of the current mood in our sector.

While we welcome the Government's confirmation of \$6 billion of infrastructure projects starting before Christmas, there's also the reality that (for example) ready-mixed concrete volumes are at their lowest level since September 2014. June-quarter volumes were down about 10 per cent compared to June 2024.

As our CEO Wayne notes in his commentary, we as an industry have mostly been able to shield our staff from the worst effects of the drastic slump in construction. That's acknowledging it's not been uniform and some of you have been going through really tough times. All credit to those of you who have worked to keep staff employed by practices such as building stock and shifting overburden.

While we know there is an upswing coming, Wayne also voices concern that this will likely stretch supply. As someone working for Stevensons, I'm delighted therefore that our Drury expansion project is starting to move, along with Kings Quarry north of Auckland – with decisions for both expected before Christmas.

The AQA has been a vocal backer of the fast-track process which sees these two quarries (and six others) included. We've also made crystal clear that we don't want – nor expect – to see the environment pay the price of the improved speed and consistency for the quarry resource consents we sought.

So, while it might not be a welcome thing to see quarry opponents in the room with fast-track panels, that's what's starting to emerge. This suggests that



neither the legislation nor the panels appointed to progress it are likely to steer New Zealand into the environmental calamities some opponents were prophesying.

Also in this Aggregate News, a profile of our newest and youngest addition to the AQA Board. Joe Hunter will no doubt reflect some of the wisdom of his father Tony – who he replaces – but he will also bring a focus on training and technology which will be very welcome.

As our story on Clayton Hill, a former IQA Australia President shows, none of us can afford to stop learning and

developing. Clayton's *20 Years, 20 Lessons* presentation at the QuarryNZ conference resonated strongly with me and I'm glad to see the lessons repeated here for those unable to attend the conference.

The conference also had a big technical focus and our AQA Technical Adviser Mike Chilton reports on our progress with initiatives such as our quarry database and NZTA's recently released M03 specs.

We've got plenty of reasons to be cheerful. **AQA**

**Jayden Ellis**  
**Chair, AQA**



Arawhiti ki Puhoi – the viaduct over Puhoi River on the existing stretch of the motorway which is now planned to reach Whangarei and so stretch aggregate demand. Photo NZTA.

## Meeting demand is the next issue

The next big issue for the quarry sector will be capacity to supply, says AQA CEO Wayne Scott.

Recently, there have been a flurry of announcements including the Government's infrastructure update, confirming \$6 billion in infrastructure projects will be underway by Christmas. Alongside that, several projects, including two quarries that sit under the fast-track approval process, are due to have decisions made by the end of the year.

Wayne says these are signals that the long-awaited momentum for the quarrying, civil construction and wider infrastructure sector is starting to emerge.

"As it ramps up next year, it will create huge demand for the quarry sector, most particularly in the 'Golden Triangle' of Auckland, Waikato and Bay of Plenty.

"Some of the projects are massive. The first approved under the fast-track process – Auckland Port's two new wharves – will by itself require vast amounts of aggregate."

Wayne says that project is dwarfed by the Northland Corridor that will see 100 kilometres of four-lane motorway connecting Auckland to Northland. A

preferred bidder for the public-private partnership to build the motorway is expected to be confirmed early next year. If successful, the contract would be awarded by mid-year.

"This will likely be our biggest-ever roading project," says Wayne. The Infrastructure Commission estimates it will consume one dollar in every \$10 spent by the government on infrastructure over the next 25 years – excluding maintenance and renewals.

He says it also needs to be remembered that the draft National Infrastructure Plan released in June proposes that spending on state highways will reduce and maintenance of existing infrastructure will get 60 per cent of the budget.

A single kilometre of four-lane motorway requires nearly 30,000 tonnes of aggregate so 100 km would need around three million tonnes.

"Admittedly, it will likely take most of a decade or more to complete all stages, but as a single project, it alone would consume the equivalent of most of the annual production of one of our biggest existing quarries."

Wayne says meeting that demand has to sit alongside other priorities. The

Sunfield housing project alone in South Auckland proposes to build 4000 new houses.

"There's a million tonnes of aggregate needed just for the homes, let alone the roads and footpaths and water infrastructure requirements."

That's why it was essential that eight quarries were among those approved for the fast-track approval process, he notes.

The first of these to get underway was Stevenson Aggregates' application to expand its Drury quarry; a decision is due in November. A month later, a decision is expected on Kings Quarry north of Auckland.

"Both of these will be critical as the roading, housing and infrastructure projects ramp up, particularly in and around Auckland."

