

Professional Practice Management Plan

Revision 9

City of Medicine Hat (CMH)
Permit Number 4206
Contact Information: Tory Coombs
(torcoo@medicinehat.ca
403-502-8769)

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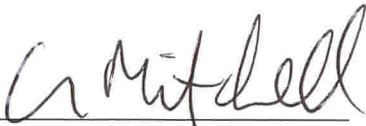
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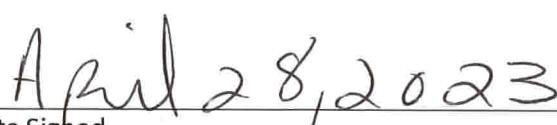
1 PPMP Part 1: General Information

1.1 PPMP Declaration

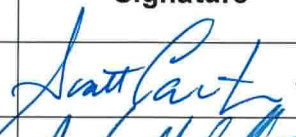
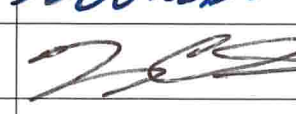

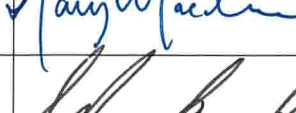
As an APEGA permit holder, we understand that we must implement and follow this PPMP, which is specific and appropriate to our professional practice, to comply with Section 48(1)(d) of the *General Regulation*.

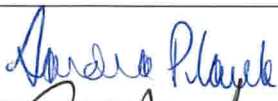
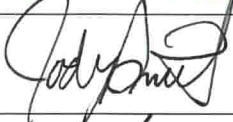

I, Ann Mitchell, as the senior officer responsible for our Permit to Practice, acknowledge that I have reviewed version 9 of the PPMP and accept responsibility for its contents.


Ann Mitchell, City Manager


Date Signed

Each Responsible Member listed in the below table, as a Responsible Member for our Permit to Practice, acknowledges that they have reviewed version 9 of the PPMP and confirm it is appropriate to each Responsible Member's area of practice.

Responsible Member	Position	Signature	Date Signed:
Scott Carter	Special Projects Advisor		March 27, 2023
Niclas Christoffersson	Strategic Management & Analysis Supervisor Geoscience Gas Production City Operations Energy & Infrastructure		March 8, 2023
Adria Coombs	Manager, Environmental Strategy and Compliance Strategic Management & Analysis		March 31/23
Tory Coombs	Director Energy & Infrastructure		Mar. 8/23
Rob Ferguson	Manager, Gas Distribution Operations City Operations Energy & Infrastructure		March 27/23
Dilruk (Handapangoda) Gunasekera	Senior Engineer Electric Engineering, Electric Distribution, City Operations Energy & Infrastructure		Mar. 22/23
Devon Hanson	Supervisor Electric Engineering, Electric Distribution, City Operations Energy & Infrastructure		2023/03/22
Mustafa Hassan	Superintendent Engineering Power and Water Energy & Infrastructure		2023/04/26
Mary Beth MacInnis	Senior Engineer Gas Distribution Engineering City Operations Energy & Infrastructure		2023/03/22
Stan Nowakowski	Manager Municipal Works Engineering City Assets Energy & Infrastructure		2023/04/19

Responsible Member	Position	Signature	Date Signed:
Sandra Plank	Manager Environmental Utilities Engineering City Assets Energy & Infrastructure		6 April 2023
Jody Smith	Manager Gas Production Engineering City Operations Energy & Infrastructure		Mar 8/23
James Stefanuk	Superintendent Construction & Signals – Electric Electric Engg. City Operations Energy & Infrastructure		MAR 27 2023

1.2 Revision History

REVISION HISTORY

DATE	VERSION	REVISION DESCRIPTION
March 23, 2007	Initial	Revised
March 30, 2010	Rev. 1	Revised
December 8, 2015	Rev. 2	Revised
March 8, 2016	Rev. 3	Revised
March 30, 2017	Rev. 4	Revised
May 15, 2018	Rev. 5	Revised
March 20, 2019	Rev. 6	Revised
March 25, 2021	Rev. 7	Revised
November 1, 2021	Rev. 8	Revised organization structure, personnel
March 8, 2023	Rev. 9	Revised to new APEGA template, personnel, depts. review and input

1.3 Permit Holder Information

1.3.1. Legal and operating name:

- 1.3.1.1. City of Medicine Hat

1.3.2. Contact information:

- 1.3.2.1. Ann Mitchell (annmit@medicinehat.ca) – City Manager
- 1.3.2.2. Tory Coombs (torcoo@medicinehat.ca; office 403-502-8769; mobile 403-952-9496)

1.3.3. APEGA Permit Number:

- 1.3.3.1. 4206

1.3.4. Areas of Practice (Disciplines and types of work):

1.3.4.1. Engineering:

Chemical, Civil, Electrical & Electronics, Environmental/Geo-environmental, Mechanical, Petroleum, Reservoir Engineering

1.3.4.2. Geoscience:

Economic geology, Sedimentology, Stratigraphy, Structural Geology, Borehole Seismology/geophysics, Petrophysics, Electromagnetic Methods, Remote Sensing, Applied geoscience, Seismic Acquisition, processing, interpretation

1.3.5. Industry of Professional Practice:

- 1.3.5.1. Design, Non-consulting, Project Management, Oil & Gas, Upstream

1.4 Objective of the PPMP

1.4.1. As an APEGA permit holder, we understand we must implement and follow this PPMP, which is specific and appropriate to our professional practice, to comply with Section 48(1)(d) of the *General Regulation*. We also understand we are bound by the Code of Ethics, described in Schedule 1 of the *General Regulation*. While providing engineering and geoscience work for the areas of practice identified in para. 1.3, we acknowledge we are regulated by APEGA and we must comply with APEGA's practice standards and bulletins and the legislation that governs the work we do.

1.4.2. The City of Medicine Hat (City) acknowledges that the APEGA Permit to Practice is a legally binding contract between APEGA and the City of Medicine Hat, which provides our right to practice and use of title.

1.4.3. Since February 2003, section 48(1) (d) of the Engineering and Geoscience Professions Regulation under the Engineering and Geoscience Professions Act (the EGP 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 practices. Thus, the requirement to maintain a current, active, and accessible PPMP forms a part of our legal obligation as a Permit Holder.

1.4.4. The other obligations and responsibilities as a Permit Holder are as follows:

- 1.4.4.1. Renew our permit annually.

- 1.4.4.2. Ensuring the completion and review of engineering and geoscience work by technically competent and ethical APEGA Licensed Professionals.
- 1.4.4.3. That the Licensed Professionals (LP) satisfy their professional obligations for Continuing Professional Development (CPD).
- 1.4.4.4. Designate competent Responsible Members (RM's).
- 1.4.4.5. That our PPMP includes the signed CAO/City Manager and RM declarations.
- 1.4.4.6. To abide by all regulations, standards, codes and APEGA (LP's) requirements as pertinent to our practice.
- 1.4.4.7. That the relevant City departments and LP's follow and adhere to the PPMP including those pertinent quality control and assurance systems for the various scopes of practice.
- 1.4.4.8. Maintain an up-to-date contact and listing of all APEGA registrants practicing under our permit.
- 1.4.4.9. Onus to respond to APEGA on all matters relevant to the practice and our permit.
- 1.4.5. The PPMP provides a written description that outlines the framework of our corporate policies, procedures and systems required to carry out engineering and geoscience practice legally and responsibly. The PPMP has been prepared in accordance with APEGA's Guidelines.
- 1.4.6. The principles that form the basis for the PPMP are:
 - 1.4.6.1. Self-regulation and our ability to practice is a privilege.
 - 1.4.6.2. Protection of the public through ensuring adequate oversight and quality control is of prime importance and paramount in the practices of engineering and geoscience.
 - 1.4.6.3. Competence through education, knowledge, experience, and ethical conduct form the basis of professionalism.
- 1.4.7. This PPMP aligns with the City's Strategic Plan, Organizational Structure and Governance model.
- 1.4.8. All applicable professional staff of the City will be knowledgeable of the City's PPMP to understand and carry out their legal responsibilities.
- 1.4.9. Specific Objectives of Professional Practice Management Plan
 - 1.4.9.1. The objectives of the PPMP and related procedures are to:
 - 1.4.9.1.1. Provide clarity as to how the City will carry out the practice in alignment with our organizational structure, governance and business plans and corporate obligations.
 - 1.4.9.1.2. Provide guidance as to how our Licensed Professionals meet their legal and professional obligations.
 - 1.4.9.1.3. Ensure we maintain appropriate quality control and the standard of technical competence and professionalism.
 - 1.4.9.1.4. Ensure compliance with all applicable standards and guidelines as well as with all legal and contractual obligations.
 - 1.4.9.1.5. Identify lines of professional responsibility and establish reporting procedures.

