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The Discipline Committee of the Association of Professional Engineers of Ontario

In the matter of a hearing under the *Professional Engineers Act*, R.S.O. 1990, Chapter P. 28

And in the matter of a complaint regarding the conduct of

A Member

a member of the Association of Professional Engineers of Ontario

BETWEEN:

The Association of Professional Engineers of Ontario and

A member

Decision and Reasons

A Panel of the Discipline Committee of the Association of Professional Engineers of Ontario (PEO) met in the offices of the association on November 14, 15, and 16, 2000, to hear allegations of professional misconduct and incompetence against a professional engineer (hereinafter referred to as "the member").

Both PEO and the member were represented by legal counsel and independent legal counsel was in attendance for the Panel of the Discipline Committee.

The hearing arose as a result of a complaint that the member had copied the master specifications and drawings of a former employer (hereinafter referred to as "the consultant") when he left their employment and had used them when he joined his new employer. The consultant became aware of the alleged use of these materials prepared by the member when the consultant received a copy of a tender package, for a water distribution system for an aboriginal band (hereinafter referred to as "Band 2").

The allegations of professional misconduct and incompetence set out in Appendix A to the Notice of Hearing and filed as an exhibit are as follows:

Appendix A

1. The member submitted an application for licensure to the Association of Professional Engineers of Ontario (PEO) in December 1995, and became licensed as a professional engineer in the Province of Ontario in September of 1996.

2. The member was previously licensed as a professional engineer in the Province of Manitoba.

3. In or about mid 1990, the member became an employee of the consultant in Manitoba.

4. The consultant's fields of practice included

water supply, sanitation and construction engineering.

5. A technologist ("the technologist") became an employee of the consultant some time after the member joined that firm.

6. Prior to and during the years that the member was employed with it, the consultant had compiled an extensive database of master specifications and master drawing files in electronic media.

7. These consultant electronic files were continually improved and updated with each new project.

8. The technologist managed the office computers of the consultant, which included control of the electronic records of specifications, drawings, and project files, some of which were password-controlled to restrict access. He had the access code to all such files.

9. During his employment with the consultant, the member acted as a project engineer. In this capacity, he had the responsibility to assemble and create specific documents by utilizing information contained within the master electronic files of the consultant.

10. The member was involved as project manager in one typical project of the consultant's, in the field of water supply and sanitation, which began in or about 1992 and extended to 1995. The consultant acted as the Consulting Engineer for a water and sewer works project for an aboriginal band in northern Manitoba (hereinafter referred to as "Band 1").

11. The member's role in this project was a significant role with respect to the water treatment plant works. The cover page of the consultant's technical specifications and tender package for the Band 1 project carried the signature and seal of the member (dated April 17, 1995), along with the seal of another consultant engineer employee.

12. The technical specifications, drawings and other aspects of the tender package for the Band 1 project consisted of documents assembled and created based on information contained within the master electronic files of the consultant.

13. In August 1995, the member resigned from the consultant and subsequently joined an engineering company located in Ontario (hereinafter referred to as "Company A"). Company A's fields of practice included municipal engineering and buildings.

14. In October 1996, the technologist resigned from the consultant and joined the member at Company A in Ontario.

15. In or about the early part of 1997, Company A acted as the Consultant on behalf of Band 2, with respect to the construction of a water distribution system for the community (hereinafter referred to as "project 2") in Ontario. In this capacity, Company A produced tender documents for project 2 that included technical specifications, a tender package and a set of tender drawings.

16. The cover page enclosing Company A's technical specifications and technical package, as well as its set of tender drawings carried the signature and seal of the member and was dated June 19, 1997.

17. Company A's project 2 tender drawings, sealed by the member, included eight plans and profile drawings, a well-detailed drawing W1, four water service detail drawings D1 to D4, 12 water treatment plant structural drawings S1 to S12, 11 mechanical drawings M1 to M11, and electrical floor layout drawing E1.

18. The Company A project 2 technical specifications and tender package sealed by the member included 17 Divisions and one Appendix. Division 0 contained instructions to bidders, a tender form, agreement, and supplementary general conditions. The technical specifications comprised Divisions 1 to 16 regarding the various trade work, and contained a total of 54 Sections. Appendix A comprised water test results.

19. In or about the latter part of 1997, the Company A project 2 tender documents were brought to the attention of the consultant. When the consultant's personnel reviewed the project 2 tender documents produced by Company A, under the seal of the member, the consultant recognized that substantial parts of the technical specifications and tender drawings were exact replicas of the consultant's technical specifications, detailed designs, and drawing notes that had been developed by the consultant for projects over the course of 15 years.

20. More specifically with respect to the Company A tender drawings for project 2, the consultant determined that 21 Company A drawings contained details and/or notes that had originated from the consultant's electronic database for various projects previously undertaken by it.

21. The consultant reviewed the details and notes on Company A's project 2 tender drawings and highlighted those details and notes that were identical to the details and notes in the consultant's master drawing electronic files.

22. Many of these highlighted details and notes were identical to the details and notes for the Band 1 project, which in turn were representative of and had originated from the material contained in the consultant's master drawing electronic files.

23. The consultant found 52 specific examples of drawing details and/or notes that were precisely copied by Company A under the seal of the member from the electronic files of the consultant.

24. Of the 52 specific examples identified by the consultant, 14 were included on its drawings S14 and S15

sealed by the member for the Band 1 project.

25. The consultant produced transparent overlays, project information and comparison comments regarding the following 11 examples of details and/or notes from the 52 specific examples included on the Company A project 2 drawings that were precisely copied from the electronic files of the consultant:

- pipe insulation detail, and notes on Company A drawing D2;
- road cross section on Company A drawing S1;
- wall section on Company A drawing S7;
- outdoor lighting detail, and notes on Company A drawing S11;
- downspout splash pad, and notes on Company A drawing S11;
- column support pad on Company A drawing S12;
- pressure filter piping layout on Company A drawing M2; and
- bowline knot on Company A drawing M5.

26. The consultant compared the 54 sections of Company A's technical specifications for project 2 with the technical specifications in its own master specification electronic files, and with the technical specifications for the Band 1 project, which were representative of the material that was contained in the consultant's master specification electronic files. The consultant's technical specifications for the Band 1 project also comprised Divisions 1 to 16 regarding the various trade work, and contained a total of 70 sections. The consultant found specific examples of text from Company A's technical specifications that were copied by Company A under the seal of the member from the consultant's master electronic files.

27. The consultant found specific examples with respect to items duplicated by Company A, items not used by Company A, and additions to the consultant's original text in sections 01400, and 03200 of the consultant's master specification electronic files. The consultant found specific examples in 50 sections of Company A's technical specifications for project 2. The consultant highlighted text in yellow in Company A's technical specifications that was identical to the text in the consultant's technical specifications for the Band 1 project. As well, the consultant highlighted text in blue in the Company A technical specifications that was identical to text in the consultant's master specification electronic files, such as section 01600, that appeared in whole in the Company A technical specifications. The text that the consultant highlighted was found in sections 01000, 01100, 01300, 01340, 01400, 01600, 01700, 01730, 02110, 02200, 02210, 02211, 02212, 02223, 02225, 02230, 02600, 02710, 02810, 03100, 03200, 03250, 03300, 03350, 05500, 07190, 07200, 07212, 07900, 08100, 08700, 09900, 10200, 10205, 10410, 10420, 11010, 11200, 11600, 12600, 13126, 15000, 15400, 16000, 16100, 16450, 16510, 16550, 16850, and 16900 of the Company A specifications for project 2.

28. The consultant noted that part of the Company A technical specifications sealed by the member for project 2 were copied from the consultant's master electronic technical specifications without correcting obvious errors or typographical mistakes. The consultant used its technical specifications for the Band 1 project to identify examples of copied consultant's errors or mistakes in the Company A technical specifications for project 2 that included the following:

- A duplication was removed in item 1.4.4 (see 1.4.6) on page 1 of 4 in section 1400, but the item numbers were not corrected accordingly;
- incorrect references to a Winnipeg company on pages 2 and 3 of section 1400;
- "electrical"not capitalized on page 2 of section 1400;
- "stumps-as" not corrected on page 1 of section 2110;
- incorrect reference to the Department of Natural Resources instead of the Ministry on page 2 of section 2110;
- period missing on page 2 of section 2600;
- incorrect reference to Manitoba on page 6 of section 2600;
- double period used on page 1 of section 3200;
- item 3.4.2 appeared twice on page 2 of section 16100; and
- period missing on page 1 of section 16450.

29. It appears that the member:

a) improperly had possession of electronic copies of portions of the consultant's electronic files;

b) knew or ought to have known that the Company A drawings and technical specifications for project 2 contained information obtained improperly from the consultant;

c) acquired copies of the electronic files prepared by the consultant without its knowledge and authorization;

d) utilized copies of the consultant's electronic files to form the basis for the preparation of Company A's drawings and technical specifications for project 2;

e) sealed Company A drawings and technical specifications for project 2 that were partly or mostly copied from the electronic files of the consultant without authorization;

f) sealed technical specifications for project 2 that were partly or mostly copied from the electronic files of the consultant without properly checking all of the text;

g) violated copyright laws; and

h) was using material from the consultant's drawings and technical specifications obtained from its electronic files, and representing the material as Company A's material.

