

Before the Expert Fast-track Panel

FTAA-2511-1150

Under the Fast-track Approvals Act 2024 (**FTAA**)

And

In the Matter of an application for approvals by **MCCALLUM BROTHERS LIMITED** for the Te Ākau Bream Bay Sand Extraction Project located at Te Ākau Bream Bay, Northland

**Evidence of Timothy Walters on behalf of McCallum Brothers Limited in
Response to Invited Comments**

(General Manager – Bridgeman Concrete Limited)

Dated 12 August 2026

Jeremy Brabant

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Introduction

1. My full name is Timothy Walters.
2. I am the General Manager of Bridgeman Concrete Limited (**BCL**).
3. I have been involved in the readymix concrete industry in New Zealand for the past 19 years with BCL. During this time I have built up extensive knowledge and experience of the industry at all levels, including the Auckland concrete manufacturing market and the market for sand supplied to Auckland concrete plants. I am also qualified as a Concrete Technician with Concrete New Zealand.
4. BCL produces and delivers ready mixed concrete—to customers in the Auckland, Waikato, and Hawke's Bay markets. Auckland is our largest market.
5. BCL supplies a significant volume of readymix concrete to the commercial and residential markets in Auckland. BCL also supplies from time-to-time specialist concrete mixes for industrial or public infrastructure works.
6. BCL has plants in Hastings, Napier, Papakura, East Tamaki, Avondale and has interests in plants in Hamilton, Tauranga and Rotorua through joint ventures.
7. As part of my role as General Manager of BCL, I need to keep up to date with the availability of alternative sand supplies and I am in regular contact with other concrete manufacturers in the industry, as well as various sand suppliers.
8. I have been asked by MBL to assist in responding to comments by other parties on some aspects of MBL's evidence in support of its Fast Track Application for consent to extract sand from a site in Bream Bay.
9. My statement is factual in content and is drawn directly from my experience as the General Manager of BCL. I confirm that the contents of this statement are true to the best of my knowledge and belief.
10. I have read the Concrete Suitability report by Paul Donaghue, his two statements of evidence in response to RFI 1 and 2 from the Expert Panel as

well as his response to comments to the Panel from other parties.

Scope of Evidence

11. This evidence is provided in response to comments from other parties in relation to MBL's Te Akau Bream Bay Sand Extraction Project under the Fast Track Approvals Act 2024. In particular, I will respond to the following comments:

- a. The Bream Bay Guardians' claim at paragraphs 3.13-3.16 that there has been no shortage in the Auckland market of sand for concrete manufacture despite the cessation of supply from Pakiri since August 2025. At paragraph 3.14 it is stated that quote "Predictions of commercial disruption have not materialized" and particular mention is made of an Affidavit sworn by Patrick Bridgeman, the Managing Director of BCL, in the Environment Court in support of MBL's Pākiri Offshore Consent application (Affidavit of Patrick John Bridgeman sworn on 16 June 2023). The Affidavit stated Mr. Bridgeman's concerns that the shortage of marine sand was one of the biggest threats to BCL's business at the time.
- b. The joint comments by Allied Concrete Limited and Brookby Quarries Limited in relation to paragraph 61 of Paul Donoghue's Concrete Suitability Statement. The claim is made that natural sand can be replaced by manufactured sand in all facets of concrete at various strengths and applications.

12. In addressing the comments identified in paragraph 11, I shall cover the following matters:

- a. An outline of Bridgeman Concrete's operations in Auckland (including products, and types of concrete);
- b. The ingredients we require to make our concrete products and in particular our requirement for natural sand;
- c. Comments from Bream Bay Guardians; and
- d. Comments in the joint statement from Allied Concrete and Brookby Quarries concerning manufactured sand.

