

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

and

IN THE MATTER OF AHMED RAZA SYED, P. Eng.

DECISION OF THE DISCIPLINE COMMITTEE

Hearing dates:	January 21 and 23, 2020
Discipline Committee Panel:	Frank Denton, P.Eng., Chair Ron Yaworsky, P.Eng. Jurgen Franke, P.Eng.
Counsel for the Association:	David Volk
For the Member	Ahmed Raza Syed, appearing on his own behalf

A. Introduction

1. This Panel of Discipline Committee (the "Panel") of the Association of Professional Engineers and Geoscientists of the Province of British Columbia doing business as Engineers and Geoscientists BC (the "Association") conducted an inquiry pursuant to section 32 of the *Engineers and Geoscientists Act*, R.S.B.C. 1996, c. 116 (the "Act").
2. The Panel found that the allegations as set out in the Notice of Inquiry dated November 12, 2019 against Ahmed Raza Syed were proven to the requisite standard and determined pursuant to section 33 of the Act that Mr. Syed breached the Code of Ethics and demonstrated unprofessional conduct.

B. Background

3. This Panel was appointed to conduct an inquiry to determine, pursuant to section 33 of the Act, whether Mr. Syed demonstrated unprofessional conduct or incompetence, and contravened the Association's Code of Ethics.

4. The particulars of the allegations against Mr. Syed are set out in the Notice of Inquiry dated November 12, 2019 as follows:
 1. That in connection with professional assignments where you were retained to serve as the registered professional of record under the British Columbia Building Code, 2012, responsible for design and field review of glass guard railing systems at [REDACTED] (“Navigators”), [REDACTED] (“Timber View”), [REDACTED], [REDACTED] (together, “Champion Way”), [REDACTED], and [REDACTED] (together, “Copper Rock”), all in the City of Langford, British Columbia (collectively, the “Projects”), you have demonstrated unprofessional conduct as you did not perform adequate engineering work or analysis prior to the installation of the glass guards at those Projects.
 2. That, in respect of Navigators, Timber View, and Copper Rock, you have demonstrated unprofessional conduct or incompetence as the glass guards installed at those projects do not meet the requirements of the British Columbia Building Code, 2012, because the glass guards are inadequate to resist all applicable loads.
 3. That, in respect of Navigators and Timber View, the design drawings sealed by you for those projects are missing material design information, including information pertaining to:
 - a. the layout, width, and type of glass panels to be installed;
 - b. the existence or design of any cap rail to be installed;
 - c. the design of the stand-offs to be installed;
 - d. the design requirements for the supporting structure;
 - e. the connection of the glass guards to the supporting structure;
 - f. the design wind load and applicable vertical reaction forces; and
 - g. the layout of the glass guard panels.
 4. That for Copper Rock, Navigators, and Timber View, you demonstrated unprofessional conduct when you signed and sealed Schedule B, Letters of Assurance, indicating that you had designed the glass guards prior to their installation and that their design substantially complied with the British Columbia Building Code in circumstances where you did not perform adequate engineering work or analysis prior to the installation of the glass guards at those projects.
 5. That for Navigators and Timber View, you demonstrated unprofessional conduct when you signed and sealed Schedule C-B, Letters of Assurance, indicating that you had fulfilled your obligations for field review and that the design of the installed glass guards substantially complied with the British Columbia Building Code in circumstances where you had not conducted any field reviews or performed adequate engineering work or analysis prior to the

installation of the glass guards at those projects.

6. That for each of the Projects you breached Bylaw 14(b) of the Bylaws of the Association by:
 - a. failing to retain adequate records of your assessments, designs and load calculations; and
 - b. failing to retain adequate records of your field reviews.
7. That contrary to the second principle of the Association's Code of Ethics you undertook and accepted responsibility for the Projects in circumstances where you lacked sufficient training or experience in the practice area of engineering of glass guard systems.

5. The hearing took place at the Association's office at 4010 Regent Street, Burnaby, British Columbia on January 21 and 23, 2020.
6. The parties both led evidence with respect to the allegations set out in the Notice of Inquiry and made oral and written submissions. Mr. Syed was given leave to provide written closing submissions after the hearing. Those were received on February 10, 2020.
7. The Panel's determination takes into account the evidence adduced at the hearing and the parties' submissions.

C. Service

8. No issues were raised with respect to service of the Notice of Inquiry. The Panel accepts that Mr. Syed was properly served with the Notice of Inquiry dated November 12, 2019. The Panel notes that the original Notice of Inquiry was issued on December 18, 2018 but was revised to change the hearing dates and location.

D. Burden and Standard of Proof

9. The Panel finds that the Association bears the burden of proof and must prove its case on a "balance of probabilities" according to the Supreme Court of Canada's decision of *F.H. v. McDougall*, 2008 SCC 53, which was cited in *Kaminski v. Association of Professional Engineers and Geoscientists of British Columbia*, 2010 BCSC 468. The Panel notes the Supreme Court of Canada's comments in *F.H. v. McDougall* that evidence must be sufficiently clear, convincing and cogent to satisfy the balance of probabilities test.