- 1.4.9.1.6. Emphasize our obligation to practice in accordance with the APEGA and City Code of Ethics.

1.5 Definitions, Acronyms, Abbreviations

1.5.1. The following is a list of acronyms used in this PPMP. No special terms or abbreviations contained herein have been identified as requiring definitions in order for users to understand these contents.

- 1.5.1.1. APEGA = Association of Professional Engineers and Geoscientists of Alberta
- 1.5.1.2. ASET = Association of Science & Engineering Technology Professionals of Alberta
- 1.5.1.3. CAO/City Manager = Chief Administration Officer/City Manager
- 1.5.1.4. CCC = Construction Completion Certificate
- 1.5.1.5. City = City of Medicine Hat
- 1.5.1.6. CPD = Continuing Professional Development
- 1.5.1.7. EGP Act = Engineering and Geoscience Professions Act
- 1.5.1.8. EIT/GIT = Engineer / Geoscientist In Training
- 1.5.1.9. FAC = Final Acceptance Certificate
- 1.5.1.10. FOIPP = Freedom of Information and Protection of Privacy Act
- 1.5.1.11. IT = Information Technology
- 1.5.1.12. LP = Licensed Professional
- 1.5.1.13. MGA = Municipal Government Act
- 1.5.1.14. OH&S = Occupational Health & Safety
- 1.5.1.15. PM = Project Manager
- 1.5.1.16. PPMP = Professional Practice Management Plan
- 1.5.1.17. PWP = Professional Work Product
- 1.5.1.18. QA/QC = Quality Assurance / Quality Control
- 1.5.1.19. RFP = Request For Proposal
- 1.5.1.20. RM = Responsible Member
- 1.5.1.21. RMM = Records Management Manual

1.6 Supporting Documents

1.6.1. The below table lists:

- 1.6.1.1. relevant APEGA practice standards, bulletins, and guidelines (including, but not limited to, requirements for preparation of a PPMP). APEGA's website: apega.ca/practice-standards is a source for the list of the relevant standards and guidelines.
- 1.6.1.2. documents referenced in the PPMP and
- 1.6.1.3. other corporate policies, procedures, or processes referred to in or otherwise supporting the requirements of the PPMP

Publication Title	Status	Publication Date	More Information
Practice Standards			

Authenticating Professional Work Products	In Effect	January 1, 2022	Revised January 2022. Enforced as of November 1, 2020. Read more on the authentication page.
Continuing Professional Development	In Effect	December 1, 2021	Revised December 2021. Enforced as of April 1, 2014. Read more on the CPD Program page.
Professional Practice Management Plan	In Effect	November 1, 2022	Revised November 2022. In effect as of May 1, 2022 and will be enforced May 1, 2023. Registrants must use the one-year transition period to familiarize themselves with the new requirements and make any necessary changes in order to comply before enforcement begins. Read more on the PPMP page.
Relying on the Work of Others and Outsourcing	In Effect	May 1, 2021	Enforced as of May 1, 2022 . Read more on the outsourcing page.
Practice Bulletins			
Clarifying Authentication Requirements for Drilling and Completions	In Effect	July 1, 2021	Enforced as of publication date
Practice Guidelines			
Concepts of Professionalism	In Effect	September 1, 2004	
Considerations for Establishing a Consulting Practice	In Effect	September 1, 2005	
Contract Employees and Independent Contractors	In Effect	September 1, 2007	
Environmental Practice	In Effect	February 1, 2004	
Ethical Practice	In Effect	August 1, 2022	Replaces the February 2013 (v2.2) publication
Ethical Use of Geophysical Data	In Effect	May 1, 2010	
Field Reviews of Engineering and Geoscience Work	In Effect	August 1, 2022	
Management of Risk in Professional Practice	In Effect	September 1, 2006	
Preserved Wood Foundations	In Effect	October 1, 2007	
Professional Engineers Providing Equipment Certification as Required by Alberta's Occupational Health and Safety Code	In Effect	April 1, 2013	
Professional Member as a Witness	In Effect	October 1, 2003	
Professional Practice	In Effect	January 1, 2013	
Professional Responsibilities in Developing Software	In Effect	February 1, 2006	
Responsibilities for Engineering Services for Building Projects	In Effect	March 1, 2009	
Selecting Engineering and Geoscience Consultants	In Effect	April 1, 2022	Replaces the March 2013 (V1.1) publication
Use of Geophysical Instruments in Near-Surface Investigations	In Effect	December 1, 2008	
Joint Practice Information			
How APEGA and ABSA Legislations Interact	In Effect	May 27, 2022	Frequently asked questions developed jointly by APEGA and the Alberta Boilers Safety Association explaining the interaction between <i>Engineering and</i>

			<i>Geoscience Professions (EGP) Act and the Pressure Equipment Safety Regulation (PESR). Read the frequently asked questions.</i>
National Building Code (Alberta Edition) Schedules User Guide	In Effect	May 2, 2022	User guide has been developed jointly with the Alberta Association of Architects (AAA) to support the Alberta building code schedules. Read the Alberta Building Code schedules on Alberta.ca.
Professional Responsibilities in Completion and Assurance of Reclamation and Remediation Work in Alberta	In Effect	July 2012	Joint practice standard prepared by six professional regulatory organizations that defines acceptable practice for licensed professionals providing reclamation, remediation, and related project management services. Read the Reclamation and Remediation webpage on Alberta.ca for more information.
Professional Responsibilities in Completion and Assurance of Wetland Science, Design and Engineering Work in Alberta	In Effect	May 1, 2017	Joint practice standard prepared by the Professional-10 regarding responsibilities of licensed professionals under the <i>Alberta Wetland Policy</i> . Read the Alberta Government Transition Directive.
City Department Specific Supporting Documents			
Medicine Hat Power and Water - Electric Generation, Water Treatment, Wastewater Treatment Plants			
Electric Generation - Authentication and Validation of Professional Work Products Proc. No. EG-PRO-ENG-003		August 11, 2020	
Electric Generation - Project Initiation and Approval		September 9, 2020	
City Assets - Water, Sewer and Solid Waste Utilities, Transportation and Traffic Management, Storm Water Management, Airport Management,			
City Assets - Environmental Utilities Quality Management Plan for Professional Work Products Doc. No. EU-PRO-001		August 10, 2021	
Municipal Works Department - Professional Document Authentication/Validation Process		January 12, 2021	
City Operations – Oil & Natural Gas Extraction and Production, Electric and Gas Distribution Utilities			
UDS - Engineering Quality Management Plan For Professional Work Products Doc. No. UDS-PRO-004		December 2, 2020	
Applicable City Corporate Documents			
Health Safety and Environmental Policy No. 8002		October 5, 2020	
Code of Ethics Policy No. 8006		April 18, 1994	
Learning and Development Policy No. 8014		May 3, 2011	
Staff Recruitment and Selection Policy No. 8016		May 20, 2008	
Employee Development / Job Planning Policy No. 8019		April 5, 1988	
Respectful Workplace Policy No. 8023		October 20, 2014	
Progressive Discipline Policy No. 8029		June 21, 2004	
Job Description Policy No. 8031		December 1, 1986	
Drug & Alcohol Policy No. 8037		April 7, 2008	
Whistleblower Policy No. 8041		October 20, 2014	

