

APEGA members and permit holders are required to practise engineering and geoscience skillfully, ethically, and professionally. They must meet all prescribed requirements and follow all applicable legislation and regulations, such as the Ethics, and Geoscience Professions Act, General Regulation, Code of Ethics, and APEGA bylaws. Investigation and enforcement—followed by, when necessary, judgment based on a fair hearing of the facts—are requirements of ours in service to the public interest. For more information, please visit www.apega.ca/enforcement/discipline-decisions.

Date of Hearing: February 20, 2020

Date of Decision: May 22, 2020

APEGA Discipline Case Number: 19-002-FC

IN THE MATTER OF A HEARING OF THE DISCIPLINE COMMITTEE OF THE ASSOCIATION OF PROFESSIONAL ENGINEERS AND GEOSCIENTISTS OF ALBERTA

Pursuant to the *Engineering and Geoscience Professions Act*, being Chapter E-11 of the Revised Statutes of Alberta 2000 In the Matter of the Conduct of Michael McLeod, P.Eng.

Under the *Engineering and Geoscience Professions Act*, RSA 2000, c E-11 (the "Act"), a hearing into this matter was held by a Hearing Panel of the Discipline Committee on February 20, 2020. The hearing addressed the conduct of Michael McLeod, P.Eng. (the "Member"). The hearing proceeded by Agreed Statement of Facts, Admission of Unprofessional Conduct and a Joint Submission on Penalty.

The hearing dealt with the following amended charges:

- 1. In or around the period between May 2016 and January 16, 2017, Michael McLeod P.Eng. ("McLeod") proceeded with the construction of various structural components of a martial arts and shooting range facility (the "Building") in Calgary, Alberta, in a manner that did not align with the Alberta Building Code ("ABC") and the building permit issued by the City of Calgary (the "Building Permit"), or either of them, particulars of which include one or more of the following:
 - a. In or around May 2016, McLeod was retained through his company, ABS Concrete Systems Ltd., by the owner of the Building (the "Owner") to construct various structural components of the Building;
 - b. Although McLeod was not the Registered Professional of Record responsible for the structural engineering of the Building ("Structural RPR") during the period of between May 2016 and January 16, 2017, or thereabouts, McLeod knew or ought to have known that the Building Permit required the Building to be



constructed in strict accordance with the plans filed upon application to the City of Calgary for the Building Permit;

- c. In or around June 2016, McLeod commenced construction without utilizing appropriate construction drawings authenticated by the Structural RPR;
- d. McLeod proceeded with construction in a manner which he knew or ought to have known was not in strict accordance with the plans filed upon application to the City of Calgary for the building permit;
- e. During the construction, McLeod made significant changes to the structural design of the Building and proceeded with construction on that basis when he knew or ought to have known the changes had not been approved by the Structural RPR or by the City of Calgary, or either of them. Such changes include but are not limited to one or more of the following:
 - i. Changing the elevation used in excavation such that a space initially designed as a crawl space would be a full basement;
 - ii. Using a different flooring system;
 - iii. Changing the thickness of the concrete foundation walls;
 - iv. Changing the design of the gun range walls;
 - v. Changing the materials from which a staircase was to be built;
 - vi. Introducing an elevator into the design;
- f. In or around the period between August 2016 and January 16, 2017, McLeod continued with the construction although he knew or ought to have known the Structural RPR had agreed to withdraw and a new Structural RPR had not yet been formally retained
- 2. Withdrawn.
- 3. In or around the period between May 2016 and January 16, 2017, McLeod implemented alternative design procedures with respect to the Building despite the fact that he was not formally retained as the Structural RPR, in contravention of the ABC and CAN/CSA A23.3 Design of Concrete Structures, or either of them.

It was further alleged that the above conduct constituted unprofessional conduct or unskilled practice of the profession as set out in section 44 of *the Engineering and Geoscience*



Professions Act, and contravened one or more of the Rules of Conduct 1, 3, 4, and 5 in APEGA's Code of Ethics, and/or was inconsistent with either or both of APEGA's Guideline for Contract Employees and Independent Contractors and APEGA's Guideline for Ethical Practice.

