

## SUMMARY OF DECISION AND REASONS

On allegations of professional misconduct under the *Professional Engineers Act* (the “Act”) regarding the conduct of Moheb (Michael) Bassily, P.Eng. (the “Member” or “Bassily”), a member of the Association of Professional Engineers of Ontario (the “Association” or “PEO”) and MBECO Engineering Ltd. (the “Holder” or “MBECO”), a holder of a Certificate of Authorization.

The Panel of the Discipline Committee heard this matter electronically via videoconference on February 13, 2023.

### AGREED STATEMENT OF FACTS & DECISION ON MISCONDUCT

The Member, MBECO, and the Association entered into an Agreed Statement of Facts (“ASF”) dated February 8, 2023, the relevant parts of which (excluding schedules) are as follows:

1. Mr. Michael Bassily, P.Eng. (“Bassily”) is, and was at all material times, a professional engineer licensed in good standing pursuant to the *Professional Engineers Act* (the “Act”). He has been licensed under the Act since 1992. Before becoming a licensee in Ontario, Bassily was registered or licensed with the Egyptian Society of Engineers and the Egyptian Syndicate of Engineers.
2. At all material times, MBECO Engineering Ltd. (“MBECO”) held a Certificate of Authorization, and listed Bassily as the individual taking professional responsibility for engineering services provided thereunder.
3. The complainant Gerald Catt, P.Eng. (“Catt”) is, and was at all material times, a professional engineer licensed in good standing pursuant to the Act. He was first licensed in 1976. He is also designated a Consulting Engineer and Building Design Specialist.
4. In 2019, Creative Carriage Ltd. (“Creative Carriage”) sought to add a building extension to its single-story manufacturing facility located in St. George, County of Brant (the “Facility”). Creative Carriage retained several contractors and engineers to assist with the construction of the building addition (the “Project”).
5. Before Creative Carriage had sought to add the addition, its manufacturing facility had a building area that was under the threshold in the Ontario Building Code (“OBC”) requiring a standpipe system for fire protection purposes.
6. With the proposed addition, the total building area met the OBC threshold. Accordingly, the OBC required the building to have a standpipe system.
7. Around June 2019, one of the Project’s contractors retained Catt to design a fire protection system for the building addition, among other things. Catt prepared drawings that implemented a standpipe system for the Facility’s building addition. Catt signed and sealed the drawings on September 6, 2019 (the “Original Drawings”). He also prepared calculations to support the Original Drawings, which he signed and sealed on the same day.
8. The Original Drawings included a fire pump to maintain a certain level of water pressure and to comply with the OBC and the National Fire Protection Association’s Standard for the Installation of Standpipe and Hose Systems (“NFPA-14”).
9. As a result of supply chain issues caused by the COVID-19 pandemic, the fire pump required in the Original Drawings was not available during construction of the building addition.
10. Consequently, one of the Project’s contractors retained Paul Flanagan of Heritage Sprinkler Design Inc. (“Heritage”) to prepare drawings and calculations for a design that did not require a fire pump. Flanagan prepared drawings that appear to be a modified version of the Original Drawings, without a fire pump (the “Revised Drawings”).
11. On September 4, 2020, Heritage retained Bassily and MBECO to review and approve the Revised Drawings and accompanying calculations (the “Hydraulic Calculations”). Bassily signed and sealed the Revised Drawings and the Hydraulic Calculations on the same day, September 4. The Revised Drawings and Hydraulic Calculations are attached as Schedule “A”.