E. Evidence

10. The Association called three witnesses:
 1. Jesse Romano, the Association's Investigation Manager;

2. Cameron Edwards, the Senior Building Official at the City of Langford; and
3. Rudolph Kevesdi, P. Eng., a structural engineer who was qualified as an expert witness.

11. The Association also submitted the Affidavit #1 of Leo Soh (April 30, 2019).
12. Mr. Syed testified on his own behalf. He did not call any other witnesses.

Jesse Romano

13. Mr. Romano testified to the Association's receipt of the complaints from Cameron Edwards, the Senior Building Official at the City of Langford (the "City"), against Mr. Syed on June 27, 2016, November 15, 2016, and January 24, 2017. The complaints concern Mr. Syed's structural engineering work for glass guard railings at six residential projects located in the City:
 1. [REDACTED] ("Navigators"), a single-family home project;
 2. [REDACTED] ("Timber View"), a single-family home project;
 3. [REDACTED] and [REDACTED] (together, "Champion Way"), two units from a duplex project; and
 4. [REDACTED], and [REDACTED] (together, "Copper Rock"), two units from a condominium project.

(the "Projects")
14. Mr. Romano outlined the investigation history into the complaints against Mr. Syed, including:
 1. The January 27, 2017 letter from the Association to Mr. Syed which summarized the issues raised in the complaints; and
 2. The April 25, 2017 written response from Mr. Syed.
15. Mr. Romano testified about the July 20, 2017 Discipline Committee hearing into Mr. Syed's failure to provide documents requested of him by the Investigation Committee, and the Panel's findings in its September 18, 2017 decision regarding the manner in which Mr. Syed maintained project files.
16. Mr. Romano testified about steps taken to ascertain whether the City had provided the Association with all relevant documentation relating to the complaints.
17. Mr. Romano testified about the November 1, 2018 interview of Mr. Syed, including his efforts to schedule that interview. The interview was conducted by the Subcommittee of the Investigation Committee. A written transcript of the interview was introduced at the hearing. The Panel was taken to several excerpts from the audio recording of the interview, including in relation to Mr. Syed's experience, documentation processes, Mr.

Syed becoming involved in the Projects after the glass guards had been installed, and Mr. Syed not performing any calculations.

Cameron Edwards

18. The Association's second witness was Mr. Edwards, who is a certified Registered Building Official at the City, where he has worked for over ten years.
19. Mr. Edwards testified about his duties at the City, including in relation to inspections and plan reviews. Mr. Edwards testified that he is not trained as an engineer and that his role is limited to assessing whether all required application information is present as opposed to assessing the adequacy of the engineering work.
20. Mr. Edwards described the City's system for letters of assurance from structural engineers working on residential projects. Mr. Edwards explained that on typical projects, one structural engineer is engaged to act as the registered professional for the structural design of the house. That engineer's role typically ends at the framing stage, after the City has completed its inspection. A second structural engineer is then engaged for assessing glass guards, which are generally installed at the end of the project.
21. Mr. Edwards testified that the City requires Schedules B and C-B from the glass guard structural engineer as well as design drawings and record of final field review.
22. Mr. Edwards identified the glass guard documentation that was submitted for all of the Projects.
23. In reviewing field review obligations, Mr. Edwards was taken to the British Columbia Building Code, 2012, Division C, section 2.2.7 which sets out a registered professional's responsibilities, including the requirements for letters of assurance and retention of field review records. The explanatory note for section 2.2.7 provides: "Schedule C-B requires that the registered professional who provides the field review provide assurance that the building as finally constructed is in substantial conformance with the Code".
24. Mr. Edwards testified as to the complaints and documents associated with each of the Projects.

Navigators

25. Mr. Edwards testified that Mr. Syed did not provide a Schedule B or design drawings for Navigators. Mr. Edwards advised Mr. Syed that his submission for that project did not contain the information required by the Association's Professional Practice Guidelines – Designing Guards for Buildings.
26. Mr. Edwards identified photographs taken of Navigators which show the glass guards installed with no cap rail.