1.7 PPMP Review Process

- 1.7.1. The City will implement the following process to conduct and document PPMP annual reviews:
 - 1.7.1.1. An appropriate City employee will be assigned by the City Manager or their delegate to create the PPMP update
- 1.7.2. The assigned City employee will:
 - 1.7.2.1. advise each independent, individual engineering department manager and Responsible Members that he/she is currently the City employee assigned to complete the annual PPMP update (and that is available for contact by anyone within the organization that may have concerns regarding the PPMP)
 - 1.7.2.2. be responsible to ensure the update is completed at least annually
 - 1.7.2.3. advise each engineering department manager and Responsible Members of the need to complete the update and
 - 1.7.2.4. request that each engineering department manager and Responsible Member
 - 1.7.2.5. review their engineering practice responsibilities and current practice requirements and
 - 1.7.2.6. identify any necessary changes to their practice, personnel, the PPMP or any PPMP supporting documents or procedures
 - 1.7.2.7. submit via email to the City employee assigned to update the PPMP any comments about the PPMP or necessary changes to be considered and approved for the inclusion in the updated PPMP
 - 1.7.2.8. incorporate any comments or necessary changes received from each engineering department manager or Responsible Member into an updated version of the PPMP
 - 1.7.2.9. circulate the updated PPMP complete with declaration for signatures from all Responsible Members and City Manager.
 - 1.7.2.10. submit approved, updated PPMP to APEGA if necessary
 - 1.7.2.11. distribute approved, updated PPMP to each engineering department manager and Responsible Member and
 - 1.7.2.12. request that each engineering department manager and Responsible Member further distribute the PPMP to their personnel members.
 - 1.7.2.13. ensure the updated PPMP is stored and filed in accordance with document retention and storage requirements
 - 1.7.2.14. ensure a notice is prepared such that a new City employee assignment, if necessary, is made and a new update process is scheduled to ensure the next annual update is done in a timely manner

2 PPMP Part 2: Ethical Practice

2.1 Ethical Practice

2.1.1. Statement of Ethics

- 2.1.1.1. The City is committed to practice in accordance with the City Code of Ethics, City Whistleblower Policy and the APEGA Guidelines for Ethical Practice and Code of Ethics as defined in the APEGA General Regulations.

- 2.1.1.2. The City insists that employee conduct be ethical and above reproach in order to achieve and preserve public trust and confidence.
- 2.1.1.3. The City expects that all employees recognize their obligations as public servants to carry out their duties impartially, fairly, honestly and to conduct themselves in a manner that will bear scrutiny.
- 2.1.1.4. Furthermore, all employees will comply with the applicable statutes, regulations, policies, codes of practice and applicable legislation and bylaws.
- 2.1.1.5. This shall also apply for the work carried out in jurisdictions outside of Alberta or Canada.
- 2.1.2.Values
 - 2.1.2.1. Our Corporate vision is to be a “Community of Choice” and our mission is “to deliver value through exceptional public service”. All employees will adhere to our values of:
 - 2.1.2.1.1. Respect
 - 2.1.2.1.2. Integrity
 - 2.1.2.1.3. Accountability
 - 2.1.2.1.4. Courage
 - 2.1.2.1.5. Caring
- 2.1.3.It is critical that our engineering and geosciences members help build a culture of service through these values and uphold the honour, dignity and reputation of their professions and as public servants.

3 *PPMP Part 3: Professional Business Practice*

3.1 Quality Management

3.1.1.Professional Business Practice

- 3.1.1.1. The City shall ensure that the designated PM’s have the skills, competencies, allocation of resources and corporate oversight as required. In turn, the PM shall consider the measures required to be in place that is conducive to good professional practice, and with appropriate quality assurance measures depending on the project and/or program complexity and risk.

3.1.2.Quality Management Plan/Procedure

- 3.1.2.1. Plans and/or procedures may be created as necessary by Responsible Members and/or City managers as deemed necessary to provide department specific framework. Specific department quality management plans are referenced in para. 1.6 Supporting Documents addressing City personnel requirements:
 - 3.1.2.1.1. to ensure work is properly reviewed and authenticated in compliance with APEGA’s practice standards
 - 3.1.2.1.2. to ensure members have an annual training commitment and completion documentation
 - 3.1.2.1.3. to ensure any other components of the City’s PPMP are satisfactorily met
 - 3.1.2.1.4. to ensure processes are in place on how the City will:
 - 3.1.2.1.4.1. minimize errors and omissions in technical work

- 3.1.2.1.4.2. manage errors once discovered
- 3.1.2.1.4.3. perform appropriate, independent checks and documentation of concepts, calculations, models, processes, and procedures, such as peer reviews to verify accuracy of work
- 3.1.2.1.5. ensure adherence to applicable regulations, codes, standards, and other relevant specifications
- 3.1.2.1.6. ensure the risks and impacts of professional work performed are understood and acceptable
- 3.1.3. Management of Technical Work (Technical and Construction Work)
 - 3.1.3.1. The City shall maintain a system of quality control that ensures work performed is well defined, undertaken by competent personnel, meets applicable codes and standards, and provides for adequate supervision.
 - 3.1.3.2. The City shall follow the formalized process that is in place for subdivision Construction Completion Certificate (CCC) and Final Acceptance Certificate (FAC) in accordance with our Municipal Servicing Standards Manual.
 - 3.1.3.3. Typically, for construction projects involving third party contractors the quality assurance and quality control requirements are outlined in the various contract documents.
 - 3.1.3.4. These documents should also specify requirements for inspections, final acceptance, and warranty work.
 - 3.1.3.5. The City often relies on a third-party Engineering/Geosciences Consulting firm to provide technical oversight and management of the Quality Assurance/Quality Control (QA/QC) process. The contract documents must clearly define those requirements. Project start-up meetings should cover and reinforce roles and responsibilities and covered as part of the on-going project management meetings and review processes through to project completion.
 - 3.1.3.6. For all other construction activities where the City is directing work then it becomes the responsibility of the assigned PM to determine how inspections and requirements for quality control and quality assurance are to be managed.
 - 3.1.3.7. Consideration for the breadth and scope of quality control may include, but not limited to the following aspects:
 - 3.1.3.7.1. Project scope, objectives, and risks (public safety, environmental, financial, legal, and reputation).
 - 3.1.3.7.2. Appropriate contract documents and required processes in accordance with appropriate industry practices.
 - 3.1.3.7.3. Level of complexity, and assignment of qualified personnel, and dedication of adequate resources.
 - 3.1.3.7.4. Requirements as deemed appropriate in accordance with applicable codes, standards, procedures, industry practice and regulations.
 - 3.1.3.7.5. Requirements for document control.
 - 3.1.3.7.6. Requirement for peer review.
 - 3.1.3.7.7. Measures that may be required for quality assurance and risk management.
 - 3.1.3.7.8. Pre and post inspections.

