



QUALITY MANAGEMENT GUIDELINES

USE OF SEAL

VERSION 2.0

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ENGINEERS &
GEOSCIENTISTS
BRITISH COLUMBIA

TABLE OF CONTENTS

ABBREVIATIONS	iii		
1.0 DEFINITIONS	1		
2.0 PURPOSE AND SCOPE	3		
3.0 GUIDELINES FOR PRACTICE	5		
3.1 WHAT IS THE PURPOSE OF A SEAL	5		
3.2 WHICH DOCUMENTS REQUIRE SEALING	6		
3.2.1 General	6	3.2.19 Non-Engineering or Non-Geoscience Documents	13
3.2.2 Internal Documents	6	3.2.20 Resources for Determining Which Documents Should Be Sealed	13
3.2.3 Preliminary Documents	6	3.3 WHO IS PERMITTED TO SEAL A DOCUMENT	13
3.2.4 CADD Drawing Files	7	3.3.1 General	13
3.2.5 Bound Documents	7	3.3.2 Limited Licensees	13
3.2.6 Reviewed Documents	7	3.3.3 Who Decides Whether and When a Document Must Be Sealed?	13
3.2.7 Copies of Originally Sealed Documents	8	3.3.4 Fees Associated with Use of the Seal	14
3.2.8 Shop Drawings	8	3.3.5 Sealing Documents in Other Jurisdictions	14
3.2.9 Standard Drawings	8	3.4 SEALING IN PROFESSIONAL CAPACITY OR UNDER DIRECT SUPERVISION	14
3.2.10 Emails	8	3.4.1 General	14
3.2.11 Documents Issued in the Field	9	3.4.2 Single Discipline Documents	14
3.2.12 Design-Build Drawings/Documents	9	3.4.3 Multiple Discipline Documents	15
3.2.13 Final Design Drawings	10	3.4.4 Revised Documents	15
3.2.14 As-Built or As-Constructed Drawings	10	3.4.5 Reissued Documents	15
3.2.15 Record Drawings	10	3.4.6 Translated Documents	16
3.2.16 Articles and Presentations	12	3.5 SEALING DOCUMENTS WITH LIMITED PRIOR INVOLVEMENT	16
3.2.17 Other Applicable Legislation	12	3.5.1 General	16
3.2.18 Out-of-Province Engineered and Supplied Equipment	12	3.6 HOW TO SEAL	18
		3.6.1 General	18
		3.6.2 Types of Seals and Their Use	18
		3.6.3 Rubber Seal	19
		3.6.4 Electronic Seals and Digital Certificates	19

3.6.5	Minimum Legal Requirements	19
3.6.6	Options for Using Electronic Seals and Digital Certificate Technology	19
3.6.7	Best Practices for Use of Electronically Applied Seals	20
3.6.8	Non-Ink Signatures	21
3.6.9	Unacceptable Seals	21
3.7	SUGGESTED METHODS FOR ISSUING SEALED DOCUMENTS	24
3.7.1	General	24
3.7.2	Hard Copy Documents	24
3.7.3	Electronically Issued Documents	25
4.0	REFERENCES AND RELATED DOCUMENTS	26
5.0	APPENDIX	27

LIST OF APPENDICES

APPENDIX A:	When to Apply Seals	A-1
-------------	---------------------	-----

LIST OF TABLES

TABLE 1:	Where to Apply Professional Seals	22
----------	-----------------------------------	----

LIST OF FIGURES

FIGURE 1:	Examples of Engineers and Geoscientists BC Seals	23
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ABBREVIATIONS

ABBREVIATION	TERM
BC	British Columbia
CADD	Computer-Aided Drafting and Design
EPC	Engineering Procurement Construction
P3	Public-Private Partnerships
PDF	Portable Document Format
QM	Quality Management

QUALITY MANAGEMENT GUIDELINES
USE OF SEAL

1.0 DEFINITIONS

The following definitions are specific to this Quality Management (QM) guideline.

TERM	DEFINITION
Act	<i>Engineers and Geoscientists Act</i> [RSBC 1996] Chapter 116.
Bylaws	The Bylaws of Engineers and Geoscientists BC made under the <i>Act</i> .
Digital Certificate	Letters, characters, numbers, or other symbols in digital form that an Engineering/Geoscience Professional creates or adopts to represent the electronic equivalent of his or her handwritten signature. Engineers and Geoscientists BC must authorize and endorse the Digital Certificate technology used in conjunction with the electronically applied Seal in order to provide confirmation with Engineers and Geoscientists BC's best practices regarding security, protection of Document integrity, and proof of authenticity.
Direct Supervision	The <i>Act</i> defines Direct Supervision as the responsibility for the control and conduct of the engineering or geoscience work of a subordinate.
Document(s)	<p>Includes, but is not limited to, reports, letter reports, certificates, design briefs, memos, field memos, specifications, drawings, maps, plans, and some Shop Drawings that provide recommendations, designs, directions, estimates, calculations, opinions, interpretations, or observations that involve technical engineering or geoscience matters in hard copy, email, or digital format.</p> <p>The term "Document" has an extended meaning and includes a photograph, film, recording of sound, any record of a permanent or semi-permanent character, and any information recorded or stored by means of any device (B.C. Reg. 168/2009).</p> <p>With regard to Sealing, electronic Documents and hard copy Documents are considered the same.</p>
Electronic Seal	A digital version of a Seal that represents a true replica of the ink impression or embossing of the Seal issued by Engineers and Geoscientists BC, with no material variation in size, format, or wording.

TERM	DEFINITION
Engineering/Geoscience Professional(s)	Professional engineers, professional geoscientists, and licencees who are licensed to practice by Engineers and Geoscientists BC.
Engineers and Geoscientists BC	The Association of Professional Engineers and Geoscientists of the Province of British Columbia, also operating as Engineers and Geoscientists BC.
Non-Ink Signature	A signature created using a touch screen or electronic pen in a manner that requires a unique gesture for each instance.
Organization	Any firm, corporation, partnership, government agency, sole proprietor, or other type of legal entity that employs Engineering/Geoscience Professionals and provides products and/or services requiring the application of professional engineering and/or professional geoscience.
Professional of Record	The Engineering/Geoscience Professional or licensee with the lowest level of direct professional responsibility for the engineering or geoscience work and any related engineering or geoscience Documents produced, and whose Seal appears on the Documents. A test of “direct professional responsibility” is the ability of that Engineering/Geoscience Professional to alter or revise the engineering or geoscience content in the master Documents.
Seal (synonymous with stamp)	<p>Noun: The Engineering/Geoscience Professional’s Seal. It is either a rubber Seal or Electronic Seal, and is collectively called “Seal” in this QM guideline.</p> <p>Verb: To affix an Engineers and Geoscientists BC professional’s Seal, along with signature and date, to a Document. The handwritten date or the digitally embedded date associated with the digital signature must be the date of Sealing and signing; this date may differ from the date on the Document.</p>
Shop Drawing	Includes, but is not limited to, a pre-existing standard or generic drawing, diagram, illustration, schedule, performance chart, brochure, or other printed information that is provided by a contractor to a Professional of Record, or is used by a Professional of Record, to illustrate details of a portion of work. Refer to the Engineers and Geoscientists BC <i>Professional Practice Guidelines: Shop Drawings</i> .

2.0 PURPOSE AND SCOPE

- 2.1 The *Acts*. 20(9) states that:
- “A member or licensee receiving a seal or stamp under this section must use it, with signature and date, to seal or stamp estimates, specifications, reports, documents, plans, or things that have been prepared and delivered by the member or licensee in the member's or licensee's professional capacity, or that have been prepared and delivered under the member's or licensee's direct supervision.”
- 2.2 Engineering/Geoscience Professionals are required to Seal all Documents that they prepare and deliver in their professional capacity or that were prepared under their Direct Supervision. When individuals become Engineering/Geoscience Professionals, they are issued a Seal by Engineers and Geoscientists BC. Engineers and Geoscientists BC retains ownership of the Seal and is the sole authority to establish rules for its use.
- 2.3 This QM guideline is intended to assist Engineering/Geoscience Professionals in the appropriate use of their Seal to meet the requirements of the *Act* by addressing the following:
- The purpose of the Seal
 - Which Documents require Sealing
 - Who is permitted to Seal a Document
- Sealing in one's professional capacity or after one's Direct Supervision
 - Sealing with limited prior involvement
 - How to Seal
- 2.4 The *Act* requires that Engineering/Geoscience Professionals must Seal all Documents that they prepare and deliver in their professional capacity or that were prepared under their Direct Supervision. Conversely, they must only Seal and deliver Documents for which they are willing to accept professional responsibility. Failure to Seal a Document that is required to be Sealed and that an Engineering/Geoscience Professional has prepared and delivered is a breach of the *Act*.
- 2.5 These obligations apply to Engineering/Geoscience Professionals working in their professional capacity in all sectors when their work applies to or is used in any of the following circumstances:
- Ongoing engineering and geoscience work
 - Projects with a defined start and finish
 - Products and services requiring the application of professional engineering or professional geoscience
 - Engineering or geoscience deliverables such as reports, drawings, specifications, or other deliverables

- Implementation or use of engineering and geoscience work as may be found in a manufacturing facility, technology company, operations, or utilities work
- Construction or installation of engineering or geoscience work
- Implementation or construction carried out by others
- Implementation or construction being carried out by the Engineering/Geoscience Professional's Organization's own forces
- Engineering or geoscience work carried out for use internally within the Engineering/Geoscience Professional's Organization
- Engineering or geoscience work carried out for others

2.6 These obligations apply to Engineering/Geoscience Professionals employed in their professional capacity in all sectors including but not limited to the following:

- Aerospace
- Construction

- Consulting
- Education
- Government
- Healthcare
- High technology
- Light and heavy industry
- Marine engineering and naval architecture
- Manufacturing
- Natural resources
- Operations
- Research and development
- Utilities

2.7 This QM guideline describes the minimum standards for use of the Seal by Engineering/Geoscience Professionals. Failure to meet the intent of this QM guideline may be evidence of unprofessional conduct and may give rise to disciplinary proceedings by Engineers and Geoscientists BC.

