

## SUMMARY OF DECISION AND REASONS

On allegations of professional misconduct under the *Professional Engineers Act* (the “Act”) regarding the conduct of Emad H. Assaad, P. Eng. (the “Member” or “Assaad”), a member of the Association of Professional Engineers of Ontario (the “Association” or “PEO”) and 1885219 Ontario Inc. O/A ASPA Engineering and Welding Solutions (the “Holder” or “ASPA”), a holder of a Certificate of Authorization.

The Panel of the Discipline Committee heard this matter electronically via videoconference on May 15, 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. At all material times, Assaad was a professional engineer licensed pursuant to the Act. Assaad holds a Bachelor of Science degree in civil engineering from Alexandria University.
2. At all material times, ASPA was the holder of a Certificate of Authorization #C100231140 issued by the Association of Professional Engineers of Ontario (“C of A”). Assaad was the individual identified who will take professional responsibility for engineering services provided under the C of A.
3. The Complainant, Heather Liddycoat, P.Eng. (“Liddycoat”), was, at all material times, a professional engineer licensed by the PEO who was employed by Witzel Dyce Engineering Inc. (“WDEI”) in connection with its role as the primary structural engineer for a child-care center addition to Saginaw Public School (the “Project”).
4. Assaad and ASPA were retained by Custom CAD Consulting Inc. (“CCCI”), a sub-sub-contractor on the Project, to provide the Open Web Steel Joist (“OWSJ”) design for the Project based on WDEI’s drawings. To perform that service, Assaad and ASPA used a computer program called RISA 3D.
5. On August 17, 2021, Assaad and ASPA issued OWSJ shop drawings which were signed and sealed by Assaad for CCCI (the “Initial OWSJ Shop Drawings”). Assaad and ASPA further created an unsigned joist calculation package dated August 25, 2021, using the RISA 3D program (“Initial OWSJ Calculations”). On review by WDEI and Liddycoat, both were rejected and required to be resubmitted with notes as follows:
  - a. The following errors, omissions and defects were required to be corrected:
    - i. the joists calculations and joist configuration were incorrect;
    - ii. the deflection and axial force diagrams were not in accordance with usual engineering practice in respect of OWSJ design;
    - iii. boundary conditions were not appropriate for the joist layout;
    - iv. the diagonal members on the joists were facing the wrong direction; and
    - v. the design documents were missing required information on several aspects, and specifically on: the joist spacing; the line loads being applied to the joists; loading information for uplift and snow pile up; bridging layout and details; and the boundary conditions, specifically whether they were fixed or roller at one end.
  - b. These defects suggested to WDEI and Liddycoat that Assaad and ASPA did not understand the concepts involved in OWSJ design.
  - c. They also suggested to WDEI and Liddycoat that Assaad and ASPA did not understand the proper use or population of the RISA 3D computer program in the manner required to generate a correct and appropriate OWSJ design.
  - d. WDEI and Liddycoat required the revised design and calculations “to be stamped by two engineers licensed in the province of Ontario”.
6. The Initial OWSJ Shop Drawings and Initial OWSJ Calculations did not comply with applicable standards and codes, and specifically did not comply with the requirements of the Ontario Building Code (“OBC”) and of CSA Standard S16-14, Design of Steel Structures, applicable to these OWSJ steel joist designs.
7. Assaad and ASPA reissued and resubmitted a revised set of shop drawings signed and sealed by Assaad dated

