

Our Ref: J240586-2
Your Ref: N/A

31 March 2025

The Nu Co
C/O The Body Corporate for Victoria Square
15 Victoria Ave
Broadbeach QLD 4218

ATTENTION: Mrs Nicole Wilde

Dear Nicole,

RE: LETTER OF OPINION REGARDING COMPLIANCY OF ENGINEERING ELEMENTS AT THE LEVEL 4 CONCRETE SLAB OF VICTORIA TOWERS

In accordance with your request, Mr Hayden Watts, a suitably qualified engineer of this office carried out an inspection at the Level 4 concrete slab of Victoria Square Apartments on 28 March 2025. The purpose of our investigation was to perform a visual inspection of the concrete slab and determine recommendations for the cracking to the concrete slab and exposed reinforcement from the removed block work walls.

It is important to note that NJA Consulting previously assessed the Level 4 concrete slab and provided recommendations regarding the removal of specific concrete slabs and walls. The contractor has since removed the concrete block walls and now requires advice on the exposed reinforcement and concrete cracking prior to proceeding with waterproofing.

Concrete Slab Cracking

It is to be noted that NJA Consulting have provided an email previously dated 19 November 2024 in regard to cracks to the concrete slab on top of the games room. It was advised at this time that due to the presence of severe cracks that it is NJA's recommendation that any cracks wider than 0.5mm (including between the patched area) are to be epoxy injected and repaired prior to the waterproof membrane being installed.

During the site inspection, it was observed that most of the cracks had been sealed by the waterproofing contractor with a flexible sealant to prevent water ingress into the slab and underlying areas. The cracks that remained visible were generally hairline and did not exceed the 0.5mm threshold. However, as the majority of cracks have recently been sealed and their precise width could not be confirmed, we recommend that the waterproofing contractor verify the crack widths to ensure the necessary rectification works are implemented.

In summary, it is NJA's recommendation that any cracks wider than 0.5mm are to be epoxy injected and repaired prior to the waterproof membrane being installed. In addition, it is on the onus of the waterproofing contractor to select a waterproof system that can tolerate the cracks (bridge across the cracks) so that no failure occurs at these locations.

Exposed Reinforcement

Exposed reinforcement was identified in several locations to the Level 4 slab, including:

- ◆ The concrete slab on Level 4 where block walls were removed.
- ◆ The suspended concrete slab around the pool area perimeter, which has been cut.

It is recommended that the following repair works be undertaken by a specialist concrete repair contractor.

- ◆ Every section of exposed reinforcement of the removed block walls and concrete slabs are to be cut back at least 15mm below slab level.
- ◆ The reinforcement shall be power tool cleaned in accordance with AS1627.2:2002 and shall be treated with Parchem Nitoprime Zincrich or an approved equivalent.
- ◆ Reconstruct the concrete slab with high-build cementitious epoxy mortar (Parchem Fosroc HB-40 or equivalent).
- ◆ All repairs shall be in accordance with the manufacturer's details and appropriate preparation and adherence to curing times are critical.

Concrete Spalling

During the inspection, significant concrete spalling was observed on the underside of the Level 4 concrete slab, specifically above the offices of Otto Chartered Accountants and Oasis Dental Studio (Level 3). We were unable to inspect the ceiling cavity of Otto Chartered Accountants at the time of the inspection, where more extensive spalling may be occurring.

Based on photographs of the spalling above Otto Chartered Accountants, the damage appears significant and suggests a long-term issue, as evidenced by previous repairs. While we do not anticipate immediate risk of collapse, we recommend a follow-up inspection when **John Mayer** (RPEQ) returns from leave to assess the necessary rectification works for the spalling concrete. NJA can then provide a quote for the required repairs.

It is to be noted that following the site inspection, additional supports may need to be installed beneath areas of concern.

Yours sincerely,



Hayden Watts
Forensic Engineer
For and on behalf of
NJA Consulting Pty Ltd