



ENGINEERS &
GEOSCIENTISTS
BRITISH COLUMBIA

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

and

IN THE MATTER OF VIJAY KUMAR BAINS, P.ENG.

ENGINEERS AND GEOSCIENTISTS BC FILE NO. T18-041

Consent Order

Background

1. On December 8, 2022, the Association of Professional Engineers and Geoscientists of the Province of British Columbia, doing business as Engineers and Geoscientists BC, issued a Citation to Vijay Kumar Bains, P.Eng. (“Mr. Bains”) pursuant to section 66(1)(d) of the *Professional Governance Act*, S.B.C. 2018, c. 47 (the “PGA”).
2. While the allegations set out in the Citation are made under the *Engineers and Geoscientists Act*, R.S.B.C. 1996, c. 116 (the “EGA”), the EGA was repealed and replaced by the PGA on February 5, 2021, and the procedures established by the PGA and the current Bylaws of Engineers and Geoscientists BC will be followed as far as they can be adapted to the proceeding related to the allegations set out in the Citation.
3. Engineers and Geoscientists BC and Mr. Bains wish to resolve the matter by consent pursuant to section 73(2) of the PGA in order to avoid the need for a disciplinary hearing.

Admissions

4. Mr. Bains admits the allegations set out in the Citation, namely that he demonstrated unprofessional conduct by:
 - a. Stamping and sealing structural drawings for submission to the City of Surrey dated January 15, 2015 (the “Drawings”), for a Tenant Improvement Permit at [REDACTED], Surrey, BC (the “Project”) that:

- i. Included irrelevant or inapplicable details or information, such as:
 - 1. architectural information that was not appropriate for inclusion on stamped and sealed engineering drawing;
 - 2. details pertaining to residential or Part 9 building projects, which were not applicable to the Project;
 - 3. masonry notes which were not applicable to the Project; and,
 - 4. a shear wall schedule, which contained types not included in the Project.
- ii. Failed to incorporate sufficient design details and information, such as:
 - 1. details respecting second floor connections, including floor joist supports;
 - 2. allowance for deflection on Section A-A of the Drawings;
 - 3. details concerning the vertical and lateral load paths;
 - 4. a design statement describing how the second floor will affect the lateral load capacity of the base building; and,
 - 5. information respecting reinforcement in detail 30 of structural drawing SD-2.
- iii. Utilized incomplete and/or incorrect:
 - 1. floor diaphragm calculations;
 - 2. shear wall calculations;
 - 3. seismic and earthquake force calculations;
 - 4. second floor joist calculations;
 - 5. R_d/R_o factor;
 - 6. snow load factor; and,
 - 7. slab thickness in the slab on grade calculations.
- b. Failing to undertake an appropriate design process to the reasonable standard expected of a professional engineer by:
 - i. failing to adequately consult or coordinate with other professionals engaged with the Project;

- ii. failing to identify or record the as-constructed aspects of the Project;
 - iii. failing to date the structural design calculations;
 - iv. utilizing inapplicable or inappropriate reference material, specifically the “GRDSLAB.xls” spreadsheet, which was not based on Canadian codes;
 - v. failing to conduct or document an internal concept review prior to stamping and sealing the Drawings;
 - vi. failing to ensure an independent structural concept review was completed in a timely fashion;
 - vii. submitting incorrect or incomplete information on an outdated letter of assurance (Schedule B);
 - viii. submitting drawings that did not meet the 2012 BC Building Code Division C Sentence 2.2.4 requirements for Structural Drawings; and,
 - ix. submitting drawings that did not meet the reasonable standard as set out in the EGBC Guidelines for Professional Structural Engineering Services for Part 3 Building Projects, Revised 2011.
- c. Accepting professional responsibility for a Part 3 building project in circumstances where he was not qualified by training or experience to fulfill that role;
- d. Failing to maintain adequate Project documentation, including:
- i. failing to include revision numbers, revision dates, revision comments, or a drawing list on the Drawings;
 - ii. failing to create or maintain minutes or notes of meetings between himself and the client, or between himself and any of the other design professionals engaged for the Project;
 - iii. failing to create or maintain any documentation regarding his site visit(s) to the Project, including failing to create or maintain a record of the as-constructed components of the Project; and,
 - iv. failing to maintain copies of the revised drawings, which he stamped, sealed, and issued to the client following the completion of the independent structural review.
5. The conduct set out above at paragraphs 4(a) – (d) is contrary to Principle 1 of the Engineers and Geoscientists BC Code of Ethics, created pursuant to the *EGA* (the “Code of Ethics”), as it stood at the time, which required that members and licensees

