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Professional Practice Management Plan



**Calgary Board
of Education**

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Professional Practice Management Plan

1. Introduction

1.1 Foreword

As of February 2003, section 49(1)(d) of the Engineering and Geoscience Professions regulation under the Engineering and Geoscience Professions Act, requires all Association of Professional Engineers and Geoscientists of Alberta (APEGA) permit holders to develop and maintain a Professional Practice Management Plan (PPMP) that is appropriate to their practises. This PPMP describes the Facilities and Environmental Services (FES), Calgary Board of Education (CBE) program as it pertains to its practice of engineering activities.

The programs and policies outlined in this plan and the referenced procedures are intended to ensure that the public interest is of prime importance and are considered paramount in FES engineering activities. This document specifies responsibility and authority of personnel as they relate to the professional engineering practice. All professional staff of FES will be mandated to be knowledgeable and adhere to this CBE FES PPMP. The objective of this document is to establish and maintain an effective and efficient PPMP.

1.2 Objectives of PPMP

The objectives of the CBE PPMP are to:

- Maintain high standards of technical competence and professionalism.
- Ensure consistency of performance.
- Support continuing professional development.
- Ensure compliance with all the applicable standards and guidelines as well as with all legal and contractual obligations.
- Identify lines of professional responsibility and establish reporting procedures.
- Ensure the practice of engineering and geoscience work in accordance with Code of Ethics.

1.3 Statement on Ethics

FES is committed to practice in accordance with the APEGA Code of Ethics and to uphold the professional nature of engineering profession. Ethical conduct shall be observed in all professional work and more generally, in any public forum. In addition, local standards, human rights code, safety and environmental codes, sensitivities and practices including linguistic, cultural, special needs and respect & accommodation for persons with disabilities (visible and invisible) shall be observed.

This Plan, its Principles and Obligations are committed to by:

Dany Breton P.Eng.

Superintendent, Facilities and Environmental Services

Date:

March 06, 2020

Sanjeev Sharma P.Eng.

Responsible Member

Date:

March 06, 2020



2. Management, Organization and Responsibilities

2.1 Scope of Practice

The CBE represents a school system educating more than 123,000 students in over 245 schools. More than 14,000 employees work together to provide learning as unique as every student.

FES as a service unit within CBE is responsible for:

- Student accommodation
- Transportation
- Facility construction, renovation and maintenance
- Building operations and management
- CBE emergency, security services, health and safety services
- Environmental stewardship
- Noon Supervision
- Food and Nutrition
- Internal Mail and delivery services

2.2 Organizational Structure

Directions and communications on the PPMP shall generally flow from the Superintendent, FES through the established chain of command and/or reporting hierarchy, to Responsible Members, to professional employees, contractors and consulting companies or in the opposite direction as the situation warrants.

A copy of FES Organizational chart can be found in Appendix D.

2.3 Superintendent-FES

The Superintendent, FES is responsible for:

- engineering work within the context of CBE corporate licence to practice;
- ensuring that there is a PPMP in place and that the Responsible Members carry out their responsibilities and requirements; and
- ensuring Responsible Members (RMs) are trained on PPMP and will advise APEGA of any changes and/or organizational changes as they may be relevant to CBE PPMP.

2.4 Responsible Members

The Responsible Members (RMs) are identified annually during the APEGA permit renewal and are listed on the permit. The RMs will provide the Superintendent, FES with responsible direction and supervision of the FES professional practice and will help ensure that its PPMP is implemented within the organization. The RMs will ensure that they are active APEGA members of good standing.

FES generally conducts the practice of engineering in the following areas as outlined below:

- Planning and Development services
- Facilities Construction
- Facilities Renovation

- Facilities Maintenance
- Building Operations
- Emergency and Security Services
- Health and Safety Services

The RMs have the responsibility and the authority to cease any engineering and/or work under their responsibility that is not in accordance with the PPMP.