30. An expert ("the expert") engaged by PEO to review this matter has expressed the view that: "the member utilized, at his new place of employment, documents, which were developed for the consultant both before and during his employment there" and that "unless there was a specific agreement or consent by the consultant for the member's use of the documents... the member's use of the documents in his new position was inappropriate, and not in keeping with the standard of the profession."

31. By reason of the facts set out above, it is alleged that the member is guilty of professional misconduct as defined in section 28(2)(b) of the *Professional Engineers* Act, R.S.O. 1990, Chapter P.28, as follows:

- "28(2): A member of the Association or holder of a certificate of authorization, temporary licence or a limited licence may be found guilty of professional misconduct by the Committee if, . . .

  (b) the member or holder has been guilty in the opinion of the Discipline Committee of professional misconduct as defined in the regulations."

32. In addition, it is alleged that the member is guilty of incompetence as defined in subsection 28(3) as follows:

- "28(3): The Discipline Committee may find the member of the Association or a holder of a temporary licence to be incompetent if in its opinion,

  (a) the member or holder has displayed in his or her professional responsibilities a lack of knowledge, skill or judgment or disregard for the welfare of the public of a nature or to an extent that demonstrates the member or holder is unfit to carry out the responsibilities of a professional engineer.

33. The Sections of Regulation 941 made under the Act relevant to the alleged professional misconduct are:

- Section 72(2)(a): as defined at section 72(1): "In this section, 'negligence' means an act or an omission in the carrying out of the work of a practitioner that constitutes a failure to maintain the standards that a reasonable and prudent practitioner would maintain in the circumstances."

- Section 72(2)(d): "failure to make responsible provision for complying with applicable statutes, regulations, standards, codes, by-laws and rules in connection with work being undertaken by or under the responsibility of the practitioner."

- Section 72(2)(e): "Signing or sealing a final drawing, specification, plan, report or other document not actually prepared or checked by the practitioner."

- Section 72(2)(g): "Breach of the Act or Regulations, other than an action that is solely a breach of the Code of Ethics."

- Section 72(2)(j): "Conduct or an act relevant to the practice of professional engineering that, having regard to all the circumstances, would reasonably be regarded by the engineering profession as disgraceful, dishonourable or unprofessional."

At the commencement of the hearing, legal counsel for PEO filed an Agreed Statement of Facts, which reads as follows:

1. The member is a 1989 graduate of the University of Manitoba in Civil Engineering.

2. In March 1990, he accepted employment as a civil engineer with the consultant located in Winnipeg, Manitoba.

3. The member was registered as a professional engineer in Manitoba in December 1991.

4. The consultant's fields of practice included water supply, sanitation and construction engineering.

5. During his employment with the consultant, the member acted as a project engineer. In this capacity, the member had some responsibility to assemble and create specific documents and master electronic files, including master specifications for the consultant and its projects.

6. Two of the projects which the member was involved in overseeing while in the employ of the consultant were to engineer water treatment and distribution facilities for the rural municipality and Band 1.

7. The member reviewed and stamped the drawings and specifications with respect to both the municipality and (along with one other engineer) the Band 1 projects.

8. When the member left the consultant's employ in October 1995, he took with him hard copies of the Band 1 project drawings and specifications, electronic copies of the drawings for the municipality project and an electronic copy of the consultant's master specifications.

9. Shortly after the member left the employ of the consultant in October 1995, he commenced employment as a project engineer for Company A, an engineering consulting firm located in northern Ontario and owned

in part by several aboriginal bands. The member and his family moved at that time to northern Ontario from Manitoba.

10. The member applied to PEO for licensure in December 1995 and was registered as a professional engineer in Ontario in September 1996.

11. In or about August 1996, Company A was asked by Band 2 to engineer (i.e. design, tender and supervise the construction of) a small water supply treatment and distribution system for project 2.

    This engineering work was not tendered and Company A's engagement resulted from the fact that it was an engineering consulting firm partly owned by the aboriginal bands. The consultant did not have an opportunity to bid for this engineering work.

12. The member was the Company A engineer who managed project 2.

13. Copies of the drawings and specifications prepared and stamped by the member in connection with the municipality, Band 1 and project 2 were given to clients, contractors and building departments as a result of the tendering of the construction process and therefore to that extent are in the public domain.

14. There is no allegation of negligence and no issue of public risk respecting the member's engineering work on behalf of the municipality, Band 1, or project 2. There are no complaints of the respective clients of either the consultant or Company A.

15. PEO also recognizes that an engineer may take copies of drawings and specifications from a project on which the engineer has worked when the engineer leaves this employment and use those drawings and specifications to some extent as reference material in future engineering work. PEO also agrees that, for liability purposes, it may be prudent for an engineer to retain copies of drawings and specifications that the engineer has sealed.

16. There is or may be an issue as to whether it is appropriate for an engineer to take electronic copies of drawings and specifications rather than hard copies for liability and reference purposes when the engineer leaves the engineer's employment.

17. However, the engineer primary issue in these proceedings before PEO is the question of whether the utilization or adaptation of some details of the municipality and Band 1project drawings and portions of the consultant's master specifications in the preparation of project 2 drawings and specifications constitutes professional misconduct.

PEO's legal counsel advised the Panel at the commencement of the hearing that while the Agreed Statement of Facts narrowed the issues, it was not admitted or agreed that the member's conduct was unprofessional and that the member had, not admitted to copying the consultant's master specifications, and therefore witnesses would be called to testify with respect to these issues.

The owner of the consulting company (hereinafter referred to as the "owner") was called as a witness on behalf of PEO. He is a professional engineer in the province of Ontario and Manitoba. He advised that the consultant is municipal and civil engineers. The consulting company was founded in 1981 and initially provided municipal engineering services. He stated that the consultant has employed as many as 22 staff.

The owner testified that the member joined the consultant in March 1990. The member had no direct experience with sewer and water projects prior to joining the consultant. The owner testified that prior to 1990, the consultant had been assembling a database of specifications on a Mac computer. They also had hard copies of standard details, which were transferred to PowerDraw™ in the early 1990's.

He stated that the consultants specifications, evolved from National Specifications, and drawing details were developed that were unique to the firm. He testified that the consultant's master specifications were created over a number of years and that the specifications were somewhat unique in that they had been researched and related to the consultant's work with water distribution systems and wastewater treatment.

He testified that the consultant's specifications drew from the National Master Specifications and contained the First Nation agreement clauses, which were unique to the consultant's retainers for and on behalf of the First Nations. He stated that the specifications were formulated from various sources, including the National Master Specifications and the Manitoba Water Services Board Construction Specifications.

He testified that the consultant's master specification was designed from specifications available in the public domain and from contract documents.

The owner testified that the member was trained at the firm and worked under a professional engineer and a certified engineering technologist. His work was reviewed internally and tested prior to field assignments.

He stated that the member's work at the consultant for the five years that he was employed by the firm included field work, planning of projects, and water plant design.

He stated that during the course of the member's employment, he showed an interest in water treatment projects and his role on these projects evolved to include the compilation of plans, arrangement and organization of plant general arrangements. The treatment process was not the member's responsibility.

The owner stated that a certified engineering technologist (CET) prepared the consultant's master specification. He stated that the member researched and recommended changes and these were reviewed by the CET before inclusion in the electronic database.

The owner testified that plans were constructed as Master Plans and that the member would organize the features of the drawings. He stated that his partner (hereinafter referred to as "the partner"), at the consultant since 1981 and one of the founding members, commissioned every consultant water plant. The partner man-

aged the integrity of the consultant's specifications and updated them as site experience was gained and equipment specifications obtained.

The owner stated that on joining the company, the member was required to sign a "Confidential Information Agreement," which was contained in a hearing brief and filed as an exhibit.

Paragraph "2" of the Confidential Information Agreement read, : Upon termination of said employment, employee shall promptly deliver to company all drawings, blueprints, manuals, letters, notes, notebooks, reports and copies thereof, and all other materials of a secret or confidential nature relating to the company's various projects and related undertakings which are in the possession or under the control of the employee."

The owner testified that the consultant was contracted by Band 1 to design and commission a water and sewer works.

He stated that the member's role in the project included preparation of plans, construction monitoring, and resolution of on-site deficiencies. He stated that the member sealed certain drawings. He testified that the member left prior to commissioning. The tender document for this project, including technical specifications and drawings, was entered as an exhibit.

The owner testified that when the member gave notice of his resignation, he was advised not to remove specifications and plans. He testified that the member and the partner had a heated discussion in the photocopying room when the partner observed the member copying documents. He stated, however, that the member left the firm on good terms.

The owner testified that subsequently a contractor bidding on project 2 provided him with the technical specifications and tender package for the project submitted by Company A, the company that the member had joined. The contractor also provided the owner with the plans submitted by Company A.

The owner testified that he compared the plans and specifications to the consultant's specifications for the Band 1 project and found significant verbatim copying of the specifications. He stated that he and other individuals in his office highlighted the text in the project 2 tender that had been copied from Band 1's specifications.

The owner referred the Panel to extensive replication in the project 2 specifications copied from the Band 1 specifications. These specifications are both available from the public domain and specifications that are unique to the consultant, including pullout tabs test and use of mansards in the plant buildings.

He testified that the concrete mix designs researched by the consultant appear in the Company A tender document, as well as the use of a concrete curb around the perimeter of the building to keep the structural framing off the wet flooring.