27. Mr. Syed made three submissions to the City for Navigators:
1. April 25, 2016 field review letter and April 25, 2016 Schedule C-B (marked "received" April 27, 2016). No drawings or Schedule B were submitted.
 2. May 10, 2016 Schedule B and May 29, 2016 design drawing (marked "received" May 30, 2016). The drawings call for a cap to be installed.
 3. June 2, 2016 Schedule C-B and design drawing (marked "received" June 3, 2016), and a June 15, 2016 field review letter. The June 2, 2016 drawing added a "notes" section.
28. Mr. Edwards testified as to the emails he exchanged with Mr. Syed on May 30 and 31, 2016, noting that the City required an up to date field review with a current date and a Schedule C for each project. The emails also identified that the drawing was missing identification of the load path and reaction loads as required by the Association's Professional Practice Guidelines.
29. Mr. Edwards testified that it was out of order to receive the June 15, 2016 field review after the June 3, 2016 Schedule C-B, given that Schedule C-B indicates completion of the field review obligations. Mr. Edwards testified that the proper order for submission of the required documents is as follows:
1. Design drawings by the registered structural engineer.
 2. Sealed Schedule B.
 3. Field Review.
 4. Sealed Schedule C-B.

Timber View

30. Mr. Edwards testified as to the application documents and communications relating to the [REDACTED] Timber View project. The following documents were submitted to the City:
1. April 25, 2016 field review letter, May 5, 2016 Schedule B and May 6, 2016 unsealed drawing (all of which are marked "received" on May 9, 2016). The drawing did not call for a cap rail to be installed.
 2. May 10, 2016 Schedule B and May 29, 2016 design drawing (marked "received" on May 30, 2016). The drawings called for a cap rail to be installed.
 3. June 2, 2016 Scheduled C-B and June 15, 2016 field review letter (marked "received on June 3, 2016). The June 2, 2017 design drawing added a "notes" section.
31. Mr. Edwards testified as to the emails he and his colleagues exchanged with Mr. Syed on May 11, 2016, May 19, 2016, May 30, 2016, and May 31, 2016.
32. Mr. Edwards testified that the order of document submissions was also incorrect with Timber View.

Champion Way

33. Mr. Edwards provided evidence that the only document submitted for the Champion Way properties was a field review dated November 15, 2016. An email from Mr. Edwards on November 15, 2016 confirmed it was submitted to the City on the same day. Mr. Edwards testified that no other documents were submitted.
34. Mr. Syed's field review states:
- We have conducted the field review for the installation of glass railing at above site address. The glass guard's assembly has been installed at the site, and complies with the BC Building Code 2012 design and safety requirements. The glass is 12 mm tempered glass and structurally good to take the load if the ladder is placed against glass to go upper floor. The work done is approved.
35. Mr. Edwards' email of November 15, 2016 records:
- The guards in question are 4' wide panels with vertical supports between each panel. The glass extends about 6" above the top of the vertical supports and has no top rail. We requested confirmation that the glass meets the requirements for guards. It's our opinion that the field review does not provide what is required. No other clarifying material was forwarded. I also spoke with the contractor and he informed me that Mr. Syed only attended the site during a framing inspection and not when the glass was actually installed for inspection.
- I have no idea what the comment about a "ladder" has to do with. It's my opinion that the comment in the field review regarding the "ladder" has to do with the contractor misunderstanding my reference to "lateral load" in our conversation. He kept saying "ladder" and I tried to clarify.
36. Mr. Edwards testified that there is no City requirement relating to a glass guard taking the weight of a ladder.

Copper Rock

37. Mr. Edwards' evidence was that the only documents submitted for Copper Rock were the:
1. August 5, 2015 field review; and
 2. August 5, 2015 Schedule B.
38. Mr. Edwards' email of January 27, 2017 to the Association states; "They currently are still tempered glass with no vertical or horizontal supports and fastened in a similar way as the Navigators guards originally were (pics supplied previously of Navigators)".

Affidavit of Leo Soh

39. The Association entered the Affidavit #1 of Leo Soh (April 30, 2019) which sets out the following evidence:

1. Communications from Association's legal counsel to Mr. Syed enclosing the Association's document disclosure and expert report.
2. Emails from Mr. Syed to the Association's legal counsel requesting calculations for the Projects performed by the Discipline Committee, and replies from Association counsel that no Discipline Committee panels prepared any such calculations.

Rudolph Kevesdi, P. Eng.

40. The Association's third witness was Rudolph Kevesdi, P.Eng. Mr. Kevesdi was qualified as an expert to give evidence regarding structural engineering in the area of glass guard design and construction.
41. Mr. Kevesdi has over twenty years' experience in providing services to the glazing industry, and 12 years' experience as a general structural engineer. Mr. Kesvesdi reviewed his involvement in a number of large projects in British Columbia. Mr. Kevesdi confirmed that his work is primarily in the commercial and not the residential realm.
42. Mr. Kevesdi prepared an expert report dated September 6, 2018 as well as a supplementary report dated November 8, 2018. Both of those reports were admitted into evidence.
43. Mr. Kevesdi gave the following expert evidence:

Navigators

1. The design documents with regards to the structural design of glass guard and field reviews of installation are deficient; specifically
 - The design drawings signed and sealed on May 29, 2016 and June 10, 2016 do not provide information on the layout and width of glass panels and location of cap rails splice joints;
 - Information with reference to the location of stand-offs is unclear, and detail A does not show the required glass hole diameter, threaded insert and ferrule;
 - Material supplier and quality of the cap rail, stand-off and the hanger bolt are not specified, nor the material and composition of the supporting structure for the stand-off and wall bracket; and
 - Wall bracket dimensions are not provided and the cap rail splicing details for the 90- and 136- (sic) degree corners are missing.
2. The design loads and reaction forces in the design drawings signed June 2, 2016 are not in compliance with the Association's Guidelines for Designing Guards as the following information is deficient:
 - Design wind load is not specified; and
 - Vertical reaction forces resulting from vertical guard load is not identified.