3.0 GUIDELINES FOR PRACTICE

3.1 WHAT IS THE PURPOSE OF A SEAL

- 3.1.1 The purpose of the proper and appropriate use of the Seal is to authenticate Documents that have been prepared and delivered by Engineering/Geoscience Professionals in their professional capacity or under their Direct Supervision. The Seal is not a mark of warranty. It is not a guarantee of accuracy. Instead, it should be considered a “mark of reliance,” an indication that others can rely on the fact that the opinions, judgments, or designs in the Sealed Documents were provided by an Engineering/Geoscience Professional who is held to high standards of knowledge, skill, and ethical conduct.
- 3.1.2 The application of the Engineering/Geoscience Professional’s Seal with the signature and date is the authentication process used to verify that a Document has not been modified or tampered with and represents the original content for which the Engineering/Geoscience Professional, by Sealing, signing, and dating the Document, has accepted professional responsibility.
- 3.1.3 Aside from the issue of authentication, the Seal is important because it is a visible commitment to the standards of the professions, and it signifies to the user of the Document that an Engineering/Geoscience Professional has accepted professional responsibility for the content of the Document. When an Engineering/

Geoscience Professional Seals, signs, and dates a Document, he or she is confirming the following:

- The engineering or geoscience work was prepared by the Engineering/Geoscience Professional in his or her professional capacity, or under his or her Direct Supervision
- He or she is professionally responsible and accountable for the Document
- The authenticity of the Document
- The identity of the Engineering/Geoscience Professional
- The Engineering/Geoscience Professional’s designation, and that he or she is in good standing with Engineers and Geoscientists BC and has practice rights
- The relevant legislation has been met
- The applicable requirements under the *Act* and the Bylaws have been met, including the quality management bylaw and the code of ethics
- He or she is qualified by training or experience in the engineering or geoscience discipline(s) related to the Document
- The intent of the relevant Engineers and Geoscientists BC professional practice guidelines have been met

3.2 WHICH DOCUMENTS REQUIRE SEALING

3.2.1 GENERAL

- 3.2.1.1 Documents requiring the Engineering/ Geoscience Professional's Seal are those Documents (in hard copy, email, or digital format) that were prepared in his or her professional capacity or under his or her Direct Supervision, involving the delivery of products or services requiring the application of professional engineering or professional geoscience.
- 3.2.1.2 The requirement to Seal applies equally to electronic Documents and hard copy Documents.
- 3.2.1.3 Engineering and geoscience Documents are delivered in various stages throughout a projects' lifecycle. All professional Documents that are prepared, delivered, and relied upon must be Sealed with a signature and date; this includes those Documents prepared for the various stages of an engineering or geoscience project.

Below is an example of typical stages in consulting engineering projects for buildings:

- Tendering
- Design
- Permitting
- Construction
- Commissioning

Other areas of engineering and geoscience are too varied to give relevant examples of typical stages.

- 3.2.1.4 The Seal is used to authenticate what you have taken professional responsibility for and when you took professional responsibility for it.

3.2.2 INTERNAL DOCUMENTS

- 3.2.2.1 Documents issued informally within an Organization that are preliminary, conceptual, or not intended to be relied on by others do not need to be Sealed. However, when Documents are intended to be sent from one department of an Organization and issued formally to another department, branch, office, division, or other entity within the same Organization, and those Documents will be used, relied on, acted upon, or externally issued by the other entity, those Documents must be Sealed. For example, preliminary Documents issued to another department to determine permitting requirements would not need to be Sealed. However, Documents issued to another department that will be used to apply for a permit would need to be Sealed, even if those Documents were not ready for or issued for construction.

3.2.3 PRELIMINARY DOCUMENTS

- 3.2.3.1 Certain Documents are considered preliminary Documents and do not need to be Sealed. These include the following:
- Documents that are incomplete or are not in their final form (i.e., will not be relied upon)
 - Documents that are being issued to indicate general works or degree of complexity

- Documents that are marked and issued as being “for discussion,” for “information only,” or for collaboration purposes

The intent that these Documents are preliminary must be clear to those who are receiving them. For example, Documents issued for “information only” to bidders to allow them to provide budget prices to a consultant do not require Sealing. However, Documents issued to bidders who will rely on the adequacy of those Documents to provide fixed prices must be Sealed.

A work-in-progress, non-finalized Document, or draft Document should be clearly marked with a notation that confirms that the status of the Document such as “Preliminary,” “Draft,” “For Review Only,” “For Discussion Only,” “Not For Construction,” or “Not for Implementation.”

3.2.4 CADD DRAWING FILES

- 3.2.4.1 Clients, such as municipal governments, may request computer-aided drafting and design (CADD) drawing files in an editable format, such as DWG, for ongoing maintenance of their facilities or infrastructure, and to publish online for use by others. Drawings in this file format can be altered by the client.

An Engineering/Geoscience Professional has a number of options for Sealing and authenticating their original work to distinguish it from future changes to the drawings made by the client. The Engineering/Geoscience Professional may use the following methods:

- Embed the CADD file(s) in a portable document format (PDF) file and Seal the PDF file using an Electronic Seal and digital certification technology that meets the Engineers and Geoscientists BC best practices for digital certification of electronically applied Seals (refer to **Section 3.6.7 Best Practices for Use of Electronically Applied Seals**).
- Seal a hard-copy version of the drawings and provide the hard copy together with a set of editable CADD files that are not Sealed.
- Scan a Sealed set of drawings and provide the Sealed set together with a set of editable CADD files that are not Sealed.

3.2.5 BOUND DOCUMENTS

- 3.2.5.1 Drawings, maps, or plans bound into another Document, such as those listed in **Section 3.2.5.2** below, do not require Sealing, provided the Document into which they are bound is Sealed.

- 3.2.5.2 Bound Documents may include booklets, reports, assessments, investigations, and evaluations. However, drawing sets are not considered bound Documents and each drawing in a drawing set must be Sealed.

3.2.6 REVIEWED DOCUMENTS

- 3.2.6.1 Reviewers of engineering or geoscience Documents where the Document was prepared by an Engineering/Geoscience Professional should not Seal the Document. The Document should only be Sealed by the Professional of Record. If the reviewer is

directly supervising the preparation of the Document by a non-Engineering/Geoscience Professional, the reviewer should Seal the Document.

3.2.7 COPIES OF ORIGINALLY SEALED DOCUMENTS

3.2.7.1 Users of a Document that was signed, Sealed, dated, and previously delivered by the Engineering/Geoscience Professional may request copies of the original Document in hard copy or electronic format. Where a copy of an authenticated Document will suffice, the copy does not need to have an original Seal applied.

3.2.7.2 A hard copy Document to which the Engineering/Geoscience Professional has affixed his or her Seal with signature and date may be scanned and transmitted electronically.

3.2.7.3 Engineering/Geoscience Professionals are cautioned against issuing copies of Documents after they have been Sealed, signed, and dated, whether in hard copy, as an electronic PDF file, or in a fax transmission, unless there are proper controls in place to prevent their Seals from being re-used by others.

3.2.8 SHOP DRAWINGS

3.2.8.1 Refer to the Engineers and Geoscientists BC *Professional Practice Guidelines: Shop Drawings* (Engineers and Geoscientists BC 2015) to determine which types of Shop Drawings should be Sealed by an Engineering/Geoscience Professional.

3.2.9 STANDARD DRAWINGS

3.2.9.1 An Engineering/Geoscience Professional may be asked to prepare a design drawing that is intended to be used in more than a single instance. The decision to authenticate such a standard/generic drawing can only be made by the Engineering/Geoscience Professional who prepared the drawing. If it is not possible to sufficiently limit or specify the conditions under which the drawing can be used, the drawing should be left unauthenticated.