12. The Revised Drawings had the following text contained within a notice box:  
THE SCOPE OF THIS DRAWING IS TO DETERMINE IF THE EXISTING STANDPIPE SYSTEM AS INSTALLED AT THE CREATIVE CARRIAGE FACILITY CAN BE SUPPLIED WITHOUT THE NEED FOR A FIRE PUMP AND STILL MEET OBC REQUIREMENTS FOR STANDPIPE DEMAND.
13. On September 18, 2020, Catt filed a complaint to the Association about the Revised Drawings and Hydraulic Calculations.
14. The Association obtained an expert report authored by Leslie Sims, P.Eng., dated May 5, 2021 (the “Sims Report”). A redacted copy of the Sims Report is attached as Schedule “B”. Bassily and MBECO do not contest the findings, opinions, and conclusions contained in the Sims Report, as redacted. They admit the findings, opinions, and conclusions contained in the Sims Report to the extent set out below.
15. Bassily and MBECO admit that the Revised Drawings and the Hydraulic Calculations were deficient and that they failed to maintain the standards that a reasonable and prudent practitioner would maintain in the circumstances by signing and sealing the Revised Drawings and Hydraulic Calculations.
16. In particular, Bassily and MBECO admit that:
  - a. The Revised Drawings did not include specified dimensions for the pipes making up the standpipe system. They also did not include pipe elevations. The dimensions and elevations used in the Hydraulic Calculations therefore could not be verified.
  - b. The Hydraulic Calculations did not consider potential friction loss.
  - c. The length of the underground supply pipe shown on the Revised Drawings was inconsistent with the length shown in the Original Drawings and information sourced from Google Maps.
  - d. The water supply information came just under the NFPA-14 requirement that it be no more than one year old.
17. Bassily and MBECO admit that, in the circumstances, including as outlined in paragraph 18, the standards of reasonable and prudent professional engineering required them to ensure all pipes were accurately dimensioned and to consider friction loss, which they failed to do. Failing to meet these standards meant that the hydraulic calculations could not be performed with certainty.
18. Bassily and MBECO admit that the safety factor they relied on in the Hydraulic Calculations (3.714 psi, less than 5 percent of the available water supply) was insufficient in these circumstances. It created a risk that even a relatively minor loss in water pressure could have resulted in the standpipe system failing to deliver the required water supply.
19. Bassily and MBECO admit that a reasonable and prudent professional engineer in the circumstances would have provided for a higher safety factor. The Association notes the opinion in the Sims Report that a safety factor of at least 10 percent of the available water supply is recognized as good engineering practice in the industry.
20. In addition, Bassily and MBECO admit that they failed to comply with OBC section 3.2.9.6(1), which requires calculating flow at the two hydraulically most remote hose stations. Contrary to this requirement, the Hydraulic Calculations calculated the flow rate from only one hose station and only considered the flow at the second most hydraulically remote hose station through deduction.
21. The Association acknowledges that using a single flow rate from one hose station may be more hydraulically demanding than what OBC section 3.2.9.6(1) requires. However, a reasonable and prudent professional engineer in the circumstances would have calculated flow rate according to the requirements of the OBC.
22. On September 29, 2020, approximately one month after Bassily’s calculations, Tidal Wave Fire Sprinkler Systems conducted a flow test on the two most hydraulically remote hose stations at the project and found the flow in excess of the requirements in OBC section 3.2.9.6(1).
23. Based on the preceding facts, the Association, Bassily, and MBECO agree that Bassily and MBECO are guilty of professional misconduct under section 72(2) of R.R.O 1990, Reg. 941 (“Regulation 941”), as follows:
  - a. They committed acts or omissions in carrying out the work of a practitioner that constitute a failure to maintain the standards that a reasonable and prudent practitioner would maintain in the circumstances, contrary to section 72(2)(a) of Regulation 941; and

- b. They failed to make responsible provision for complying with applicable codes in connection with work being undertaken by or under their responsibility, contrary to section 72(2)(d) of Regulation 941.

The Member and Holder admitted the allegations set out in the Agreed Statement of Facts. The Panel conducted a plea inquiry and was satisfied that the Member's and Holder's admissions were voluntary, informed, and unequivocal.

The Panel accepted the Member's and Holder's admissions, and the facts set out in the ASF. On that basis, the Panel found the Member and Holder guilty of professional misconduct under section 28(2)(b) of the Act and section 72(2)(a) and (d) of Regulation 941 under the Act.

#### JOINT SUBMISSION ON PENALTY & DECISION ON PENALTY

The parties filed a joint submission on penalty ("JSP"), which can be summarized as follows:

1. Pursuant to s. 28(4)(d) of the *Professional Engineers Act* (the "Act"), there shall be a term and condition on Bassily's licence requiring Bassily to successfully complete the Certified Water-Based Systems Professional (CW BSP) Online Learning Path – Premium course, offered by the National Fire Protection Association, within 18 months from the date of pronouncement of the decision of the Discipline Committee (the "Date");
2. Pursuant to s. 28(4)(f) of the Act, Bassily and MBECO shall be reprimanded, and the fact of the reprimand shall be permanently recorded on the Register;
3. Pursuant to s. 28(4)I(i) and (k) of the Act, a restriction shall be imposed on Bassily's licence prohibiting Bassily from practising professional engineering except under the direct supervision of another professional engineer who shall take professional responsibility for the work by affixing their signature and seal on every final drawing, report, or other document prepared by Bassily, which restriction shall be suspended for a period of 18 months from the Date. If Bassily successfully completes the remedial course within or after the time period contemplated in paragraph 1 above, this restriction shall be suspended indefinitely;
4. Pursuant to s. 28(4)(e)(i) and (k) of the Act, a restriction shall be imposed on MBECO's Certificate of Authorization prohibiting MBECO from offering or providing professional engineering services except under the direct supervision of another professional engineer who shall take professional responsibility for the work by affixing

their signature and seal on every final drawing, report, or other document prepared by Bassily, which restriction shall be suspended for a period of 18 months from the Date. If Bassily successfully completes the remedial course within or after the time period contemplated in paragraph 1 above, this restriction shall be suspended indefinitely; and

5. No order as to costs.
6. For clarity, the Association, Bassily, and MBECO make no joint submission as to publication pursuant to s. 28(4)(i) of the Act of the Discipline Panel's findings and order in the official publication of PEO, either in detail or in summary and with or without names, and will address this issue before the Panel.