AGREED STATEMENT OF FACTS Background

- 1. The Member has been a member of APEGA since 1991 and has been a professional member of APEGA at all times material to these proceedings.
- 2. ABS Concrete Systems Ltd. ("ABS"), of which the Member is a Director and Shareholder, is a company specializing in resurfacing concrete, Insulated Concrete Form construction, and Fortruss floor system installation, but is not a permit holder with APEGA.
- 3. In May 2016, the Member was engaged through ABS by the Owner to construct various structural components of the Building. The Member was not formally retained as the Structural RPR responsible for the structural engineering of the Building.
- 4. The Member did not prepare the initial construction drawings for the Building and was not involved in submitting the initial construction drawings to the City of Calgary for approval. The Member made numerous changes to the design of the Building and proceeded with construction even though he knew or should have known that the changes had not been approved by the Structural RPR or the City of Calgary.
- 5. One such change occurred in September 2016 when the Owner agreed with the Member to incorporate a Fortruss floor system into the design plan of the Building that was not in the original design prepared by the Structural RPR. The Member was retained to carry out the structural engineering and design of the Fortruss floor system.
- 6. In December 2016 or January 2017, the Member submitted as-built plans ("As-Built Plans") to the Owner, reflecting the changes the Member had made in the design of the Building.
- 7. On January 6, 2017, the Owner directed the Member to stop all work on the Building. On January 16, 2017, the Structural RPR contacted the City of Calgary and formally withdrew their responsibility for the structural engineering of the Building.
- 8. Subsequently, the Owner submitted an application to the City of Calgary including the As-Built-Plans. The City of Calgary identified deficiencies with the application and eventually refused the application.

Charge 1:



- 9. The Member admitted and acknowledged that all of the allegations and particulars in Charge 1 were factually true.
- 10. The Member admitted and acknowledged the following:
 - a. He was not retained by the Owner as the Structural RPR of the Building.
 - b. Regarding Charge 1(b), the initial construction drawings prepared by the Structural RPR did not use the Fortruss floor system. The Member understood from the outset that the Owner wished to use the Fortruss floor system which ABS specialized in installing. The Member advised the Owner that the preliminary drawings should be redrawn and resubmitted to the City of Calgary before construction, but the parties agreed that evidence gathered by the Investigative Committee indicated that the Owner wanted the construction to commence without new drawings. The Member agreed that in retrospect, he understood and acknowledged that he should have refused to do the work without updated and accurate plans and specification.
 - c. Regarding Charge 1(c), he should not have commenced construction without receiving the appropriate drawings from the Structural RPR. This was not a formality but a requirement.
 - d. Regarding Charge 1(d), he proceeded with the construction in a manner that he knew was not in strict accordance with the plans filed upon the application to the City of Calgary for the Building Permit and knew that the drawings should have been revised to reflect any significant changes to the design before construction proceeded.
 - e. Regarding Charge 1(e), he made six changes to the design of the Building and proceeded with construction despite knowing the changes had not been approved of by the Structural RPR or the City of Calgary. It was unacceptable to make significant changes to the structural design of the Building and to continue with the construction without first seeking approval from the Structural RPR and the City of Calgary.
 - f. Regarding Charge 1(f), he was aware in August 2016 of the Structural RPR's intention to withdraw. The plan was for the Member to become the Structural RPR but the steps to finalize this were never taken. Instead, the Member acted as the *de facto* Structural RPR between August 2016 and January of 2017. This included making the changes to the structural design of the Building although he was not being paid for engineering services and never formally took responsibility for the structural engineering of the Building.



g. The ABC requires that the authority having jurisdiction be notified when there is a change of a Registered Professional of Record and that when a Registered Professional of Record ceases to be retained, work on the portion of the project for which the registered professional was responsible must stop until the registered professional is replaced. Therefore, it was unacceptable for the Member to continue with construction and act as the de facto Structural RPR during the period from August 2016 to January 2017 without having been formally retained as the Structural RPR and without formally taking responsibility as Structural RPR.