hold paramount the safety, health and welfare of the public, the protection of the environment and promote health and safety within the workplace.

6. The conduct set out above at paragraphs 4(a) – (c) is contrary to Principle 2 of the Code of Ethics, as it stood at the time, which required that members and licensees undertake and accept responsibility for professional assignments only when qualified by training or experience.
7. The conduct set out above at paragraphs 4(a) – (c) is contrary to Principle 3 of the Code of Ethics, as it stood at the time, which required that members and licensees provide an opinion on a professional subject only when it is founded upon adequate knowledge and honest conviction.
8. The conduct set out above at paragraphs 4(b) and (d) is contrary to section 14(b)(1) of the Engineers and Geoscientists BC Bylaws, created pursuant to the *EGA* (the “Bylaws”), as it stood at the time, which required that members and licensees establish and maintain documented quality management processes for their practices, which shall include, as a minimum: retention of complete project documentation which may include, but is not limited to, correspondence, investigations, surveys, reports, data, background information, assessments, designs, specifications, field reviews, testing information, quality assurance documentation, and other engineering and geoscience documents for a minimum of 10 years.
9. The conduct set out above at paragraph 4(b)(vi) is contrary to section 14(b)(4) of the Bylaws, as it stood at the time, which required that members and licensees establish and maintain documented quality management processes for their practices, which shall include, as a minimum: [...] (4) documented independent review of structural designs prior to construction by members or licensees having appropriate experience in designing structures of a similar type and scale, and not involved in preparing the design. The review shall examine representative samples of the structural assumptions, continuity of gravity and lateral load paths, stability and detailing. Where appropriate, the reviewer shall perform numerical calculations on a sample of gravity and lateral force resisting elements necessary to satisfy any review concerns. The extent of the review shall be determined by the reviewer based on the progressive findings of the review. This review and any follow up action must be completed before the documents are issued for construction.
10. The conduct set out above at paragraph 4(d)(iii) is contrary to section 14(b)(2) of the Bylaws, as it stood at the time, which required that members and licensees establish and maintain documented quality management processes for their practices, which shall include, as a minimum: [...] (2) documented field reviews by, or under the direct supervision of, members or licensees, of their domestic projects during implementation or construction.

Disposition

11. By consent, this Order is made pursuant to section 73(2) of the *PGA*.
12. Mr. Bains' registration with Engineers and Geoscientists BC is suspended for a period of two months, commencing October 23, 2023 (the "Suspension Period").
13. During the period from the date of the execution of this Consent Order to the commencement of the Suspension Period, Mr. Bains will:
 - a. make reasonable arrangements for the orderly transfer of his ongoing professional engineering project files to other professional engineers; and
 - b. limit his practice to those project files that he is currently engaged on and will not take on any new project files or other engineering work.
14. Effective immediately, Mr. Bains agrees that he will not perform any engineering work requiring the application of Part 3 of the British Columbia Building Code, as amended (the "Practice Restriction"). Mr. Bains' practice of structural engineering will be restricted to Part 9 of the British Columbia Building Code but may include the design of structural elements within such buildings, that are governed by Part 4 of the British Columbia Building Code.
15. If Mr. Bains wishes to lift or modify the Practice Restriction set out in paragraph 15, he must:
 - a. Successfully complete two for-credit core courses offered by Structural Engineers Association of British Columbia ("SEABC"), at his own expense, or obtain prior written approval from Engineers and Geoscientists BC to take an alternative course or courses;
 - b. After successfully completing the two required educational courses set out in paragraph 16(a), all engineering work requiring the application of Part 3 of the British Columbia Building Code, must be subject to peer review pursuant to the *Discipline Committee Ordered Peer Review Policy* and the *Peer Review Guidelines* of Engineers and Geoscientists BC, as may be amended or revised from time to time (the "Peer Review"), subject to the following conditions:
 - i. The peer reviewer must be a professional engineer who is a registrant of Engineers and Geoscientists BC and who is approved in writing by the Registrar of Engineers and Geoscientists BC (the "Approved Peer Reviewer");
 - ii. The Peer Review will continue for either a minimum period of six months from the date the Approved Peer Reviewer is approved by the Registrar, or the completion of four projects requiring the application of Part 3 of the British Columbia Building Code, whichever comes later (the "Peer Review Period");