3.2 Project Execution

3.2.1. Project Execution

3.2.1.1. For engineering and geoscience projects that deliver professional services or have deliverables that require authentication and validation the City will ensure through support from its RMs and LPs:

3.2.1.1.1. The scope of the professional work is defined and documented, including assumptions and limitations of work

3.2.1.1.2. Appropriate communication plans exist detailing when, what, and how information is communicated to stakeholders throughout the project, especially related to the expectations regarding professional services

3.2.1.1.3. All professional services output deliverables requiring authentication and validation are identified throughout the project.

3.2.1.1.4. Appropriate and adequate policies and procedures for change orders and change management are in place and agreed upon to ensure impacts to professional services and PWP's are considered and authenticated and validated, if required

3.2.1.1.5. Appropriate resources are in place to carry out the professional responsibilities for the project, such as field construction and inspections, field reviews, field supervision, and commissioning and start-up plans

3.2.1.1.6. Appropriate risk assessments related to the practices of engineering and geoscience are completed and documented

3.2.2. City project management within the practice of engineering and/or geoscience generally entails the following aspects.

3.2.2.1. Project definition including scope and deliverables.

3.2.2.2. Personnel management including organizational structure, communications, professional expertise, assignments, and quality management systems.

3.2.2.3. Work plan and schedule from design, through construction and to final acceptance.

3.2.2.4. Determining the appropriate public and stakeholder engagement and management.

3.2.2.5. Contractor management including where appropriate designation of prime contractor.

3.2.2.6. Change control.

3.2.2.7. Financial management including budget, cost estimates and tracking expenditures.

3.2.2.8. Documentation including approvals, contracts, agreements, drawings, and specifications, change requests/orders, progress payments, completion and final acceptance certificates and final records.

3.2.2.9. Implementation activities including coordination, inspections, commissioning and close out activities.

3.2.2.10. Ensuring that there is a robust quality control and quality assurance process in place.

- 3.2.3.A PM may be assigned with multi-discipline teams engaged in the practice of engineering and/or geoscience.
- 3.2.4.The Director and/or RM shall ensure that there is clear definition and assignment of roles and responsibilities for all engineering and geoscience project/construction work. In addition, that there is clear determination and controls in place including use of our existing city practices and procedures to appropriately assess and manage the various aspects noted above.
- 3.2.5.Change Management
- 3.2.5.1. All change orders related to construction and PWP's shall as a minimum include but not be limited to the following requirements/considerations:
 - 3.2.5.1.1. Be well documented in writing.
 - 3.2.5.1.2. Include the reason for the change as well as options, risks if applicable and associated cost impacts.
 - 3.2.5.1.3. Follow the City procurement procedures and approval/sign-off procedures for consultant and contractor change orders.
 - 3.2.5.1.4. Include a technical review and synopsis if appropriate including a revised and authenticated PWP if the change affects an existing PWP (e.g. design drawings and specifications).
 - 3.2.5.1.5. The revised PWP must clearly indicate the revising LP's acceptance of responsibility for the revisions and effects of those revisions.
 - 3.2.5.1.6. Identify the boundary of professional responsibility between the original and revised PWP if a different LP is revising PWP.
 - 3.2.5.1.7. Ensure that the engineer of record for the construction project communicates the changes to the contractor and/or appropriate field staff as applicable and recorded in the as-built(s) and final record drawings.
 - 3.2.5.2. There are circumstances that at times require execution in the field in advance of receiving full documentation including approvals and any required revisions to a PWP. In those circumstances, discussions and consultation must occur with the assigned PM. The PM should consult with the LP and RM if the changes require a revision to the PWP.
 - 3.2.5.3. Those discussions and rationale must be recorded, approved, signed-off, and authenticated as it pertains to project and financial documentation, project detail, and PWP's as soon as possible. The rationale for proceeding should identify the pertinent considerations such as avoidance of unsafe conditions, hazards, operational problems, risk assessments and mitigation.
 - 3.2.5.4. The degree by which these changes and documentation are required is predicated on the nature and significance/complexity of the intended change.
 - 3.2.5.5. The intent is not to cause unnecessary delays to operational and project delivery where the risks and significance are minor in nature.

4 *PPMP Part 4: Authentication and Validation*

4.1 Authentication and Validation of Professional Work Products

- 4.1.1. Authentication is a legal requirement as part of the Permit to Practice, demonstrates the City's responsibility and attests to the work as aligned with our quality management systems as outlined in the PPMP. It also ensures that a technically and ethically competent professional has completed the work.
- 4.1.2. The APEGA Authenticating Professional Work Documents Professional Practice Standard provides further guidance on the processes and requirements.
- 4.1.3. The professional is always responsible and accountable to fulfil their professional obligations under the Act regardless of whether a PWP is authenticated or not.
- 4.1.4. Authentication has two parts being:
 - 4.1.4.1. Authentication stamped and signed by the LP taking responsibility for the work that they have either prepared directly; directly supervised and controlled; or have thoroughly reviewed.
 - 4.1.4.2. Validation by the RM that the authenticated PWP is within the authenticator's scope of practice; that it was developed according to the City and APEGA code of ethics and, that it meets all applicable quality assurance requirements as applicable under the PPMP.
- 4.1.5. By authenticating, the LP accepts professional responsibility.
- 4.1.6. Authentication includes an LP stamp image, signature, and date. Validation includes a Permit to Practice stamp, RM signature, RM APEGA ID number, and the date. This can be done with a Permit to Practice Stamp, or inserted manually by the RM.
- 4.1.7. Only APEGA can issue Professional Stamps (physical or electronic) and must remain under the control of the LP/RM including being locked and secured.
- 4.1.8. LP/RM's looking to use digital signatures must follow the APEGA requirements and only APEGA-approved digital signature providers who issue a certificate of authority are acceptable.
- 4.1.9. City IT must be consulted where an LP/RM wishes to use an electronic signature.
- 4.1.10. APEGA provides in the standard, a three-part test to assist in determining if a PWP requires authentication. This tool is very broad and does not replace professional discretion. The questions are:
 - 4.1.10.1. Does the output contain technical information?
 - 4.1.10.2. Is the technical information complete for its intended purpose?
 - 4.1.10.3. Is the technical information going to be relied on by others to make a decision or take action?
- 4.1.11. If the answer to these three questions is yes then the PWP likely requires authentication.
- 4.1.12. Work Products that need to be authenticated include, but are not limited to, design work (drawings, reports, concept plans etc.) for construction/tender/regulator review; final record drawings; specifications; programs, models, and calculation sheets; drilling and completions work: shop and fabrication drawings that contain technical work or design; design/construction changes that contain technical details; and operating and maintenance equipment and procedural changes.