3. With respect to the engineering calculations completed by Mr. Kevesdi:
 - The factored stress of 12 mm tempered glass around the holes exceeds the factored resistance by 8% to 116%;
 - The stand-off anchor in wood, with 3/8" x 2-1/2" long hanger bolt, would fail on pull-out; and
 - The cap rail bending moment for the vertical load condition would exceed the bending resistance by 16% to 18% for vertical load condition.
4. The April 25, 2016 and June 15, 2016 letters to the City confirm conduct of field reviews of installation and compliance with the design of the 2012 Building Code requirements, however, the Building Code requires glass designs comply with the requirements of CAN/CGSB-12.20 – M89 Structural Design of Glass for Buildings, which required, at the material times, that glass guards have a top cap rail. Photos from the City show the installed glass guards do not have cap rails.

The June 15, 2016 letter also claims compliance with the Building Code but the engineering calculations confirm the glass guards do not meet the design load requirements of the Building Code.

5. Mr. Kevesdi testified that the absence of a cap rail presents a safety risk as, if the glass were to break, there would be insufficient support for a person standing next to the glass guard.
6. In Mr. Kevesdi's opinion, the documents and designs signed and sealed by Mr. Syed are not in accordance with the Association's Professional Practice Guidelines – Designing Guards for Buildings as:
 - Glass, cap rail and stand-off anchorage design does not meet design loads;
 - A fail-safe load path in the event of glass breakage has not been provided;
 - The glass guards also fail to meet the objectives and functional statements of the Code:
 - OS2.1 structural safety
 - OS3.1 safety in use
 - F20 to support and withstand expected loads and forces
 - F30 to minimize the risk of injury to a person as a result of tripping, slipping, falling or collision.
7. The files for the project are incomplete because of the absence of proper field review reports, transition of the design change is not recorded, and compliance and possible deviations from the design drawings is not properly documented.

Timber View

1. Mr. Kevesdi stated his opinion that the design documents with regards to the structural design of glass guard and field reviews of installation are deficient; specifically

- The preliminary design drawing received by the City on May 9, 2016 does not show the complete layout of glass guard panels;
 - Material and anchorage detail of the stand-off to the stair stringer is not clearly specified;
 - Glass type and thickness is not specified;
 - General notes reference applicable standards and specify strength of materials that are not used on the project; and
 - Handrail at the stairs is not provided in the design.
2. Design drawings show the same deficiencies as Navigators.
 3. Mr. Kevesdi's site visit confirmed the glass guard installed on the exterior deck is cap-less and therefore deviates from the signed and sealed drawings.
 4. Engineering calculations by Mr. Kevesdi for the cap-less guard indicated that the factored stress of 12 mm tempered glass around the holes exceeds the factored resistance by 72% to 190%. The stand-off anchor in wood with 3/8" x 2-1/2" long hanger bolt would fail on pull-out regardless of the load combination.
 5. Mr. Syed's June 15, 2016 letter to the City confirmed conduct of field reviews of installation and compliance with the 2012 Building Code requirements and safety requirements, however Mr Kevesdi's engineering calculations confirm that the glass guard does not meet with the design load requirements of the Building Code, and a site visit confirmed that the installation is without a cap rail, therefore the statements in the letter are incorrect and the glass guard is not safe.
 6. In Mr. Kevesdi's opinion, the documents and designs signed and sealed by Mr. Syed are not in accordance with the Association's Professional Practice Guidelines – Designing Guards for Buildings as:
 - Glass, cap rail and stand-off anchorage design does not meet design loads;
 - A fail-safe load path in the event of glass breakage has not been provided;
 - Handrail for the glass railing on stairs has not been specified;
 - The glass guards also fail to meet the objectives and functional statements of the Code:
 - OS2.1 structural safety
 - OS3.1 safety in use
 - F20 to support and withstand expected loads and forces
 - F30 to minimize the risk of injury to a person as a result of tripping, slipping, falling or collision.
 7. The files for the project are incomplete because of the absence of proper field review reports. The letter confirming the field review and compliance with design is not a proper field review report as it is missing important elements and observations such as confirmation of structural compliance of installed

anchors, confirmation of supplied materials with the design documents, deviations of installed product from the documents, observations and approval of changes in the installation method.