Charge 3:

- 11. Regarding Charge 3, the Member admitted and acknowledged that he had implemented alternative design procedures with respect to the Building despite the fact that he was not formally retained as the Structural RPR. The Member admitted and acknowledged that this was a breach of the ABC and CAN/CSA A23.3 – Design of Concrete Structures.
- 12. Legal counsel for the Investigative Committee noted that there were many individuals involved in the design and construction of the Building; however, this hearing was focused on the Member's conduct. The Member was hired as a contractor and not an engineer but because he was an engineer, his conduct must be assessed as an engineer.
- 13. It was further noted that the Member was subject to increasing demands from the Owner to carry out structural changes. It was clear and admitted by the Member that at a certain point he should have said "no" to the Owner's demands and stopped work.

DECISION REGARDING UNPROFESSIONAL CONDUCT

- 14. The Hearing Panel accepted the Member's admissions of unprofessional conduct and agreed that the Charges 1 and 3 were factually proven and constituted unprofessional conduct under section 44 of the EGP Act:
 - 44(1) Any conduct of a professional member, licensee, permit holder, certificate holder or member-in-training that in the opinion of the Discipline Committee or the Appeal Board
 - (a) is detrimental to the best interests of the public,
 - (b) contravenes a code of ethics of the profession as established under the regulations,

(d) displays a lack of knowledge of or lack of skill or judgment in the practice of the profession



..

whether or not that conduct is disgraceful or dishonourable, constitutes either unskilled practice of the profession or unprofessional conduct, whichever the Discipline Committee or the Appeal Board finds.

- 15. In addition, the Member's conduct contravened the APEGA Code of Ethics:
 - 1. Professional engineers and geoscientists shall, in their areas of practice, hold paramount the health, safety and welfare of the public and have regard for the environment.

. . .

- 3. Professional engineers and geoscientists shall conduct themselves with integrity, honesty, fairness and objectivity in their professional activities.
- 4. Professional engineers and geoscientists shall comply with applicable statutes, regulations and bylaws in their professional practices.
- 5. Professional engineers and geoscientists shall uphold and enhance the honour, dignity and reputation of their professions and thus the ability of the professions to serve the public interest.
- 16. Respecting Charge 1, the admitted facts made clear that the Member proceeded with construction of various structural components of the Building when he knew that the construction was not in strict accordance with the plans filed with the application to the City of Calgary for a building permit. The Member also admitted that he made significant structural changes to the structural design of the Building and proceeded with construction on this basis when he knew or ought to have known that the changes had not been approved by the Structural RPR or by the City of Calgary.
- 17. The Member also admitted that he commenced with construction without using appropriate construction drawings authenticated by the Structural RPR and that between August 2016 and January 2017 he continued with construction and acted as the *de facto* Structural RPR and proceeded with construction of structural changes he made without the approval of the Structural RPR or the City of Calgary.
- 18. The Member acknowledged and understood that he should have refused to do the work without updated and accurate plans and specifications that were approved by the Structural RPR and the City of Calgary. The Member acknowledged that using appropriate drawings prepared by the Structural RPR is not a formality but a specific requirement.



- 19. The Member also acknowledged that his actions breached the ABC (section 2.2.12.2) in failing to ensure that the authority having jurisdiction was notified of a change in the Structural RPR and section 2.4.3.3 of the ABC when he did not stop work on the project until a new Structural RPR was retained.
- 20. The Hearing Panel found that the unprofessional conduct of the Member breached provisions of the ABC and the professional and ethical obligations of a professional engineer that are intended to protect the public and his actions showed a serious lack of judgment and were detrimental to the best interests of the public.
- 21. The Hearing Panel accepted the request of the Investigative Committee to withdraw Charge 2 in this matter.
- 22. Respecting Charge 3, the Hearing Panel understood that the Member revised the original (and approved Building Permit) structural design without being formally retained as the Structural RPR. The phrase "alternative design procedures" might have implied that the Member engaged in providing an "alternative solution" as described in Section 2.3 of Division C of the ABC, which the Hearing Panel understood that the Member did not engage in.
- 23. The Hearing Panel reached this conclusion because it found that the revisions made by the Member represented changes to the design of the Building but not an alternative design process. However, these revisions by the Member were inappropriate as he was not the Structural RPR. This admitted conduct by the Member was a serious breach of the procedures required by the ABC and was serious enough to constitute unprofessional conduct.