The owner testified that some of the drawing details were unique to the consultant, including details such as the mansard, stucco-coated plywood, and the consultant's use of concrete curbs.

He testified that drawing M3 prepared by the member showed some innovations made by the consultant, including refinement to their designs and specifically, sumps to allow submersible pumps to abstract the complete contents of a reservoir, and the details for a bowline knot for pump retrieval.

In cross-examination by the member's legal counsel, the owner stated that no process, equipment or designs had been patented. He also stated that no copyright was shown on the drawings or specifications.

Legal counsel for the member filed exhibits including a brochure and drawings, which showed details, that the owner claimed to be unique to the consultant.

The Manitoba Water Services Board (hereinafter referred to as "MWSB") 1989 specifications were filed as an exhibit. The member's legal counsel referred the owner to sections of the MWSB, which appear verbatim in the consultant's master specifications.

The owner stated that when he became aware of the use of the consultant's master specifications and drawings in the Company A tender package, he went to the Association of Professional Engineers for the Province of Manitoba to review the case, and also obtained a legal opinion regarding a civil cause of action. He stated that a parallel discipline proceeding in the Province of Manitoba is pending the outcome of the PEO decision.

With respect to the Confidential Information Agreement, the owner stated that he did not explain the definition of confidential to the member prior to the signing of the agreement.

He stated that he spoke to the member and the partner following the heated discussion between them prior to the member's departure regarding copies of drawings in the member's possession. He stated that the partner was concerned that the member was taking drawings from the firm.

The expert was called on behalf of PEO.

He is a graduate of the University of Waterloo, and is registered with PEO. He is also designated as a Consulting Engineer in accordance with Regulation 538/84 under the *Professional Engineers Act*. He is the President of his company.

He has 28 years of experience in the field of structural engineering and was accepted as an expert by the Panel.

The expert testified that he reviewed the information provided to him by PEO, including the tender prepared by the consultant for the Band 1 project and the technical specifications and tender package for the project 2, prepared by Company A.

He testified that it was apparent that documents, which had been developed by the consultant, were used by the member at his new place of employment, subsequent to the member's departure from the consultant.

He testified that the practice of consulting engineering relies on the skills of professional engineers who are specialists, who can with creativity, design and prepare solutions to their client's needs. He stated that over time, a firm will develop certain details and specifications that are unique to their particular field of expertise, and that, with the growth of personal computers, this information can be stored electronically and can be easily edited to meet the needs of specific projects. This database enables the firm to be competitive and not to have to "reinvent the wheel" when certain components within a project are similar to those used in the past.

He testified that it is standard practice in the industry that this database, which is generally produced by employees, remains the property of the company and is not in the public domain for general use.

He further testified that engineering firms do utilize standard details and spec-

ifications and incorporate these into their master specifications. These include: (1) Canadian Master Specifications; (2) Ontario Provincial Standard Details; (3) specifications issued by organizations such as the Canadian Institute of Steel Construction and American Concrete Institute; (4) specifications and standard details provided by manufacturers of proprietary products.

He testified that provided these databases are legitimately obtained, they could be properly used to improve the efficiency and quality of the consultant's final product.

He stated that when these are used, one would expect to see similarities between the works of different firms. He testified that this type of database is not portable, as some of it would have been purchased from the provider.

He testified that when engineers first enter the job market after completing their academic career, while they have theoretical training, they lack practical experience. His evidence was that junior engineers would have general knowledge and understanding for their area of expertise, but learning institutions generally do not teach codes, standards, or how to prepare documents, and that these skills are developed through on-the-job training.

He stated that with guidance from senior engineers, junior engineers develop expertise and with each successive project become more experienced and wiser. When they seek new employment, their past experience in the work place has value for their new employers.

Based on his review of the information that he received from PEO, the expert's opinion was that the member utilized, at his new place of employment, documents that were developed at the consultant both before and during his employment there. In his opinion, these documents do not appear to be in the nature of the standard details and specifications described as being available from outside sources. He stated that, by industry standard, the documents in question appear to be the property of the consultant, and as such, unless there was a specific agreement or consent by the consultant for the member's use of the documents, it is his opinion that the member's use of the documents in his new position was inappropriate, and not in keeping with the standard of the profession.

The expert testified that it is not uncommon for engineers to take drawings and work product with them when they leave a firm, particularly if the work bears the engineer's seal. He stated that the reproduction of the firm's drawing at another firm, however, was unprofessional.

From his review of the consultant's database, he considered it to be extensive and unique. In the expert's opinion, it was not normal practice to take one firm's data and use it at a new place of employment.

The expert testified that it was not appropriate to copy designs and specifications obtained from designs and specifications in the public domain if these were purchased for the firm's use.

With respect to the use of information available in the public domain, he testified that this information still requires the engineer's expertise to compile this into a design or specification.

He stated that in his opinion, the member did not meet normal engineering performance standards and did not follow the intent of the confidentiality agreement.

In his opinion, the member did not display normal behaviour and he categorized the member's conduct as unprofessional.

In cross-examination by the member's legal counsel, the expert stated that PEO forwarded to him the specifications and documentation that had been highlighted by the consultant, indicating the details and specifications copied by the member.

He agreed that his report was based solely on his review of the material forwarded to him by PEO and that he did not interview the member.

The expert testified that PEO had requested him to assess the performance of the member in regard to accepted consulting engineering practices and not to assess the uniqueness of the consultant's specifications or the degree of similarity between the tenders of the consultant and Company A.

He conceded that the use of a curb at a wall/floor and other details were not unique.

He was referred to a report, which was filed as an exhibit, prepared by an expert retained by legal counsel for the member.

The expert concurred generally with the following standards within the industry, which were referred to in the member's expert's report:

1. Building Codes, CSA, standards and other governmental bodies dictate many of the requirements that consulting engineers must comply with and therefore generate similarities in details and standards amongst consultants.

2. Organizations, such as the Canadian Institute of Steel Construction and the American Concrete Institute produce documents and details that become effective standards utilized throughout the industry, and therefore become common to most consultants practising in each specific field.

3. Manufacturers of products very often have standard details that become common in a particular industry.

He conceded that the mobility of people from firm to firm results in similar ideas that show up in competing firms specifications and drawings. He also agreed that it is not uncommon for engineers to maintain their personal records of previous work.

In response to questioning about the use of confidential information, the expert produced and referred to the PEO *Guideline to Professional Practice* 1988. The current revision to this Guideline is dated 1998.

This document was not referred to in the expert's report. He stated that he did not have a copy of the PEO guideline at the time that he prepared his report and did not know of the guideline when he prepared his report.

In paragraph 13, "Confidential Information," it states, inter alia: "Employed engineers may be concerned as to the precise obligation upon them when changing employment within their field. It is generally considered that engineers may apply in the new position any information or expertise gained in the old position, as long as it falls into a 'state of the art' category that has become general knowledge. However, engineers are not entitled to apply in the new position information gained in the old position that is of a proprietary nature and considered to fall into the category of 'trade secrets'."

He conceded that he did not assess whether the water treatment plant's design was state of the art.

He conceded that plans and specifications could be filed with the local Construction Association. He conceded that specifications such as those published by CSA and the Canadian Institute of Steel Construction were incorporated in the consultant's specifications.

He was not aware that on the cover of the Canadian Standards Association and Canadian Institute of Steel Construction publications, it stated that no part of the publications could be reproduced without the permission of the publisher. He stated that it is common practice for the specifications therein to be included in professional engineer's specifications.

He stated that when record drawings are requested from the Building Department in a city in Ontario, it is stated that the drawings are for information purposes only.

In response to questions by the Panel, he indicated that he had been a complainant in a similar case. He stated that he had created a set of drawings and the client requested electronic copies of as-built drawings, which were then provided to an engineer who used them as part of another design-build project. That conduct resulted in a discipline proceeding being taken by PEO.

The member testified with respect to his conduct in this matter.

With respect to the confidential agreement, the member stated that he was not aware of the content and signed it as part of a package of documents when he joined the consultant. He testified that he did not receive a copy of the confidential agreement.

He testified that when he joined the consultant, they had two computers and that the partner had a computer and that specifications were prepared from the computer. He stated that drawings were generally done by hand.

He testified that he was with the company for five and a half years and that during his employment, he developed a full spectrum of skills for design of water treatment systems, and acquired expertise in all areas to take a project from concept to commissioning, except contract review.

He testified that he was initially involved in drafting drawings and that he gained more expertise, as he became involved in other projects.

He stated that he was "intimately" involved in improving the consultant's drawings and specifications, features and configurations. He stated that he obtained specifications for new and improved plant layouts and features. He stated that the consultant's master specification was prepared on the basis of specifications obtained from manufacturers and from the public domain and contract documents.

The member testified that he and others edited the specification package, and that the partner had no control because of the rate of changes. He stated that anyone could access and edit the master specification.

With respect to the computers at the consultant's, the member stated that there was an increase in the number and usage of computers during his employment and this increase developed to a server installation.

He stated that he carried out a drawing software evaluation and selected "Power Draw," which they implemented at the consultant's office.

He stated that there was no discussion of drawing confidentiality at the consultant's during these developments.

He stated that the consultant's municipality and Band 1's projects ran concurrently with up to 10 other projects.

