IN THE MATTER OF THE *PROFESSIONAL GOVERNANCE ACT* S.B.C. 2018, CHAPTER 47

and

IN THE MATTER OF BRIAN MCCLURE, P.ENG., STRUCT.ENG.

Engineers and Geoscientists BC Investigation File No. T19-054

ORDER OF THE INVESTIGATION COMMITTEE

A. Background

- 1. On December 12, 2019, the Investigation Committee of Engineers and Geoscientists BC (the "Committee") passed a motion to investigate Brian McClure, P.Eng., Struct.Eng. (the "McClure Investigation") with respect to the structural engineering services he provided as the structural engineer of record for the 11-storey residential building located at 2766 Claude Road in Langford, British Columbia ("Danbrook One"). The Committee appointed a subcommittee of the Committee to conduct the McClure Investigation (the "Investigation Subcommittee").
- As part of the McClure Investigation, Greg Smith, P.Eng., Struct.Eng., member of the Investigation Subcommittee, prepared reports on the field reviews conducted during the construction of Danbrook One (the "Smith FR Report") and the non-seismic elements of the design of Danbrook One (the "Smith NSE Report"), respectively dated July 14, 2020, and February 2, 2021.
- 3. As part of the McClure Investigation, an investigative interview with Mr. McClure was held on June 3, 2021 (the "Interview").
- 4. On June 30, 2021, Dr. Perry Adebar, P.Eng., delivered an expert report regarding the structural design of Danbrook One (the "Adebar Report"). The Adebar Report was commissioned by Engineers and Geoscientists BC to assist in the conduct of the McClure Investigation.
- 5. On July 22, 2021, the Investigation Subcommittee and the Engineers and Geoscientists BC staff Investigator appointed to the McClure Investigation (the "McClure Investigators") delivered their final investigation report regarding the McClure Investigation (the "Investigation Report") to the Committee for their review and consideration.
- 6. At their meeting on July 29, 2021, the Committee resolved that the Committee:

- a. pursuant to section 9.7.3(6) of the Bylaws, considers that it is necessary to protect the public interest and makes an order pursuant to section 67(1)(a) of the PGA to impose limits or conditions on the practice of the regulated practice by Mr. McClure in relation to documented independent reviews of his structural engineering work and that reasons in the form of an order be delivered to Mr. McClure and the complainant pursuant to section 67(2) of the PGA; and
- b. the condition that the documented independent reviews of Mr. McClure's structural engineering work required pursuant to section 7.3.5 of the Bylaws be completed by someone outside of the firm with which Mr. McClure is employed. The Investigation Committee directs staff to draft notification, with reasons, to Mr. McClure, which are to be circulated to and approved by the Investigation Committee prior to being sent to Mr. McClure.
- 7. Pursuant to item b of the motion passed by the Committee on July 29, 2021, the notification and reasons were circulated to the Committee and on September 29, 2021, the Committee passed a motion approving the content of this order (the "Order").

B. Reasons of the Investigation Committee

- 8. The Committee has made the Order based on their review of and discussion arising from the Investigation Report and the appended materials. In making the Order, the Committee was particularly informed by the following information contained in the Investigation Report and the appended materials:
 - a. The Adebar Report contains the following findings:
 - The structural design of Danbrook One is not in compliance with the version of the British Columbia Building Code in place at the time Danbrook One was constructed.
 - Mr. McClure's structural engineering services for Danbrook One did not meet the standard expected of a professional engineer practicing in BC.
 - iii. Mr. McClure is not qualified to carry out structural engineering services for a building such as Danbrook One.
 - b. The Smith FR Report contains the following findings:
 - i. The industry standard of field reviews for a building such as Danbrook One is between 45 and 55 for the concrete work.