2.5 Employees and Contractors

It is expected that the RMs will ensure that their respective employees involved in engineering activities will be made aware of the PPMP through a formal and reported training process/structure. All such respective employees are in consequence expected to follow the PPMP. Professional contractors are mandated to be knowledgeable of the PPMP and/or have one of their own staff.

A list of FES Professional APEGA members can be found in Appendix C.

2.6 Engineering Consultants

Consulting companies that the FES works with or hires shall be aware of CBE PPMP and shall submit their corporate PPMP upon request. Departments through the Project Manager (PM) and/or RMs shall also ensure that the consulting companies engaged in the work with FES are also fully conversant with CBE PPMP.

3. Ethical Standards

FES staff shall follow the most current version of the APEGA Guideline for Ethical Practice in the practice of engineering and geoscience. FES staff shall also endeavour to conduct its professional practice in a manner that reinforces the fundamental virtues of ethical conduct, our corporate values, respect of public safety, competency, integrity, rule of law and the dignity of profession.

- A copy of the APEGA Guideline for Ethical Practice can be found at: [APEGA Ethical Practice](#)
- A copy of the CBE Employee code of conduct can be found at: [AR 4027](#)
- A copy of the CBE Board of Trustees Governance Policies can be found at: [Governance Policies](#)
- APEGA Members and Permit Holders Legal Obligations can be found at: [Legal Obligations](#)

4. Professional and Technical Resources

The Director, Facility Projects, on behalf of the Superintendent, FES, shall ensure the necessary compliment of professional and technical staff resources are allocated according to the capability and competency of the professional work being performed. In addition, staff shall have access to the necessary reference materials within the budget constraints to complete the work in accordance with recognized codes and standards.

4.1 Personnel Resources

4.1.1 Hiring of Professional Engineers and Technologists

FES staff shall assess the skill levels required for staff, contract positions and consultants and hire or engage qualified personnel. Determination of skill and competency may include but not be limited to verifying using current resume, past experience, reliable references and confirmation of good standing with APEGA and/or Association of Science and Engineering Technology (ASET) as may be required.

The required skill levels shall be included in the job descriptions. Professional staff or professional contractors must be qualified and competent to perform professional related work. FES staff shall observe CBE fair hiring practices and shall not discriminate on the basis of race, gender, age, religion or disability.

For Professional engineers, professional members will be required to be in good standing with APEGA and/or have the ability to become professional member. The same requirements apply for Technologists where there is a need to be a member of ASET.

4.1.2 Review of work by others

Reviewing and authenticating work completed by others (i.e. consulting firms) will follow these PPMP guidelines as per other professional work projects to ensure that all safety, regulatory and due diligence issues are addressed.

4.2 Reference Materials

The Director, Facility Projects shall endeavour to maintain appropriate technical resources for use by professional and technical staff in performing their duties.

A list of CBE technical resource books, codes and manuals can be found in Appendix A. Technical resource books, codes and manuals are located in Facility Projects department at Highfield office location.

FES will maintain membership in APEGA through its Corporate License to Practice. Copies of the most current APEGA Permit to Practice CBE Corporate License, Annual permit renewal application and Permit responsible member designation can be found in the Appendix-B.

Support will be provided to APEGA and ASET members to meet their ongoing and continual professional regulatory and developmental obligations in order to maintain professional certification.

- A copy of CBE Three year education plan can be found at: [Three Year Education Plan](#)
- A copy of CBE Terms & Conditions of employment for various groups can be found at: [Employment-Terms and Conditions](#)
- A copy of CBE Administrative Regulation 2060 can be found at: [AR 2060](#)

FES will also support memberships in appropriate industry organizations where there is a demonstrated need as part of the professional practice.

5. Quality Control

Designated FES professional project managers (PMs) have the skills, competencies, allocation of resources and corporate oversight as required. In turn, the PMs shall give

consideration to the appropriate quality control measures and other measures that are required to be in place to be conducive to good professional practice depending on the project and/or complexity and risk.

5.1 Professional Business Practices

5.1.1 Freedom of Information and Protection of Privacy Act (FOIP)

All documents and information including books, maps, drawings, photographs, letters and information that is written, photographed, recorded or stored in any manner submitted to FES in respect to projects, are records in the custody and control of FES. As such, they may be subject to the access and privacy provisions of the FOIP Act (Alberta) and other legislation, whether currently in force or enacted in the future. The FOIP Act may give a person the right to access the records in the custody or control of the FES subject to limited and specific exceptions.

FES staff shall ensure hired consultants/contractors are advised that the FOIP Act applies and that Vendors and Contractors are aware of the process and requirements should a FOIP request for information or privacy breach occur. All parties acknowledge that the FOIP head of local body retains the sole authority when making decisions regarding disclosure of records and that any such decision can be subject to review by the Privacy Commissioner. The vendor should seek its own legal advice on specific aspects of these obligations.

5.1.2 Conflict of Interest and Dispute Resolution

FES recognizes the potential for disputes or conflicts of interest and supports a proactive approach to identify and resolve contentious issues at the earliest stages. Resolution of disputes or conflicts between professionals or contractors shall be handled in the most appropriate and professional ways.

FES staff engaged in the selection of consultants and contractors and/or making recommendations shall ensure that they adhere to the corporate policies and requirements in regards to “impartiality and confidentiality”.

5.2 Technical and Constructive work

FES shall maintain a system of quality control that ensures all work being performed is properly defined, is undertaken by competent, qualified and skilled personnel, meets applicable codes and standards, provides for adequate supervision and checking and specified requirements for documentation.

Typically, for construction projects involving third party contractors the quality assurance and quality control requirements are outlined in the various contract documents. These documents should also specify requirements for inspections, final acceptance and warranty work.

For all other construction activities where FES directs work then it becomes the responsibility of the assigned PM to determine how inspections and requirements for quality control are to be managed.

Considerations for the breadth and scope of quality control may include but may not be limited to following aspects:

- Consideration of the project scope, objectives and risks (public safety, environmental, financial, legal and reputation).

- Use of standard contract documents and processes for consistency and in accordance with appropriate industry practices.
- Assessment of the level of complexity and assignment of qualified personnel and dedication of adequate resources.
- Determination and/or confirmation of applicable codes, standards, procedures, industry practice and regulations.
- Requirements for document control.
- Requirements for Peer review.
- Measures that may be required for quality assurance and risk management.
- Pre and Post inspections.

5.2.1 Relying on the work of others

Due diligence requirements with reasonable and judicious skill and care will be implemented when relying on the work of others to ensure that the technical work is done competently and in accordance with applicable codes, standards and specified design requirements.

Reference will be made to the most current version of the APEGA Guideline for Relying on Work Prepared by others, available at: [APEGA Guidelines](#)

5.2.2 Training and use of applicable Codes and Standards

Professional staff will be expected to be knowledgeable of applicable code and standards when hired.

Continuing education and training is expected of professional FES staff and will be facilitated by FES. Please refer to the APEGA continuing professional development program at: [Professional Development](#)

6. Professional Documents and Records

6.1 Documents Policy and Retention

The Director, Facility Projects shall ensure that all professional documents are handled with the appropriate controls to maintain accuracy and completeness. Technical, professional and support staff are responsible for preparing the documents in accordance with the procedures identified for the project. Communications with regards to professional work should be recorded and filed in the project files. Verbal communications should be noted and record of the conversation placed in the project file when applicable and in particular when there is professional guidance, direction or decision provided. Also:

- Professional documents should list the relevant regulatory codes, standards as applicable and relevant. In addition, assumptions made to complete the work should be listed on the document or otherwise noted in the project files.
- Documentation is to be kept and filed in the project folders, where the documents are stored either electronically or as a hard copy.
- Computer systems shall be on a scheduled back up procedure.

6.2 Professional Documents requiring Authentication

APEGA advises, as documented in the Practice Standard for Authenticating Professional documents:

“Essentially, Alberta law requires every professional member who performs a task that is within the practice of engineering and geoscience to authenticate (stamp, sign and date) all final documents prepared or reviewed by the member as part of that task before the documents are issued. The requirement applies equally to an employee working for an employer or to a consultant working for a client.

The stamp and signature signify that a licensed professional member of APEGA has accepted responsibility for the engineering or geoscience work represented in the authenticated document. A stamp is only issued to an individual who is qualified to practice engineering or geoscience in some capacity. The stamp is not a warranty or guarantee of accuracy”.

In this context it is important to separate the concept of responsibility from the concept of liability. Professional responsibility and leadership on the part of each FES professional staff member is encouraged.

All technical reports that will be used to make a decision or preparing a report relying on the work of other professionals’ opinion or recommendations will be signed by the engineer. FES staff will operate with the following rule:

- Engineering consultants must authenticate their professional documents. FES professional employees shall follow this example and will authenticate similar documents prepared by FES staff.

All professional members shall be familiar with and adhere to the APEGA Practice Standard for Authenticating Professional documents, available at:

- APEGA document authentication rules and procedures: [Document Authentication](#)

6.3 Signing Letters, faxes or Email

When a Professional member is expressing a formal opinion or a recommendation via any written medium their professional designation (P.Eng., P.Geo., P.Geoph., P.Tech., P.L.(Geo) should be used in the “signature”. This shall be done whether the communication is internal or external. Application of the Professional Member or Permit stamp is practical only for letters and faxes.

7. Review

This document shall be reviewed on an as-required basis and/or at a minimum annually as part of the application for the renewal of CBE Corporate License to Practice.

Appendix A: List of FES CBE technical resource books, codes and manuals

- 2014 Alberta Building Code
- 2014 Alberta Fire Code
- 2015 National Energy Code
- 2015 Canadian Electrical Code
- CAN/ULC-S524:2014-AMD1 – Standard for Installation of Fire Alarm Systems

Appendix B: APEGA Permit to Practice CBE Corporate License/Annual Permit Renewal



PERMIT TO PRACTICE P09038

Calgary Board of Education, Architectural & Engineering Services

Is Hereby Authorized to Engage in the Practice of Engineering in the Province of Alberta



Start Date: August 1, 2019
 Expiry Date: July 31, 2020
 Permit Holder Since: August 2005

Gregory

 P.Eng.
 President

F. Magendran

 P.Eng.
 Registrar & CEO

Appendix C: List of FES CBE Professional APEGA members

Name	Member Type	Member Status	Designation	Practicing Status	License Expiry Date	Job Title
Aquin, Marc	Professional Licensee	Active	P.L.(Eng.)	Practicing	2020-07-31	Director Facility Projects
Belanger, Nicole	Member-In-Training	Active	E.I.T.	Non-Practicing	2021-02-28	Project Engineer
Breton, Dany	Professional Member	Active	P.Eng.	Practicing	2020-10-31	Superintendent, Facilities and Environmental Services
Gill, Jasmeet	Member-In-Training	Active	E.I.T.	Non-Practicing	2020-07-31	Project Engineer-EIT
Jaimes, David	Professional Member	Active	P.Eng.	Practicing	2021-01-31	Engineer in Training
Juzkiw, Olena	Professional Member	Struck/Non-Payment	P.Eng.	Non-Practicing	2019-10-31	Energy and Environmental Services
Khandakar, Rahat	Professional Member	Active	P.Eng.	Practicing	2020-09-30	Supervisor Electrical
Lee, Kelvin	Member-In-Training	Active	E.I.T.	Non-Practicing	2020-09-30	EIT Capital Projects
Sharma, Sanjeev	Professional Member	Active	P.Eng.	Practicing	2020-11-30	Acting Environmental Projects Coordinator

Appendix D: FES Organizational Chart

Facilities and Environmental Services

Superintendent, Facilities and Environmental Services

Executive Administrative Assistant