He stated that these projects were done on a "cookie cutter" basis and that this approach applied to all projects with adaptations made from one project to the other.

He stated that the Band 1 project was developed from a previous project produced by a combination of hand and electronic details. He stated that transparencies from small details were drawn electronically and transferred to drawing sheets by copying reproduction.

The uniqueness of the consultant's drawings, testified to by the owner, was reviewed with the member. He stated that the basis for these drawings was obtained from other references and specifications, including the MWSB specifications.

He stated that the Band 2 pipe insulation detail is very similar to the consultant's drawing for this detail.

He stated that the water treatment process is provided by equipment, which is usually sourced as a "package" and tendered based on a performance specification.

He referred to a typical pump drawing from a well-known manufacturer, relating to submersible "pitless" pump installation, which shows the detail for a bowline knot. He stated that this detail is similar to the detail used by the consultant.

He stated that the uniqueness of a project encompasses the entire project and how it is configured to meet the client's needs. He stated that the Band 1 project was not similar in engineered design to Company A's project 2.

With respect to the specifications, the member stated that the consultant's master specification was a compilation of all the consultant's experience to that time, but were distributed to contractors and building departments and were available in the public domain.

With respect to the First Nation policies contained in the specifications, he stated that these were not unique to the consultant's specification and that contracts for First Nations require that benefits and opportunities for First Nations people be known to all bidders.

The member stated that proof rolling would not be in the consultant's master specification if it had not shown up in a previous specification.

With respect to the consultant's specification for concrete, the member stated that the specification was not unique to the consultant. He stated that a local test laboratory and he developed the pullout test jointly, and other companies in Winnipeg could use this test.

Referring to the consultant's weather stripping specification, the member stated that he found another weather stripping to be superior and that this product was then incorporated into the consultant's master specification.

The member testified that when he left the consultant, he took copies of the drawings that he had drawn and he copied the master specification because it contained all of the updates that he had made.

He testified that he tendered his resignation on October 4, 1995, and at that time the Band 1 project was coming up for final inspection. He testified that the drawings were complete and the consultant's master specifications had been updated through their work in the field on the Band 1 project.

He testified that with respect to the Band 1 project, that he did the design. He testified that his intention was to take his copy of the Band 1 drawings and specifications. The member testified that he was in the photocopying room at the consultant and the partner approached him and asked him what else he was taking.

He testified that there was no discussion regarding confidentiality agreements. He testified that the owner did not approach him and that he left the consultant on good terms. He testified that he took drawings from the Band 1 project and an electronic copy of the consultant's master specifications.

In cross-examination by legal counsel for PEO, the member stated that the consultant's expertise and involvement in water treatment projects was established when he joined the company. He stated that there was a "basic form" and that he built up a resource in the office of master specifications and computer-based drawings for water treatment projects.

He stated that the benefit of updating the specifications was for the consultant to have a better product for their clients and he conceded that it was not for his benefit.

He conceded that the consultant developed the consultant's master specification and it existed prior to his arrival, and he and others added to it.

The member stated that he researched documents in the public domain to identify areas of similarity to the consultant's master specification. He did not provide to the hearing specifications from the public domain to match all of the specifications in the consultant's master specifications.

He conceded that the consultant's database was not his property. He stated that he understood the importance of the master specification and that the consultant wanted to protect it.

The member stated that he recognized the requirements under the confidential agreement and returned the information specifically requested by the owner before he left. He stated that when the partner approached him when he was photocopying documents and asked him what else he was taking, that he knew the partner's concern was that he was taking documents with him. The member stated that he understood that the principal of the firm was concerned about him taking anything from the firm. He stated that he did not tell the partner that he was taking the master specification for reference purposes, or the drawings bearing his seal.

He agreed that the project 2 tender package included copies of the consultant's master specification.

He admitted that he knew at the time of preparing project 2 that the consultant would contest Company A's use of the data, that he had taken and used.

He agreed that he attempted to provide a short-cut for his new employer using this data. He admitted that he did not carry out research to find specifications in the public domain to assist in the design of project 2.

He admitted that he recognized that this practice was improper, and when he took this course of action, he knew that it might lead to a discipline proceeding in the future.

He admitted that he substantially replicated the consultant's specifications on project 2. He stated that he no longer has copies of the material and that Company A went bankrupt and the database is in the hands of the receiver.

An engineer (hereinafter referred to as "the member's expert") gave evidence on behalf of the member. The member's expert obtained his Bachelor of Applied Science and Civil Engineering from the University of Toronto. He is a licensed professional engineer in the Province of Ontario and is designated as a consulting engineer in the Province of Ontario. He is registered as an engineer in the state of Florida and founded his own company in 1969.

He stated that he reviewed documents received from the member and PEO and also spoke to the member and the PEO expert, prior to preparing a report. He testified that the member was employed with the consultant as a staff engineer and was not a shareholder or partner in the business. He stated that as a staff engineer, the member signed and sealed documents, at the request of the owner, and therefore assumed a very large professional liability with regard to these documents.

The member's expert stated that at his company, only shareholders (associates) sign and seal documents. He stated that he would not expect a junior to intermediate engineer with three to five years' experience to sign and seal documents.

He stated that, in his opinion, when the member left the consultant, he had a duty to himself as a professional engineer, and to the public, to take and retain copies of the documents, which he signed and sealed for liability purposes.

He stated that the member had no assurance that the consultant would continue in existence, and even if it did continue in existence, had no assurance that it would maintain professional liability insurance to provide protection for him.

He testified that it was agreed that the member had electronic and/or hard copies of the drawings and specifications, which he signed and sealed while at the consultant's. He referred to an article published by PEO in *The Link*, October/November 2000 issue, which included an article regarding secondary liability insurance. He testified that this article implied that the member had a significant exposure to professional liability depending on what the consultant did or did not do in the future, and reinforced the concept that the member should maintain copies of any document that he signed and sealed.

In the member's expert's opinion, the standards within the industry include:

1. Building Codes, CSA Standards and other governmental bodies that dictate many of the requirements that consulting engineers must comply with and therefore generate similarities in details and standards amongst consultants.

2. Organizations such as the Canadian Institute of Steel Construction and the American Concrete Institute produce documents and details that become effective standards utilized throughout the industry and therefore become common to most consultants practising in each specific field.

3. Manufacturers of products very often have standard details that become common in a particular industry.

4. Documents, drawings and specifications become part of the public domain, once building permits have

been applied for and once a job has been issued for tender and construction. Any party can obtain these documents, as evidenced by the consutant obtaining Company A's drawings.

5. Consulting firms employ people, engineers and draftspeople who acquire knowledge about a firm and its standards and operations.

6. People move from firm to firm and as a result a particular area of specialization will evolve with many similarities between the various firms because of the mobility of people.

7. Professionals, whether they are engineers, lawyers, etc., will utilize ideas and standards that may have been originally developed by a competing firm.

8. If copying and using parts of codes without written permission is against the law, then virtually every consulting engineer in the country has broken the law. He mentioned as an example that the Canadian Standards Association (CSA) states: "All rights reserved. No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, without the prior permission of the publisher."

In his report, the member's expert stated,

> "I am sure that former staff members of my company have both electronic and hard copies of many of our projects and/or office standards;" and
>
> "I know that in the City of Toronto most consulting structural engineering firms have many typical details, notes and standards that are very similar to each other and many of these 'standards' can trace their roots back to other engineering companies documents from the, '50s and, '60s. I am not aware of other engineering companies ever filing a suit or a complaint with regard to any person or party 'copying' their typical details. To paraphrase an old expression; perhaps this imitation should be considered a form of flattery."

He stated that it was agreed that the member did and does have copies of the consultant documents. He stated that it is his opinion that the member should have copies of the documents because of the fact that he signed and sealed the documents.

He stated that it was agreed that the member utilized the information that he took but that this included National Master specifications; building codes; CSA standards; information from the public domain; and information that was within his mind from his training and experience, and copies of documents prepared by and sealed by him from previous projects.

He testified that, to the best of his knowledge, the member did not duplicate any drawing, detail, specification, section, etc. He stated that any utilization of information available to him was done by using computer hardware and software different than the originals, and that all documents were produced for specific Company A projects and incorporated the thoughts and requirements of the member and Company A.

The member's expert testified that he could find almost identical details in his competitors' details for a column. He stated that documents such as engineering drawings are in the public domain and he has copies of many competitors' drawings in his own office, all of which have been obtained legitimately.

He stated that to obtain a document in electronic format, it could now be scanned. He stated that while there was much consternation about the member's conduct, it is a fact of life that engineering firms have competitors' work product. He stated that he had a young engineer who left his employment and he believed that he took and utilized the company's specifications. He stated that another engineering company developed specifications in the 1960s and that those specifications are the genesis of many engineers specifications.

He stated that, in his opinion, the member's use of the documents was appropriate and not unusual in the engineering profession.

He produced specifications from his office, which are identical to specifications contained in the consultant's master specifications.

With respect to the claim by the consultant that their specifications were unique, he referred to their specifications for concrete, pullout testing, skin slab, and curbs, and stated that none of these specifications were unique.

He stated that his definition of the term "use" is the copying and using of drawings on a different project.

He testified that the PEO *Guideline to Professional Practice* refers to trade secrets and does not apply to the facts in this case. He stated that, in his opinion, "trade secrets" apply to the development of a particular product, for example, by a chemical engineering company, and that if an engineer employed by the company advised a competitor of the formula, that would be a breach of the Code of Ethics.

