Design and Building Practitioners Regulation 2020

Stakeholder Feedback Template Form

This template has been designed to help you make a written submission as part of the public consultation on the Design and Building Practitioners Regulation 2020.

The template contains three sections to guide stakeholders to providing feedback on:

- Regulatory Impact Statement
- Draft Design and Building Practitioners Regulation 2020
- Draft Continuing Professional Development Guidelines for Prescribed Practitioners
- Draft Continuing Professional Development Guidelines for Professional Engineers.

You don't have to give feedback on all sections and can feel free to choose which questions or fields that would like to fill in.

Submissions close 5:00pm 11 January 2021

Your Name: Thomas Perriment

Organisation Name: [redacted]

Date: 11/01/2020

About you

I am a Geotechnical Engineer with 7 years experience in the built environment and infrastructure sector. I regularly undertake subsidence and slope risk investigations for large residential developments amongst many other types of infrastructure. I trained as an engineering geologist and became a geotechnical engineer in the UK before coming out to Australia. I hold a masters in Engineering Geology (MSc Engineering Geology, University of Newcastle, UK) accredited by the Institute of Civil Engineers (UK) and the Geological Society of London and a BSc (Hons) in Geology and Physical Geography, also accredited by the Geological Society of London.

I am also a committee member of the Australian Geomechanics Society (AGS). The AGS is a technical society of Engineers Australia (EA), created to promote and advance the theory and practice of geomechanics in Australia. The membership of the AGS comprises Geotechnical Engineers and Engineering Geologists, with the two disciplines having significant cross over. I suggest that the AGS are well placed to provide further information to the NSW government on the roles of these two disciplines in the building industry.

Please share information about yourself or the organisation that you are responding on behalf of. This information helps us work out what various groups think about the changes and how they will be affected.

If the reforms will affect the work you or your organisation does, please tell us what that work is.

If you think you will need to be registered as a Design Practitioner, Principal Design Practitioner, Building Practitioner or a Professional Engineer, please share details of your qualifications and experience.

If you are a member of the public, please share the reason you are interested in these reforms and how you learnt about them.

Please feel free to share any other details you think will help us develop these reforms.

Regulatory Impact Statement (RIS)

Please use this section to provide feedback on the RIS. The questions from the RIS have been reproduced here for convenience. Page numbers in brackets refer to the section in the RIS.

Scope of reforms (page 15)

1. Do you think the reforms should be expanded to other types of buildings over time? Why/Why not? If so, which types of buildings do you think should be next? **No comment.**

2. Do you agree that the reforms should only apply to existing arrangements where the Complying Development Certificate or Construction Certificate has been applied for on or after 1 July 2021? Why/Why not? **No comment.**

Regulated design (page 17)

3. Are the proposed exclusions from 'building work' appropriate? Why/Why not? **No comment.**

4. Are there other works that should be exempted? Please provide the basis for the exemption and when the exemption should be effective (for example, a description of the works or threshold of the value including the reason for that value). **No comment.**

Registration of Compliance Declaration practitioners (page 23)

5. Do you support the proposed classes of Design Practitioner? Why or why not?

The Design Practitioner – Geotechnical Engineering should be renamed **Design Practitioner – Ground Engineering** to cater for Engineering Geologists which are key design practitioners for class 2 buildings (refer to the answer to Question 7). Alternatively, an additional category of Design Practitioner is proposed: **Design Practitioner – Engineering Geologist** to cater for Engineering Geologists who are currently design practitioners for class 2 buildings (refer to the answer to Question 7).

6. Other than qualifications, skills, knowledge and experience requirements, are there any other eligibility criteria that applicants should meet to be eligible for registration? **No comment.**

7. Are there other types of Design Practitioners that should be included or any that should be removed? If so, what are they and why?

Yes. The Regulations omit an essential type of Design Practitioner: Engineering Geologists.

Engineering Geologists investigate and interpret the natural and built environment subsurface to manage ground risks at planning, design and construction stage. They use their geological skills to enhance engineering practice in such fields as site investigation, slope stability analysis, mapping of geological and geotechnical hazards, foundation and earthworks design, and underground construction and excavation supervision. Engineering Geologists are therefore key Design Practitioners for residential apartment buildings class 2 and as such should be included in these Regulations.

The important role played by professional engineering geologists is already recognized by the NSW Department of Infrastructure, Planning and Natural Resources in their Geotechnical Policy Kosciuszko Alpine Resorts. This policy is applicable for building work covered by State Environmental Planning Policy No. 73 Kosciuszko National Park - Alpine Resorts) 2007. Professional engineering geologists with RPGeo or CPGeo are recognised by this Policy.

Poor characterisation and understanding of the soil or rock mass can severely impact class 2 buildings in NSW. Examples of geological hazards affecting NSW Class 2 buildings are provided in the table below. The damage to these class 2 buildings could have been avoided with an assessment of ground conditions by an Engineering Geologist.