3.2.9.2 An Engineering/Geoscience Professional who subsequently uses an unauthenticated standard drawing is responsible for determining that the drawing is suitable for the current purpose and for its authentication.

3.2.10 EMAILS

3.2.10.1 During work on a project, it is common to exchange a large number of emails. If emails contain engineering and/or geoscience opinions or decisions that will be relied on by others, then this information must be captured in a Sealed Document within a reasonable timeframe. For example, the emailed information could be captured in the next issuance of a Sealed drawing, in a Sealed report, or in a weekly memo that is Sealed.

Alternatively, if an Electronic Seal is used in combination with the Digital Certificate, an Electronic Seal and Digital Certificate can be applied to an email. This can be achieved by converting the email to a PDF Document, applying the Electronic Seal and Digital

Certificate, and attaching the PDF Document to a covering email.

Professional judgement must be used to determine if the communication requires a Seal and what type of Sealed Document is most appropriate.

3.2.11 DOCUMENTS ISSUED IN THE FIELD

3.2.11.1 Documents issued in the field that are not Sealed at the time must be followed up with an appropriately Sealed Document when they include engineering or geoscience decisions or opinions that change Documents issued for construction or implementation. Unless required by contractual obligations, the Sealed Document does not also need to be issued to the recipient of the field-issued Document; however, the Sealed Document must be filed and retained as a record to meet the intent of this QM guideline.

3.2.12 DESIGN-BUILD DRAWINGS/DOCUMENTS

3.2.12.1 Pre-bid package design-build Documents do not need to be Sealed, as they are preliminary in nature and are prepared as part of the process of developing the final bid package for delivery. These Documents may include partially complete reports, letter reports, design briefs, memos, field memos, specifications, drawings, maps, or plans that provide recommendations, designs, directions, estimates, calculations, opinions, and interpretations or observations that involve technical engineering or geoscience matters. These Documents are typically prepared by the

design-build team under contract with a construction contractor or contractor joint venture for the purpose of developing a commercial bid for a project procured via design-build, engineering procurement construction (EPC), or public-private partnerships (P3).

3.2.12.2 The final bid package that will be submitted to the client(s), as well as any subsequent engineering or geoscience Documents, must be Sealed prior to delivery. The design-build project model, which is commonly employed in P3 projects, involves preparing design-build drawings/Documents intended for use by those receiving and reviewing bid packages. Bid packages prepared for these purposes can vary in percentage of completion. There is a degree of uncertainty with respect to cost and impact on the final design.

To address these issues, the Engineering/Geoscience Professional who is responsible for the engineering or geoscience work should incorporate the following declaration into the professional Documents that are being prepared and delivered at this stage of a project:

“The seal and signature of the undersigned on this document only certifies that the accuracy and completeness of the design/information in the document is appropriate for the design-build tender stage of the project, and the state of completion of the document reflects that limited use.

The undersigned does not warrant or guarantee, nor accept any responsibility

for, the use of these documents for any purposes other than the design-build tender stage.”

3.2.13 FINAL DESIGN DRAWINGS

3.2.13.1 Engineers and Geoscientists BC recommends that the Professional of Record who is responsible for the design and field review services must Seal the final design drawings upon completion of the construction project. These drawings reflect design changes made during construction and incorporate contract-related items such as addenda and change orders, but do not include as-constructed information provided by others.

3.2.14 AS-BUILT OR AS-CONSTRUCTED DRAWINGS

3.2.14.1 Engineers and Geoscientists BC discourages use of the terms “as-built drawings” or “as-constructed drawings,” as these terms imply that the drawings show exactly what was built or constructed. The terms may also suggest a level of certification or impose inappropriate liability. For this reason, Engineers and Geoscientists BC recommends and uses the term “record drawings.”

Refer to **Section 3.2.15 Record Drawings** for the appropriate requirements for these drawings.

3.2.15 RECORD DRAWINGS

(I) General

3.2.15.1 There are substantial legal and liability issues associated with Engineering/Geoscience Professionals Sealing record

drawings that include as-constructed conditions supplied by others who are not under the Direct Supervision of the Engineering/Geoscience Professional.

3.2.15.2 The *Act* states that Engineering/Geoscience Professionals must only use their Seal with signature and date on Documents that they have prepared in their professional capacity or that others have prepared under their Direct Supervision.

3.2.15.3 Engineering/Geoscience Professionals are not permitted to Seal and take professional responsibility for information on record drawings provided by others whom they did not directly supervise. This means that Engineering/Geoscience Professionals are not permitted to take professional responsibility for record drawings that are prepared by, or are based on information or measurements provided by, a contractor, developer, operations manager, or others responsible for implementation or construction.

3.2.15.4 To Seal record drawings that include as-constructed conditions and remain in compliance with the *Act*, the Engineering/Geoscience Professional (or his or her subordinate) must observe and record all as-constructed information, including measurements, used in the record drawings. Even if the Engineering/Geoscience Professional (or his or her subordinate) had been present on the project site full-time, it is not likely the Engineering/Geoscience Professional could sufficiently observe and record all necessary measurements to take professional

responsibility for as-constructed information on the record drawings.

(ii) Professional Liability Insurance

- 3.2.15.5 Sealing record drawings also has serious implications for professional liability insurance coverage.
- 3.2.15.6 Standard professional liability insurance policies for Engineering/Geoscience Professionals typically exclude coverage for claims against the Engineering/Geoscience Professional resulting from warranties or guarantees that they provided, unless the Engineering/Geoscience Professional's liability would already exist at law.
- 3.2.15.7 If an Engineering/Geoscience Professional Seals and takes professional responsibility for record drawings, which include as-constructed information prepared by others, this may be considered a warranty or guarantee of the accuracy of the as-constructed information. As a result, the Engineering/Geoscience Professional's liability insurance coverage for any claim concerning the accuracy of the as-constructed information may be compromised or negated.
- 3.2.15.8 If, however, the Engineering/Geoscience Professional prepares the record drawing only with as-constructed information observed and recorded by the Engineering/Geoscience Professional (or his or her subordinate), the Engineering/Geoscience Professional's liability would already exist at law and the exclusion in the standard professional liability insurance policy would not apply.

(iii) Declaration

- 3.2.15.9 To address these legal and liability issues, Engineers and Geoscientists BC recommends that the Engineering/Geoscience Professional responsible for the engineering or geoscience work and field review does not Seal record drawings when the as-constructed information was provided by others, unless the following declaration (or a similar one from his or her insurance or legal advisor) is provided on the drawing:

“The seal and signature of the undersigned on this drawing certifies that the design information contained in these drawings accurately reflects the original design and the material design changes made during construction that were brought to the undersigned's attention. These drawings are intended to incorporate addenda, change orders, and other material design changes, but not necessarily all site instructions.

The undersigned does not warrant or guarantee, nor accept any responsibility for the accuracy or completeness of the as-constructed information supplied by others contained in these drawings, but does, by sealing and signing, certify that the as-constructed information, if accurate and complete, provides an as-constructed system which substantially complies in all material respects with the original design intent.”

(iv) Exposure to Disciplinary Proceedings

3.2.15.10 If an Engineering/Geoscience Professional Seals record drawings containing as-constructed information provided by others that he or she did not directly supervise, the Engineering/Geoscience Professional may be exposed to disciplinary proceedings under the *Act* unless a declaration is provided on the drawings that is consistent with the one provided above.

3.2.16 ARTICLES AND PRESENTATIONS

3.2.16.1 Purely informative materials that are prepared only for general information and that are not materials on which someone would be expected to take action or rely, should not be Sealed. Technical journal articles, conference papers, magazine articles, and slide presentations are examples of materials that may fall within this category.

3.2.17 OTHER APPLICABLE LEGISLATION

3.2.17.1 Engineering/Geoscience Professionals must be aware of and follow Sealing requirements and protocols provided in other federal or provincial legislation, such as the *Occupational Health and Safety Regulation*, the *BC Building Code*, and the *Safety Authority Act*.

3.2.18 OUT-OF-PROVINCE ENGINEERED AND SUPPLIED EQUIPMENT

3.2.18.1 Where Engineering/Geoscience Professionals specify using equipment, products, or components that require

engineering design, manufacturing, or fabricating from out-of-province but for use on projects in BC, they should begin by preparing and Sealing a performance specification for the equipment, products, or components. The specifications should indicate that the manufacturer or fabricator must certify that the equipment meets the performance specification. In such circumstances, Engineers and Geoscientists BC does not require the Engineering/Geoscience Professional to Seal the fabrication or vendor drawings.

3.2.18.2 However, when Engineering/Geoscience Professionals receive such equipment, products, or components, they do have some obligations that require the application of their Seal. If occupational health and safety legislation imposes any requirements, such as guards and safety switches, Engineering/Geoscience Professionals are responsible for checking and Sealing that the equipment meets these requirements. Engineering/Geoscience Professionals must also confirm that the equipment meets any Technical Safety BC (formerly the BC Safety Authority) requirements. Where the equipment requires services such as electrical, gas, or water feeds, Engineering/Geoscience Professionals are responsible for designing and Sealing Documents showing these services.