He stated that documents in the public domain available for use are not proprietary. He testified that there was nothing in the documents taken by the member that he would consider being proprietary.

In cross-examination, the member's expert stated that he is a structural engineer. He is not in a position to advise the Panel on municipal engineering.

PEO's legal counsel put to him a hypothetical case of a company employing a young engineer who brings to his new employer specifications and plans from a former employer. In response to the question of whether he would review specifications and drawings in such circumstances, the member's expert stated that depending on the situation, he might look at them, but there may be 100 different parameters around it. Parameters could include the age of the reviewing engineer and how long the engineer had been in business.

When asked by PEO's legal counsel whether he would incorporate this information into his design, he stated that a number of factors would have to be considered, including age, experience, moralities and beliefs. When it was put to the member's expert by PEO's legal counsel that he would not do it, he conceded that he would not. He stated that he had not done it and that he would not do it.

He testified that while he would not do what the member had done, it was his view that it was not unprofessional for others to do so.

He gave examples of his design being used by another engineer in a similar project.

In his report and in examination in chief, he testified that the member did not duplicate any drawing, detail or specification. He agreed that it is not appropriate for professional engineers to copy and use specifications line for line and word for word on a similar project.

With reference to his report, he stated that professional engineers would be entitled to take documents that they had prepared for liability reasons and for reference. He agreed that they could not be copied verbatim for use by another employer.

Following the evidence, counsel made submissions for the parties. On re-examination by the member's legal counsel, the member's expert stated that the member used typical details in Company A's drawings.

Counsel Submissions

Counsel for PEO submitted that the member, in cross-examination, had admitted to a form of copying. He stated that this was the first time that the member had made this concession and that it was a fact that the member had copied drawings and the consultant's master specifications.

Referring to the Agreed Statement of Facts, PEO's legal counsel stated that the member had not agreed that the documents were copied, but had admitted therein to "utilization" or "adaptation."

PEO's legal counsel submitted that the member had copied substantial portions of his former employer's electronic database and had used it in his new employment.

With respect to the anticipated argument that specifications were in the public domain, PEO's legal counsel stated that information in the public domain has to be purchased and incorporated into a specification.

He further submitted that the consultant's master specification was the product of many years work, and that various aspects of the master specifications were unique to the consultant. He submitted that the consultant had a particular approach and, while the owner had testified that the design of water distribution systems was not "rocket science," the master specification contained the design philosophy of the consultant and was developed by the consultant. He stated that the whole database was not available in the public domain and that it contained the consultant's ideas and unique approaches.

While he anticipated that the member's counsel would argue that good ideas should be shared to the benefit of the public, he submitted that such ideas should be shared in academic settings and at industry meetings. He submitted that such proprietary information should only be shared voluntarily.

PEO's legal counsel submitted that it was not sufficient for the member to claim that he contributed to the database. He stated that it was not in evidence that the member had prepared the master specification. The evidence indicated that there were other contributors.

He submitted that an engineer could not place his seal on a document and claim ownership to it. He stated that it was clear that the member understood that it was the consultant's specification.

With respect to the drawings drawn by the member on the Band 1 project, which were taken by him and used on project 2, he stated that the member sealed some drawings and that it may be appropriate to copy those documents for liability reasons or for reference purposes in future work. He stated that the member's evidence indicated that he knew that what he was doing was wrong. He submitted that the member knew that the owner did not authorize him to take the documents and that the member had indicated that he knew when he used the specifications that he could end up in a hearing.

Counsel for PEO submitted that the expert called on behalf of the member had conceded that he would not do what the member had done. He submitted that the Committee could not rely on the member's expert's evidence that this conduct may be appropriate for others. He stated that there is a single standard of conduct. In his submission, the member's conduct was not appropriate.

He stated that the expert had testified that the designs and specifications were property of the firm and that it was unprofessional to take the material and use it in the manner that the member did.

He submitted that the PEO expert was neither biased nor vindictive due to his involvement in a similar case.

With respect to the *Guideline to Professional Practice*, he stated that it might be relevant to the Panel for their consideration, although he did not know whether the guideline addressed the situation. He submitted that the guideline is ambiguous but provides a general reference. He submitted that it does not indicate what a trade secret is.

Counsel for PEO submitted that in this case, the owner quite clearly did not give his authorization for the use of the documentation. He submitted that common sense suggests that it is not appropriate to use proprietary information, and that it is proprietary if developed over years and intended not to be copied by competitors.

He submitted that the member had admitted both copying and using the documentation, and that the expert had testified that that was unprofessional and the member's expert had testified that he would not do it.

Counsel for the member, in his submissions on behalf of the member, stated that the Panel's role was not to look at personal subjective standards. He submitted that there was contrition on the part of the member. He stated that the member's expert had said that he would not copy and use the documents, but had indicated that this is not an uncommon practice.

He stated that the *Guideline to Professional Practice* was not produced until three-quaters of the way through the hearing. Referring to the Guideline, he stated that it was conjunctive requiring documents or information to be both of a proprietary nature and considered falling into the category of trade secrets.

He submitted that the documents copied by the member were not trade secrets or unique and that the specifications were not patented and most of the specifications were available in the public domain.

The purpose of specifications is so that a contractor knows what is to be built. He stated that the owner had testified that this was not "rocket science."

With respect to the evidence of the expert, counsel for the member stated that

the expert was a complainant in what he described as a similar case and that he never spoke to the member prior to preparing his report or attending to give evidence at the hearing.

He submitted that the expert never researched the information that is contained in outside sources, and while the expert's opinion was that the member did not meet the industry standard, the expert had not investigated what the industry standard is.

He submitted that the expert knew of the *Guideline to Professional Practice*, but did not refer to it in his report and only brought it out during the course of his cross-examination.

He submitted that the owner was not credible and was not prepared to agree that basic specifications were not unique. He submitted that the expert should have investigated the standard in the industry and that he was biased, based on his involvement as a complainant in a similar proceeding.

He stated that section 77(3) is the applicable section of the Regulation with respect to a breach of confidentiality. He submitted that this was a breach of the Code of Ethics and that the member had not been charged with a breach of the Code of Ethics. He submitted that PEO's guidelines relate to secret processes and do not relate to the type of information taken by the member.

He submitted that this was a civil dispute between two parties and not a matter that should be before PEO.

He further submitted that the member was not guilty of professional misconduct and at worst, the member had breached the Code of Ethics but he had not been charged under the Code of Ethics section of the Act.

The Panel also received advice from its independent legal counsel with respect to the standard of proof. Independent legal counsel advised that the association bears the onus of proving the allegations in accordance with the standard of proof in a civil case, namely on a balance of probabilities, subject to one important qualification. She referred to the Divisional Court case of *Re Bernstein and The College of Physicians and Surgeons of Ontario* for the proposition that where there is a serious allegation against a member, the proof must be clear and convincing and based on cogent evidence accepted by the Panel, before the Discipline Panel can make a finding against the member.

Following the evidence and submissions by counsel for the parties and the advice given by independent legal counsel, the Panel retired to deliberate.

The Panel applied the standard of proof provided by independent counsel.

The Panel accepted the evidence of the owner, which was conceded by the member, that the development of the consultant's master specification was commenced prior to the member joining the firm. The Panel considered this to be an evolutionary process and accepted the evidence of the member that he contributed to the master specification after he joined the firm.

While this master specification was not patented, in the Panel's view, the consultant had proprietary rights to the master specification.

The Panel found that the master specification comprised specifications available in the public domain. These specifications included the MWSB 1989 standard construction specifications; Canadian Standards Association specifications; the National Master Specifications, as well as specifications provided by manufacturers for their product.

The Panel considered the uniqueness of the consultant's specifications and drawing details. The Panel accepted the member's expert's evidence that the specifications and details individually were not unique to the consultant, but the Panel found that the manner in which they were assembled and used was unique to the consultant's business.

The Panel was of the view, however, that the master specification, while substantially derived from documents available in the public domain, took a substantial amount of time to develop into a master specification specific to the consultant's business of water supply system design. The Panel found that the consultant used this master specifications on its water supply system contracts, including those on behalf of the First Nations.

The Panel found that the consultant had the proprietary rights to its master specification, which was contained on its computers.

The Panel found that the member had copied this electronic proprietary document when he left the employment of the consultant to join Company A. The Panel found that the member had conceded copying this document when he knew that the consultant had not authorized him to do so. In fact, on the basis of the "heated discussion" between the member and the partner, the Panel concluded that the member was aware, prior to leaving the consultant, that the consultant was very concerned about the member copying and taking documentation and information, which the consultant considered proprietary.

The Panel found that the member copied the consultant's master specification, together with drawings, which he had prepared and sealed.

The Panel accepted the evidence of the expert that the member was entitled to retain copies of drawings he had prepared and sealed for two purposes:

1. Liability, in the event that the company did not provide insurance coverage for the member in the future;

2. As a reference in future projects.

The Panel found that when the member joined Company A, he was the professional engineer with primary responsibility for the design and preparation of technical specifications and tender package for project 2. The Committee found that the member prepared the drawings and technical specifications for this contract and that many of the details in the drawings were identical to the details in the drawings the consultant prepared for the Band 1 project, which was in progress but had not been commissioned when the member left the consultant.