Copper Rock

1. The July 19, 2017 letter to the City confirmed conduct of field reviews of installation and compliance with the 2012 Building Code and the Association's Professional Practice Guidelines – Designing Guards for Buildings. The letter does not state compliance with the design documents. The compliance statement is incorrect because the installed glass guard on the exterior deck is cap-less, it does not meet design loads, and therefore cannot be in compliance with the Building Code and Association's Professional Practice Guidelines.
2. No design drawings were provided for this project, therefore Mr. Kevesdi was unable to provide an opinion on whether the drawings contained any deficiencies.
3. In Mr. Kevesdi's opinion, the glass guard design by Mr. Syed is not in accordance with the Association's Professional Practice Guidelines – Designing Guards for Buildings, as:
 - Glass guard design shop drawings have not been provided;
 - Glass strength design does not meet design loads;
 - A fail-safe load path in the event of glass breakage has not been provided;
 - The glass guards also fail to meet the objectives and functional statements of the Code:
 - OS2.1 structural safety
 - OS3.1 safety in use
 - F20 to support and withstand expected loads and forces
 - F30 to minimize the risk of injury to a person as a result of tripping, slipping, falling or collision.
4. The files for the project are incomplete as the following have not been provided:
 - Design drawings;
 - Field review reports; and
 - Letter of Assurance Schedule C-B

Champion Way

1. The November 15, 2016 signed and sealed letter to the City is not in compliance with the Association's Professional Practice Guidelines due to the absence of design drawings.
2. The files for the project are incomplete as the following have not been provided:

- Design drawings;
- Field review reports;
- Letter of Assurance Schedules B and C-B

44. In Mr. Kevesdi's opinion, "Mr. Syed is lacking the proper understanding and implementation of glass guard design principles, safety requirements, related Codes and Guidelines. Lack of competence is evident throughout the design document review". In Mr. Kevesdi's opinion, Mr. Syed is not qualified to carry out design and approval of glass guards. Finally, in Mr. Kevesdi's opinion, Mr. Syed failed to demonstrate that his services would meet the standard expected of an engineer practicing in British Columbia.
45. Mr. Kevesdi also prepared a report dated November 8, 2018. This report followed Mr. Kesvesdi's attendance of Mr. Syed's interview with the Subcommittee of the Investigation Committee on November 1, 2018. Mr. Kevesdi provided the following opinion in his November 8, 2018 report:

My. Syed admitted that he did not do the engineering calculations in advance as regular component of the design process. The design drawings were prepared after the guardrail was installed, and they do not exactly replicate the installed condition. Mr. Syed's engineering skills are very basic and he is not competent to design a safe glass guard. His field review skills are questionable, and he does not have any field review reports of his projects. Mr. Ahmed Raza Syed failed to demonstrate that his services would meet the standard expected of an engineer practicing in British Columbia.

Ahmed Raza Syed, P.Eng

46. Mr. Syed testified that:
1. He did the calculations required of him and did everything according to the relevant specifications and requirements. The City accepted his submissions which he understood to mean that the City was comfortable with his work.
 2. With respect to capping, when he inspected the Timber View property, the cap was there but it was later removed by the owner. Likewise, with Copper Rock, there was capping when he observed the property but the owner did not like it and removed the capping. With respect to Champion Way, the City did not accept his submissions and accepted the submissions of another engineer, accordingly, in Mr. Syed's view, he bears no responsibility.
 3. He admits he did not prepare proper drawings according to the Association's standards but did, or approved, the calculations.
 4. Mr. Syed only became involved after the installation of the glass guards and that no contractor provided him with shop drawings pertaining to the installation.

5. The contractor communicates with the City to determine what information they require. Mr. Syed then provides that information.

47. On cross-examination, Mr. Syed testified that:

1. He had no specific training in glass guards, but that he worked with a very senior engineer who passed away in July 2018. That engineer performed all of the design calculations but was not involved in the design drawings of the glass guards.
2. With respect to filing the schedules with the City in the proper order, Mr. Syed stated that if a contractor did not want to take all of the schedules to the City, he cannot force the contractor to do so. Mr. Syed provides whatever the City requested.
3. Unless the contractor requires drawings, he did not prepare them. Rather, Mr. Syed would attend at the site to see if the requirements are met.
4. Mr. Syed acknowledged that he did not maintain proper documentation. He testified he and his colleague kept a notebook during field reviews. Mr. Syed was not certain whether he still had a copy of the notebook as his offices had moved.
5. Mr. Syed's understanding is that the Building Code does not require a cap rail on glass guards.
6. Mr. Syed admitted that he signed the field review letters and Schedule C-B letters for Navigators before installation was complete. With respect to the other projects, the owners removed the cap rails.
7. With some projects, Mr. Syed did the calculations after returning from the site visit. In other cases, he did the calculation "by experience", which he explained means that he made assumptions with respect to the design based upon other similar designs he had seen.
8. No calculations were prepared for Champion Way. Mr. Syed could not recall whether calculations were performed for Copper Rock.