- 4.1.13. Work products that would not typically require authentication include but are not limited to journal and conference papers/articles; contracts (technical components may require authentication but not the whole contract); schedules and cost estimates; general notes and documents on a project; communication documents, reference drawings which illustrate general location of systems; and documents that are not final for their intended purpose (e.g. drafts or for discussion purposes).
- 4.1.14. Administrative Briefing Notes and emails etc. do not require authentication recognizing that these may be based on technical recommendations that are or may need to be authenticated.
- 4.1.15. Building and Safety Codes would not generally require authentication, as there is already an accepted legal requirement and process in place.
- 4.1.16. Authentication is not required in the operations and maintenance of city facilities and various equipment, building components, equipment and mechanical systems as these activities are being carried out in according to manufacturer's specifications.
- 4.1.17. Authentication may be required only if the work and/or maintenance activities deviates from the manufacturer's instructions and/or specifications. In those circumstances, consultation is required with an LP that is professionally and competently qualified to undertake the assessment.
- 4.1.18. Each department or area of professional designation will have differing engineering and geosciences activities that are managed with different work processes and means to ensure quality assurance. As such, each department that is operating under the City Permit to Practice will ensure that:
 - 4.1.18.1. There is a documented and clearly defined work process and procedures that outlines how authentication and validation of PWP's will be managed.
 - 4.1.18.2. That the document and practices adhere to the principles and requirements as required by APEGA and our PPMP.
 - 4.1.18.3. That the RM's and LP's own and manage the process to ensure compliance and that the process supports the relevant business plans and service delivery requirements.
 - 4.1.18.4. That all professional, technical and employees engaged in and performing technical, engineering, and/or geoscience activities will be thoroughly familiar with the processes and requirements.
 - 4.1.18.5. That the work process is reviewed at least annually for relevancy and applicability as part of the permit to practice renewal process and that any changes are documented.
- 4.1.19. Plans and/or procedures may be created as necessary by Responsible Members and/or City managers as deemed necessary to provide department specific framework. Specific department authentication and validation procedures are referenced in para. 1.6 Supporting Documents addressing City procedures on:
 - 4.1.19.1. The authentication and validation process used by the department including how digital PWPs (such as code, software, or modelling and simulation) will be authenticated and validated
 - 4.1.19.2. The method used for authentication and validation (physical, digital, or combination)

- 4.1.19.3. How revisions to previously authenticated PWP's are managed, including subsequent authentication and validation
- 4.1.19.4. Authentication and validation during continuous operation for design revisions, change orders, and field or operational changes
- 4.1.19.5. Authentication and validation of single-discipline PWP's and multi-discipline PWP's
- 4.1.19.6. Authentication and validation of PWP's destined for use outside of Alberta

4.2 Stamps—Control and Security

- 4.2.1. Electronic and physical stamps are the property of APEGA. Physical stamps must be returned upon request. Permit holders and licensed professionals are responsible to keep their stamps secure. Each RM and LP:
 - 4.2.1.1. Are responsible for the security of their physical and electronic stamps and must ensure their physical stamp is stored in a secure manner and their electronic stamp is not used or shared in an insecure manner
 - 4.2.1.2. Storage of physical stamps in secure offices is considered an acceptable method of storage. Lockable drawers should be used where available.
 - 4.2.1.3. Use of APEGA approved electronic stamp provider is considered an acceptable method.
- 4.2.2. The City does not currently use a Permit to Practice stamp delegation process.

5 PPMP Part 5: Relying on the Work of Others and Outsourcing

5.1 Relying on the Work of Others

- 5.1.1. Due diligence is critical when relying on the work of others and/or outsourcing to ensure that the technical work is done competently, and in accordance with applicable codes, standards, and specified design requirements.
- 5.1.2. Typically, the City engages third party engineering and geosciences consulting services through "outsourcing" to assist with and augment in the delivery of our services. Such services include but are not limited to preparing construction design and specifications, construction supervision; infrastructure condition assessments and determination of maintenance and rehabilitation requirements; and technical assessments.
- 5.1.3. The Control Measures that the City uses includes, but not limited to areas follows:
 - 5.1.3.1. Our corporate procurement policies and procedures.
 - 5.1.3.2. Use of a Request for Proposal (RFP) process where selection while considering price, is also based on a number of considerations including relevant qualifications and technical competence, corporate experience and understanding of scope in accordance with industry best practices with the intent to hire the "best evaluated" bid/proposal.
 - 5.1.3.3. Engaging only engineering and geoscience firms that are in good standing and authorized by APEGA to undertake work in the Province of Alberta.
 - 5.1.3.4. Clearly defined scope of work.
- 5.1.4. The City is fully within its jurisdiction to rely on authenticated and validated PWP's by other APEGA LP's and Permit Holders.

5.2 Outsourcing to Entities Licensed by APEGA

- 5.2.1. The same requirements outlined in para. "5.1 Relying on the Work of Others" apply to the City's Outsourcing to Entities Licensed by APEGA including requirements to:
- 5.2.1.1. Follow the City's procurement processes to create a plan for outsourcing
 - 5.2.1.2. Clearly defining the scope of professional services being outsourced
 - 5.2.1.3. Ensure the selection of an outsourced entity considers and accepts:
 - 5.2.1.3.1. the previous experience demonstrating competency in delivering similar professional services defined by the scope of work
 - 5.2.1.3.2. Professional reputation and licensure status with APEGA and whether there are any outstanding disciplinary orders
 - 5.2.1.4. Clearly communicate and accept compliance obligations including:
 - 5.2.1.4.1. Relevant statutes, regulations, bylaws, standards, and codes
 - 5.2.1.4.2. Project-specific requirements, including regulatory and permitting requirements
 - 5.2.1.5. Confirm the outsourced entity has acceptable and adequate processes for:
 - 5.2.1.5.1. Quality control and assurance
 - 5.2.1.5.2. Authentication, validation, and outsourcing (if applicable)
 - 5.2.1.6. Confirm the outsourced entity has an acceptable, adequate, and documented management of change process related to the specific scope of the outsourced work including authentication and validation of changes (such as during field implementation)
 - 5.2.1.7. When multiple outsourced entities are engaged in a project the City is responsible to develop and manage, or ensure it is developed and managed, the interface management process. An acceptable and adequate interface management process must be prepared and followed including:
 - 5.2.1.7.1. The responsibilities of the City
 - 5.2.1.7.2. The responsibilities of each outsourced entity
 - 5.2.1.7.3. Protocols for management of change that may affect other's work
 - 5.2.1.7.4. A procedure for integrating multiple PWPs as required to ensure authentication and validation conform to the practice standard Authenticating Professional Work Products
 - 5.2.1.8. Ensure requirements of Section 4 of the APEGA practice standard Relying on the Work of Others and Outsourcing are met
- 5.2.2. The City is fully within its jurisdiction to rely on authenticated and validated PWP's by other APEGA LP's and Permit Holders.

5.3 Outsourcing to Entities Not Licensed by APEGA

- 5.3.1. The same requirements outlined in para. "5.1 Relying on the Work of Others" apply to the City's Outsourcing to Entities Licensed by APEGA including requirements to:
- 5.3.1.1. When APEGA licensed professionals or permit holders outsource professional services to an entity not licensed by APEGA, they must exercise due diligence and develop and document an outsourcing plan for each professional service rendered. APEGA licensed professionals and permit holders are professionally responsible for the professional services imported to Alberta.

- 5.3.1.2. The Outsourcing Plan
 - 5.3.1.2.1. To ensure all requirements are met, APEGA licensed professionals and permit holders must substantially complete the outsourcing plan before outsourcing professional services. Each outsourcing plan must include the requirements listed in the following sections.
- 5.3.1.3. Scope of Work
 - 5.3.1.3.1. The outsourcing plan must clearly define the scope of the professional service being outsourced to entities not licensed by APEGA.
 - 5.3.1.3.2. The scope of work must:
 - 5.3.1.3.2.1. describe the required professional service, including all technical and functional requirements
 - 5.3.1.3.2.2. describe the scope of work boundaries, including whether the outsourced entity is permitted to undertake subsequent outsourcing and if so, for what scope of work
 - 5.3.1.3.2.3. list the professional work products (PWP) that will be created by the outsourced entity. All PWP require authentication and validation to comply with the practice standard Authenticating Professional Work Products
 - 5.3.1.3.2.4. list work products the outsourced entity will rely on, including those provided by the outsourcing entity, such as preliminary engineering work
- 5.3.1.4. Selection Process
 - 5.3.1.4.1. The outsourcing entity must consider and accept the outsourced entity's:
 - 5.3.1.4.1.1. previous experience demonstrating competency to provide the professional services defined in the scope of work
 - 5.3.1.4.1.2. professional reputation, including previous incidents resulting from the professional services rendered that may have caused concerns to the safety of infrastructure, the environment, or the public
 - 5.3.1.4.1.3. quality control and assurance processes for performing engineering or geoscience work
 - 5.3.1.4.1.4. knowledge of Alberta and Canadian statutes and regulations, APEGA standards, and all other applicable statutes, regulations, bylaws, standards, and codes
 - 5.3.1.4.1.5. plan for the procurement, management, and quality control of any further outsourcing or subcontracting of professional services related to the defined scope of work
- 5.3.1.5. Due Diligence in Authentication and Validation of PWP
 - 5.3.1.5.1. Licensed professionals and permit holders must ensure that outsourced PWP are authenticated by APEGA licensed professionals and, if applicable, are validated by Responsible Members, to conform with the standard Authenticating Professional Work Products. This requirement applies under all circumstances, even when the outsourcing entity does not have the in-house expertise to authenticate the PWP from the professional services. Therefore, outsourcing entities must assign licensed professionals and Responsible