- ii. During the McClure Investigation, Mr. McClure provided Engineers and Geoscientists BC with 17 field review reports for Danbrook One. These did not include any field review reports for:
 - 1. Vertical elements in the tower portion.
 - 2. The lateral resisting system, which consists of ductile coupled walls containing critical structural detailing.
- iii. The number of structural field reviews performed by Mr. McClure was insufficient for the Danbrook One structure and does not meet either the Engineers and Geoscientists BC guidelines or the standard of practice.
- c. The Smith NSE report contains the conclusions that the structural design of Danbrook One contains many potential deficiencies of structural elements and numerous discrepancies between structural and architectural drawings, and that some of the structural elements appear to be significantly overstressed.
- d. As part of the McClure Investigation, the McClure Investigators and Dr. Adebar conducted the Interview. During the Interview, Mr. McClure provided the following information:
 - i. Prior to beginning his work on Danbrook One, Mr. McClure had never designed a building such as Danbrook One. Mr. McClure's prior experience consisted of designing wood frame residential buildings up to five storeys and concrete residential buildings up to two storeys. Mr. McClure also had experience designing steel studs and in the course of this work he routinely reviewed structural drawings for high-rise reinforced concrete buildings. Mr. McClure erroneously believed that his prior experience qualified him to design Danbrook One.
 - designed the core and Mr. McClure included design in the structural design drawings for Danbrook One, which Mr. McClure authenticated. Mr. McClure did not design the core because he did not believe he was qualified to do so. However, Mr. McClure did design the core footing of Danbrook One. Mr. McClure now believes he should not have designed the core footing because he now

understands that he was not qualified to do so.

ii. Mr. McClure did not design the core of Danbrook One. Instead,

- iii. No design reviews or independent reviews of any part of the design of Danbrook One were conducted prior to the construction of Danbrook One. Mr. McClure said that he knew these reviews needed to be done but that at the time he was preparing the design Mr. McClure's firm was comprised only of himself and Mr. Sorensen, and that the necessary reviews "just never happened."
- e. The McClure Investigators believe that, based on the evidence gathered during the McClure Investigation, including the statements made by Mr. McClure during the Interview, Mr. McClure made a critical error in judgment in believing that he had the requisite skill and knowledge to design Danbrook One, and that Mr. McClure did not make even the minimum effort to rectify his shortcomings before beginning or during his work on Danbrook One, which should have included properly conducted reviews and independent reviews of the design drawings. Failure to have proper design checks and field reviews put the public at risk and, if not reported, could have resulted in a catastrophic event.
- 9. For these reasons, the Committee considers it necessary in the public interest to place certain conditions on Mr. McClure's engineering practice.

C. Legal Basis

- 10. The McClure Investigation was opened pursuant to section 30(3) of the EGA.
- 11. On February 5, 2021, the EGA was repealed and replaced by the PGA. Section 127(3) of the PGA states:
 - (3) If an investigation committee for an affected body, or a committee of the affected body with similar duties and powers, commenced an investigation before the reference date, that committee is deemed to be an investigation committee for the regulatory body for the purpose of continuing the investigation on and after the reference date.
- 12. The Order is made by the Committee pursuant to the following provisions of the PGA and the Bylaws.
- 13. Section 67 of the PGA states:
 - (1) If the council of a regulatory body, or a discipline committee established under section 75 [discipline hearings], considers the action necessary in the public interest during an investigation under section 66 (1) (a) or pending a hearing under section 75, the council may, by order and without giving the registrant an opportunity to be heard,

- (a) impose limits or conditions on the practice of the regulated practice by the registrant, or
- (b) suspend the registration of the registrant.
- (2) An order of the council under subsection (1) must
 - (a) be in writing,
 - (b) include reasons for the order, and
 - (c) be delivered to the complainant, if any, and to the registrant.
- (3) A decision under subsection (1) is not effective until the earlier of
 - (a) the time the registrant receives the notice under subsection (2), and
 - (b) 3 days after the notice is mailed to the registrant at the last address for the registrant recorded in the register of the regulatory body.
- (4) If the council determines that action taken under subsection (1) is no longer necessary to protect the public, it must cancel the limits, conditions, or suspension and must notify the registrant in writing of the cancellation as soon as possible.
- (5) After an order of the council is made under subsection (1), the registrar of the regulatory body must promptly notify the superintendent about the order.
- 14. Section 9.2(2) of the Bylaws [Powers of the Investigation Committee] states, in part:
 - (2) The Council authorizes the Investigation Committee to exercise the Council's powers pursuant to the following sections of the PGA and Regulations, other than the Council's bylaw-making authority:

[...]