3.2.18.3 Pre-engineered buildings designed and fabricated outside of BC must be Sealed, signed, and dated by an Engineering/Geoscience Professional.

3.2.19 NON-ENGINEERING OR NON-GEOSCIENCE DOCUMENTS

3.2.19.1 Engineering/Geoscience Professionals must not Seal Documents that do not contain engineering or geoscience content unless stipulated by other regulatory requirements.

3.2.20 RESOURCES FOR DETERMINING WHICH DOCUMENTS SHOULD BE SEALED

3.2.20.1 Refer to **Appendix A: When to Apply a Seal**, which identifies various types of Documents and provides recommendations on Sealing according to good professional practices.

3.3 WHO IS PERMITTED TO SEAL A DOCUMENT

3.3.1 GENERAL

3.3.1.1 Documents associated with engineering and geoscience work or projects that have been prepared and delivered by, or under the Direct Supervision of, an Engineering/Geoscience Professional, must be Sealed by the Professional of Record.

3.3.2 LIMITED LICENSEES

3.3.2.1 Engineering or geoscience licensees granted a limited scope, as specified in their licences, are authorized to affix their Seal only to Documents that are within the defined scope of practice identified on their limited licences.

3.3.3 WHO DECIDES WHETHER AND WHEN A DOCUMENT MUST BE SEALED?

3.3.3.1 An Engineering/Geoscience Professional cannot avoid Sealing a Document on the grounds of his or her job description or at the request of an employer or client. The Engineering/Geoscience Professional should, on their own, use their professional judgement to decide whether a Document requires Sealing in accordance with the *Act*.

3.3.3.2 The use of a Seal should not be automatic but should be affixed only after the Engineering/Geoscience Professional has evaluated and is ready to accept professional responsibility for the Document. The legal liability of an Engineering/Geoscience Professional is not dependent on whether or not the Engineering/Geoscience Professional affixes his or her Seal to a Document that he or she prepared or was prepared under his or her Direct Supervision and delivered to others who will rely on it. Engineering/Geoscience Professionals are professionally responsible and accountable for any aspect of a project, work, or Document that they have prepared and delivered, whether or not they apply their Seal.

3.3.3.3 Before deciding to Seal a Document, an Engineering/Geoscience Professional typically prepares or has others prepare the Document, reviews the Document, and takes professional responsibility for the Document's content. Only after doing so, does the Engineering/Geoscience Professional Seal the Document and deliver it to those who will use or rely on it.

3.3.4 FEES ASSOCIATED WITH USE OF THE SEAL

- 3.3.4.1 An Engineering/Geoscience Professional may not charge a fee for simply applying his or her Seal to a Document.

The Seal may be used only for engineering and geoscience work that the Engineering/Geoscience Professional carries out or reviews in his or her professional capacity or for work carried out by others under his or her Direct Supervision.

3.3.5 SEALING DOCUMENTS IN OTHER JURISDICTIONS

- 3.3.5.1 Engineering/Geoscience Professionals who prepare Documents related to products or services requiring the application of professional engineering or geoscience, for works on projects located outside of BC must confirm the Sealing requirements in the jurisdiction in which the works or projects are located. If there are no Sealing requirements in the relevant jurisdiction, for the purpose of authentication, it is recommended that the Engineering/Geoscience Professional Seal the Documents. Where Sealing requirements exist, Documents may only be Sealed by individuals who are licensed to practice in the other jurisdiction.

3.4 SEALING IN PROFESSIONAL CAPACITY OR UNDER DIRECT SUPERVISION

3.4.1 GENERAL

- 3.4.1.1 An Engineering/Geoscience Professional should only Seal a Document that he or she has prepared or that was prepared under his or her Direct Supervision.

See the *QM Guideline: Direct Supervision* (Engineers and Geoscientists BC 2017).

- 3.4.1.2 Refer to **Section 3.5 Sealing Documents with Limited Prior Involvement** for information on situations where Engineering/Geoscience Professionals Seal Documents in their professional capacity despite having minimal or no prior involvement.

- 3.4.1.3 For guidance on intellectual property and copyright of engineering or geoscience Documents, refer to the *Guidelines on Intellectual Property*, published jointly by the Association of Consulting Engineering Companies–British Columbia (ACEC-BC), Engineers and Geoscientists BC, and the Architectural Institute of British Columbia (AIBC) (ACEC-BC; Engineers and Geoscientists BC; AIBC 2009).

3.4.2 SINGLE DISCIPLINE DOCUMENTS

- 3.4.2.1 Documents involving a single discipline of engineering or geoscience must always be Sealed by the Professional of Record. Where there is input from one or more Engineering/Geoscience Professional specialists, each specialist must also Seal

the Document and qualify the extent of his or her responsibility. For example, in such a case, a structural engineer could qualify the Seal with a statement such as, "For Wood Trusses Only."

3.4.3 MULTIPLE DISCIPLINE DOCUMENTS

3.4.3.1 If more than one engineering and/or geoscience discipline is included in one Document, the Engineering/Geoscience Professional for each discipline must Seal the portion of Document for that specific discipline and qualify the extent of his or her responsibility. Where there is input from one or more Engineering/Geoscience Professional specialists, each specialist must also Seal the Document and qualify the extent of his or her responsibility. For example, in such a case, a structural engineer could qualify the Seal with a statement such as, "For Structural Aspects Only."

3.4.4 REVISED DOCUMENTS

3.4.4.1 When a Sealed Document is revised by, or is revised under the Direct Supervision of, the same Engineering/Geoscience Professional who was responsible for the originally issued Document, the following applies:

- The act of revising should be clearly indicated in the Document's title block.
- Any revisions should be clearly identified.

- When the Engineering/Geoscience Professional is ready to accept professional responsibility for the revisions, he or she must Seal and date the Document to indicate the date of the revisions.

3.4.4.2 When a Sealed Document is revised by, or is revised under the Direct Supervision of, an Engineering/Geoscience Professional other than the Engineering/Geoscience Professional who was responsible for the originally issued Document, the following applies:

- The act of revising should be clearly identified in the Document's title block.
- The revisions only, including all elements of the Document affected by the revisions, must be Sealed and dated by the Engineering/Geoscience Professional who is taking professional responsibility for the revisions.

3.4.4.3 By Sealing the revised Document, the Engineering/Geoscience Professional who Seals the revisions is responsible only for the revisions and their appropriateness in the revised Document. Care should be taken to clearly identify the revisions, as this identifies the boundary of professional responsibility between the Professional of Record for the original Document and the one taking responsibility for the revised Document.

3.4.5 REISSUED DOCUMENTS

3.4.5.1 When a Sealed Document is reissued by, or is reissued under the Direct Supervision of, the same Engineering/Geoscience

Professional who was responsible for the originally issued Document, the following applies:

- The act of reissuing should be clearly indicated in the title block.
- If a reissued Document is reproduced from an unsealed master Document, the Engineering/Geoscience Professional must Seal, sign, and date the reproduced Document.
- When reissuing a copy of a Document that was previously Sealed, the same Engineering/Geoscience Professional who originally Sealed the Document must initial and date the reissued copy of the Document.

3.4.5.2 An example of a Document reissued without revisions may be drawings previously prepared for a delayed phase of a project.

3.4.5.3 When a Sealed Document is reissued by, or under the Direct Supervision of, an Engineering/Geoscience Professional(s) other than the Engineering/Geoscience Professional(s) responsible for the originally issued Document, the following applies:

- The act of reissuing should be clearly indicated in the title block.
- The reissuing Engineering/Geoscience Professional must Seal, sign, and date the reissued Document, thereby accepting professional responsibility for the Document.

3.4.5.4 When an Engineering/Geoscience Professional other than the Engineering/Geoscience Professional responsible for the originally issued

Document reissues or revises a Document, there is no requirement for the original Engineering/Geoscience Professional to be made aware of these actions.

3.4.6 TRANSLATED DOCUMENTS

3.4.6.1 An Engineering/Geoscience Professional may be requested to Seal a Document in one or more languages other than his or her working language(s).

3.4.6.2 The act of translating an engineering or geoscience Document is the practice of professional engineering or professional geoscience; therefore, it is unlawful for a non-Engineering/Geoscience Professional to translate an engineering or geoscience Document.

It would also be unprofessional for an Engineering/Geoscience Professional to Seal and sign an engineering or geoscience Document that was translated by a non-Engineering/Geoscience Professional into a language other than his or her working language(s), or to Seal and sign a Document that is entirely or partly in a language other than his or her working language(s).

3.5 SEALING DOCUMENTS WITH LIMITED PRIOR INVOLVEMENT

3.5.1 GENERAL

3.5.1.1 Some Engineering/Geoscience Professionals acting in their professional capacity Seal engineering or geoscience Documents prepared by others who were not under their Direct Supervision. For example, where the Engineering/Geoscience Professional has not

been actively involved in a project, or prior or early involvement was minimal or non-existent.