- Members (if applicable) in the outsourcing plan to ensure this requirement is met.
- 5.3.1.6. Authentication of PWPs When the Expertise is Available In-House
- 5.3.1.6.1. If an outsourcing entity has in-house expertise in the scope of the outsourced work, they can authenticate and take professional responsibility for the PWPs produced by the outsourced entity. However, for the licensed professionals to do so, they must either provide direct supervision and control over the PWPs' preparation or conduct a thorough review of the PWPs. If the outsourcing entity is a permit holder, the PWPs also require validation by Responsible Members.
- 5.3.1.7. Authentication of PWPs When the Expertise is Not Available In-House
- 5.3.1.7.1. When an outsourcing entity does not have the in-house expertise to take professional responsibility for the PWPs produced by an entity not licensed by APEGA, the outsourcing entity must provide adequate due diligence to ensure that APEGA licensed professionals authenticate and validate (in case of a permit holder) the PWPs produced. Outsourcing entities can use one of the following approaches to ensure PWPs are authenticated and validated to conform to the practice standard Authenticating Professional Work Products:
- 5.3.1.7.1.1. have the outsourced entity obtain a Permit to Practice from APEGA so it can deliver authenticated and validated PWPs
- 5.3.1.7.1.2. outsource the authentication and validation of PWPs to another entity licensed by APEGA
- 5.3.1.7.1.3. provide training to licensed professionals working under their Permit(s) to Practice so they can authenticate and validate PWPs
- 5.3.1.8. Compliance Requirements
- 5.3.1.8.1. All compliance obligations must be communicated and accepted between the outsourcing entity and the
- 5.3.1.8.2. outsourced entity. The outsourcing entity must confirm the outsourced entity is aware of and meets compliance obligations, including:
- 5.3.1.8.2.1. relevant statutes, regulations, bylaws, standards, codes, and APEGA practice standards
- 5.3.1.8.2.2. project-specific requirements, including regulatory and permit requirements
- 5.3.1.8.2.3. local environmental and design conditions and constraints
- 5.3.1.9. Quality Control and Assurance
- 5.3.1.9.1. The outsourcing entity must document the due diligence undertaken to ensure that PWPs or professional services procured from an entity not licensed by APEGA are created following adequate quality control and assurance processes acceptable to the outsourcing entity.
- 5.3.1.10. Management of Change
- 5.3.1.10.1. The outsourcing entity must ensure that a documented management of change process related to the scope of outsourced work exists that is acceptable and adequate to the outsourcing entity and will be followed by the outsourced entity. This includes the process for how changes are appropriately

authenticated and validated to conform to the practice standard Authenticating Professional Work Products, such as changes to PWP's that may occur during field implementation. The management of change process must also describe how the outsourced entity will be engaged in making such changes.

5.3.1.11. Interface Management

5.3.1.11.1. When multiple outsourced entities are engaged in a project, an adequate interface management process must be in place and followed to mitigate risks.

5.3.1.11.2. The interface management process must include:

5.3.1.11.2.1. the responsibilities of the outsourcing entity

5.3.1.11.2.2. the responsibilities of each outsourced entity

5.3.1.11.2.3. protocols to manage changes in the scope of work of each outsourced entity that may affect another

5.3.1.11.2.4. outsourced entity's work

5.3.1.11.2.5. the procedure for integrating multiple PWP's as required to ensure authentication and validation conform to the practice standard Authenticating Professional Work Products

5.3.1.11.3. When a permit holder or a licensed professional is directly outsourcing to multiple outsourced entities, the permit holder or the licensed professional is responsible to develop and manage the interface management process.

5.3.1.11.4. If the interface management work itself is being outsourced, that outsourced entity is responsible to manage the process. However, it is the outsourcing entity's responsibility to ensure such a process exists and is followed, and if applicable, the final integrated PWP's are authenticated and validated.

5.3.2. Ensure requirements of Section 5 of the APEGA practice standard Relying on the Work of Others and Outsourcing are met

6 PPMP Part 6: Organization and Roles

6.1 Use of Title

6.1.1. A Licensed Professional shall include their professional designation as part of their signature block and must be included when expressing a formal opinion or a recommendation.

6.1.2. The title/designation shall include identification as being an Engineer; Geoscientist; Geologist; or Geophysicist Professional Member (e.g. P.Eng. P.Geo.; P.Geol.; or P.Geoph.), or Professional Licensee (e.g. P.L. Eng.; or P.L. Geo.) as approved and permitted by APEGA.

6.1.3. Other APEGA designations for Member-in-Training, or Provisional Licensee may use their title designations as permitted by APEGA provided it is clarified (e.g. Operations Engineer-in-Training).

6.1.4. Responsible Members and department managers will ensure reserved titles are used correctly in the City's practice during their involvement and review of documents and

correspondence including job postings, on websites, on social media, and in email signatures.

6.2 Organizational Structure

6.2.1. Scope of Practice

- 6.2.1.1. The scope of the City's practice is municipal engineering and energy utility, within the fields of transportation and traffic management, storm water management, airport management, water, sewer and solid waste utilities, planning/design, hazard controls, oil and gas extractions, and energy utilities within the electric, natural gas, environmental, and alternative energy areas, including the practice of geoscience.
- 6.2.1.2. As the City conducts activities not related to the practice of engineering, this PPMP applies only to the projects/activities falling within the practice of engineering and geosciences.
- 6.2.1.3. The City generally conducts the practice of engineering and geosciences in the following areas as outlined below:
 - 6.2.1.3.1. Medicine Hat Power and Water - Electric Generation, Water Treatment, Wastewater Treatment Plants
 - 6.2.1.3.2. City Assets - Water, Sewer and Solid Waste Utilities, Transportation and Traffic Management, Storm Water Management, Airport Management,
 - 6.2.1.3.3. City Operations – Oil & Natural Gas Extraction and Production, Electric and Gas Distribution Utilities, Facilities Management
 - 6.2.1.3.4. City Planning and Development Services
 - 6.2.1.3.5. Environment, Land, and Government Relations – Environmental
- 6.2.1.4. The City also uses third party engineering consultants and/or other departments in the delivery of its services and deemed to follow under the scope of engineering practice as defined by APEGA and the Act. Departments that rely solely on third party engineering services do not require Responsible Members (RM's) and Licensed Professionals (LP's) provided that:
 - 6.2.1.4.1. The department solely relies on those third parties to take professional responsibility as defined by APEGA.
 - 6.2.1.4.2. Those third parties have a permit to practice and are in good standing with APEGA.
- 6.2.1.5. Professional Work Products (PWP's) provided to the department are authenticated and validated as required under their permit and under their legal obligations to APEGA and our PPMP.
- 6.2.1.6. Facilities Management provides oversight for projects involving engineering principles. However, the oversight is limited to financial and non-technical judgement and Facilities Management outsources any required third-party engineering consultant support for project design and technical direction and supervision.
- 6.2.1.7. Facilities Management also carries out facility management on the various city buildings and is carried out in according to manufacturer's specifications, therefore deemed to fall outside the practice of engineering.

