

**IN THE MATTER OF THE ENGINEERS AND GEOSCIENTISTS ACT
R.S.B.C. 1996, CHAPTER 116**

And

IN THE MATTER OF JOHN BRYSON, P.Eng., Struct.Eng.

Engineers and Geoscientists BC File No.: T15-009

CONSENT ORDER

Background

1. On October 12, 2018, the Association of Professional Engineers and Geoscientists of the Province of British Columbia (the "Association"), doing business as Engineers and Geoscientists BC, issued a Notice of Inquiry to John Bryson, P.Eng., Struct.Eng. ("Mr. Bryson") pursuant to section 32 of the *Engineers and Geoscientists Act*, R.S.B.C. 1996, c. 116 (the "Act").
2. The Association and Mr. Bryson wish to resolve this matter by way of a consent order pursuant to section 32.1 of the Act.

Admissions

3. Mr. Bryson admits that in connection with a high-rise tower project located in Surrey, British Columbia (the "Building") for which Mr. Bryson was the registered professional responsible for the structural design of the Building:
 - I. That contrary to the Act, Mr. Bryson demonstrated unprofessional conduct and acted contrary to Principle 1 of the Association's Code of Ethics, which provides that members shall hold paramount the safety, health and welfare of the public, as the structural design for the Building, as depicted in final design drawings dated March 12, 2013 (the "Structural Design for the Building") is deficient insofar as it does not comply with the 2006 British Columbia Building Code ("2006 BCBC"), in particular:
 - a. in respect of the seismic design of the Building:
 - i. certain aspects of the design of the headers and the core walls of the Building do not comply with the 2006 BCBC;
 - ii. at certain levels, for columns C3 and C3A, the applicable inelastic rotational demand significantly exceeds the applicable rotational capacity; and
 - iii. the long wall supporting the transfer slab at Level 2 lacks certain seismic detailing and concentrated zone reinforcement at the ends of the wall;
 - b. certain aspects of the wind design of the core and gravity-load frame for the Building do not have sufficient capacity to resist the total factored wind force in compliance with the 2006 BCBC;

- c. the demand capacity ratio for certain columns in the Building exceeds 1.20 on certain levels, which is outside the margin of error for column design; and
 - d. in respect of the slab design of the Building:
 - i. the transfer slab at level 2 of the Building does not have the minimum shear reinforcing specified in 11.2.8.1 of CSA Standard A23.3-04 in the vicinity of column 6; and
 - ii. certain areas of parking floors such as the entrance ramp, garbage room, storage room, and mechanical/electrical rooms have not been designed for higher loadings as required by the 2006 BCBC.
- II. That contrary to the Act, Mr. Bryson demonstrated unprofessional conduct insofar as in his role as the registered professional responsible for the Structural Design for the Building:
- a. Mr. Bryson failed to undertake an adequate design process, in particular, incomplete design documentation was created and at the time the Structural Design for the Building was completed and certain calculations were not performed; and
 - b. Mr. Bryson:
 - i. utilized certain less conservative requirements specified in the National Building Code 2010 for the calculation of seismic design loads despite the drawings for the Structural Design for the Building specifying that the base building structure shown on the structural design drawings had been designed in accordance with the 2006 BCBC, which was the code in force at the time the Building was designed and the building permit was issued;
 - ii. did not use other requirements of the National Building Code 2010, that were more conservative than those in the 2006 BCBC including requirements pertaining to wind; and
 - iii. failed to inform both the City of Surrey and Mr. Bryson's client that the Structural Design of the Building was not based entirely on the 2006 BCBC and that in preparing that design Mr. Bryson utilized an approach of using certain less conservative requirements from the National Building Code 2010 while not using other more conservative requirements from the National Building Code 2010.
- III. That contrary to the Act, Mr. Bryson demonstrated unprofessional conduct when, in response to an October 7, 2015 request by the Association for Mr. Bryson to produce his complete original file for the design of the Building and related design documentation, Mr. Bryson provided the Association with output files from an ETABS model that was modified after the design for the Building was completed but which he described to the Association in a March 21, 2016 letter as being output files from original engineering software models for the design of the Building.

- IV. That in respect of the independent review for the Building, Mr. Bryson breached Bylaw 14(b)(4) and demonstrated unprofessional conduct by failing to ensure that the independent review was:
- a. completed;
 - b. properly documented; and
 - c. completed prior to the issuance of design documents for construction.

Disposition

4. This Consent Order is made pursuant to section 32.1 of the Act.
5. Mr. Bryson hereby resigns his membership in the Association effective 1st April, 2019 (the "Date of Resignation"), and he agrees not to re-apply for membership.
6. During the period from the date of the execution of this Consent Order to the Date of Resignation, Mr. Bryson 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 not take on any project files or other engineering work.
7. Within 30 days of the date of this Consent Order, Mr. Bryson will pay a fine to the Association in the amount of \$25,000.
8. By four equal installments to be paid every three months over the next 12 months following the date of this Consent Order, Mr. Bryson will pay \$215,000.00 to the Association as a contribution to the Association's costs in this matter.
9. The full text or a summary of this Consent Order will be published by the Association in print and electronic publications including on the Association's website.
10. This Consent Order has the same force and effect as an Order made under section 33(2) of the Act and may be dealt with under section 34 of the Act if conditions in the Consent Order are not met.
11. Mr. Bryson agrees that he has had the benefit of independent legal advice regarding this Consent Order.

[space intentionally left blank]

12. The Association and Mr. Bryson agree that this Consent Order may be executed in counterparts and delivered as an electronic document.

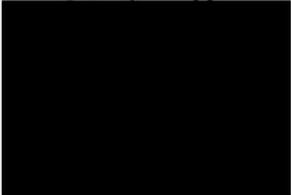
This Consent Order is approved and accepted by Mr. Bryson and the members of the Discipline Committee Review Panel this 26 day of March, 2019.



John Bryson, P.Eng., Struct.Eng

Kerry Short

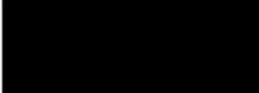
Name of Witness



Christopher Arthur, P.Eng.
Member, Discipline Committee



Signature of Witness



Roz Nielsen, P.Eng.
Member, Discipline Committee



Bruce Nicholson, P.Eng.
Member, Discipline Committee