- September 9, 2021, and a series of 10 joist reports apparently outputted from the RISA 3D program, dated September 8 and 9, 2021 (together the “Revised OWSJ Design”).
8. The Revised OWSJ Design attempted to address the comments noted by WDEI and Liddycoat regarding boundary conditions and the direction of the diagonal members, but it did not otherwise address the noted comments or revise the OWSJ design parameters and RISA 3D models on which the Initial OWSJ Shop Drawings and Initial OWSJ Calculations were based. As a result, on review by WDEI and Liddycoat, the Revised OWSJ Design drawings were found to have many of the same errors, omissions, and deficiencies in the OWSJ design to those previously noted and described in paragraphs 5-6, above. Those same errors, omissions and deficiencies were also present in subsequent design drawings, calculations and RISA 3D outputs sent by Assaad and ASPA to WDEI and Liddycoat between September 10 and September 13, 2021.
  9. On September 14, 2021, Liddycoat advised Assaad by email that she intended to make a complaint to PEO. The complaint was filed the next day.
  10. On or about September 15, 2021, Assaad and ASPA engaged Brian Waddell, P.Eng. (“Waddell”) as a second professional engineer to assist in the completion of the OWSJ design and to satisfy the second seal requirement referred to above. The final shop drawings were signed and sealed by both Assaad and Waddell. They, together with the final joist calculations, were reviewed and accepted by Liddycoat on or about October 12th [2021].
  11. PEO acknowledges that Assaad cooperated with all involved through the process referred to above, and that he attempted to correct the errors noted by WDEI and Liddycoat.
  12. PEO retained Nathan Proper, P.Eng., to review the actions and conduct of the Respondents. He prepared a report (the “Tacoma Report”) dated April 4, 2022, which concluded, among other things: that the Respondents failed to comply with the codes and standards applicable to the design of OWSJs; that the errors, omissions, and deficiencies identified in the Tacoma Report would not be expected of a reasonable and prudent practitioner; that the Respondents failed to meet the standard expected of a reasonable and prudent practitioner in the circumstances; and that there was a small potential safety impact as a result of the failure to comply with the standards and codes. Attached as Schedule “A” is a copy of the Tacoma Report.
  13. For the purposes of these proceedings, the Respondents accept as correct the findings, opinions and conclusions contained in the Tacoma Report. The Respondents admit that they failed to make reasonable provision for the safeguarding of the public, that they failed to make responsible provision for complying with applicable standards and codes, and that they failed to maintain the standards that a reasonable and prudent practitioner would maintain in the circumstances.
  14. The acts and omissions by Assaad and ASPA referred to in paragraphs 5-8, above, show a lack of awareness on their part of the requirements of the OBC and of CSA Standard S16-14 applicable to OWSJ designs, and a failure to make responsible provision for complying with that code, that standard, and other rules in relation to the work they undertook in the preparation of OWSJ drawings and calculations.
  15. While Assaad is and was qualified as a civil engineer, he had no special training or expertise in steel joist design, and he had had very little prior experience in the use of the RISA 3D program. Assaad was therefore not competent to undertake the OWSJ design for the Project.
  16. By reason of the aforesaid, the parties agree that Assaad and ASPA are guilty of professional misconduct under 72(2) R.R.O 1990, Reg. 941 (“Regulation 941”), as follows:
    - a. Professional misconduct as defined in section 72(2) (a) of Regulation 941, in being negligent in the preparation, revision and submission of the Initial OWSJ Shop Drawings and Initial OWSJ Calculations, the Revised OWSJ Design, and other OWSJ design documents provided to WDEI and Liddycoat between August 17 and September 13, 2021;
    - b. Professional misconduct as defined in section 72(2)(b) of Regulation 941, in failing to make reasonable provision for the safeguarding of the life, health and property of persons, including those who might subsequently use the child-care center addition to Saginaw Public School [in Cambridge, Ontario];

- c. Professional misconduct as defined in section 72(2) (d) of Regulation 941, in failing to make responsible provision for complying with the requirements of the OBC and of CSA Standard S16-14 applicable to OWSJ steel joist designs in relation to the Project; and
  - d. Professional misconduct within section 72(2)(j) of Regulation 941, in that the conduct of the Respondents was unprofessional.
17. Further, it is agreed that Assaad is guilty of professional misconduct as defined in section 72(2)(h) of Regulation 941, in that he undertook work for which he was not qualified in all the circumstances.

On behalf of himself and ASPA, the Member admitted the allegations set out in paragraphs 16(a) to 16(d) and 17 of the Agreed Statement of Facts. The Panel conducted a plea inquiry and was satisfied that the Member's admission was voluntary, informed, and unequivocal.

The Panel considered the Agreed Statement of Facts and found that the facts, as agreed, support findings of professional misconduct and, in particular, it found that the Member and ASPA committed acts of professional misconduct as set out in paragraphs 16(a) to 16(d) and 17 of the Agreed Statement of Facts, above.

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

The parties filed a joint submission on penalty ("JSP") as follows:

- a. Pursuant to s. 28(4)(f) of the Act, Assaad and ASPA shall be reprimanded, and the fact of the reprimand shall be recorded on the Register permanently;
- b. Pursuant to s. 28(4)(b) of the Act, the Member's licence and the Holder's Certificate of Authorization shall be suspended for a period of one (1) month commencing on the date of pronouncement of the Discipline Committee's penalty decision;
- c. The findings and order of the Discipline Committee shall be published in summary form under ss. 28(4)(i) and 28(5) of the Act, together with the names of the Member and the Holder;
- d. Pursuant to s. 28(4)(d) and/or s. 28(4)(e) of the Act, it shall be a term, condition or restriction on Assaad's licence and ASPA's Certificate of Authorization that they shall be prohibited from providing structural engineering services, except that they shall be permitted to continue

- to carry out steel connections reviews, so long as such reviews do not involve Open Web Steel Joists;
- e. If Assaad demonstrates his competence in structural engineering by successfully passing the following examinations administered by PEO, namely,
  - i. 07-Str-A4 (Advanced Structural Analysis), and
  - ii. 07-St-A5(Advanced Structural Design),
 the term, condition or restriction set out in subparagraph d) above shall be lifted; and
- f. There shall be no order as to costs.

