

ENGINEERS GEOSCIENTISTS MANITOBA

IN THE MATTER OF:

*The Engineering and Geoscientific Professions
Act, C.C.S.M. c. E120*

and

IN THE MATTER OF:

Robert A. McDonald, P. Eng., a Professional
Engineer in the Province of Manitoba

ORDER OF THE DISCIPLINE COMMITTEE

ENGINEERS GEOSCIENTISTS MANITOBA
870 PEMBINA HIGHWAY
WINNIPEG, MANITOBA
R3M 2M7

ENGINEERS GEOSCIENTISTS MANITOBA

IN THE MATTER OF:

The Engineering and Geoscientific Professions Act, C.C.S.M. c. E120

and

IN THE MATTER OF:

Robert A. McDonald, P. Eng., a Professional Engineer in the Province of Manitoba

WHEREAS the Investigation Committee of the Association of Professional Engineers and Geoscientists (the “**Association**”) formulated a charge of professional misconduct and unskilled practice of engineering against Robert A. McDonald, P. Eng. (“**Mr. McDonald**”) on November 29, 2022 in relation to four sets of structural drawings (the “**Drawings**”) sealed by Mr. McDonald and submitted to the City of Winnipeg in connection with renovations being undertaken by the Crown Autobody & Glass autobody shop located at 800-1717 Waverly Street in Winnipeg, Manitoba (the “**Charge**”), a copy of which is attached hereto as Schedule “A”;

AND WHEREAS the Charge was referred to the Discipline Committee of the Association pursuant to s. 35(1)(b) of *The Engineering and Geoscientific Professions Act, C.C.S.M. c. E120* (the “**Act**”) on December 2, 2022, whereupon the Chair of the Discipline Committee selected a panel for the hearing of the Charge pursuant to s. 39(1) of the Act (the “**Panel**”);

AND WHEREAS a notice of hearing returnable before a Panel on Tuesday, February 14, 2023 by way of videoconferencing, along with a copy of the Charge, was duly served on Mr. McDonald on December 5, 2022 and was duly served on Mr. McDonald’s legal counsel on December 21, 2022;

AND WHEREAS the hearing of this matter was duly commenced on February 14, 2023 in accordance with the Act and By-Laws of the Association and then adjourned to permit the scheduling of the substantive hearing of this matter;

AND WHEREAS Mr. McDonald now admits, and this Panel so finds, that he committed the following acts as particularized in the Charge (as modified below) and further acknowledges that such acts constitute a violation of s. 46(1)(a) and 46(1)(e) of the Act:

That in connection with the preparation and issuance of the Drawings, Mr. McDonald:

- a. sealed the Drawings for construction when they were not complete, fully checked or appropriate for construction use;
- b. issued drawings which contained design errors, including:
 - i. piling specifications and design criteria were not included in the design notes on some of the Drawings;
 - ii. in the July 3, 2020 Drawings, the beam that was to replace the existing beam at grid line 2a between grids E and F on the roofing plan, as shown on that drawing, did not contain the necessary beam labels;
 - iii. in the July 3, 2020 Drawings, beam B3 at grid line E between 4 and 5 on the roofing plan, as shown on that drawing, lacked details in terms of lateral bracing of the beam's top flange which, if not addressed, posed a risk of failure; and
- c. relied on the steel fabricator to complete the design by way of shop drawings.

AND WHEREAS on February 6, 2024, this Panel heard submissions from counsel for the Investigation Committee and counsel for Mr. McDonald relating to the appropriate penalty to be issued to Mr. McDonald;

NOW THEREFORE, THIS PANEL ORDERS THAT pursuant to ss. 47 and 48 of the Act:

1. Mr. McDonald be and is hereby reprimanded;

2. Mr. McDonald undergo a general practice review (the "**Practice Review**") conducted by a reviewer (the "**Reviewer**") appointed by the Investigation Committee, on the following terms:
 - a. the Practice Review shall occur within 60 days from the appointment of the Reviewer;
 - b. the Practice Review shall include at least one visit to Mr. McDonald's workplace and shall involve the following items:
 - i. an evaluation of the process by which work is produced;
 - ii. an examination for adherence to the Act and the Association's Bylaws, Code of Ethics, and applicable practice guidelines and practice notes;
 - iii. an evaluation of competence in Mr. McDonald's discipline or field of practice as determined by the Reviewer;
 - iv. examination of a product of Mr. McDonald's work on no less than two projects for compliance with established technical codes and standards, with access to such work product to be reasonably made available by Mr. McDonald;
 - v. an evaluation of Mr. McDonald's access to resources; and
 - vi. an evaluation of Mr. McDonald's record management.
 - c. Mr. McDonald shall reasonably co-operate in all aspects of the Practice Review; and

- d. following completion of the Practice Review, the Reviewer shall, within 30 days, issue to the Investigation Committee a written report of the Practice Review for assessment by the Investigation Committee
3. Mr. McDonald shall make a contribution to the Association's costs as follows:
 - a. a contribution of \$7,500.00 towards the Association's costs for the investigation of this matter, to be paid within 30 days from the date of this order; and
 - b. 50% of the cost of the Practice Review, to be paid within 30 days from the issuance of the Reviewers written report; and
 4. The disposition of this matter and any information relating to any finding or order made by this Panel shall be published by the Association in accordance with the Act and the Association's policy on publication.

DATED at the City of Winnipeg in the Province of Manitoba this 6 of FEBRUARY, 2024.