6.2.2.Organizational Structure

- 6.2.2.1. Directions and communications on the PPMP shall generally flow downward and upward from the CAO/City Manager through the Managing Directors and the chain of command as appropriate
- 6.2.2.2. The Corporate and departmental organizational structure can be found in the City's and various Divisional, and Department Business Plans.
- 6.2.2.3. The Executive Services Manager shall coordinate the annual Permit to Practice submission. The Manager shall also maintain a current listing of the City's licensed professionals and keep APEGA apprised of any changes. The listing shall include as a minimum the following information:
 - 6.2.2.3.1. Legal name as registered with APEGA and the APEGA ID number.
 - 6.2.2.3.2. Professional designation and practicing status.
 - 6.2.2.3.3. Job title and department.
 - 6.2.2.3.4. Scope or area of practice.
 - 6.2.2.3.5. The supervisor by title that the individual reports to and the technical supervisor if different.
 - 6.2.2.3.6. Indicating the RM's, and date for the last taken mandatory Permit to Practice seminar.
- 6.2.2.4. List of RMs is included in para. 1.1 of this PPMP. Each RM is responsible to hold its own Permit stamp.

6.3 Roles

6.3.1.CAO/City Manager

- 6.3.1.1. The City's Chief Administrative Officer (CAO)/City Manager is responsible for ensuring that the practice of engineering and/or geoscience for the City of Medicine Hat is in full accordance with the legal obligations and responsibilities as a Permit Holder and as regulated by the EGP Act.

6.3.2.Managing Directors and Directors

- 6.3.2.1. Managing Directors and Directors shall ensure that there is at least one LP within their scope of responsibility designated to act as the RM where the practice of engineering under the EGP Act is being undertaken and for each discipline/professional designation (e.g. civil, electrical, geology etc.).
- 6.3.2.2. The designation of RM(s) should consider the corporate organizational structure, span and breadth of control, type of work conducted and ability of the RM to fulfil his or her obligations under our permit.
- 6.3.2.3. Managing Directors and Directors will determine within their areas of jurisdiction, the number of RM's required and whether a back-up RM is required during periods when the incumbent is away. That determination may, but not be limited to, the following considerations:
 - 6.3.2.3.1. Requirement to have a backup RM for review of PWP's and verification of authenticated documents.
 - 6.3.2.3.2. The ability to utilize other RM's within the corporation to assist with the particular professional designation requirements.

6.3.3.In addition, the Managing Directors and Directors will:

- 6.3.3.1. Ensure that the assigned RM's have the requisite technical knowledge, qualifications, experience and authority to carry out their responsibilities within their professional designation.
- 6.3.3.2. Provide the assigned RM's with the authority and accountability to carry out their responsibilities. This may include written authorization if deemed appropriate.
- 6.3.3.3. Support the RM's to ensuring that the City in the conduct of its business and its licensed professionals comply with the PPMP and our APEGA obligations as a permit holder.
- 6.3.3.4. Ensuring that there is alignment between our corporate business plans and practice and our PPMP obligations.
- 6.3.3.5. Ensure clarity as to roles and responsibilities so there is alignment with technical and supervisory functions within the department and as it pertains to undertaking professional work and departmental operating and capital programs.
- 6.3.3.6. Advise the City Manager if there are any areas of non-compliance in regards to the PPMP and/or in the conduct of engineering and/or geosciences in accordance with our Permit or the EGP Act.
- 6.3.3.7. Assign an RM/LP to engineering members-in-training (EIT/GIT) employed by the City within the role of engineering practice for technical and professional supervision, guidance, and mentoring. The assignment should be clear on roles and responsibilities where the assigned RM/LP is not the direct supervisor.
- 6.3.4. Responsible Members (RM's)
 - 6.3.4.1. The City will confirm its designated RM's annually as part of the corporate APEGA permit renewal process and listed on the permit. The RM's will advise their Director and/or Managing Director, as well as the City Executive Services Manager should there be any changes in their status who shall in turn advise APEGA.
 - 6.3.4.2. RM's are also responsible for ensuring that the listing of the City's LP's are up to date and will advise the Executive Services Manager of any changes as required under para. 6.2.
 - 6.3.4.3. The RM's will provide responsible direction and supervision of the City's professional practice and with the implementation of the PPMP within the organization. That scope of responsibility encompasses the following:
 - 6.3.4.3.1. The PPMP meets our APEGA obligations.
 - 6.3.4.3.2. That the City has the appropriate quality control and assurance systems in place for their area of practice.
 - 6.3.4.3.3. There is the appropriate framework in place for the proper review and authentication of engineering and geoscience work.
 - 6.3.4.3.4. Validate PWP's as required under our Permit to Practice obligations.
 - 6.3.4.3.5. Before validation, the PWP must be reviewed to ensure that it is within the authenticator's scope of work, that it was developed according to the City and APEGA code of ethics and that it meets all applicable quality assurance requirements as applicable under the PPMP.
 - 6.3.4.4. The RM's will ensure that they are qualified, experienced, and competent to perform their duties, and are active APEGA members and of good standing. Those

obligations include, but are not limited to, engaging in professional development as per APEGA guidelines, and submitting their annual CPD hours.

- 6.3.4.5. The RM's will be expected to be the regulatory expert on the EGP Act for the City as the permit holder and for all City LP's and staff. The RM's must also understand and ensure there is compliance under the following APEGA practice standards and guidelines:

- 6.3.4.5.1. Authenticating PWP's
- 6.3.4.5.2. Ethical practice
- 6.3.4.5.3. Relying on the Work of Others and Outsourcing
- 6.3.4.5.4. Professional Practice
- 6.3.4.5.5. Concepts of Professionalism
- 6.3.4.5.6. Determining the Need for Professional Involvement in Outsourced Engineering/Geoscience
- 6.3.4.5.7. Guideline for PPMP's

- 6.3.4.6. The designated RM must also complete a Permit to Practice seminar within the first six months of designation, and at least once every five years thereafter.

- 6.3.4.7. Ensure there is appropriate professional oversight for any EIT and GIT Members-in-Training assigned and such oversight encompasses professional development, mentoring, technical guidance and review and sign-off on any PWP as assigned by the Managing Director/Director.

- 6.3.4.8. The RM's have the responsibility and authority to cease any engineering and/or geoscience work under their responsibility that is not in accordance with the PPMP.

- 6.3.4.9. P.Techs may perform work under our City Permit to Practice as licensed by APEGA. Where the City requires a P.Tech to assume the duties of an RM then a Permit to Practice under the Association of Science and Engineering Technology Professionals of Alberta (ASET) may also be required as well as an (ASET) Professional Management Plan.

- 6.3.4.10. City legal obligations with APEGA and ASET will need consideration when designating a P. Tech(s) as an RM(s).

6.3.5. Licensed Professionals (LP's)

- 6.3.5.1. LP's will ensure that they are qualified, experienced, and competent to perform their duties and are active APEGA members of good standing.

- 6.3.5.2. LP's have the responsibility to maintain their technical and ethical competence and abide by all relevant regulations, codes, standards and, ensure all professional work carried out is within that technical competence and scope of practice.

- 6.3.5.3. LP's are responsible to:

- 6.3.5.3.1. Authenticate all PWP's for which they are legally obliged to accept professional responsibility.
- 6.3.5.3.2. Only authenticate PWP's that they prepared directly, were prepared under their direct supervision and control, or that were prepared by others, but they have thoroughly reviewed.
- 6.3.5.3.3. Ensure that all authenticated PWP's under their care are forwarded to the designated RM for validation.