The following three examples describe how Sealing such Documents may be carried out in a way that meets the requirements in the *Act* and this QM guideline.

Example 1

- 3.5.1.2 An Engineering/Geoscience Professional may be asked to Seal engineering or geoscience Documents prepared by engineering or geoscience professionals registered in another jurisdiction. The Seal is required to permit the use or application of the engineering or geoscience Document for a project or works located within BC.

In this case, the Engineering/Geoscience Professional must carry out a thorough and documented review or check of the engineering or geoscience product sufficient to merit the application of the Engineering/Geoscience Professional's Seal to the pertinent Documents. Such a review or check may include, but is not limited to, considering all engineering or geoscience assumptions and parameters, and checking the engineering or geoscience work included in the Document. After applying the Seal, the Engineering/Geoscience Professional assumes full professional responsibility for the Sealed Documents.

Example 2

- 3.5.1.3 An Engineering/Geoscience Professional may be asked to Seal an engineering or geoscience Document prepared by individuals who were directly supervised

by another Engineering/Geoscience Professional.

In this situation, the Engineering/Geoscience Professional Sealing the Document is acting in his or her professional capacity, and hence must perform a review at a level comparable to that required to prepare the original Document.

Example 3

- 3.5.1.4 An Engineering/Geoscience Professional may be asked to Seal engineering or geoscience Documents that were prepared by others not under his or her Direct Supervision; that is, the Engineering/Geoscience Professional is not actively involved and prior or early involvement was minimal.

When Sealing such Documents, the Engineering/Geoscience Professional is acting within his or her professional capacity.

- 3.5.1.5 Where the Engineering/Geoscience Professional has had minimal prior involvement before being asked to Seal a Document, professional practice requires that one of the following two prerequisites is met and documented:

1. The Engineering/Geoscience Professional has confirmed that:
 - a) A documented formal quality management system appropriate to the nature of the work being carried out is in place;
 - b) The Engineering/Geoscience Professional has documentation

- related to the formal training and experience of the individual involved carrying out the professional engineering or professional geoscience work; and
 - c) The individual developing the Document is working within a practice area for which he or she has appropriate training and experience.
2. The Engineering/Geoscience Professional has a long-standing relationship with the individual, who is an active staff member of the same Organization and is involved in the delivery of similar products or services requiring the application of engineering or geoscience on a repeated basis.
- 3.5.1.6 Provided that one of the two prerequisites is met, the Engineering/Geoscience Professional must also carry out an appropriate review of the engineering or geoscience work before Sealing the Document. An appropriate review would include a review of all key engineering or geoscience issues before Sealing the Document.
- 3.5.1.7 The Engineering/Geoscience Professional must be familiar enough with the engineering or geoscience Document to be able to directly deal with and respond to questions related to the Document or its implementation.
- 3.5.1.8 The Engineering/Geoscience Professional Sealing the Document is taking professional responsibility for the Document.

3.6 HOW TO SEAL

3.6.1 GENERAL

- 3.6.1.1 A Seal is not complete without a signature and date. The date must be the date of Sealing and signing, even though this date may differ from the date on the Document.
- 3.6.1.2 Sealed Documents may not be signed by another person signing on behalf of (“per”) the Engineering/Geoscience Professional who is identified on the Seal.

3.6.2 TYPES OF SEALS AND THEIR USE

- 3.6.2.1 The traditional rubber Seal issued by Engineers and Geoscientists BC to all Engineering/Geoscience Professionals is used to Seal hard-copy Documents. The Seal is applied along with the Engineering/Geoscience Professional’s signature and date.

The Sealing of engineering and geoscience Documents prepared in an electronic form require the application of an Electronic Seal in combination with a Digital Certificate. In order to be recognized as equivalent to a hard copy, see **Section 3.6.6.2**.

All members receive a rubber Seal as part of their membership; however, members can choose to additionally purchase a long-reach embosser Seal, which is acceptable to use on professional Documents.

- 3.6.2.2 Refer to **Table 1: Where to Apply Professional Seals** at the end of this section for guidance on the location of the Seal for different types of Documents.

3.6.2.3 Refer to **Figure 1: Examples of Engineers and Geoscientists BC Seals** at the end of this section for examples of the various professional Seals.

3.6.3 RUBBER SEAL

3.6.3.1 The ink impression of the rubber Seal should be clear and legible, and the Document must be signed and dated adjacent to or across the Seal. It is preferred if the ink used for the Seal, and the ink used for the signature and date, are contrasting colours.

3.6.3.2 To mitigate the risk of unauthorized copying of the Seal, it is recommended that the date touch or cross the Seal. If the Document will be posted online for public tender or other use, it is acceptable to add a qualifying statement across/behind the Seal, such as "BC Bid Tender."

3.6.4 ELECTRONIC SEALS AND DIGITAL CERTIFICATES

3.6.4.1 Engineering/Geoscience Professionals may Seal electronic Documents using an electronic version of their Seal in conjunction with the Digital Certificate technology.

3.6.4.2 Where an electronic Document has been digitally Sealed, the electronic file is the original and any printed reproductions are copies. It is acceptable to provide these printed copies; however, clients and authorities having jurisdiction retain the right to request that originals be provided in either electronic or hard copy form.

3.6.5 MINIMUM LEGAL REQUIREMENTS

3.6.5.1 The minimum legal requirements established under the *Act* regarding the use of electronically applied Seals and Digital Certificates are as follows:

- Engineers and Geoscientists BC members must use an Electronic Seal issued by Engineers and Geoscientists BC (this requirement can also be met by using a Digital Certificate technology service provider that has been independently confirmed to meet Engineers and Geoscientists BC best practices, as listed below).
- The Seal must bear the engineer's, geoscientist's, or licensee's name, as well as the words "Professional Engineer, Province of British Columbia," "Professional Geoscientist, Province of British Columbia," or "Limited Licensee," respectively.
- The Electronic Seal must be capable of being "returned" to Engineers and Geoscientists BC; that is, a member must be able to show Engineers and Geoscientists BC that he or she is no longer able to use the Electronic Seal.
- The Digital Certificate must include the date the Document was Sealed.

3.6.6 OPTIONS FOR USING ELECTRONIC SEALS AND DIGITAL CERTIFICATE TECHNOLOGY

3.6.6.1 Engineering/Geoscience Professionals may use Electronic Seals with Digital Certificate technology in one of the following ways:

1. By creating or purchasing an electronic version of their Seal from Engineers and Geoscientists BC and using an Engineers and Geoscientists BC-endorsed Digital Certificate service provider such as Notarius, Inc.
2. By creating or purchasing an electronic version of their Seal and using their choice of a Digital Certificate service provider that has been confirmed to Engineers and Geoscientists BC by an independent consultant (paid for by the Engineering/Geoscience Professional or their Organization) as meeting Engineers and Geoscientists BC best practices (see **Section 3.6.7 Best Practices for Use of Electronically Applied Seals**).
3. By purchasing an electronic image of their Seal from Engineers and Geoscientists BC and using a Digital Certificate service provider that has not been independently confirmed as meeting Engineers and Geoscientists BC best practices (see **Section 3.6.6.2** below).

3.6.6.2 With option 3 above, Engineers and Geoscientists BC cannot confirm to those receiving such Documents electronically that they have an appropriate level of security, protection of document integrity, and proof of authenticity equivalent to a hard copy Document that has been Sealed with the Engineering/Geoscience Professional's ink stamp and handwritten signature and date.

3.6.7 BEST PRACTICES FOR USE OF ELECTRONICALLY APPLIED SEALS

3.6.7.1 For Engineers and Geoscientists BC to be able to confirm the integrity, security, and authenticity of Documents that have been Sealed using an electronic image of the Seal, the following must occur:

1. Engineering/Geoscience Professionals must apply a Digital Certificate that has been independently verified as meeting the Engineers and Geoscientists BC best practices, according to Item 2 below.
2. To meet Engineers and Geoscientists BC best practices, the service provider used must:
 - be experienced in providing this technology to members and licensees of other professional associations;
 - have the resources, technical support, and systems in place to provide continuity of service for the foreseeable future;
 - have protocols consistent with Engineers and Geoscientists BC's authority to regulate the use of the Engineering/Geoscience Professional's Seal, by allowing Engineers and Geoscientists BC to revoke or suspend the Engineering/Geoscience Professional's ability to use their Seal;

- have protocols consistent with Engineers and Geoscientists BC's need to ensure that only an Engineering/Geoscience Professional is granted the authority to own and use an electronically applied Seal with his or her personalized Digital Certificate;
- have a platform that offers flexibility and ease of use for a wide range of purposes and applications (e.g., compatible with different file formats, ability to Seal, sign, and date multiple sets of engineering or geoscience Documents in a single operation);
- have Digital Certificate technology that is compatible with that used by members of the Architectural Institute of BC;
- use a Public Key Infrastructure, which is a combination of hardware, software, people, policies, and procedures needed to create, manage, distribute, use, store, and revoke digital signatures;
- have a Digital Certificate that is compliant with the International Telecommunications Union X509v3 standard;
- maintain the Digital Certificate under the sole control and possession of the Engineering/Geoscience Professional;
- allow the Digital Certificate to be stored on the media of the Engineering/Geoscience Professional's choice (e.g., hard drive, memory stick); and

- provide interfaces between the technology and the software used by Engineering/Geoscience Professionals so the image of the Engineers and Geoscientists BC professional Seal with signature and date appears when printing the Document.

3.6.8 NON-INK SIGNATURES

3.6.8.1 It is acceptable to use a touch screen or electronic pen as long as it is done so in a manner that requires a unique gesture for each instance. The Professional of Record must sign and date the Document adjacent to or across the Seal, and the signature must be applied by hand for each instance. Copying an image of the signature and using it on other Documents or on other instances of the Seal is strictly forbidden.

A Non-Ink Signature is not a secure digital signature that attaches a Digital Certificate and does not protect the Document from alteration.

Engineers and Geoscientists BC cannot confirm to those receiving such Documents electronically that they have an appropriate level of security, protection of Document integrity, and proof of authenticity equivalent to a hard copy Document that has been Sealed with the Engineering/Geoscience Professional's ink stamp and handwritten signature and date.

3.6.9 UNACCEPTABLE SEALS

3.6.9.1 Engineers and Geoscientists BC does not approve the use of other types of Seals, including but not limited to stick-on Seals,

photocopied Seals, Electronic Seals complete with an electronic image of signature in electronic files without digital certification, and electronically scanned images of ink stamp Seals applied to originally Sealed Documents.

3.6.9.2 Placing an image of a handwritten signature and date with a Seal on an electronically prepared Document is not equivalent to Sealing the Document and is not approved by Engineers and Geoscientists BC. To be

acceptable, the minimum requirement is a live signature applied by the Engineering/ Geoscience Professional named on the Seal.

3.6.9.3 Placing text, a graphic, or any other marking on an unsealed professional Document indicating that an appropriately Sealed copy exists at another location is not acceptable. If unsealed convenience copies are provided, an appropriate disclaimer should be placed on the Document to mitigate unintended usage.

TABLE 1: *Where to Apply Professional Seals*

TYPE OF DOCUMENT	LOCATION
Drawings	In an allotted space in title block or in the lower right-hand corner of each drawing
Specifications	On the first page or cover sheet of the section to which the Seal applies or, if responsible for the overall specification, on the cover sheet for the overall specification
Reports	Next to the title of the author or signature in the report, whether at the beginning or end of the report
Other Written Documents	Next to the title of the author or signature on the Document, whether at the beginning or end of the Document
Digital Files	Use an Electronic Seal and signature only in combination with Digital Certificate technology that has been confirmed as meeting Engineers and Geoscientists BC best practices, and in locations appropriate to the type of Document (see Section 3.6.7 Best Practices for Use of Electronically Applied Seals)

Acceptable examples of Seals (sign and date adjacent to or across the Seal).

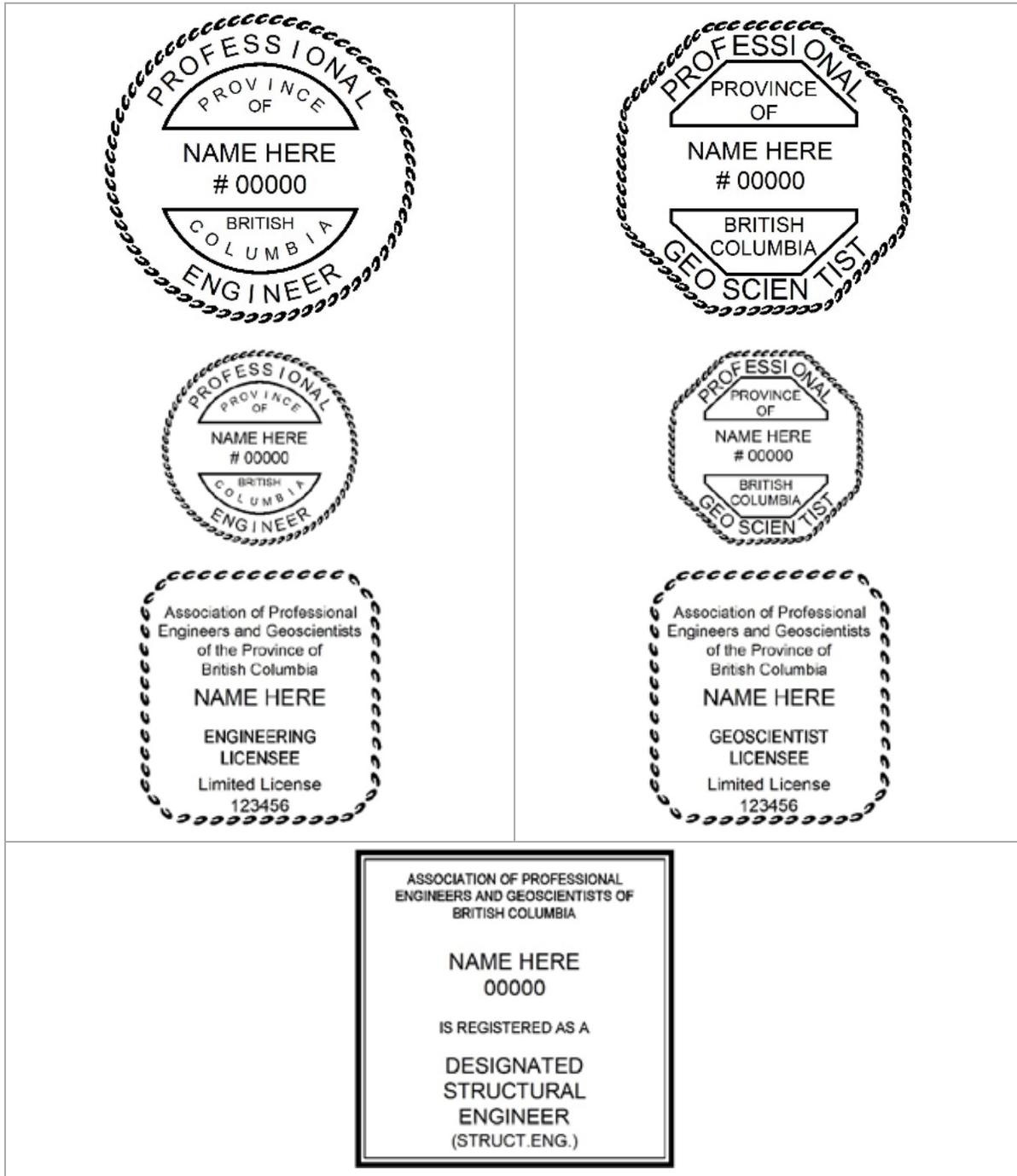


FIGURE 1: Examples of Engineers and Geoscientists BC Seals

3.7 SUGGESTED METHODS FOR ISSUING SEALED DOCUMENTS

3.7.1 GENERAL

3.7.1.1 The *Act* requires that Engineering/Geoscience Professionals Seal any Document that they prepare and intend to deliver or that has been prepared and will be delivered under their Direct Supervision. Before deciding whether an issued Document must be Sealed according to the *Act*, the Engineering/Geoscience Professional should ask the following question:

- Will those receiving the Document be relying on the engineering or geoscience content or is it being issued for information only?
 - If the Document will be relied on, whether for bidding, permitting, construction, implementation, use, or other reliance, Seal the Document.
 - If the Document is for information only, discussion purposes, or collaboration, or if the Document is not in its final form and it is obvious to the receiver that they cannot rely on it to price, construct, install, implement, or use, do not Seal the Document.

3.7.1.2 **Sections 3.7.2 Hard Copy Documents and Section 3.7.3 Electronically Issued Documents** describe some practical methods for issuing Documents that require Sealing in compliance with the *Act*.

3.7.2 HARD COPY DOCUMENTS

- Print the Document, apply the Seal to the hard copy Document, sign and date the Seal, and issue the hard copy Document. A Sealed set must be retained by the Engineering/Geoscience Professional as a record. This method may not be practical when issuing a large number of sets.
- Print the Document, apply the Seal to the hard copy Document, sign and date the Seal, reproduce multiple hard copies as needed, and issue the copies of the Document. The Engineering/Geoscience Professional does not need to originally Seal the copies. A Sealed set must be retained by the Engineering/Geoscience Professional as a record.
- Apply an electronic version of the Seal to the Document file, print the Document, sign and date the Seal on the original Document, reproduce multiple hard copies as needed, and issue the copies of the Document. Remove the Electronic Seal from the working Document files. The Engineering/Geoscience Professional does not need to originally Seal the copies. A Sealed set must be retained by the Engineering/Geoscience Professional as a record.
- Apply an electronic image of the Seal to the file with digital certification that meets Engineers and Geoscientists BC best practices, add fine print to the digital signature zone stating, "This document is a printed copy from a digitally signed and sealed original," and print the Document. A Sealed set must be

retained by the Engineering/Geoscience Professional as a record.