DECISION REGARDING ORDERS FOR PENALTY

- 24. The parties made a joint submission on penalty. The Hearing Panel accepted the joint submission with some minor modifications consented to by the parties. The Hearing Panel made the following orders:
 - a. The Member shall be reprimanded for his conduct, and the Discipline Committee's written decision shall serve as the reprimand.
 - b. The Member shall successfully undertake the National Professional Practice Exam within one year from the date of the Discipline Committee's decision. If the examination is not successfully completed within this time, the Member shall be suspended from the practice of engineering until he successfully completes the examination. The Member shall be responsible for all costs associated with completing the National Professional Practice Exam.



- c. The Member shall pay fine in the amount of \$3500.
- d. The Member shall pay a portion of the hearing costs in the amount of \$2,500.
- e. The fine and costs referred to in paragraphs (c) and (d) above are a debt owing to APEGA and shall be paid within one year after the issuance of the Discipline Committee's order regarding penalty. Failure to pay as set out in this paragraph shall result in the immediate suspension of the Member's registration until payment is made.
- f. The Discipline Committee's decision shall be published and circulated as follows:
 - i. a written summary of the decision shall be published in the PEG, in a manner that identifies the Member; and
 - ii. if any member of the public inquires with APEGA as to whether the Member was the subject of a discipline hearing or was found guilty of any charges under the *Engineering and Geoscience Professions Act*, APEGA shall be at liberty to provide a complete copy of the Discipline Committee's decision.
- g. Furthermore, the Member shall of his own accord, within two months after successfully completing the National Professional Practice Exam, write a reflective essay outlining what he has learned about the ethical and professional responsibilities of a professional engineer serving in a contractor role, and how his learning will affect his future practices. The Member shall submit this reflective essay to the Director, Investigations to be used at APEGA's discretion as a learning tool for others.

Reasons for the Orders:

- 25. The Hearing Panel found the above orders to be appropriate and not unreasonable or against the public interest for the following reasons:
 - a. The Member's conduct constituted serious unprofessional conduct and was a serious breach of the Member's professional duty and created potential safety risks. The pressures the Member felt in dealing with the Owner and in trying to complete the project did not justify serious breaches of his professional duties.
 - b. The Hearing Panel gave the Member credit for his cooperation and his willingness to acknowledge that his conduct was a breach of his professional duties.



- c. A significant fine of \$3500 was appropriate to recognize the serious nature of the Member's conduct. The Member's cooperation, his agreement to undertake the National Professional Practice Examination, and willingness to provide a reflective essay made it clear that the Member recognized the seriousness of his conduct and was taking steps to ensure that such conduct would not repeated.
- d. The Hearing Panel's decision would protect the public and the integrity of the profession through publication of the decision which will show that actions of this nature will have serious consequences. The publication of the decision, which will identify the Member by name, would serve as a specific deterrent to the Member in the future.
- e. The Hearing Panel's decision would serve as a warning to the profession of the fact that when undertaking a project for an owner that also involves other engineering professionals, the roles of each party must be clearly defined and respected. Where there is a Structural RPR, it is important to ensure that the owner has a contract with the Structural RPR that provides sufficient scope to deal with structural changes made to the original approved plans. The decision will also emphasize that any structural changes must be approved by the Structural RPR and the approving authority before any work regarding those structural changes is undertaken.
- f. Regarding the \$2500 in costs the Member was ordered to pay, the Hearing Panel noted that had this matter not proceeded by way of a joint submission on penalty, it would have ordered more costs against the Member. The Member's cooperation meant that the hearing could be completed in an efficient and timely manner. This cooperation and the recognition by the Investigative Committee of the difficult financial circumstances of the Member and his company provided a reasonable basis for a limited order on costs.

Signed, RALPH HILDENBRANDT, P. ENG.
Panel Chair, APEGA Discipline Committee

DOUG COX, *P.ENG*.

Panel Member, APEGA Discipline Committee

BRENT LAING, *P. ENG*.
Panel Member, APEGA Discipline Committee