F. Analysis and Findings

48. In assessing Mr. Syed's conduct in these matters, the Panel considered the following standards, codes and guidelines:

- a) Code of Ethics;
- b) British Columbia Building Code, 2012;

- c) The Association's Quality Management Guidelines regarding the Use of the Seal;
 - d) The Association's Professional Practice Guidelines for Designing Guards for Buildings; and
 - e) The Association's Quality Management Guideline for Documented Field Reviews during Implementation or Construction
49. The allegations in the Notice of Inquiry refer to "unprofessional conduct" and "incompetence". Both concepts are found in section 33(1) (c) of the Act.
50. The Panel accepts the meaning of unprofessional conduct set out in the 2015 Discipline Committee decision of *Re Foreman* of a marked departure from the standard to be expected of a competent professional:

[94] Hence, unprofessional conduct is that which does not meet the standard expected through application of the Code of Ethics. The Panel accepts the submission of the Association, based upon *Law Society of British Columbia v. Martin*, 2005 LSBC 16, that professional misconduct is established when there is a marked departure from the standard to be expected of a competent professional, and that minor or inadvertent failure to comply with professional standards does not constitute unprofessional conduct.

51. The Panel also accepts the definition of incompetence set out in *Re Foreman* of a professional who habitually fails to perform their work with the appropriate degree of skill or accuracy:

[95] In considering whether a member's conduct is incompetent, the Panel was referred to *Reddy v. Association of Professional Engineers and Geoscientists of British Columbia*, 2000 BCSC 88, in which the following definition of incompetence was accepted:

"We believe it is fair to say a person who habitually fails to perform his work with the degree of skill or accuracy usually displayed by other persons regularly employed in such work is incompetent. And the same is true of one who usually performs substantially less than others regularly so employed. ... The true significance of the term "incompetency" should not be overlooked. It embraces habitual carelessness."

[96] The Panel accepts this definition of incompetence, and notes that it is consistent with *previous* decisions of the British Columbia courts and previous disciplinary panels of the Association.

Allegation 1

52. The Panel finds that the glass guards were already installed for all Projects prior to Mr. Syed's involvement and arrival on the project sites.

53. Mr. Syed only prepared drawings for the Navigators and Timber View projects because the City required those drawings. He prepared no drawings for the Champion Way and Copper Rock projects.
54. The Panel finds the drawings Mr. Syed prepared for Navigators and Timber View were inadequate because:
1. The unsealed drawing dated May 6, 2016 for Timber View contains incorrect connection detail (Detail at "A");
 2. The May 29, 2016 and June 2, 2016 drawings for Navigators fail to identify the number of panels required and the width of those panels; and
 3. The drawings fail to list all the required drawing details contained in section 4.5 of the Association's Professional Practice Guidelines Designing Guards for Buildings, in particular the requirements to:
 - Identify the intended load path to the base structure,
 - Show reaction loads, and
 - Show connection details.
55. The Panel also finds no evidence that Mr. Syed performed any calculations for any of the Projects. While Mr. Syed testified that some calculations were done "by experience" and that other calculations were performed by a former colleague who is now deceased, the Panel has seen no evidence that Mr. Syed performed any calculations.
56. The Panel finds that Mr. Syed provided the glass guard contractor with a signed and sealed field review and Schedule C-B before the cap rail was installed. The assurance given in Schedule C-B is that the engineer has "fulfilled my obligations for field review..." and "those components of the project opposite my initials in Schedule B substantially comply in all material respects with the applicable requirements of the B.C. Building Code and other applicable enactments respecting safety, not including construction safety aspects, and the plans and supporting documents submitted in support of the application for the building permit". Mr. Syed provided his assurance, under seal, prior to completion of the installation.
57. The Panel finds that for Navigators, Mr. Syed issued the Schedule C-B prior to issuing a Schedule B. Moreover, he issued Schedules B and C-B prior to preparing design drawings. Mr. Syed provided an assurance that he had prepared the design for the glass guard components and that the work had been installed in accordance with design, despite the fact that no design had been prepared at the time he provided that assurance.
58. The Panel finds that for Champion Way, Mr. Syed provided a field review which included wording that the glass was "structurally good to take the load if the ladder is placed against glass to go to upper floor". It appears that Mr. Syed misunderstood "lateral" as meaning "ladder" and that he included this wording about "ladder" because

someone had asked him to do so.