The Sealed set retained as a record may be either a hard copy original, a photocopy, a digitally signed and Sealed original, or a scanned electronic copy.

3.7.3 ELECTRONICALLY ISSUED DOCUMENTS

- Apply an electronic image of the Seal to the file with Digital Certification that meets Engineers and Geoscientists BC best practices and transmit the file to others. A Sealed set must be retained by the Engineering/Geoscience Professional as a record.

- Print the Document(s), apply the Seal to the original Document, sign and date the Seal, scan the hard copy of the originally Sealed Document, and issue the file created electronically. A Sealed set must be retained by the Engineering/Geoscience Professional as a record.

Note: The application of an image of the Engineering/Geoscience Professional's signature to a Document is not allowed, unless it is done in conjunction with an appropriate Digital Certificate. Any Engineering/Geoscience Professional who is aware of or authorizes the application of an image of their signature in conjunction with their professional Seal may be disciplined under the *Act*.

4.0 REFERENCES AND RELATED DOCUMENTS

Court Rules Act. Supreme Court Civil Rules. B.C. Reg. 168/2009.

Engineers and Geoscientists Act [RSBC 1996], Chapter 116.

Safety Authority Act [SBC 2003], Chapter 38.

Workers Compensation Act. Occupational Health & Safety Regulation. B.C. Reg. 296/97.

Association of Consulting Engineering Companies – British Columbia (ACEC-BC); Engineers and Geoscientists BC (formerly the Association of Professional Engineers and Geoscientists of BC [APEGBC]); and the Architectural Institute of British Columbia (AIBC). 2009. Guidelines on Intellectual Property (June 2009). Vancouver, BC: ACEC-BC/Engineers and Geoscientists BC/AIBC. [accessed: 2017 Nov 23]. <https://www.egbc.ca/Practice-Resources/Professional-Practice-Guidelines>.

BC Office of Housing and Construction Standards. 2012. BC Building Code. [accessed: 2017 Nov 23]. <http://www.bccodes.ca/>.

Engineers and Geoscientists BC. 2015. Professional Practice Guidelines: Shop Drawings. Version 2.0. Burnaby, BC, Canada: Engineers and Geoscientists BC. [accessed: 2017 Nov 23]. <https://www.egbc.ca/Practice-Resources/Professional-Practice-Guidelines>.

Engineers and Geoscientists BC. 2017. Quality Management Guidelines: Direct Supervision. Version 1.3. Burnaby, BC, Canada: Engineers and Geoscientists BC. [accessed: 2017 Nov 23]. <https://www.egbc.ca/Practice-Resources/Quality-Management-Guidelines>.

5.0 APPENDIX

Appendix A: When to Apply Seals

QUALITY MANAGEMENT GUIDELINES
USE OF SEAL

APPENDIX A: WHEN TO APPLY SEALS

STAGE OR TYPE OF DOCUMENT	INTERNALLY ISSUED CONCEPTUAL OR PRELIMINARY DOCUMENTS ¹ (not Intended or ready to be relied upon by others) For use solely within the entity in which it was created such as a company, government ministry, or an engineering/geoscience office or department	EXTERNALLY ISSUED OR FORMALLY PREPARED AND DELIVERED INTERNAL DOCUMENTS			RETAIN DOCUMENT?
		Delivered to external users such as clients, contractors, government ministries, or authorities having jurisdiction			
		Delivered to Internal users within the Organization such as other departments, branches, offices, or divisions for external or formal Internal use ²			
		SINGLE DISCIPLINE – SINGLE PROFESSIONAL OF RECORD	SINGLE DISCIPLINE – MULTIPLE PROFESSIONALS OF RECORD	MULTIPLE DISCIPLINES	
PRELIMINARY OR DRAFT DOCUMENT A work in progress; non-finalized Document ³	No	No, unless required by other laws or regulation If required, Seal as per originally issued Document and mark accordingly (e.g., PRELIMINARY, NOT FOR IMPLEMENTATION, NOT FOR CONSTRUCTION)	No, unless required by other laws or regulation If required, Seal as per originally issued Document and mark accordingly (e.g., PRELIMINARY, NOT FOR IMPLEMENTATION, NOT FOR CONSTRUCTION)	No, unless required by other laws or regulation If required, Seal as per originally issued Document and mark accordingly (e.g., PRELIMINARY, NOT FOR IMPLEMENTATION, NOT FOR CONSTRUCTION)	Yes, if submitted for legal or regulatory purposes
ESTIMATES	No	No, unless the Document contains engineering or geoscience content	No, unless the Document contains engineering or geoscience content	No, unless the Document contains engineering or geoscience content	Yes, if work awarded is based on the Document
BID, TENDER, PURCHASE, OR PROCUREMENT DOCUMENTS Documents prepared for any procurement process related to engineering and/or geoscience works, including any addenda incorporated in Documents during bidding process	No, if the tender, purchase or procurement Documents are being issued to bidders as information only and the bidders understand that they cannot rely on their completeness or accuracy (e.g., for budget pricing based on general works and degree of complexity)	Yes, Seal as per originally issued Document and mark accordingly (e.g., FOR TENDER ONLY, NOT FOR CONSTRUCTION, NOT FOR IMPLEMENTATION)	Yes, Seal as per originally issued Document and mark accordingly (e.g., FOR TENDER ONLY, NOT FOR CONSTRUCTION, NOT FOR IMPLEMENTATION)	Yes, Seal as per originally issued Document and mark accordingly (e.g., FOR TENDER ONLY, NOT FOR CONSTRUCTION, NOT FOR IMPLEMENTATION)	Yes

Continued...

¹ For discussion or review purposes only as the validity of the contents are not intended or ready to be relied on by others.

Refer to Internal Documents and Preliminary Documents in Sections 3.2.2 and 3.2.3 of this QM guideline.

² Refer to Internal Documents and Preliminary Documents in Sections 3.2.2 and 3.2.3 of this QM guideline.

³ Refer to Preliminary Documents in Section 3.2.3 of this QM guideline.

APPENDIX A: WHEN TO APPLY SEALS

STAGE OR TYPE OF DOCUMENT	INTERNALLY ISSUED CONCEPTUAL OR PRELIMINARY DOCUMENTS ¹ (not Intended or ready to be relied upon by others) For use solely within the entity in which it was created such as a company, government ministry, or an engineering/geoscience office or department	EXTERNALLY ISSUED OR FORMALLY PREPARED AND DELIVERED INTERNAL DOCUMENTS			RETAIN DOCUMENT?
		Delivered to external users such as clients, contractors, government ministries, or authorities having jurisdiction Delivered to Internal users within the Organization such as other departments, branches, offices, or divisions for external or formal Internal use ²			
		SINGLE DISCIPLINE – SINGLE PROFESSIONAL OF RECORD	SINGLE DISCIPLINE – MULTIPLE PROFESSIONALS OF RECORD	MULTIPLE DISCIPLINES	
STANDARD DRAWING⁴	No	Yes	Yes, each professional to Seal and qualify area of responsibility	Yes, each professional to Seal and qualify area of responsibility	Yes
SPECIFICATIONS	No	Yes	Yes, each professional to Seal and qualify area of responsibility	Yes, each professional to Seal and qualify area of responsibility	Yes
ISSUED FOR PERMITTING Documents prepared and deemed ready for permit purposes	No	Yes, Seal as per originally issued Document and mark accordingly ISSUED FOR PERMIT PURPOSES ONLY	Yes, Seal as per originally issued Document and mark accordingly ISSUED FOR PERMIT PURPOSES ONLY	Yes, Seal as per originally issued Document and mark accordingly ISSUED FOR PERMIT PURPOSES ONLY	Yes
DESIGN-BUILD	No, if the Documents are being used for internal purposes in preparation of the bid package	Yes, Seal as per guidance in Section 3.2.12	Yes, Seal as per guidance in Section 3.2.12	Yes, Seal as per guidance in Section 3.2.12	Yes
ISSUED FOR CONSTRUCTION, IMPLEMENTATION OF USE DOCUMENTS Documents prepared and deemed ready for construction, implementation of use, including reissued bid Documents where no changes were made during bidding	Not Applicable	Yes, Seal as per originally issued Document and mark accordingly ISSUED FOR CONSTRUCTION, IMPLEMENTATION OR USE If reissuing bid Documents, see guidance in Section 3.4.5	Yes, Seal as per originally issued Document and mark accordingly ISSUED FOR CONSTRUCTION, IMPLEMENTATION OR USE If reissuing bid Documents, see guidance in Section 3.4.5	Yes, Seal as per originally issued Document and mark accordingly ISSUED FOR CONSTRUCTION, IMPLEMENTATION OR USE If reissuing bid Documents, see guidance in Section 3.4.5	Yes

Continued...