Wayne says the Drury and Kings projects will also prove essential in easing the demand on Northland, Waikato and even Bay of Plenty quarries which for years have helped meet Auckland's demand for aggregate.

The other upper North Island fast-track quarry approval for consideration sought is from J Swap Contractors to expand its Katikati quarry near Tauranga. **AQA**



The new project site now being considered under the fast-track process is to the north of Waihi.

# Opponents getting heard under fast-track process

Claims that the Fast-Track Approvals Act would be disastrous for the environment are not panning out, says an unsurprised AQA CEO, Wayne Scott.

He says the panels being appointed under the legislation to process fast-track consents are beginning to show their determination to hear from those with concerns about projects.

"I think they will also take on board some of those concerns."

This has extended to inviting Forest & Bird and the Parliamentary Commissioner for the Environment, Simon Upton to comment on OceanaGold's bid for fast-track approval to expand its gold mining activities around Waihi.

Forest & Bird has campaigned for years against the Waihi mine, including in earlier hearings under the previous Labour Government's fast-track process. A principal concern has been on possible effects of mining expansion on the rare Archey's frog. The environmental group described the current fast-track legislation as an "unprecedented attack on nature."

Simon Upton, a former National Government Minister and vocal critic of some of the current Government's policies, did not ask to be involved and is yet to decide whether he or his office will comment on the \$1 billion-plus development.

Coromandel Watchdog of Hauraki group, chaired by former Green MP Catherine Delahunty, is also invited to comment. Wayne says this falls within the scope of what the Fast-track Approvals Act intended as Watchdog members could be said to be affected by the project if approved.

Panels are also required to seek comment from government agencies and local iwi and councils.

The panels can also invite others with a less direct connection,

if they consider it appropriate.

"My pick is that we will see other panels following the lead set by former Supreme Court Justice Sir William Young, who is chairing the panel considering the OceanaGold expansion proposal.

"Sir William sits on that panel with Rob van Voorthuysen, a vastly experienced resource management consultant, freshwater ecologist Greg Burrell who has worked for 25 years in the field and Cathy Katene whose CV includes 30 years in food safety.

"The only person with any connection to mining is Cameron Lines who's an engineering geologist."

The AQA submitted on the Fast-track Approvals Bill saying the quarry industry did not want to see it used to support environmental degradation, Wayne says.

"The quarry sector has made clear it is not seeking any reduction at all in environmental requirements for applications made under the Fast-track Approvals Act. We just need clearer, faster and more consistent regulatory and consenting processes.

"Now I think we are starting to see that the balanced approach we were calling for is being delivered."

Wayne adds that having environmental activists invited into fast-track panel processes won't always be a comfortable thing for them or industry representatives.

"But we need to respect each other and respect the process. I truly think we will see a lot of win-win outcomes." **AQA**

## AQA works for the quarry industry – join us today

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AGGREGATE & QUARRY ASSOCIATION OF NZ

Supporting New Zealand from the ground up



Joe Hunter points the way at Logan Point quarry.

# Quarrying is in his blood

Joe Hunter is a believer in genetics. As a sixth-generation descendant of James Palmer who established Dunedin's Logan Point quarry 145 years ago, he reckons he was destined to work in the industry, following in the footsteps of his father Tony.

For the last seven years he has been managing Logan Point, coming into the industry 10 years ago after giving up a short career in property management.

At 32, he's now also the youngest AQA Board member, replacing Tony who relinquished his AQA Board seat at the July AGM having retired last Christmas as GM of Blackhead Quarries.

Quarrying has been part of Joe's life since he can remember. "I definitely spent quite a bit of time jobbing around with Dad, pushing buttons for the blast at a young age. That was always quite exciting!"

He began doing holiday jobs in his teens, initially bagging sand at the Fairfield sand operation.

"In later years, I worked out at Blackhead in the crushing plant."

After finishing school, he went to Lincoln University to study valuation and property management before working in Christchurch for a couple of years with Colliers.

"It was good but there was too much time in the office sorting out other people's problems."

In 2015, he moved to AB Lime near Winton in Southland, owned by Palmer Resources.

"I did my B Grade there and spent 18 months mostly driving the digger or the truck, or in the mill."

Then it was time for his OE, touring Europe for five months in a van with mates.

"We had a helluva time."

At the end of 2017, Joe returned to Dunedin and started work at Logan Point.

"I was just driving the digger when the manager left as I was finishing my A Grade."

He took over at Easter 2018 and remains there managing Logan Point and some mobile operations. Joe also married Olivia whom he'd first known at Lincoln. They now have two young daughters, Sally and Rosie.