- (d) section 67(1) and (4) of the PGA [Extraordinary action];
- 15. Section 9.7.3 of the Bylaws states, in part:
 - (1) At any time after authorizing an investigation pursuant to section 66(1)(a) of the PGA [*Investigations*], the Investigation Committee may, if it considers that it is necessary to protect the public interest,

- (a) take action pursuant to section 67 of the PGA [Extraordinary action], or
- (b) refer the file to the Discipline Committee, without the issuance of a citation, for the Discipline Committee to consider taking action pursuant to section 67 of the PGA [Extraordinary action].
- (2) The members of any Investigation Subcommittee carrying out an investigation or overseeing and taking responsibility for an investigation carried out by an Investigator and the members of any Resolution Subcommittee must not, for the same matter, participate in any Proceedings related to section 67 of the PGA [Extraordinary action].
- (3) If the Investigation Committee decides to proceed pursuant to subsection (1)(a), the Investigation Committee may determine the process and procedure for making a determination pursuant to this section of the Bylaws, including determining whether Proceedings are to be conducted
 - (a) in writing,
 - (b) in person,
 - (c) by Electronic Means, or
 - (d) in any combination of (a), (b), or (c).
- (4) The Investigation Committee may, before initiating Proceedings held pursuant to this section of the Bylaws, provide written notice to the Registrant subject to investigation that
 - (a) action may be undertaken pursuant to section 67(1)(a) or (b) of the PGA [Extraordinary action], and
 - (b) the Registrant subject to investigation may, by a specified date, make written submissions to the Investigation Committee
- (5) The Investigation Committee may hear oral submissions from the Registrant subject to investigation in the place of or in addition to the written submissions referred to in subsection (4)(b).
- (6) Despite subsections (4) and (5), if the Investigation Committee considers that it is necessary to protect the public interest, the Investigation Committee may initiate Proceedings held pursuant to this section of the Bylaws or make an order pursuant to section 67(1)(a) or (b) of the PGA [Extraordinary action] without

- (a) Providing notice to the Registrant subject to investigation, or
- (b) Providing the Registrant subject to investigation with an opportunity to make written or oral submissions to the Investigation Committee
- (7) An order made by the Investigation Committee pursuant to section 67(1)(a) or (b) of the PGA [Extraordinary action] must comply with sections 67(2) and (3) of the PGA [Extraordinary action].
- (8) Pursuant to section 67(4) of the PGA [Extraordinary action], if the Investigation Committee determines that its order pursuant to section 67(1)(a) or (b) of the PGA [Extraordinary action] is no longer necessary to protect the public interest, it must, in writing, cancel any limits, conditions, or suspension ordered pursuant to section 67(1)(a) or (b) of the PGA [Extraordinary action] and notify the Registrant subject to investigation.
- (9) An order made by the Investigation Committee pursuant to section 67(1)(a) or (b) of the PGA [*Extraordinary action*] is effective until the final disposition of the matter by the Investigation Committee of the Discipline Committee, as applicable.

D. Order

- 16. Pursuant to section 67(1)(a) of the PGA the Committee orders as follows:
 - a. That the documented independent reviews of Mr. McClure's structural engineering work required pursuant to section 7.3.5 of the Bylaws be completed by someone outside of the firm with which Mr. McClure is employed.

DATED this 29th day of September, 2021 <original signed by>

Peter Helland, P.Eng., Chair, Investigation Committee