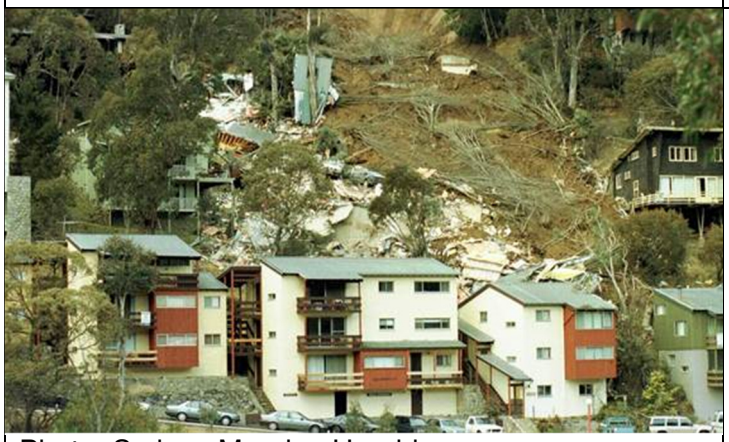
 Photo: James D Morgan / Getty Images	**Erosion** (Newcastle - 2020); Source: https://www.theguardian.com/australia-news/2020/jul/18/nsw-central-coast-houses-partially-collapse-after-beach-erosion-caused-by-swells
 Photo: Tim Hunter. Source:News Corp Australia	**Differential settlement** (Jordan Springs East - 2020). This issue led to a Contractor buying back 841 homes (source: https://www.theguardian.com/australia-news/2020/dec/15/western-sydney-lendlease-to-buy-back-up-to-841-homes-at-jordan-springs-east-site).
 Photo: Sydney Morning Herald	**Slope instability** (Thredbo - 1997); This event led to the loss of 17 lives on Wednesday July 30, 1997.

 Photo: Newcastle Star	**Subsidence** due to mine tunnel collapse (Swansea Heads - 2014). Source: https://www.newcastlestar.com.au/story/2386272/mine-subsidence-damage-compensation-payouts-rise/

The current Regulations do not cater for Engineering Geologists and changes are required in the definitions of Design Practitioners.

Following two approaches are proposed for to cater for Engineering Geologists within the Regulations:

- Group Engineering Geologists with the Design Practitioner - Geotechnical Engineers in a new design practitioner type called Design Practitioner - Ground Engineering Specialist (Alternative 1), or:

- Add a new design practitioner type called Design Practitioner - Engineering Geologist (Alternative 2).

8. Do you support the proposed qualification, skills, knowledge and experience requirements for each class of practitioner? Why or why not? Please make suggestions for additional or alternative requirements.

As described in the answer to Question 7, there are two approaches for the Regulations to cater for Engineering Geologists:

- Group Engineering Geologists with the Design Practitioner - Geotechnical Engineers in a new design practitioner type called Design Practitioner - Ground Engineering Specialist (Alternative 1), or:

- Add a new design practitioner type called Design Practitioner - Engineering Geologists (Alternative 2).

ALTERNATIVE 1

For alternative 1, the possible change would be to rename the qualification matching the renamed type of design practitioner:

- Schedule 2, Part 3 Section 17
  Design practitioner - ~~geotechnical~~ **ground** engineering

  (1) **Qualification**
  Must be registered as a professional engineer in the class of professional

engineer — geotechnical engineering under the Act**, or**
Must be registered as a professional engineering geologist in an area of ground engineering by a professional body of engineers or engineering geologist that—

(i) **operates with a professional standards scheme, and**
(ii) **requires the successful completion of a qualification relevant to carrying out professional engineering work in accordance with the professional standards scheme.**

ALTERNATIVE 2

For alternative 2, the possible change would be to add the new qualification/knowledge and skills matching the new proposed type of design practitioner:

- Schedule 2, Part 3

20 Design practitioner— engineering geologist

(1) Qualification
At least one of the following—
(a) an accredited 3 year full-time or equivalent part-time undergraduate bachelor degree in engineering geology
(b) an accredited postgraduate masters degree in engineering geology,
(c) a non-accredited qualification that has been assessed as being equivalent to an accredited qualification in paragraph (a) or (b)—
(i) for a qualification that was conferred by an Australian university or tertiary institution—
by an Australian signatory to the Washington Accord, or
(ii) for a qualification that was conferred by a foreign university or tertiary institution—by an assessing authority for the skilled occupation of engineering geologist.

(2) Knowledge
Must know and understand the knowledge referred to in clause 17(2) of this Schedule.