#### PENALTY ORDER

The Panel accepted the Joint Submission as to Penalty and Costs and made an order to give it effect without any change.

#### Reasons for Penalty

The Panel considered the Joint Submission on Penalty and Costs. It is a well-established principle of law that a disciplinary panel should not interfere with a joint submission on penalty except where the panel is of the view that to accept the joint submission would bring the administration of the disciplinary process into disrepute or otherwise be contrary to the public interest (see, e.g., *Bradley v. Ontario College of Teachers*, 2021 ONSC 2303.)

The Panel was satisfied that the penalty protects the public and serves the principles of general and specific deterrence, rehabilitation, and maintenance of the public's confidence in the profession.

The Panel accepted that the immediate restriction on the Member's licence and on ASPA's Certificate of Authorization appropriately protects the public by prohibiting him from providing structural engineering services. The Panel noted that the exception to this prohibition, which allows the Member to conduct steel connections reviews, was narrowly tailored and supported by a review of previous work submitted by the Member to PEO for that purpose, demonstrating that Assaad is competent in this area of engineering.

The Panel noted that the restriction shall remain in place until the Member successfully completes two examinations in structural engineering to demonstrate his current competence in this area. The Panel believed that this appropriately balances the need to protect the public while allowing the Member an opportunity to demonstrate rehabilitation should he wish to practise in this area in future.

Similarly, the Panel decided that the suspension, the reprimand, and the publication of its reasons in summary form with reference to names will serve the purpose of both general and specific deterrence, as well as help to uphold the public's

confidence in the regulation of the engineering profession. These measures demonstrate to the public and the profession that practising beyond the scope of one's competence will be taken seriously by PEO and result in significant consequences.

The Panel was reassured in its conclusions by the cooperation of the Member throughout the investigation, including his guilty plea and agreement to an agreed statement of facts and joint submission on penalty. This suggested to the Panel that the Member has demonstrated insight into the issues identified in his practice and has the ability to better recognize the limits of his competence in future. The Panel also noted that this was the Member's first appearance before the Discipline Committee, which was a further mitigating factor.

Finally, the Panel noted that the penalty ordered in this matter is in line with two previous decisions of the Discipline Committee that dealt with similar cases involving inadequate structural designs. The Panel was therefore of

the view that it falls within a reasonable range of penalties ordered in previous cases.

For all of the above reasons, the Panel accepted the Joint Submission as to Penalty and Costs. The Panel delivered the reprimand immediately following the conclusion of the hearing. During the reprimand, the Panel highlighted the importance of recognizing the limits of one's competence, of having an established quality assurance process to identify errors and omissions, and of remembering that while software is an important tool, it does not replace the need for an engineer's analytical skills.

On June 19, 2023, Glenn Richardson, 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: Jag Mohan, P.Eng. and Eric Bruce, J.D.

## DECISION AND REASONS

In the matter of a hearing under the *Professional Engineers Act, R.S.O. 1990, c. P.28*; and in the matter of a complaint regarding the conduct of KAZI A. MAROUF, P.ENG., a member of the Association of Professional Engineers of Ontario.

This panel of the Discipline Committee (the "Panel") of the Association of Professional Engineers of Ontario (the "PEO") convened a hearing electronically via Zoom on March 30, 2023, to consider the conduct of Kazi A. Marouf ("Mr. Marouf") as described more particularly herein.

As Mr. Marouf was not present at the time specified for the commencement of the hearing in the Notice of Hearing and not represented, the Panel took a fifteen minute break before the start of the hearing to see if Mr. Marouf and/or a representative would arrive at the hearing. That did not occur, and the Panel commenced the hearing immediately following the fifteen minute break.

At the beginning of the hearing (i.e. following the fifteen minute break), counsel for the PEO provided an Affidavit of Service which showed that on February 19, 2023, Mr. Marouf was personally served with the Notice of Hearing for this matter and a copy of the Rules of Procedure of the Discipline Committee of the PEO. Counsel for the PEO also

provided an Affidavit of Service showing that on March 28, 2023, Mr. Marouf was served with a letter reiterating the hearing date and providing details regarding the electronic hearing. Based on the evidence, the Panel concluded that Mr. Marouf was given reasonable notice of the hearing pursuant to Sections 6 and 7 of the *Statutory Powers Procedure Act, R.S.O. 1990, c. S.22* and that the hearing could proceed in his absence.

### THE ALLEGATIONS

The allegations against Mr. Marouf are stated in the Statement of Allegations dated October 18, 2022. The relevant parts of the Statement of Allegations, taken directly therefrom, are as follows:

It is alleged that Kazi Abdul Marouf, P. Eng. ("Marouf") is guilty of professional misconduct as defined in the *[Professional Engineers] Act* and Regulation 941 [of the Act], as follows: