

Mark Meldrum
Executive Director Land Services
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Australia

1 April 2021

Dear Mark,

RE: Building Reform Consultation: Compulsory Third-Party Review – Structural Design

This letter is a submission for the Northern Territory Government's request for feedback to develop priority reforms that consider Compulsory Third-Party Review in Structural Design.

About Engineers Australia

With around 100,000 individual members, Engineers Australia is the profession's peak body. We are the voice of the profession and exist to advance the science and practice of engineering for the benefit of the community. In the Northern Territory, we represent over 950 Engineers.

Our high standards, globally-recognised credentials and international agreements enable Engineers Australia members to live and work around the world – with our members currently in more than 120 countries.

Founded in 1919 as the Institution of Engineers Australia, our work has underpinned the progress of our nation for more than a century. Engineering plays a pivotal role in society and will continue to shape the future of Australia, creating healthy, just, prosperous, secure and sustainable communities.

1. What is reviewed?

Engineers Australia Generally agree with what is proposed. The independent third-party reviews on structural elements (The reviews) should be high level and aim to capture critical structural design elements. If any issues are identified during this process, more extensive/detailed review may be triggered. We suggest the level of details be based on the complexity of the building. For example, in a building of very high complexity, it is prudent to conduct a more detailed review than a medium complexity building.

Engineers Australia supports the NT variation to introduce the reviews on medium complexity buildings. However, random reviews on very low/low complexity buildings should be performed to ensure the general quality and compliance of all types of buildings.

2. Who conducts the review?

An experienced independent engineer who is a Chartered Professional Engineer (Chartered status with Engineers Australia or equivalent) with minimum 10 years of experience and registered in Northern Territory. We note the consultation paper proposes National Engineers Register (NER) as the key credential. However, given the level of experience required, we suggest CPEng **and** work experience be used as criteria. All the reviewers should confer with their Professional Indemnity (PI) insurers so that the reviews are covered by adequate PI insurance to perform the review.

3. How is an independent reviewer be identified?

Engineers who meet the above criteria (outlined under answers to Q2) and express an interest could be identified by an endorsement on their NT registration and should be listed by Building Advisory Services (BAS) for project proponents to select in accordance with the principle of being independent. Ensuring sufficient independence of reviewers from project proponents will need to be carefully managed.

4. When is the review conducted?

In general, after completion of design and documentation by designer and prior to issue of Building Permit. However, for certain high complexity projects, the review process may be considered to start early so that any issues identified are not too late to flag, given that program delays may be caused until the issues have been addressed.

5. How are disputes resolved between the various practitioners?

Typically, practitioners should be able to talk to each other to clarify matters and resolve disagreements. If an impasse is reached, this should NOT be up to the certifier to resolve. When the dispute occurs, it should be referred to the Director of Building Control (DBC) for a decision. The DBC can then rely on separately obtained opinion – either from internal expertise if available or externally if required.

6. Who bears the cost of the review process?

The project proponent. Engineers Australia note that the benefit to the public far outweighs the additional cost to a project.

7. What documentation/record keeping is required?

A statement from the original designer to declare the design is ready for the review and a summary of review from the reviewer (e.g. if the review process is initiated at the end of the design process, Issue for Construction (IFC) drawings and Section 40 design certificate should be passed onto the reviewer to demonstrate the completeness of documentation). Both documents could be in the form of a certificate (format/content of the form should be prescribed by the government) which then forms part of the pack of documents required as part of the Building Permit. The summary of the review shall include the background/stage when the review occurs and outline any exclusions, assumptions, and issues identified by the reviewer.

Associated documentation could include the basic calculations of the check if applicable.

We suggest reviews as well as the reviewers' information should be documented and lodged on file at the BAS.

Any Other Feedback?

- It is appropriate for the certifier to decide when a review is required i.e., when determine the building complexity and provide notice to the project proponent as early as possible. However, the method of building complexity assessment should be made clear for practitioners to establish better understanding.

- We support the mandatory review of buildings with a minimum complexity level of medium. We note that in the NT due to cyclonic conditions, all buildings will have at least 1 complexity factor resulting in a minimum rating of low. If buildings with a 'low' rating are reviewed as per ABCB consultation paper, then all buildings including garden sheds, simple residential etc would be subject to the review process which is excessive.
- Liability for reviewers needs to be carefully considered. The fees for a review are likely to be significantly less than those for design. Therefore, attracting full liability is not considered appropriate or commercially feasible. We note that the intent of the review is for a high-level check of the main structural elements and **not** a detailed design review of the calculations and drawings etc – the detailed design review process should be captured by original designer's inhouse quality assurance (QA) process. As such, we do note the liability of the independent third-party reviewer should be limited and clarified further.
- Most importantly, consultation with insurers should be undertaken to understand their appetite to insure third party reviewers, especially with the current deteriorating insurance market nationwide. If insurers are unwilling to insure (and this may depend on the liability as noted above) engineers will not be able to undertake reviews.
- The project proponent should take potential delays in the Permit to Build process into account due to the time required to resolve differences in opinions.
- Staged projects should go through staged review process.
- In summary, managing cost, program and liability are the crucial parts to the success of independent 3rd party review. Engineers Australia suggest the department consider previous Engineers Australia submission to ABCB on the holistic independent third-party review paper for additional comments. The Engineers Australia submission can be accessed via [this link](#).

Thank you for considering this submission. If you would like to discuss the issues raised in more detail, please contact me on KQuinn@engineersaustralia.org.au or 0439 659 050.

Kind Regards,



Keely Quinn

General Manager Northern Division