(3) Skills
In addition to the skills referred to in clause 17(3) of this Schedule, must be able to:
- Demonstrate they can assess the nature of the ground in activities requiring specialist and in-depth engineering geological knowledge.
- Demonstrate they can work closely with other engineering professionals to solve (identify, investigate, assess and communicate) complex engineering geological problems.
- Demonstrate they can work closely with other engineering professionals to convey engineering geological context.

(4) In this clause— accredited, assessing authority, skilled occupation and Washington Accord have the same meanings as in clause 21 of this Schedule.

9. Do you agree that practitioners should be required to have 5 years of recent and relevant practical experience? Yes

10. Some classes of practitioner have been proposed with authority to work on low and medium rise buildings? Do you support this approach? No comment.

Registration of Professional Engineers (page 29)

11. Are there any other areas of engineering that should be captured for the purposes of designing or constructing a class 2 building, or a building containing a class 2 part?

Engineering geologists operate in the area of geotechnical engineering as currently defined in the Regulations ("an area of engineering that involves the mechanics of soil and rock and the application of the mechanics to the design and construction of foundations, retaining structures, shoring excavations, and ground bearing structures for buildings and other systems constructed of, or supported by, soil or rock").

Mechanics of soils and rock depend on material and mass properties, which the professional engineering geologist is particularly well-suited to characterise. The engineering geologist fulfils a key role in the identification of any required changes to design assumptions during construction of foundations, particularly retaining structures, shoring excavations, and ground bearing structures and elements for Class 2 buildings which are constructed of, or supported by, soil or rock.

The important role played by professional engineering geologists is already recognized by the NSW Department of Infrastructure, Planning and Natural Resources in their Geotechnical Policy Kosciuszko Alpine Resorts. This policy is applicable for building work covered by State Environmental Planning Policy No. 73 Kosciuszko National Park - Alpine Resorts) 2007. Professional engineering geologists with RPGeo or CPGeo are recognised by this Policy.

ALTERNATIVE 1

For alternative 1 (as provided in the answer to Question 7 - Design Practitioner - Ground Engineering Specialist), the only required change would be to rename the area of geotechnical engineering to area of ground engineering without further changes to the definition provided in the Regulations.

ALTERNATIVE 2

For alternative 2, an additional (or change to) area of engineering is not required to cater for the new proposed type of design practitioner: Design Practitioner - Engineering Geologist as both practice areas can refer to the provided geotechnical engineering definition in the Regulations.

12. Do you support a co-regulatory approach for the registration of engineers?

13. Pathway 1 will require an engineer to satisfy certain qualifications, skills, knowledge and experience requirements. Are there any other eligibility criteria that engineers should meet before being registered?

14. The Regulation proposes recognition of Washington Accord accredited qualifications. Do you think this is appropriate? If not, what alternative approach do you suggest?

15. Under Pathway 2 what criteria do you think the professional engineering body should satisfy to be eligible to perform their function?

16. Would you be supportive of professional bodies developing a PSS for Pathway 3 to be available?

I would support Pathway 3 in the near future to cater for engineering geologists.

There are three Australian professional bodies which could provide professional accreditation for engineering geologists in the near future: the Geological Society of Australia (GSA), the Australian Institute of Geoscientists (AIG) and AusIMM (Australasian Institute of Mining and Metallurgy).

17. Do you agree that Professional Engineers should be required to have 5 years of recent and relevant practical experience?

Yes, I do agree that in both proposed alternatives (refer to the answer to Question 7) the 5 years of recent and relevant practical experience should be required.

18. Do you support the proposed generic list of skills and knowledge requirements for all classes of engineering (excluding fire safety)? If not, please outline what you think the specific skills and knowledge for each class of engineer should be. No comment.

Compliance Declaration Scheme: practitioner requirements (page 38)

19. Do you support the proposal that all construction issued regulated designs must be lodged before any building work can commence? Why or why not? No comment.

20. Do you support the Building Practitioner being primarily responsible for lodging regulated designs on the NSW Planning Portal? Why or why not? If not, who do you think should

be responsible at the different lodgement points? Please explain your answer. No comment.

21. Do you support the matters covered in the Design Compliance Declaration? Why or why not? No comment.

22. Do you consider any other matters should be included in the Design Compliance Declaration? No comment.

23. Do you support the proposed title block? Are there any other matters that should be included in the title block? No comment.

24. Do you support the title block being available in a .dwg format? No comment.

25. Do you support the proposal that varied regulated designs be lodged within 1 day of the building work being commenced? Why or why not? No comment.

26. Do you support the proposal that the Building Compliance Declaration, regulated designs and variation statements be lodged prior to the application for the Occupation Certificate? Why or why not? No comment.

27. Are there further matters that should be included in the Building Compliance Declaration? If so, what are they? No comment.

28. Are there further matters that should be included in the Principal Compliance Declaration? If so, what are they? No comment.

Insurance (page 51)

29. Do you support the approach proposed for insurance requirements for Design Practitioners and Professional Engineers? Why or why not? No comment.

30. Do you consider additional insurance requirements should be prescribed for Design Practitioners and Professional Engineers? If so, what? No comment.

31. Do you support the proposed transitional arrangements that exempt Building Practitioners from being insured for issuing Building Compliance Declarations? Why or why not? No comment.

Continuing professional development (CPD) (page 54)

32. Do you support the proposed CPD requirements for Design and Building Practitioners? Why or why not? **No comment.**

33. What types of training, education or topic areas would be relevant for the functions carried out by Design and Building Practitioners? **No comment.**

34. Do you support the proposed CPD requirements for engineers under pathway 1? **No comment.**

35. Do you support the mandatory CPD topic areas? Why/why not? Please make any suggestions for amendments and explain why they are necessary. **No comment.**

Penalty notice offences (page 57)

36. Do you support the proposed penalty notice offences and amounts proposed in Appendix 1? Why or why not? No comment.

37. Do you think the proposed penalty notice offences and amounts are fair and reasonable?

Fees (page 59)

38. Do you support the reasons for the proposed fees? Why or why not? **No comment.**

39. What do you think NSW Fair Trading should consider in determining the fees? **No comment.**

40. Are you interested in being involved in targeted stakeholder consultation on fees? **No comment.**

Proposed Design and Building Practitioners Regulation 2020

Please use this section to provide feedback on the proposed Regulation. Headings have been included to assist you in providing feedback on particular topics covered in the Regulation.

1. Part 2 – Regulated designs and types of work

Requirements for regulated designs and compliance declarations, building work and professional engineering work

2. Part 3 – Requirements for designs and building work

Lodgement of designs and compliance declarations, requirements of principal design practitioners and building practitioners

3. Part 4 – Registration of practitioners

Applications and conditions of registration and registration obligations

4. Part 5 – Recognition of professional bodies of engineers

Applications and requirements for recognition or registration scheme

5. Part 6 – Insurance

Insurance for design and principal design practitioners, professional engineers, building practitioners and adequacy of cover

6. Part 7 – Record keeping

Record keeping for design and principal design practitioners, professional engineers, building practitioners

7. Part 8 – Miscellaneous

Authorised and penalty notice officers, exchange of information, transitional arrangements for insurance for building practitioners and qualifications for fire system designers and work done under existing arrangements.

8. Schedule 1 – Classes of registration

Classes of registration for practitioners and scope of work

9. Schedule 2 – Qualifications, experience, knowledge and skills

For building practitioners, design practitioners, principal design practitioners and professional engineers

10. Schedule 3 – Continuing professional development

CPD for prescribed practitioners and CPD for professional engineers

11. Schedule 4 – Code of practice

Code for prescribed practitioners and code for professional engineers

12. Schedule 5 – Penalty notice offences

13. Schedule 6 – Forms

Design Compliance Declaration

14. General feedback

Any other comments you would like to make on the proposed Regulation.

Proposed Continuing Professional Development Guidelines (CPD Guidelines)

Please use this section to provide feedback on the proposed CPD Guidelines. There are two Guidelines we are seeking feedback on:

1. *CPD Guidelines for prescribed practitioners (design practitioners, principal design practitioners and building practitioners) and,*
2. *CPD Guidelines for professional engineers.*

Questions have been included to assist you in providing feedback.

CPD Guideline for prescribed practitioners

1. Do you consider that requiring practitioners to undertake three hours of CPD activity is appropriate? Why or why not?

2. Do you support that CPD activities must be from the approved platforms? If not, please explain why.

3. Do you support the guidelines prioritising technical CPD activity (i.e., improving knowledge and understanding of the National Construction Code and Building Code of Australia) over other CPD activities? If not, please explain why.

4. The Department is working with industry to develop courses that would assist practitioners. What courses or topic areas should be developed and available on the Construct NSW Learning Management System? We are particularly interested in providing courses that cover gaps in current learning content.

5. Are there any other general comments you would like to make on the Continuing Professional Development Guidelines for prescribed practitioners?

CPD Guidelines for professional engineers

1. Do you support the proposed CPD structure and allocation of points? Why/why not? Please make any suggestions for amendments and explain why they are necessary.

2. Do you support the mandatory CPD topic areas? Why/why not? Please make any suggestions for amendments and explain why they are necessary.

3. Are there any activities that should be included/not included as:
   a) Formal education and training activities?
   b) Informal education and training activities?

4. Structured training courses available from Construct NSW Learning System and from the Australian Building Codes Board are proposed to count for 2 CPD points. Do you support this approach?

5. The Department is working with industry to develop courses that would assist professional engineers. What courses or topic areas should be developed and available on the Construct NSW Learning Management System? We are particularly interested in providing courses that cover gaps in current learning content.

6. Are there any other general comments you would like to make on the Continuing Professional Development Guidelines for Professional Engineers?