In his spare time, he enjoys playing golf, spending time with friends and family boating on the lake or at the beach wing foiling and building sandcastles with the girls.

While he says they will decide their own careers, he does see a good future for quarrying.

"Absolutely. I think we're going to need more and more aggregate if you look at the roads and infrastructure we're going to require with population growth."

Like most millennials, Joe enjoys using new technology such as drones, which are beginning to be used for quarry planning.

"It's just figuring out how best to use the technology and apply it to what we do in quarries."

He also has a strong focus on training. When we spoke, he had six of his dozen staff away doing their B Grades. And he backs the need for the AQA to continue supporting and representing smaller players in the industry, noting it's these quarries that help provide locally sourced aggregate.

"We need to get a balance between looking after the 2-4-person operations as well as those doing 1M tonnes plus."

As someone who started small and worked his way up, Joe's great great grandfather James Palmer might have said the same thing. **AQA**



# Lessons from, and for, the quarry sector

You've got to be pretty switched on to work for a global consultancy like SLR Consulting, so Clayton Hill had an attentive audience at the QuarryNZ conference in Hamilton.



Clayton's title is quite a mouthful as SLR's Technical Discipline Manager – Construction Materials and Services for the Asia Pacific region.

But, behind that is a degree in environmental technology, a Masters in Public Health and more than 23 years in the quarry industry. He's worked as a quarry manager and also on health and safety compliance, and he's well-known to some in NZ both in his SLR role (it employs 175 staff in 10 offices here) and from attending QuarryNZ conferences. He's also a past president of Australia's Institute of Quarrying.

Clayton's presentation on the 20 lessons he'd learned was deserving of focused attention. Many of the points he made resonate with anyone working in health and safety but they hit the nail on a number of other requirements that any manager or supervisor needs to be across.

They were numbered by Clayton and we present them in that sequence but he says some of those further down may be more applicable if you want to be ahead of particular issues with staff.

## Here are his 20 lessons learnt:

1. Don't assume people know what they're doing.
2. Listen, before you speak – silence can be a great tool.
3. Don't ask someone to do something that you wouldn't do yourself.
4. Walk in someone else's shoes. That might include driving an articulated dump truck or crawling into a screen to check for wear (not while it's operating!).
5. Being positive is worth the effort – praise goes a long way.
6. Have the difficult conversations – but prepare first.
7. Learn from others.
8. Surround yourself with good people.
9. It's ok – until it's NOT.
10. It takes only one action to make a difference.
11. The standard you walk past is the standard you accept.
12. Determine your values.
13. Trust your gut. If it doesn't feel right it probably isn't.
15. Learn to filter, not all information is useful or correct.
16. No one is going to do the work for you.
17. There are two sides to every story. Ask questions.
18. No matter what is happening, there's always time.
19. Relationships – build them and work on them.
20. Everyone has potential – you just have to find your place, purpose or your why.

SLR's statement of purpose as a global consultancy is Making Sustainability Happen. Clayton Hill

reminds us that nothing is sustainable in any business without safe and productive people. **AQA**

## The Aggregate & Quarry Association appreciates the support of our members



# Intro to the M03 2025 sub-base spec



Back in August the new M03 Sub-base (2025) specification and notes were introduced for public use, replacing the old Sub-base Notes from 1986, explains **Mike Chilton**, the AQA Technical Adviser.

The new specification and notes were developed by a joint working group representing the NZTA, the quarrying industry, CCNZ, industry consultants and CETANZ (civil engineering testing professionals) over three years.

Four members of the AQA Technical Committee were involved in the development of the specification.

The 1986 Notes document resulted in many different sub-base specifications around the country, often in the same geographical area. This meant quarries were holding and testing similar, but different, materials in stockpiles, often using overly premium feedstock.

The new specification is intended to reduce the variation in sub-base aggregate and simplify stockpiling and production at the quarry, while maintaining a suitable standard for state highway use.

The 2025 specification continues with the idea of classes of aggregate, similar to the M04 2024 basecourse specification. Class 5 sub-base is intended for use under Classes 1 and 2 basecourse and Class 6 sub-base is for use under Classes 3 and 4 basecourse.

Something new with this specification is that a quarry may nominate its own particle size distribution (PSD) when this is combined with acceptable repeated load triaxial (RLT) testing and permeability. This gives quarries, which may not easily meet the PSD limits, the ability to produce suitable sub-base without unnecessary scalping/wastage.

Recycled crushed concrete is encouraged, with either a 40mm or 65mm top size acceptable as sub-base and limits placed on foreign materials.