The Panel noted that the member had not designed all of the Band 1 drawings. In any event, the Panel found that these drawings were the property of the consultant and that the member was only entitled to retain copies of those prepared and sealed by him for liability and reference purposes.

The Panel found that significant sections of the project 2 specifications were copied verbatim from the specifications contained in the tender prepared by the consultant for the Band 1 project.

The verbatim copying included specifications both available in the public domain and specifications developed by the consultant. These specifications related to: First Nation policies, shop drawings, quality assurance, material and equipment, project closeout, clearing and grubbing, excavating and backfilling for structures, site grading, rock removal, top soil and seeding, excavating and backfilling for trenching, roads and drainage, granular sub-base and base courses, water supply and distribution piping materials, septic fields, CMP culverts, concrete framework, concrete reinforcement, concrete accessories, cast-in-place concrete, disinfection, metal fabrications, sheet vapour barriers, fibrous building insulation, rigid insulation, sealants and caulking, steel hollow metal doors and frames, finishing hardware, painting, louvers, dampers and intakes, exhaust fans, signs, identifications, maintenance equipment, treatment plant mechanical, laboratory equipment, furnishings, pre-engineered steel buildings, general mechanical provisions, plumbing and process control devices, electrical work, conduits, boxes and accessories, panel board, emergency lighting, area lighting, and electric heating controls.

The Panel found that the member knew when he joined Company A that the consultant would take issue with the use of their master specifications and details in the project's technical specifications and tender package and drawings.

The member testified that he spoke with two colleagues at Company A and told them that he could either design the project and prepare the technical specifications from scratch, or use the specifications and drawings that he had copied and taken from the consultant. The member testified that he knew that if he used this documentation for the purpose of preparing the project design and specification, that he could end up in a hearing such as the Discipline hearing before PEO.

The Panel found that the member not only copied the consultant's electronic database, but also used it when he joined his new employer in the preparation of the project specifications and drawings.

The Panel found that the member did so notwithstanding the fact that he knew that the use of the consultant's specifications and engineered details was inappropriate.

The Panel accepted the evidence of the expert that the member's use of this material was unprofessional.

The Panel considered the evidence of the member's expert. In examination-in-chief and in his report dated November 9, 2000, he testified and stated that to the best of his knowledge, the member did not duplicate any drawing, detail, specification, section, etc., and any utilization of information available to him was done by using computer hardware and software different than the originals.

The member's expert testified that the member's use of the documents was appropriate, having regard to all the circumstances, and not unusual in the engineering profession. The Panel rejected this opinion evidence.

In cross-examination, when a hypothetical situation was put to the member's expert in which a young engineer joined his firm and brought documentation from his former employer, while the member's expert indicated that he may review it, he conceded that he would not use it and would not do what the member had done.

He testified that it is common practice for engineers to copy specifications and drawings when leaving the employment of a firm for use on future projects, but added that this is not a practice that he follows.

The Panel, while accepting the member's expert's evidence that he would not conduct himself in this manner, rejected the proposition that there is a dual standard for professional engineers licensed to practise in the Province of Ontario.

The Panel found that the member, although a young engineer, should be held to the same professional and ethical level of conduct as the expert who testified on his behalf.

The Panel considered section 13 of the PEO *Guideline to Professional Practice*. This section relates to confidential information and includes the following paragraph relating to the issues being considered by the Panel.

"Employed engineers may be concerned as to the precise obligation upon them when changing employment within their field. It is generally considered that engineers may apply in the new position any new information or expertise gained in the old position, as long as it falls into a (state of the art) category that has become general knowledge. However, engineers are not entitled to apply in the new position information gained in the old position that is of a proprietary nature and considered to fall into the category of 'trade secrets'."

The Panel found the electronic database copied by the member to be of a proprietary nature. The Panel found that the information copied by the member and applied in his new position did not fall into the category of "trade secrets."

Counsel for the member argued that the guideline was conjunctive and required that the information taken and applied had to be both of a proprietary nature and considered falling into the category of "trade secrets."

The Panel considered that a requirement of both criteria was far too narrow in scope and would relate, for example, to a formula developed by a chemical engineering company for a new chemical product. The Panel was of the view that the intent of the guideline was broader and included the use of information and documentation of a proprietary nature.

The Panel noted that PEO had not alleged a breach of the Code of Ethics. The Panel found the PEO *Guideline to Professional Practice* to be ambiguous and too narrow in scope. The Panel considered its role to determine whether the member's conduct afforded a finding of professional misconduct. The Panel found that there was no evidence to suggest that the member's design of the project 2 tender specifications and drawings was negligent. The Panel was of the view, however, that the member's copying and use of the master specifications and details developed by the consultant over a number of years and the use by the member of the specifications and details on a project for a new employer was inappropriate and unprofessional.

The Panel accepted that the member had contributed to the specifications. The specifications were, however, the property of the

consultant and the Panel found that the consultant had proprietary rights to them.

The Panel found that the member admitted copying in both hard and electronic form all or considerable portions of the database of his former employer without permission.

While recognized material may be retained when changing employment for reference or liability purposes, the evidence demonstrated the use made of the material was for commercial purposes.

The Panel found the member guilty of professional misconduct, and specifically, pursuant to Section 72(2)(j) of the *Professional Engineers Act*, Ontario Regulation 941/90 being: "Conduct or an act relevant to the practice of professional engineering that, having regard to all of the circumstances, would reasonably be regarded by the engineering profession as... unprofessional."

Counsel for the parties made submissions with respect to penalty. Counsel for PEO submitted that general deterrence was required and that PEO was seeking an order that:

- to the extent that the member comes into the possession of the information that he copied, that he return the information to the consultant;
- the member make inquiries of the Trustee in Bankruptcy of Company A to see whether this information is available;
- the member not engaged in any further reproduction or use of the consultant's materials;
- the member be reprimanded;
- the member's licence be suspended for three months, but the suspension be suspended and withdrawn if the first three conditions above are complied with and the member successfully passes the Professional Practice Examination (PPE) within 12 months of the date of issuance of the Decision and Reasons;
- the Decisions and Reasons be published in the *Gazette* with names.

Counsel for the member submitted that he took no issue with the first three orders that PEO was seeking. He submitted that in a more serious case, the name of the engineer had not been published.

Following submissions by counsel with respect to penalty, the Panel retired to deliberate.

The Panel considered that the requirement of the member to return any originals or copies of the consultant's materials to the consultant and to seek the return of the consultant's material from the Trustee in Bankruptcy for Company A and return the material to the consultant and that the member engage in no further reproduction or use of the consultant's materials, to be reasonable.

The Panel considered that it would be appropriate for the member to be reprimanded for his conduct in this matter.

The Panel also considered the suspended suspension of the licence to practise and the requirement that the member passes the PPE within 12 months of the date of the issuance of the Decision and Reasons to be reasonable.

The Panel considered that the member posed no danger to the public and that publishing the decision with names was not justified in this case.

By virtue of the power vested in it by Section 28 of the *Professional Engineers Act*, the Panel ordered that:

1. **If the member has in his possession or comes into possession of any originals or copies of the consultant's materials (defined as the copy of the consultant's master specifications and the consultant's project drawings and specifications that the member took with him when he left the employ of the consultant in October 1995), he will return it to the consultant immediately and report the return to PEO. Notwithstanding the above, the member is permitted to retain copies of plans he prepared and sealed for professional liability and reference purposes;**
2. **The member, to the greatest extent possible, seek the return of the consultant's material from the Trustee in Bankruptcy for Company A, and return the material to the consultant. The outcomes of these efforts are to be reported to PEO;**
3. **The member engage in no further reproduction or use of the consultant's materials;**
4. **The member be verbally reprimanded and the reprimand be recorded on the Register of the association for 18 months;**
5. **The member's licence be suspended for three months, but the suspension be suspended and will be withdrawn if the first three conditions above are complied with and the member successfully passes the Professional Practice Examination within 12 months of the date of issuance of the Decision and Reasons;**
6. **The Decisions and Reasons be published in the *Gazette* without names.**

Dated at Sault Ste. Marie this 22nd day of January 2001.

William R. Walker, P.Eng. (Chair)

(For and on behalf of the panel of the Discipline Committee)

Barry De v. Batchelor, P.Eng.
Bruce E. Clarida, P.Eng.
Ken Lopez, P.Eng.
John Wilkes, P.Eng.

Note from the Department of Legal and Professional Affairs

The member appealed the Decision to the Divisional Court. The appeal was dismissed without costs in December 2001. The member successfully completed the association's Professional Practice Examination.

The Discipline Committee of the Association of Professional Engineers of Ontario

In the matter of a hearing under *the Professional Engineers Act*, R.S.O. 1990, Chapter P. 28

And in the matter of a complaint regarding the conduct of

Alfred R. Kettle, P.Eng.,

a member of the Association of Professional Engineers of Ontario

BETWEEN:

The Association of Professional Engineers of Ontario and

Alfred R. Kettle, P.Eng.

Agreed Statement of Facts and Order of the Discipline Committee

A Panel of the Discipline Committee of the Association of Professional Engineers of Ontario (PEO) met in the offices of the association on October 1, 2001, to hear allegations of professional misconduct and a breach of the provisions of the Code of Ethics of the association contained in Section 77 under Regulation 941 of the *Professional Engineers Act*, R.S.O. 1990, c.P.28 against Alfred R. Kettle, P.Eng. (hereinafter referred to as "Kettle").