Allan Ball, Chair, Discipline Committee Panel



Don Spangelo, Member, Discipline Committee Panel



Robert Janz, Member, Discipline Committee Panel

SCHEDULE “A”

ENGINEERS GEOSCIENTISTS MANITOBA

IN THE MATTER OF: Robert A. McDonald, P.Eng. a Professional Engineer
registered in the Province of Manitoba

AND IN THE MATTER OF: *The Engineering and Geoscientific Professions Act,*
C.C.S.M. c. E120

CHARGE

ENGINEERS GEOSCIENTISTS MANITOBA
870 PEMBINA HIGHWAY
WINNIPEG, MANITOBA
R3M 2M7

**THE ASSOCIATION OF PROFESSIONAL ENGINEERS AND GEOSCIENTISTS
OF THE PROVINCE OF MANITOBA**

IN THE MATTER OF: Robert A. McDonald, P.Eng. a Professional Engineer
registered in the Province of Manitoba

AND IN THE MATTER OF: *The Engineering and Geoscientific Professions Act,*
C.C.S.M. c. E120

CHARGE

The Investigation Committee of the Association of Professional Engineers and Geoscientists of the Province of Manitoba formulates the following charge.

Robert A. McDonald, P.Eng., while registered as a professional engineer in the Province of Manitoba, displayed conduct which constitutes professional misconduct or unskilled practice, in that:

In the course of providing engineering services as engineer of record for structural renovations to the Crown Auto Body building at 1717 Waverley St. in the City of Winnipeg, Province of Manitoba, Mr. McDonald displayed conduct that was detrimental to the public interest in violation of s. 46(1)(a) *The Engineering and Geoscientific Professions Act* (the “**Act**”) and/or conduct that displayed a lack of knowledge of or lack of skill or judgment in the practice of professional engineering in violation of s. 46(1)(e) of the Act.

Particulars

On or about July 3, 2020, August 27, 2020, September 1, 2020, and September 4, 2020 (collectively, the “**Drawings**”), Mr. McDonald, in association with RAM Engineering Inc., sealed and submitted structural drawings for an addition to the Crown Auto Body Building at 1717 Waverley St. in the City of Winnipeg, Province of Manitoba. In doing so, Mr. McDonald:

1. failed to adequately supervise junior staff during the preparation of the Drawings;
2. sealed the Drawings for construction that were not complete or appropriate for construction use, and failed to properly review the Drawings prior to sealing same to ensure they were complete and appropriate;
3. issued the Drawings for construction use when the Drawings were deficient, contained numerous design errors, contravened provisions of the Manitoba Building Code (the “**Code**”) and/or generally fell below the standard expected of a competent professional engineer, including:
 - a. with respect to the July 3, 2020 drawings:

- i. piling specifications and design criteria were not included in the design notes, contrary to the requirements of the Code;
 - ii. the existing beam grid line 2a between grids E and F on the roofing plan contained a mid-span splice between two existing beams which, if not corrected, could have led to the collapse of the structure;
 - iii. beam B3, grid line E between 4 and 5 on the roofing plan was incorrectly designed in terms of tributary load area, and lacked details in terms of connections, elevation and lateral bracing of the beam's top flange, which, if not corrected, could have led to the collapse of the structure;
 - iv. as regards the foundation plan and roof framing plans:
 - 1. general details were missing throughout;
 - 2. the spacing of two new piles did not comply with the geotechnical requirements for minimum spacing;
 - 3. the roof framing plan lacked connection details, shoring details and verification of structural checks regarding new snow and mechanical loading;
 - 4. new beam B5 was shown in the wrong direction;
 - v. framing elevation details were missing for column baseplates, cross-bracing connections and girt connections; and
 - vi. improper, or lack of, other typical details in the drawings.
- b. with respect to the August 27, 2020 drawings:
- i. piling specifications and design criteria were not included;
 - ii. as regards the roof framing plan:
 - 1. required bracing for beam B5 had been deleted;
 - 2. details showing connections to existing beams, in order to remove existing beams and replace them with new beams, were not provided;
 - 3. a new beam B3 was added on grid line E, between 4a and 5, and the drawings relied upon shop drawings from the steel fabricator to complete the design;

4. details were missing regarding beam B3 including the elevation of the beam, connection details, stiffeners and lateral bracing of the top flange, which, if not corrected, could have led to the collapse of the structure;
 - iii. elevation 6/S1.0 was missing details of connection or design forces for the cross-bracing, girts and column connections; and
 - iv. improper, or lack of, other typical details in the drawings.
- c. with respect to the September 1, 2020 drawings:
 - i. pile design criteria were not specified;
 - ii. the mechanical unit at E and 2a was shown in a new location without the design first being re-checked for associated loads at the new location;
 - iii. overhead framing details were revised to include 4 new girts, but were not explained or detailed; and
 - iv. beam B3 was structurally deficient.
- d. with respect to the September 4, 2020 drawings:
 - i. the mechanical unit at E and 2a was once again shown in a new location without the design first being re-checked for associated loads at the new location.
4. relied on the steel fabricator for the construction project to correct or complete design deficiencies in the Drawings by way of shop drawings prepared for fabrication purposes.

DATED at Winnipeg, Manitoba, this 29 day of Novem
ber, 2022.

John Doering

Signed with ConsignO Cloud (2022/11/29)
Verify with verifio.com or Adobe Reader.



John Doering, P.Eng. FCSE, FEC, FCAE
Chair, Investigation Committee