59. The Association submits that Mr. Syed's involvement in the Projects amounted to him being a "seal for hire" because of the timing of his involvement post-construction in the projects and the manner in which he prepared the relevant documents and assurances.
60. Mr. Syed submits that he was simply following the common practice of guard rails being installed before the contractor engaged him as an engineer. He further submits this allegation must fail because the City accepted his paperwork. The Panel rejects this assertion.
61. The Panel finds that the following minimum conduct was expected of Mr. Syed as an engineer:

1. That he would only place his seal on a document such as a letter of assurance, filed review, or drawing where he could with honest conviction, confirm for others that they could rely on the fact that the opinions, judgments or designs in the sealed documents were provided by an Association professional held to high standards of knowledge, skill and ethical conduct;

The Association's Quality Management Guidelines
regarding the Use of the Seal section 3.1.1

Code of Ethics Principle 3

2. That his engineering work would meet or exceed the minimum standard of the BC Building Code; and

Building Code, 2012

Re: J.C. Harrison, P. Eng and I.F. Tacy, P. Eng and
T.A. London, P.Eng. and E.H.Y Man, P. Eng (1988)

3. That his engineering work would be documented.

The Association's Quality Management Guideline for Documented
Field Reviews during Implementation or Construction section 2.6 and 3.10.6
Bylaw 14(b)

62. The Panel finds that Mr. Syed's conduct in failing to prepare drawings, or preparing inadequate drawings after the glass guards were installed; failing to perform any calculations; and providing assurances under seal for work that had not yet been performed, constitutes a marked departure from the standards expected of an engineer in his circumstances. The evidence establishes that Mr. Syed demonstrated unprofessional conduct.

Allegation 2

63. Mr. Syed submits that he met applicable Building Code requirements at the time.
64. The Panel prefers the evidence of expert, Mr. Kevesdi.
65. Mr. Kevesdi's evidence was that it was a requirement of the Building Code at the material times that glass guards have a top cap rail.
66. Mr. Kevesdi's evidence established that the glass guards for Navigators, Timber View, and Copper Rock as installed, did not meet the requirements of the Building Code because the glass guards were inadequate to resist all applicable loads. In addition, Mr. Kevesdi's expert report establishes that a cap rail was installed at Navigators but not at Timber View or Copper Rock.
67. Mr. Kevesdi's calculations established that for Navigators and Timber View:
 1. the factored stress of the 12 mm tempered glass around the holes exceeded the resistance by a significant margin. This was worse for Timber View as no cap rail was installed,
 2. the anchors into wood for the standoffs would pull out.
68. Mr. Kevesdi also opined that for Navigators and Copper Rock, the glass guards did not meet the Building Code because no cap rails were installed.
69. The Panel finds that the glass guards for Navigators, Timber View and Copper Rock, as installed, did not meet the requirements of the Building Code because the glass guards were inadequate to resist all applicable loads. The Panel finds this to be a marked departure from the applicable standard and finds that Mr. Syed committed unprofessional conduct.

Allegation 3

70. Mr. Edwards and Mr. Kevesdi gave evidence that Mr. Syed's sealed drawings are missing material design information which is required in section 4.5 of the Association's Professional Practice Guidelines for Designing Guards for Buildings.
71. Mr. Syed admitted that that his sealed drawings were missing some information and were inadequate.
72. The Panel agrees and finds that the Mr. Syed's drawings for Navigators and Timber View are missing material design information which is required by the Association's Professional Practice Guidelines for Designing Guards for Buildings.

Allegation 4

73. Mr. Syed submits that no contractor engages an engineer prior to installation and argues that Mr. Edwards acknowledged this in his testimony.
74. The Panel finds the evidence shows that that for Copper Rock, Navigators, and Timber View, Mr. Syed signed and sealed Schedule B Letters of Assurance indicating that he had designed the glass guards prior to their installation and that their design substantially complied with the Building Code. The evidence demonstrates that Mr. Syed did this in circumstances where he did not perform adequate engineering work or analysis prior to the installation of the glass guards at those projects.
75. The Panel finds that the standard required Mr. Syed, as an engineer, to only place his seal on a document such as a letter of assurance, filed review, or drawing where he could with honest conviction, confirm for others that they could rely on the fact that the opinions, judgments or designs in the sealed documents were provided by an Association professional held to high standards of knowledge, skill and ethical conduct.

The Association's Quality Management Guidelines
regarding the Use of the Seal section 3.1.1

Code of Ethics Principle 3

76. The Panel finds Mr. Syed's conduct to be a marked departure from the applicable standard and finds that Mr. Syed committed unprofessional conduct.

Allegation 5

77. Mr. Syed submits this allegation is baseless. He submits that he issued a field review letter after completing the field review.
78. The Panel finds the evidence demonstrates that for Navigators and Timber View, Mr. Syed signed and sealed Schedule C-B Letters of Assurance indicating that he had fulfilled his obligations for field review and that the design of the installed glass guards substantially complied with the Building Code. The evidence shows Mr. Syed did this in circumstances where he had not conducted any field reviews or performed adequate engineering work or analysis prior to the installation of the glass guards at those projects.
79. The Panel finds that the standard required Mr. Syed, as an engineer, to only place his seal on a document such as a letter of assurance, filed review, or drawing where he could with honest conviction, confirm for others that they could rely on the fact that the opinions, judgments or designs in the sealed documents were provided by an Association professional held to high standards of knowledge, skill and ethical conduct.