Bridgeman Concrete Operations in Auckland

13. BCL supplies the Auckland concrete market from three concrete plants. These are located in Avondale, East Tamaki and Papakura. This provides a broad geographic spread across Auckland and does permit the supply to one concrete customer from one or all of our concrete plants, depending on the operational and technical demands required by that customer.
14. BCL supplies a wide range of customers across Auckland with a range of concrete mixes from low strength concrete to complex technical mixes for commercial and industrial applications, including high strength mixes as described in by Paul Donaghue at Paragraph 21 of his Concrete Suitability Statement (Attachment 20).

Ingredients Bridgeman Concrete uses in its Auckland Plants

15. The ingredients for concrete are well described in 18 to 24 by Paul Donaghue in his Concrete Suitability Statement (Attachment 20). BCL uses similar proportions of ingredients as is described in paragraph 21 and Figure 1 by Mr Donaghue. We currently source our aggregates from Brookby Quarry and our sand from two locations; Tomorata dune sand for our East Tamaki and Avondale branches and Kaipara Harbour marine sand, with Tomorata sand as a backup, for our Papakura plant.
16. There are several reasons that BCL purchases Tomorata sand for its two main plants:
 - a. Concerns over security of sand supply should there be a shortage. This was demonstrated in December 2023 when the plants were using Kaipara Harbour sand. At the time the market was much busier and BCL was concerned it would be unable to secure supply of sand. In fact, for various reasons, the Mt Rex Shipping Company ran out of stock. This led to Mt Rex Shipping completely cutting BCL from supply. As Pākiri sand from MBL was no longer available to BCL, we were put in the position of having to sign a supply agreement for dune sand with the Tomorata Quarry.

- b. The majority of sand supply to the Auckland market is now Kaipara Harbour sand and BCL likes to retain alternative options as to its sources of supply. We have real concerns that there are currently too few sources and suppliers of natural sand in the Auckland market.
 - c. Access to Kaipara sand is controlled by Mt Rex Shipping, which is controlled by the owners of Atlas Concrete Limited (**Atlas**). I doubt that BCL would be able to obtain reliable supplies of Kaipara sand from Atlas/Mt Rex Shipping in sufficient amounts to keep the three Auckland plants running on a long-term basis.
 - d. After MBL's Pakiri off-shore application was refused by the Environment Court, BCL has had concerns about the outcome of Kaipara Harbour consent renewal process and wanted to secure an alternative supply of sand for longer term supply security.
17. The Bream Bay sand project would provide an excellent source of quality marine sand for the industry and a new supply option for the region. From a concrete manufacturer's point of view the Auckland industry needs more good quality supply options rather than reducing the number of alternatives. This promotes competition and provides options to customers. Without Bream Bay sand, Auckland is left with very few suppliers and in my experience this is likely to lead to shortages in the future as market activity increases.

Comments from Bream Bay Guardians

18. I have referred above to statements by Bream Bay Guardians disputing shortages of sand in the Auckland market in recent years and contending that sand supply is not a significant issue in the Auckland market and is not a constraint on development. Particular reference is made to Mr Bridgeman's affidavit of June 2023 and his statement that the shortage of sand was one of the biggest threats to BCL's business at the time.
19. I can confirm Mr Bridgeman's statement. At the time, the concrete industry was very busy and there had already been shortages of sand. I have referred to this above. The comments made by the Bream Bay Guardians in their Paragraphs 3.14 where they assert "Predictions of commercial disruption

have not materialized” are not correct. I can tell you that commercial disruption has occurred to the point where the Auckland concrete industry has run out of sand, as it did on several occasions between June 2022 and January 2024. These were short term but are incredibly disruptive as industry members tried to stockpile resource to maintain their own customer base. For example, on a number of occasions, BCL experienced shortages of sand which meant that we had to turn away work to prioritise key customers. The worst of these were during the lead up to Christmas 2023.