- 6.3.5.3.4. Undertake all responsibility for EIT/GIT professional oversight and professional development as assigned.
- 6.3.6.Members-in Training (EIT's and GIT's)
 - 6.3.6.1. Engineers and Geoscientists in Training (EIT's and GIT's) shall maintain their registered status as a member in good standing and engage in their professional development as per APEGA guidelines and requirements to gain professional status. That responsibility includes maintaining their technical and ethical competence.
- 6.3.7.Employees
 - 6.3.7.1. Directors and RM's for each department will ensure that all of their respective employees engaged in and performing technical, engineering, and/or geoscience activities will be thoroughly familiar with the PPMP and all relevant requirements.
 - 6.3.7.2. All such respective employees will follow the PPMP.
- 6.3.8.Engineering and Geoscience Consultants
 - 6.3.8.1. The City will only engage and work with professional consultants who are in good standing with APEGA and deemed as fully competent and capable to provide the engineering and geosciences services being considered.
 - 6.3.8.2. Departments through the designated Project Manager (PM) and/or RM shall also ensure that consulting companies engaged on work with the City are also fully conversant with our PPMP as may be relevant to the scope of services being provided.
 - 6.3.8.3. Further guidance for engaging third party engineering services can be found in the PPMP under 5. Relying on Work Prepared by Others.
- 6.3.9.The City maintains its Permit Holder APEGA Professional Membership List containing the following information:
 - 6.3.9.1. Name
 - 6.3.9.2. APEGA ID, if applicable
 - 6.3.9.3. Position (job or work) title
 - 6.3.9.4. Professional designation, if applicable
 - 6.3.9.5. Area of Practice (such as discipline)
 - 6.3.9.6. Practicing status, if applicable
 - 6.3.9.7. Performance supervisor, technical supervisor, and Responsible Member
 - 6.3.9.8. Responsible Member status and the date they last attended a Permit to Practice seminar, if applicable

7 PPMP Part 7: Management of Professional Resources

7.1 Recruitment

7.1.1.Personnel Resources

- 7.1.1.1. The City shall ensure that there is the necessary compliment of professional and technical staff resources with the capability and competency of undertaking the professional work performed. In addition, staff shall have access to the necessary reference materials within budget constraints, to complete the work in accordance with recognized codes and standards.
- 7.1.2.Hiring of Professional Engineers, Geoscientists and Technologists

- 7.1.2.1. The City 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 limited to verifying using current resume, experience, reliable references, and confirmation of good standing with APEGA and/or Association of Science and Engineering Technology (ASET) as may be required.
- 7.1.2.2. 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 with the City. The City shall observe fair hiring practices in accordance with our HR practices and policies and shall not discriminate because of race, gender, age, religion, or disability.
- 7.1.2.3. For Professional Engineers and Geoscientists, the City will require that they be professional members in good standing with APEGA and/or have the ability to become a professional member. The same requirements apply for Technologists where there is a need to be a member of ASET.

7.2 Continuing Professional Development

- 7.2.1. The City will ensure its Licensed Professionals are meeting the requirements of the APEGA practice standard Continuing Professional Development including annual performance reviews as part of the tasks required by the City's Leading Human Performance process to review employee accomplishments, performance, etc. and as referenced in this PPMP para. 6.3 Roles and 7.3 Supervision.
- 7.2.2. If deemed applicable, RM/LP's will ensure necessary support and opportunities are available, where possible, for MIT's to obtain engineering work experience that is aligned with the competency-based assessment, as outlined in the APEGA Competency-Based Assessment Guide, to work towards registration as a Professional Engineer or Licensee.

7.3 Supervision

- 7.3.1. The mentoring and supervising for all professional and technical staff shall be in accordance with our City platform for Leading Human Performance Program and applicable policy. That process should encompass a review and plan to ensure that the requisite professional development meets the requirements for CPD and reporting to APEGA.

8 *PPMP Part 8: Management of Technical Resources*

8.1 Practice Reference Resources and Aids

8.1.1. Reference Materials

- 8.1.1.1. The City shall endeavor to maintain appropriate technical resources for use by professional and technical staff in performing their duties including, but not limited to, document library subscription services such as Techstreet.
- 8.1.1.2. The City will support APEGA and ASET members to ensure that they meet their ongoing and continual professional regulatory and development obligations in order to maintain Professional Certification.

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

8.2 Information Technology

- 8.2.1. Computer systems and software used for professional related work shall be suitable for the activities performed and in accordance with our corporate policies and practices as deemed appropriate by the City's Information Technology department (IT).
- 8.2.2. Any software upgrades, purchases and/or modifications requires consultation and/or approval by the Director of IT and/or his or her designate.

8.3 Equipment and Tools

- 8.3.1. The City will ensure any equipment, instruments, hardware, software, firmware, and tools used by the permit holder to create professional services are certified, operated, maintained, and calibrated properly through its procurement policies, licensed professional and RM involvement in acquisition and management of applicable tools/software. If deemed applicable in the future, references to operating procedures, manuals, and methods or schedules of calibration will be included/referenced directly in the PPMP.

9 PPMP Part 9: Professional Services Output Management

9.1 Originals and Copies

9.1.1. Document Policy and Retention

- 9.1.1.1. Documents and records are managed in accordance with the City Records Management Policy, and the City Classification and Retention Schedule. The policy ensures there are systematic controls and standards to the creation, security, use, retention, conversion, disposition, and preservation of recorded information to meet our obligations under the Municipal Government Act (MGA) and Freedom of Information and Protection of Privacy Act (FOIPP).
- 9.1.1.2. Details on the Records Management Manual (RMM) can be found on the City Intranet, and outline in detail our procedures and records management including retention, disposition, vital records, and legal holds. The RMM provides the formal City framework and updated as required. Questions on the RMM and/or policies should be directed to the City Clerk.
- 9.1.1.3. The City shall ensure that all professional documents are handled with the appropriate controls to maintain accuracy and completeness. Technical, professional and support staff are responsible to prepare 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 a record of the conversation placed in the project file when applicable and in particular when there is professional guidance, direction, or decisions provided.

- 9.1.1.4. 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.

9.2 Revision Control and Transmittals

- 9.2.1. Individual department procedures (see para. 1.6 Supporting Documents) for producing PWP's are to include requirements to adequately control revisions.

9.3 Retention

- 9.3.1. Documents and records are retained in accordance with the City Records Management Policy, and the City Classification and Retention Schedule. The policy ensures there are systematic controls and standards to the creation, security, use, retention, conversion, disposition, and preservation of recorded information to meet our obligations under the Municipal Government Act (MGA) and Freedom of Information and Protection of Privacy Act (FOIPPA). Refer to para. 9.1.1. Document Policy and Retention for additional detail.

9.4 Storage and Disposal

- 9.4.1. Documents and records are retained in accordance with the City Records Management Policy, and the City Classification and Retention Schedule. The policy ensures there are systematic controls and standards to the creation, security, use, retention, conversion, disposition, and preservation of recorded information to meet our obligations under the Municipal Government Act (MGA) and Freedom of Information and Protection of Privacy Act (FOIPPA). Refer to para. 9.1.1. Document Policy and Retention for additional detail.

10 Conflict of Interest and Dispute Resolution

- 10.1. The City 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 manner.
- 10.2. Generally, the City will define how disputes are to be resolved within the City of Medicine Hat's Consulting and/or Contract Agreements.
- 10.3. 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".
- 10.4. City Legal will be consulted if there is a risk that there may be litigation and/or claims arising through the dispute process.