Mr. Kettle was found guilty of professional misconduct as defined in Section 28(2)(b) of the *Professional Engineers Act*. Particularly, he breached the following sections of Ontario Regulation 941: 72(2)(a); 72(2)(b); 72(2)(d); and 72(2)(j).

Allegations with respect to 72(2)(g) were withdrawn, along with the allegations that he breached the Code of Ethics contained in section 77 of the Regulation.

In addition, he was found not guilty of the breach of section 72(2)(i) of Regulation 941. As part of the penalty, the Committee ordered that the Summary of the Agreed Statement of Facts of the matter, together with its Order be published in the official publication of the PEO.

The Agreed Statement of Facts and the Committee's Order appear below.

1. "Kettle was first licensed as a professional engineer in the Province of Ontario in July 1965.

2. In July 1995, Dr. G.D. Ravi ("Dr. Ravi") retained Mr. Don Wright ("Wright") of Don Wright Designs ("DWD") to design additions and renovations to Dr. Ravi's home located in Sudbury, Ontario.

3. DWD applied for a building permit on August 18, 1995 and the Regional Municipality of Sudbury issued the permit on September 7, 1995. Five drawings were included with the building permit application. These were prepared by DWD and dated between July 30, 1995, and August 18, 1995. Two of the drawings, Nos. 2 and 4, included the engineering stamp of Kettle along with his signature and a date of August 17, 1995. Kettle provided these services on behalf of Spriet Associates. Drawing No. 2 showed the general structure of two exterior raised decks at the back of the home.

4. Drawing No. 2 did not, however, include:

a) timber specifications stating what species of wood was to be used;

b) detail regarding the connection between the beams and columns;

c) detail regarding the connection between the columns and foundations;

d) indication of a requirement for cross-bridging or blocking of the joists at midspan; and

e) detail regarding the method of anchorage of the ledger beam to the side of the house.

5. The renovations were built by Wright and Kettle acting together as contractors operating under the business name of DNA Enterprises. Their work progressed with numerous modifications and changes agreed to between September 30, 1995, to November 8, 1995. The as-built version of the two exterior decks differed from the design drawings.

6. On November 28, 1995, Kettle, in his capacity as general manager of Spriet Associates Sudbury Limited, signed and certified a letter in the form of a Certificate of Substantial Performance addressed to Wright at DNA Enterprises. The letter stated that Kettle had carried out a general review of the construction of the renovation and that he certified that the

project was substantially complete, ready for occupancy, and that "the construction, workmanship and quality of materials used in the completed renovations are in conformity with the municipally approved plans and with the intent of applicable codes and by-laws governing building construction" for the Regional Municipality of Sudbury. Kettle closed the letter by stating that his letter had been prepared to confirm compliance with Ontario Building Code ("OBC") requirements. Kettle states that he wrote the letter with a view to assisting the Ravi's, but acknowledges in retrospect that the letter was inappropriate, and constitutes professional misconduct.

7. Some months later, a handyman working for Dr. Ravi observed and pointed out that the rear decks constructed by DNA Enterprises were not built in accordance with OBC requirements. Dr. Ravi contacted the Regional Municipality of Sudbury Building Department and learned that the certifying engineer had been Kettle.

8. In the circumstances, Dr. Ravi requested an inspection by the Regional Municipality of Sudbury Building Department. This inspection, carried out on August 16, 1996, confirmed the observations of Dr. Ravi's handyman and identified several other instances where the renovations and additions did not conform to the approved plans or the OBC requirements. The Building Department issued four Orders to Comply to DNA Enterprises, Kettle and Wright on March 6, 1997.

9. Apart from two requests for extensions of time made by Kettle (and granted by the Building Department), there was no action taken by any of DNA, Kettle or Wright with respect to these Orders to Comply. Kettle does not recall having requested extensions of time, but acknowledges that these requests are recorded in the file of the Building Department.

10. In the meantime, Dr. Ravi became concerned about the safety of the deck when it shifted as he and a friend stood at the railing. The deck had pulled away from the house by up to an inch and would visibly move under the weight of a single individual walking on the surface of the deck.

11. In those circumstances, in June 1997, Dr. Ravi engaged Mr. Earl Mumford, P.Eng., of J.L. Richards & Associates Limited, Consulting Engineers and Planners, to inspect the two decks. In a report dated August 1, 1997, Mumford identified several deficiencies and code violations in the as-built design of the decks, including:

a) anchors used to anchor the deck to the masonry wall were substandard and not suitable for that application;

b) use of the brick veneer wall as a load bearing element in contravention of CSA standard CAN 3-S304, which requires a minimum thickness of 190 mm for a load bearing masonry wall;

c) the 2 x 8 floor joists with a 4'6" cantilever were stressed in excess of the allowable amount by a factor of 1.15;

d) the two 2 x 12 beams supporting the floor joists did not have adequate bearing or fastener supports; and

e) the foundations for the deck were questionable in that the 4 x 4 wood posts in 8" diameter concrete piers would cause the pier to crack over time as the wood swells from wetness.

12. An independent expert reviewed this matter on behalf of PEO. Having reviewed the matter in detail, the expert reached a number of conclusions, including the following:

a) that the sealing and signing of the two design drawings and the preparation and submission of the November 28, 1995 letter to the Regional Municipality of Sudbury constitute the practice of professional engineering;

b) that the deck design as shown in the drawing complies with applicable building codes to the extent that member sizes shown on Drawing No. 2 are adequate for anticipated loadings. However, the drawings do not include several key specifications and details that should have been provided in order to meet the objectives of CSA 086.1-94 Engineering Design in Wood;

c) that Kettle should have advised Dr. Ravi that as engineer of record on a portion of the project, being the deck, he would have to provide field review letters to the local municipality commenting upon the construction work that he was about to complete for a separate fee or alternatively Kettle should have asked another professional engineer with suitable experience to complete the field review;

d) that it does not appear that Kettle advised the municipality that he, as certifying engineer, had an interest in DNA Enterprises and that there may have been an intent to mislead the Sudbury Chief Building Official and his department. The expert notes that in any case the certification letter was apparently self-serving and was later shown not to be accurate;

e) that there is information confirming that the work that Kettle was supervising and had certified was not in accordance with his Certificate and his responsibility to the public (Dr. Ravi), that the deck that he apparently designed and stamped in 1995 was actually constructed differently from that shown on the approved plans and not in compliance with the *Ontario Building Code* and that Kettle's actions may have exhibited professional misconduct in that he failed to make responsible provisions for complying with applicable statutes, regulations, standards, codes and by-laws in connection with work undertaken by or under the responsibility of the practitioner;

f) that it appears that Kettle was less than responsive to concerns expressed by the Building Department and the Chief Building Official; and

g) that one of the most significant concerns with this project is the fact that the as-built design of the elevated wood decks did not meet the OBC requirements and was not in accordance with the approved drawing and yet was certified by Kettle as being in compliance. The expert concluded that this is not in keeping with professional engineering standards or practice.

By reason of the facts set out above, it is agreed by PEO and Kettle that Kettle is guilty of professional misconduct as defined in Section 28(2)(b) of the Act. Specifically it is agreed that Kettle's conduct constitutes professional misconduct pursuant to the definitions under Regulation 941, paragraphs 72(2)(a), 72(2)(b), 72(2)(d), 72(2)(g), 72(2)(i) and 72(2)(j).

Sections of O. Reg. 941 relevant to this matter: Section 72(2). For the purposes of the Act and this Regulation, "professional misconduct" means:

(a) negligence,

(b) failure to make reasonable provision for the safeguarding of life, health or property of a person who may be affected by the work for which the practitioner is responsible,

(d) failure to make responsible provision for complying with applicable statutes, regulations, standards, codes, by-laws and rules in connection with work being undertaken by or under the responsibility of the practitioner,

(j) conduct or an act relevant to the practice of professional engineering that, having regard to all the circumstances, would reasonably be regarded by the engineering profession as disgraceful, dishonourable or unprofessional.

Kettle has been diagnosed as suffering from a medical problem which has caused him not to engage in the practice of professional engineering for a period of several months.

Kettle receives disability payments relative to the medical problem and has no intention of returning to the practice of professional engineering at any point in the future.

In retrospect, Kettle believes that the medical problem, which currently prevents him from practising professional engineering, was in substantial part responsible for the conduct described above in the circumstances of this case.

The Panel ordered that:

1. **Kettle's licence shall be and is hereby suspended for a period of 24 months.**

2. **In connection with the suspension of his licence, Kettle shall deliver to PEO, immediately, his seal, his licence, and any documentation, including business cards, setting out his designation as a professional engineer.**

3. **After the period of suspension specified in paragraph 1 above, it shall be a term of and restriction on Kettle's licence that until he provides medical information establishing to the satisfaction of PEO that he is medically fit to resume practice on an unsupervised basis, Kettle may only undertake acts of professional engineering under the direct supervision of a licensed member of PEO in good standing, which member takes professional responsibility for any work undertaken by Kettle, by signing and sealing as required.**

4. **A summary of the Agreed Statement of Facts and of this order shall be published in the official publication of the PEO.**

5. **In view of Kettle's cooperation and his medical condition, there shall be no order as to costs.**

Comments of the Panel

The Panel found in this case that there was no clear and cogent evidence of non-disclosure of a potential conflict of interest. However, in the opinion of the Panel, this case demonstrates the responsibility of engineers to clearly disclose their interest, in a timely manner, to clients and authorities. Especially in smaller communities, it is not uncommon for an engineer to play several roles during a project. When this is the case, it is important that the engineer is both clear and prompt in disclosing any potential conflict, and that the client understands and accepts that position. When this is done it is our opinion that the requirements of Section 72(2)(i) of Regulation 941 of the Act have been fully met.