20. I note that the claim that there is no evidence for the industry running out of sand was made by an outside commentator who admits he has no concrete industry experience. I can assure the Panel based on my own experience that sand shortages have been a reality and in my opinion without Bream Bay sand they are highly likely to threaten the industry again as economic conditions improve and concrete demand increases.
21. In my experience, a successful concrete and infrastructure industry needs supplies of raw materials from multiple locations and sources. We should be seeking more supply options rather than less and a resource like Bream Bay provides that with the added advantage of being able to be shipped centrally to Auckland or other ports. If Bream Bay sand were to be available in sufficient volumes I anticipate BCL would be interested in purchasing it for its Auckland sand requirements.

Allied/Brookby Comments and BCL’s Experience with Manufactured Sand

22. Due to the shortages of concrete sand that occurred through 2023 and 2024 BCL felt it had no option but to go out to market and assess various sand and aggregate options in an effort to future proof its business. We were not alone in doing that with many other concrete industry members doing this to varying levels to my knowledge.
23. As part of this assessment BCL was supplied with manufactured sand by Brookby Quarry. We undertook concrete trials with that sand from March

2023 to April 2024. BCL tried different mixes and had several criteria that needed to be met for the supply of this product to be considered successful;

- a. It needed to be in the same area of economic feasibility as the costs of natural sand.
- b. It needed to produce concrete acceptable to our customers' needs.
- c. It needed to be able to make technical concrete mixes that could be pumped and handled in their raw form (uncured) without problems.
- d. It needed to have the same surface qualities, compressive strength and durability as concrete made using natural sand.

24. The trials raised significant issues. Finished quality (including colour), workability and pumpability were not to the standards we require.

25. Our initial mixes using 100% Brookby manufactured sand (in place of all PAP7 and natural sand) were difficult to pump and caused repeated pump line and hopper blockages. Increasing slump on site (i.e. increasing water content) improved flow only after some considerable disruption. The difficulty with increasing water content is that it reduces the strength of the concrete, potentially to below the standard required for certification. Reliable pumping was achieved only when we added significantly higher doses of pump-aid admixture, but this materially changed the mix design and increased cost to the point that the economic feasibility of the concrete mix was undermined.

26. To meet required compressive strengths, the manufactured sand mixes also required a higher cement content than our standard natural sand mix designs. The combined effect of additional cement and increased additives resulted in a significant cost increase per cubic metre.

27. Concrete surface colouring was also problematic. Concrete produced with 100% manufactured sand showed widespread surface discolouring across the slabs. The mottled appearance was simply not acceptable and would not meet our customers' expectations. In Figure 1 below I have inserted two photos of the pour trail that was undertaken on 4 April 2024 that

demonstrates some of the issues we have faced with two different manufactured sand blends.