The Panel was satisfied that the jointly proposed penalty satisfied the test for accepting a joint submission, as it protects the public and serves the principles of general and specific deterrence, rehabilitation, and maintenance of the public's confidence in the profession. The joint submission was also consistent with prior decisions of the Discipline Committee with similar facts.

The Association, the Member and the Holder made no joint submission as to the issue of publication of the Panel's decision. After considering the submissions of the parties, the Panel determined that its decision would be published in the official publication of the Association with names.

The Panel determined that the principles of sanctioning along with the public interest in openness and transparency in the discipline process justified publication with names in this case. Publication with names serves three purposes in this case: openness, transparency and general deterrence. The Panel found that the goal of general deterrence is best served by the publication of its decision for all members of the profession. In the Panel's view, members of the profession should be made aware that instances of misconduct may, and often will, be published with names. The openness and transparency of the discipline process would also be significantly lessened by not publishing the Panel's findings or by not publishing with names.

## PENALTY ORDER

The Panel ordered the following penalty:

1. Pursuant to s. 28(4)(d) of the *Professional Engineers Act* (the “Act”), there shall be a term and condition on Moheb Bassily’s licence requiring the Member to successfully complete the Certified Water-Based Systems Professional (CWBSPP) Online Learning Path – Premium course, offered by the National Fire Protection Association, within 18 months from the date of pronouncement of the decision of the Discipline Committee (the “Date”);
2. Pursuant to s. 28(4)(f) of the Act, the Member and the Holder shall be reprimanded, and the fact of the reprimand shall be permanently recorded on the Register;
3. Pursuant to s. 28(4)(e)(i) and (k) of the Act, a restriction shall be imposed on the Member’s licence prohibiting the Member from practising professional engineering except under the direct supervision of another professional engineer who shall take professional responsibility for the work by affixing their signature and seal on every final drawing, report, or other document prepared by the Member, which restriction shall be suspended for a period of 18 months from the Date. If the Member successfully completes the remedial course within or after the time period contemplated in paragraph 1 above, this restriction shall be suspended indefinitely;
4. Pursuant to s. 28(4)(e)(i) and (k) of the Act, a restriction shall be imposed on the Holder’s Certificate of Authorization prohibiting the Holder from offering or providing professional engineering services except under the direct supervision of another professional engineer who shall take professional responsibility for the work by affixing their signature and seal on every final drawing, report, or other document prepared by the Member, which restriction shall be suspended for a period of 18 months from the Date. If the Member successfully completes the remedial course within or after the time period contemplated in paragraph 1 above, this restriction shall be suspended indefinitely; and
5. Pursuant to section 28(4)(i) of the Act, the findings and order of the Discipline Committee shall be published in summary form together with the names of the Member and Holder in the official publication of the Association.

At the conclusion of the Hearing, the Panel administered a reprimand to the Member and the Holder.

On April 21, 2023, Michael Wesa, P.Eng., signed the Decision and Reasons for the decision as Chair of the Discipline Panel and on behalf of the Members of the Discipline Panel: David Germain, J.D., and Rishi Kumar, P.Eng.

## WINCHESTER MAN AND COMPANY FINED \$10,000 FOR USE OF PROFESSIONAL ENGINEER’S SEAL

The Ontario Court of Justice at Cornwall fined a corporation and its principal \$10,000 for applying a facsimile of a professional engineer’s seal to design drawings without the knowledge or consent of the professional engineer.

6993231 Canada Inc. (d.b.a. Empire Construction) and its principal, Edsel Byers, were retained by a client to assist with the construction of a canvas structure on the client’s property. In preparing design drawings for the client, Empire Construction and Mr. Byers copied a professional engineer’s seal from a previous set of drawings onto the new drawings, without the professional engineer having reviewed the new drawings and without the professional engineer’s knowledge or consent. Empire Construction and Byers then gave the improperly sealed drawings to the client, who submitted them

to the Township of North Dundas in connection with a permit application.

On April 26, 2023, Mr. Byers pled guilty to one count of breaching section 40(2)(c) of the *Professional Engineers Act* and Empire Construction pled guilty to one count of breaching section 40(3)(b) of the *Professional Engineers Act* in connection with this conduct. His Worship Brian Snyder imposed a \$5,000 fine on Mr. Byers and a \$5,000 fine on Empire Construction.

Matthew Howe (counsel) and Annecy Pang (student-at-law), both from the Toronto law firm Polley Faith LLP, represented PEO on the matter. PEO would like to thank the Township of North Dundas and the engineer for their cooperation in this investigation.