

I make this submission based on over 30 years of experience as a Building Surveyor with a large regional council preceded by 14 years as a tradesman working on a wide range of construction sites including supervisory and project management roles . I am an A1 Accredited Certifier ( council ) and held an unrestricted Builders License for more than 40 years .

### **BASIS OF SUBMISSION**

I am concerned that , what I consider , a **basic role** of a Building Surveyor has been overlooked - **inspection of buildings under construction - expanding Mandatory ( critical stage ) inspections** .

Until recently ( generally coinciding with the introduction of Building Certification ) inspection of buildings under construction was a significant part of a Building Surveyors daily work . **Not** to be confused with the role of a Clerk of Works . My team inspected all structural elements before covering including all footings and all in-situ concrete structural elements prior to pouring concrete , we also inspected all wet area waterproofing ( not just a percentage ) , external waterproofing , passive and active fire protection including all penetrations ( not just a percentage )

Builders in our region considered it a normal part of the construction process to request inspections (from either private or council Building Surveyors ) at those stages . Many of the larger buildings have been constructed by National construction companies ( including some metropolitan ) from outside the region and they likewise considered inspections to be a normal part of the construction process .

None of my various team members held formal qualifications in engineering but did have some exposure to structural engineering principles during tertiary studies , something that **seems** to lack from current courses approved by NSW BPB . I have had 15 trainees ( male & female ) many with no practical building site experience but , with appropriate training and coaching on building site methods and culture , they all became confident and competent in carrying out building inspections and communicating defects and rectification requirements with construction site supervisors ( and other workers ) of all classes of buildings .

Based on that experience , I consider it **illogical** to propose a suite of changes **without also including procedures that ensure buildings are actually constructed correctly** . To simply rely on a **builders certification - self certification is not sufficient** . **What is required** is a return to the **robust third party inspection system** that existed until recent years .

House builders have been licensed in NSW since the 1970's but I still regularly find matters that **require rectification during inspections** . By identifying those matters , they can be rectified **prior to covering** thereby avoiding building failures . They could not be rectified after covering .

The report into the Opal Towers identified a number of construction faults that **could have been rectified** if identified during an inspection prior to covering .

Interesting to note that critical stage inspections for certain structures at Ports Botany and Kembla and Port of Newcastle include excavation prior to placing any footings and prior to **pouring any in-situ concrete building elements** so there seems no reason why that could not be **extended to all buildings** .

From talk back radio and social media it is clear that there is a **community understanding and expectation that buildings are inspected during construction by an independent third party - PCA** Clearly there can be no public confidence in the building regulatory process until that happens .

That can readily be achieved by simply expanding the mandatory ( critical stage ) inspections and including structural engineering principles in all courses approved as a requirement for obtaining accreditation as a Building Certifier ( Surveyor )

Just other observations . If all practitioners involved in the preparation of documentation for the application for a Construction Certificate are required to be Accredited , what procedures are proposed to ensure that the Certifier independently and comprehensively assesses the application , and documentation , comply with the NCC ( BCA ) rather than simply relying on certificates provided by Accredited practitioners to issue the CC ? Also , in my experience engineers have differing ideas about construction methods with some refusing to use some footing systems allowed by the NCC and that other engineers are very comfortable with e.g. a footing system favoured by cottage builders because of the competitive advantage ( cost saving ) is used by most engineers in our area but others do not agree with design principle , so not sure how the proposed Building Commissioner will deal with that in Accrediting Engineers . It seems that the footing design ( and concept ) provided by the structural engineer for Mascot Towers differed from other similar buildings constructed in the area , probably to reduce construction costs .

#### **RECOMENDATION**

##### **1) Expand Mandatory (Critical Stage ) Inspections to include ;**

- a) All structural elements before covering including all footings and in-situ structural concrete elements prior to pouring concrete ,**
- b) All wet area waterproofing ,**
- c) External cladding and waterproofing ,**
- d) All active and passive fire protection including all penetrations .**

##### **2) Include structural engineering in any courses approved as a pathway to obtaining Accreditation**