The Association's Quality Management Guidelines

regarding the Use of the Seal section 3.1.1

Code of Ethics Principle 3

80. The Panel finds Mr. Syed's conduct to be a marked departure from the applicable standard and finds that Mr. Syed committed unprofessional conduct.

Allegation 6

81. Mr. Syed admits that he failed to keep adequate records of any assessments, designs and load calculations for the Projects, and failed to retain adequate records of his field reviews for the Projects.

82. The Association submits that the deficiencies in Mr. Syed's documentation processes were observed by the panel that heard the July 20, 2017 Discipline Hearing, and were described by Mr. Syed at his November 1, 2018 interview in relation to this matter. The Association submits that there has been no improvement in Mr. Syed's documentation processes given that Mr. Syed has confirmed he retained no documentation from the field reviews for the Projects other than the letter which he signed and sealed for the City.

83. The Panel agrees with the Association's submissions and Mr. Syed's admission and finds that for each of the Projects, he failed to keep adequate records of any assessments, designs, and load calculations, and failed to retain adequate records of his field reviews.

84. The Panel finds this conduct is in breach of section 14(b) of the Association's Bylaws which requires the following:

Quality management

14 (b) Members and licensees shall establish and maintain documented quality management processes for their practices, which shall include, as a minimum:

(1) 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 period of 10 years;

...

(3) documented field reviews by, or under the direct supervision of, members or licensees, of their domestic projects during implementation or construction;

Allegation 7

85. The Code of Ethics provides that members and licensees shall:
2. Undertake and accept responsibility for professional assignments only when qualified by training or experience,
 3. Provide an opinion on a professional subject only when it is founded upon adequate knowledge and honest conviction,
86. As set out above, in Mr. Kevesdi's opinion, Mr. Syed lacked the proper understanding and implementation of glass guard design principles, safety requirements, related Codes and Guidelines. In his opinion, lack of competence is evident throughout the design document review. In Mr. Kevesdi's opinion, Mr. Syed is not qualified to carry out design and approval of glass guards. Moreover, he found Mr. Syed's engineering skills to be very basic and, in his opinion, Mr. Syed is not competent to design a safe glass guard. Mr. Kevesdi also found Mr. Syed's field review skills to be questionable and noted that Mr. Syed did not have any field review reports of his projects.
87. Mr. Syed submits that in the future he will not sign and seal any documents that are beyond his expertise and experience.
88. The Panel agrees with and accepts Mr. Kevesdi's opinion and finds that Mr. Syed undertook and accepted responsibility for the Projects in circumstances where he lacked sufficient training or experience in the practice area of engineering of glass guard systems. In addition, he provided opinions on a professional subject, including under seal, when it was not founded upon adequate knowledge and honest conviction. The Panel finds this conduct to be contrary to the second and third principles of the Code of Ethics.

G. Summary

89. Under section 33 of the Act, after conducting an inquiry, the Discipline Committee may make the following determinations:

Disciplinary actions

33 (1)After an inquiry under section 32, the discipline committee may determine that the member, licensee or certificate holder

(a) has been convicted in Canada or elsewhere of an offence that, if committed in British Columbia, would be an offence under an enactment of the Province or of Canada, and that the nature or circumstances of the offence render the person unsuitable for registration or licensing,

(b) has contravened this Act or the bylaws or the code of ethics of the association, or

(c) has demonstrated incompetence, negligence or unprofessional conduct.

90. The Panel has determined pursuant to section 33(1)(b) and (c) of the Act that Mr. Syed has breached the Code of Ethics and has demonstrated unprofessional conduct.
91. The Panel will determine the sanctions that should be imposed upon Mr. Syed pursuant to s. 33(2) of the Act and whether direct costs are payable pursuant to s. 35 of the Act. The Panel requests that Mr. Syed and the Association provide written submissions in this regard in accordance with the following schedule:
1. Submissions must be delivered by counsel for the Association ("Association Submissions") to Mr. Syed and to the Panel within 14 days of the date of this decision.
 2. Submissions must be delivered by Mr. Syed to counsel for the Association and to the Panel within 14 days of the receipt of the Association Submissions.
 3. Reply submissions may be delivered by counsel for the Association to Mr. Syed and the Panel within 10 days of receipt of Mr. Syed's submissions.
 4. Submissions for the Panel shall be delivered to Susan Precious, counsel for the Panel, and may be delivered electronically.

<original signed by>

Frank Denton, P.Eng., Chair

Date: 8 May 2020

<original signed by>

Ron Yaworsky, P.Eng.

Date 8 May 2020

<original signed by>

Jurgen Franke, P.Eng.

Date: May 9th, 2020