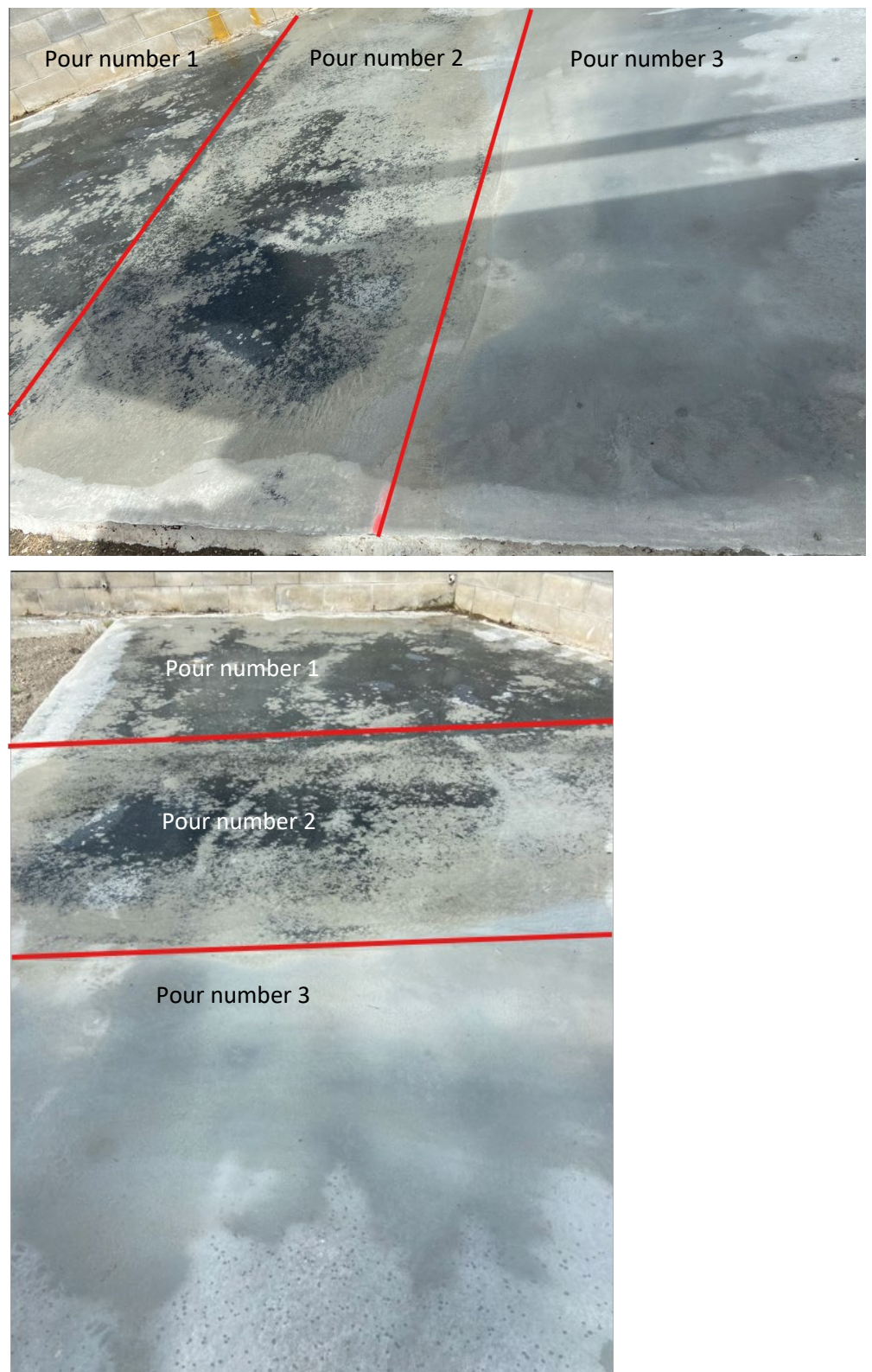
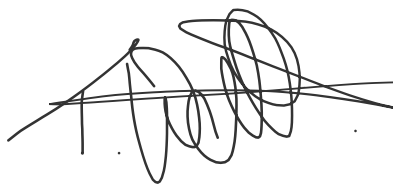


Figure 1: Pour trial of two different manufactured sand blends. Photo taken 16 April 2024.

28. The photograph in Figure 1 shows three bands of concrete, each of which represents a separate mix and concrete pour. The delineation between the three is presented with an overlain red line in the picture.
- a. Pour number 1 was a 25MPa concrete mix using manufactured sand to replace 100% of the PAP7 and 100% of the natural sand.
 - b. Pour number 2 was a 25 MPa concrete mix using manufactured sand to replace 100% of the PAP7 and 80% of the natural sand.
 - c. Pour number 3 was our usual 25 MPa concrete mix using PAP7 and natural sand.
29. The additional trial (Pour number 2) was conducted to see if the surface discoloration issues could be eliminated. The blended sand mix did still show significant (albeit slightly reduced) discoloration confirming to us that the manufactured sand itself was the primary cause.
30. Issues with pumpability, compressive strength, surface finish, discolouration and increased cost together meant that products made with a substantial volume of manufactured sand, as a replacement for natural sand, would not be acceptable to our customers.
31. Based on the trials it undertook BCL saw no reason to use an ingredient in its concrete that has the technical problems described above and increases the cost of production (due to extra cement and additives).

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke extending to the right.

Timothy Walters

12 August 2026