A summary of the required aggregate testing is displayed in this table below.

## Time for your production results

The NZPAM's annual production survey for 2024 is now closed, but I encourage you to do a late response if you haven't already done so.

As Infometrics economist Brad Olsen reminded our industry at the QuarryNZ conference this year, the failure of a high percentage of quarries to report production is counting against us. Fewer than 40 per cent of our 1000 commercial quarries have reported aggregate production in some recent years.

As Brad reminded us, without your input it's really hard to make our case to government with data that can be out by tens of millions of tonnes.

So please, take a few minutes answering the survey; it could make your lives a whole lot easier. You have three options but NZPAM recommends the online response. <https://www.nzpam.govt.nz/nz-industry/nz-minerals/minerals-statistics/annual-return-of-industrial-rocks-and-minerals-output-2024>

If you need any help or advice in filling in your survey, you are welcome to contact me.

tech@aqa.org.nz **Q&M**

M03 (2025) Aggregate Class	Class 5	Class 6
Loading	Very heavy / heavy	Medium / light
Source Property Tests (every 10,000m <sup>3</sup> )		
Crushing Resistance	≤10% at 130kN	≤10% at 80kN
Wet/Dry Variation	≤30%	N/A
Weathering Quality Index	AA, AB, AC, BA, BB or CA	AA, AB, AC, BA, BB, CA or CB
XRD Petrographics	Yes	Yes
Production Property Tests (every 2,000m <sup>3</sup> )		
Plasticity Index OR Clay Index	≤ 10	≤ 15
	≤ 5	≤ 5
Sand Equivalent (Note: if not met, use permeability test)	≥ 30	≥ 25
Broken Faces	≥ 50%	≥ 30%
Specified Particle Size Distribution	Yes	Yes
Bespoke Particle Size Distribution	Yes, combined with RLT Soaked/undrained < 2.70% Dry/drained < 0.60%	Yes, combined with RLT Dry/drained < 1.0%
MDD/OWC/SD (every 5,000m <sup>3</sup> )	Yes	Yes
California Bearing Ratio OR RLT (every 20,000m <sup>3</sup> )	≥ 80% RLT limits above	≥ 60% RLT limit above

# AQA Technical update

## QuarryNZ technical session

- About 200 delegates attended the QuarryNZ conference technical session, hosted by the AQA Technical Committee.
- Chair Clare Dring spoke about interpreting RLT test results and XRD testing.
- NZTA guest speaker Rob Damhuis introduced the M03 (2025) sub-base specification on behalf of Grant Bosma who was coordinating the working group and writing the spec and notes.
- As AQA Technical Adviser I gave an overview of the M04 basecourse implementation and garnered audience feedback to add to the written feedback received.
- A show of hands revealed about 10% of the delegates could make Class 1 M04 basecourse at their quarry, highlighting potential issues for the lower North Island, Bay of Plenty and Northland in particular.
- The first tender requesting Class 4 (lowest) basecourse was mentioned and it was great to hear consultants are specifying lower-grade aggregate for lower-risk sites.
- Major concerns highlighted for M04 (2024 spec) were the testing costs, with some claiming up to \$5/tonne more than the 2006 spec, test date expiry which is a problem for lower-volume sites and the wet/dry strength variation limit tripping up some quarries.

## M03 Sub-base Specification

- The new M03 sub-base specification is now available from NZTA: <https://nzta.govt.nz/resources/sub-base-aggregate>.
- Keeping many of the original notes' ideas, the new M03 spec adds statistical acceptance criteria and two different classes of material, dependent on designed pavement loadings.
- An alternate grading can be offered by producers, as long as RLT and permeability requirements are met.



AQA Technical Committee Chair Clare Dring at July's Hamilton conference .

## Personnel Changes

- Arne Corrie-Johnston has replaced Michelle Farrell as Technical Strategy and Engagement Manager at CCNZ.
- Grant Bosma has retired from NZTA, just after M03 sub-base spec was released. We extend our thanks to Grant for his engagement with industry and contributions to aggregate specifications (particularly M06, M04 and M03) during his time there.

## Auckland Council Infrastructure Technical Specifications

- For those supplying the Auckland market using the council's specifications, be aware the Infrastructure Technical Specifications were updated in July 2025.
- The latest specifications are available from [www.AucklandDesignManual.co.nz](http://www.AucklandDesignManual.co.nz).

Don't forget I am available to assist AQA members with technical issues. Contact me: [tech@aqa.org.nz](mailto:tech@aqa.org.nz) **AQA**

**Mike Chilton**  
**AQA Technical Adviser**

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