This case also illustrates the importance of professional engineers acknowledging complaints of design deficiencies from clients or regulatory bodies in a timely and professional manner and taking steps to resolve them.

Dated at Toronto this 22nd day of February, 2002

J.E.(Tim) Benson, P. Eng. (Chair)

(For and on behalf of the Panel of the Discipline Committee)

Daniela Iliescu, P.Eng.
Nick Monsour, P.Eng.
Glenn Richardson, P.Eng.
Ed Rohacek, P.Eng.

Note from the Department of Legal and Professional Affairs

Mr. Kettle did not appeal the Committee's decision and as a result the two-year suspension commenced October 1, 2001.

Enforcement proceedings

The Association of Professional Engineers of Ontario versus Lester Awnings and Tent Rentals Corp.

At a trial held in the Provincial Offences Court, Peterborough, Ontario, on May 29, 2003, before his Worship W.G. Jacklin, Lester Awnings and Tent Rentals Corp. was found guilty of the following charge brought under the *Professional Engineers Act*:

- That on or about the months of August to September 2001 at Peterborough, Ontario, Lester Awnings and Tent Rentals Corp. did commit the offence of engaging in the business of providing, to the public, services that are within the practice of professional engineering, when the company did not hold a Certificate of Authorization from the Association of Professional Engineers of Ontario, contrary to the *Professional Engineers Act*, R.S.O. 1990, ch. P. 28 as amended of Sections 12(2) and 40(1) by providing an outdated and unauthorized Pole Tent Framing Plan to the Lindsay Lion's Club.

Lester Awnings and Tent Rentals Corp. does not, nor has it ever held a Certificate of Authorization under the *Professional Engineers Act*. Dana M. Peebles of McCarthy Ttrault represented the Association. Petér Millard represented Lester Awnings and Tent Rentals Corp.

Mr. Peebles told the Court that the matter first came to PEO's attention when a professional engineer had reported that a drawing bearing his professional engineer's seal, which he had prepared for a 1992 project, had been provided, without his permission, by Lester Awnings and Tent Rentals Corp. to a client for use in support of a building permit application in 2001 to the City of Kawartha Lakes. The permit was required to erect a beer tent for the Lindsay Lion's Club.

After reviewing the Building Permit Application and the drawing in question for the beer tent, the local building official rejected the application, as the 1992 drawing was outdated. The engineer was notified, and he confirmed to the Building Department that he had not authorized the 1992 drawings to be used by Lester Awnings for the 2001 Application.

The Company pleaded guilty to the charge and after submissions with respect to sentence, His Worship convicted the company of the violation of the *Professional Engineers Act* and imposed a fine of $4,000 (including a Victim's Impact Surcharge). As a result of the guilty plea by Lester Awnings and Tent Rentals Corp., two other charges were withdrawn.

Note from the Department of Legal and Professional Affairs

The success of this prosecution was in large part due to the vigilant reporting of the matter by the local building official who also cooperated with the association in its investigation of the matter.

Note from the Department of Legal and Professional Affairs

Overseas outsoucing

PEO has learned that overseas engineering firms have been approaching Ontario firms holding Certificates of Authorization (Cs of A), offering to undertake design and drafting work they might want to outsource. It is important when deciding to whom to outsource work that Ontario professional engineers consider the provisions of the *Professional Engineers Act* and Regulation 941, regarding proper delegation and supervision of work performed by unlicensed personnel. In fact, it is PEO's observation that many of the proposed business arrangements from overseas firms are in clear violation of the Act and should be cautiously approached.

PEO will not comment on the competence of overseas practitioners. However, under the Ontario Act, it is illegal for anyone other than a licensed Ontario professional engineer, or a person working under the direct supervision of a licensed practitioner, to offer or provide professional engineering services in the province. Individuals and businesses offering professional engineering services to the public ("the public" in this instance includes holders of PEO Cs of A) are also required to hold a PEO C of A. The fact that services used in Ontario are actually performed outside of Ontario is of no relevance. Unless personnel are under the direct supervision of a licensed Ontario professional engineer who is qualified to assess their competence, only an Ontario licence and an Ontario C of A are adequate proof of their qualification to provide professional engineering services to be used in Ontario.

Members who outsource professional engineering work to any outside person or business that does not hold an Ontario C of A, whether that person or business is inside or outside Ontario, may be subject to discipline for aiding and abetting the unlicensed practice of engineering. Ontario professional engineers would also be liable for discipline by PEO if they were to approve any work performed by unlicensed people if that work were subsequently found to be incompetent or negligent.

Professional engineers may outsource any work, such as drafting, that is not professional engineering to whomever they want. They may also use the services of overseas employment agencies to seek competent personnel to work on projects in Ontario, so long as whomever they hire either obtains the P.Eng. licence or works under the direct supervision of a licensee.

The Code of Ethics

Blueprint for ethical practice

Following is PEO's Code of Ethics (Section 77 of Regulation 941 of the *Professional Engineers Act*) for your reference. An ideal to which all professional engineers should aspire, it is meant to guide PEO members in their professional practice and dealings with clients, employers, employees, associates and the public.

1. It is the duty of a practitioner to the public, to the practitioner's employer, to the practitioner's clients, to other members of the practitioner's profession, and to the practitioner to act at all times with,
   i. fairness and loyalty to the practitioner's associates, employers, clients, subordinates and employees,
   ii. fidelity to public needs,
   iii. devotion to high ideals of personal honour and professional integrity,
   iv. knowledge of developments in the area of professional engineering relevant to any services that are undertaken, and
   v. competence in the performance of any professional engineering services that are undertaken. O.Reg.48/92
2. A practitioner shall,
   i. regard the practitioner's duty to public welfare as paramount,
   ii. endeavour at all times to enhance the public regard for the practitioner's profession by extending the public knowledge thereof and discouraging untrue, unfair or exaggerated statements with respect to professional engineering,
   iii. not express publicly, or while the practitioner is serving as a witness before a court, commission or other tribunal, opinions on professional engineering matters that are not founded on adequate knowledge and honest conviction,
   iv. endeavour to keep the practitioner's licence, temporary licence, limited licence or Certificate of Authorization, as the case may be, permanently displayed in the practitioner's place of business.
3. A practitioner shall act in professional engineering matters for each employer as a faithful agent or trustee and shall regard as confidential information obtained by the practitioner as to the business affairs, technical methods or processes of an employer and avoid or disclose a conflict of interest that might influence the practitioner's actions or judgment.
4. A practitioner must disclose immediately to the practitioner's client any interest, direct or indirect, that might be construed as prejudicial in any way to the professional judgment of the practitioner in rendering service to the client.
5. A practitioner who is an employee-engineer, and is contracting in the practitioner's own name to perform professional engineering work for other than the practitioner's employer, must provide the practitioner's client with a written statement of the nature of the practitioner's status as an employee and the attendant limitations on the practitioner's services to the client, must satisfy the practitioner that the work will not conflict with the practitioner's duty to the practitioner's employer, and must inform the practitioner's employer of the work.
6. A practitioner must cooperate in working with other professionals engaged on a project.
7. A practitioner shall,
   i. act towards other practitioners with courtesy and good faith,
   ii. not accept an engagement to review the work of another practitioner for the same employer except with the knowledge of the other practitioner or except where the connection of the other practitioner with the work has been terminated,
   iii. not maliciously injure the reputation or business of another practitioner,
   iv. not attempt to gain an advantage over other practitioners by paying or accepting a commission in securing professional engineering work, and
   v. give proper credit for engineering work, uphold the principle of adequate compensation for engineering work, provide opportunity for professional development and advancement of the practitioner's associates and subordinates, and extend the effectiveness of the profession through the interchange of engineering information and experience.
8. A practitioner shall maintain the honour and integrity of the practitioner's profession and, without fear or favour, expose before the proper tribunals unprofessional, dishonest or unethical conduct by any other practitioner. R.R.O. 1990, Reg. 941, s. 77; O. Reg. 48/92, s. 1.

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Order form is online at www.peo.on.ca

Publications Order Form

	$	No.	Total
The Professional Engineers Act, R.S.O. 1990, Chapter P.28	N/C		
Ontario Regulation 941	N/C		
By-law No. 1	N/C		
Practice Guidelines			
Acting as Contract Employees (2001)	10.00		
Acting as Independent Contractors (2001)	10.00		
Acting Under the Drainage Act (1988)	10.00		
Acoustical Engineering Services in Land-Use Planning (1998)	10.00		
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Agreement Between Prime Consultant & Sub-Consultant (1993) per package of 10	10.00		
Licensing Guide & Application for Licence (2001)	N/C		
Required Experience for Licensing in Ontario (1995)	N/C		
Schedule of Fees for Engineering Services (2001)	10.00		

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