- iii. Following the Peer Review Period, the Approved Peer Reviewer will provide Engineers and Geoscientists BC with confirmation in writing that Mr. Bains has completed the peer review process and that, in the opinion of the Approved Peer Reviewer, Mr. Bains has demonstrated competence such that he should be permitted to perform engineering services requiring the application of Part 3 building projects without oversight;
 - iv. Following the Peer Review Period, if the opinion of the Approved Peer Reviewer is that Mr. Bains has not demonstrated competence such that he should be permitted to perform engineering services requiring the application of Part 3 building projects without oversight and requires further peer review, the Peer Review Period must continue for additional four-month period, or the completion of two additional projects requiring the application of Part 3 of the British Columbia Building Code, whichever comes later (the "Extended Peer Review"), following which the Approved Peer Reviewer must provide confirmation in writing that Mr. Bains has completed the Extended Peer Review and has demonstrated he should be permitted to perform engineering services requiring the application of Part 3 building projects without oversight; and
- c. All costs associated with the peer review shall be borne by Mr. Bains.
16. Within 12 months of the effective date of this Consent Order, Mr. Bains agrees to undergo a practice review conducted by Engineers and Geoscientists BC (the "Practice Review"), at his own expense. The precise timing and process of the Practice Review will be determined by the Audit and Practice Review Committee.
 17. Mr. Bains will complete the Professional Engineering and Geoscience Practice in BC Online Seminar, at his own expense, no later than two months from the effective date of this Consent Order.
 18. Mr. Bains will pay \$7,000 towards the legal and investigative costs of Engineers and Geoscientists BC contemporaneous with the effective date of this Consent Order.
 19. In the event that Mr. Bains fails to comply with any of the terms of this Consent Order, his registration with Engineers and Geoscientists BC will be suspended until every default has been remedied in accordance with the terms of this Consent Order.

Consequences of the Consent Order

20. The full text or a summary of this Consent Order will be published by Engineers and Geoscientists BC in print and electronic publications including on the Engineers and Geoscientists BC website.
21. This Consent Order has the same force and effect as an action taken or penalty imposed under section 75(6) of the *PGA*.

22. Mr. Bains agrees that Engineers and Geoscientists BC has advised him that he should receive independent legal advice regarding this Consent Order and that he has had the benefit of independent legal advice regarding this Consent Order.
23. Engineers and Geoscientists BC and Mr. Bains agree that this Consent Order may be executed in counterparts and delivered as an electronic document.

This Consent Order is approved and accepted by Mr. Bains and the members of the Discipline Resolution Panel this 20th day of October, 2023.

<original signed by>

Vijay Kumar Bains, P.Eng.

Munit Bector

Name of Witness

<original signed by>

Chris Arthur, P.Eng.
Member, Discipline Resolution Panel

<original signed by>

Signature of Witness

<original signed by>

Peter Bobrowsky, P.Geo.
Member, Discipline Resolution Panel

<original signed by>

Mike Racich, DMD
Member, Discipline Resolution Panel