⁴ Refer to Standard Drawings in Section 3.2.9 of this QM guideline. A professional who subsequently uses an unauthenticated standard Document must determine that it is suitable for the current purpose and authenticate it accordingly.

APPENDIX A: WHEN TO APPLY SEALS

STAGE OR TYPE OF DOCUMENT	INTERNALLY ISSUED CONCEPTUAL OR PRELIMINARY DOCUMENTS ¹ (not Intended or ready to be relied upon by others) For use solely within the entity in which it was created such as a company, government ministry, or an engineering/geoscience office or department	EXTERNALLY ISSUED OR FORMALLY PREPARED AND DELIVERED INTERNAL DOCUMENTS			RETAIN DOCUMENT?
		Delivered to external users such as clients, contractors, government ministries, or authorities having jurisdiction			
		Delivered to Internal users within the Organization such as other departments, branches, offices, or divisions for external or formal Internal use ²			
		SINGLE DISCIPLINE – SINGLE PROFESSIONAL OF RECORD	SINGLE DISCIPLINE – MULTIPLE PROFESSIONALS OF RECORD	MULTIPLE DISCIPLINES	
REVISED DOCUMENT⁵ Document changed from a master Document, or an earlier revised Document, by a different Engineering/Geoscience Professional	No	Yes, clearly identify revisions; Engineering/ Geoscience Professional revising Document must Seal, sign, and date revisions with date revised	Yes, clearly identify revisions; Engineering/ Geoscience Professional revising Document must Seal, sign, and date revisions with date revised	Yes, clearly identify revisions; Engineering/ Geoscience Professional revising Document must Seal, sign, and date revisions with date revised	Yes
FINAL DESIGN DRAWINGS Document that includes all design changes made by change order during construction, or by addenda during bidding, and not previously incorporated in Documents	Not Applicable	Yes, Seal as per originally issued Document	Yes, Seal as per originally issued Document	Yes, Seal as per originally issued Document	Yes
RECORD DRAWINGS⁶ Document that includes as-constructed or as-implemented information	Not Applicable	No, unless required to do so If required, Seal as per originally issued Document and, if Document includes as-constructed information supplied by others, add declaration not accepting responsibility for that information (see Clause 3.2.15.9)	No, unless required to do so If required, Seal as per originally issued Document and, if Document includes as-constructed information supplied by others, add declaration not accepting responsibility for that information (see Clause 3.2.15.9)	No, unless required to do so If required, Seal as per originally issued Document and, if Document includes as-constructed information supplied by others, add declaration not accepting responsibility for that information (see Clause 3.2.15.9)	Yes

Continued...

⁵ Refer to Section 3.4.4 of this QM guideline for further information regarding a different Professional of Record Sealing revised Documents.

⁶ Refer to Section 3.2.15 in this QM guideline for further information regarding Sealing record drawings.

APPENDIX A: WHEN TO APPLY SEALS

STAGE OR TYPE OF DOCUMENT	INTERNALLY ISSUED CONCEPTUAL OR PRELIMINARY DOCUMENTS ¹ (not Intended or ready to be relied upon by others) For use solely within the entity in which it was created such as a company, government ministry, or an engineering/geoscience office or department	EXTERNALLY ISSUED OR FORMALLY PREPARED AND DELIVERED INTERNAL DOCUMENTS			RETAIN DOCUMENT?
		Delivered to external users such as clients, contractors, government ministries, or authorities having jurisdiction			
		Delivered to Internal users within the Organization such as other departments, branches, offices, or divisions for external or formal Internal use ²			
		SINGLE DISCIPLINE – SINGLE PROFESSIONAL OF RECORD	SINGLE DISCIPLINE – MULTIPLE PROFESSIONALS OF RECORD	MULTIPLE DISCIPLINES	
FIELD DOCUMENTS⁷ Professional Documents prepared and issued in the field that contain opinions or decisions that change the issued for construction Documents	Not Applicable	Seal in the field or follow up by preparing in office, Sealing as per originally issued Document, and retaining in files This QM guideline does not require that a Sealed copy be sent to field recipient	Seal in the field or follow up by preparing in office, Sealing as per originally issued Document, and retaining in files This QM guideline does not require that a Sealed copy be sent to field recipient	Seal in the field or follow up by preparing in office, Sealing as per originally issued Document, and retaining in files This QM guideline does not require that a Sealed copy be sent to field recipient	Yes
SHOP DRAWINGS Documents prepared and designed by an Engineering/Geoscience Professional for a fabricator, supplier, equipment manufacturer, installer, or erector	No	Yes, Seal as per originally issued Document (see the association's <i>Professional Practice Guidelines: Shop Drawings</i>)	Yes, Seal as per originally issued Document (see the association's <i>Professional Practice Guidelines: Shop Drawings</i>)	Yes, Seal as per originally issued Document (see the association's <i>Professional Practice Guidelines: Shop Drawings</i>)	Yes
REPORTS Prepared by an Engineering/Geoscience Professional	No	Yes, next to the title of the author or signature in the report, whether at the beginning or end of the report	Yes, next to the title of the author or signature in the report, whether at the beginning or end of the report	Yes, next to the title of the author or signature in the report, whether at the beginning or end of the report	Yes
DRAWINGS, MAPS, OR PLANS BOUND INTO ANOTHER BOUND DOCUMENT Bound booklets containing reports, drawings, plans, maps	No	No, provided the bound Document is Sealed	No, provided the bound Document is Sealed	No, provided the bound Document is Sealed	Yes

Continued...

⁷ Refer to Section 3.2.11 of this QM guideline for further information regarding Sealing field Documents.

APPENDIX A: WHEN TO APPLY SEALS

STAGE OR TYPE OF DOCUMENT	INTERNALLY ISSUED CONCEPTUAL OR PRELIMINARY DOCUMENTS ¹ (not Intended or ready to be relied upon by others) For use solely within the entity in which it was created such as a company, government ministry, or an engineering/geoscience office or department	EXTERNALLY ISSUED OR FORMALLY PREPARED AND DELIVERED INTERNAL DOCUMENTS			RETAIN DOCUMENT?
		Delivered to external users such as clients, contractors, government ministries, or authorities having jurisdiction		Delivered to Internal users within the Organization such as other departments, branches, offices, or divisions for external or formal Internal use ²	
		SINGLE DISCIPLINE – SINGLE PROFESSIONAL OF RECORD	SINGLE DISCIPLINE – MULTIPLE PROFESSIONALS OF RECORD		
DOCUMENTS SUBMITTED IN RESPONSE TO DEMAND-SIDE LEGISLATION <i>(e.g., the Occupational Health and Safety Regulations, BC Building Code, or Safety Authority Act)</i>	Not Applicable	Yes, Seal as per originally issued Document	Yes, Seal as per originally issued Document	Yes, Seal as per originally issued Document	Yes
ELECTRONIC DOCUMENT Documents in digital format containing engineering or geoscience information	No	Yes, Seal as per originally issued Document using Electronic Seal with Digital Certificate technology that meets Engineers and Geoscientists BC best practices, or print to hard copy, Seal, sign, date, and retain in files	Yes, Seal as per originally issued Document using Electronic Seal with Digital Certificate technology that meets Engineers and Geoscientists BC best practices, or print to hard copy, Seal, sign, date, and retain in files	Yes, Seal as per originally issued Document using Electronic Seal with Digital Certificate technology that meets Engineers and Geoscientists BC best practices, or print to hard copy, Seal, sign, date, and retain in files	Yes
DOCUMENTS FOR NON-BC WORK Engineering or geoscience projects geographically located outside of BC	No	Seal only if a member or licensee in the respective jurisdiction where the works or projects are located Where there is no licensure requirement, Seal as an Engineering/ Geoscience Professional	Seal only if a member or licensee in the respective jurisdiction where the works or projects are located Where there is no licensure requirement, Seal as an Engineering/ Geoscience Professional	Seal only if a member or licensee in the respective jurisdiction where the works or projects are located Where there is no licensure requirement, Seal as an Engineering/ Geoscience Professional	Yes

Continued...

APPENDIX A: WHEN TO APPLY SEALS

STAGE OR TYPE OF DOCUMENT	INTERNALLY ISSUED CONCEPTUAL OR PRELIMINARY DOCUMENTS ¹ (not Intended or ready to be relied upon by others) For use solely within the entity in which it was created such as a company, government ministry, or an engineering/geoscience office or department	EXTERNALLY ISSUED OR FORMALLY PREPARED AND DELIVERED INTERNAL DOCUMENTS			RETAIN DOCUMENT?
		Delivered to external users such as clients, contractors, government ministries, or authorities having jurisdiction			
		Delivered to Internal users within the Organization such as other departments, branches, offices, or divisions for external or formal Internal use ²			
		SINGLE DISCIPLINE – SINGLE PROFESSIONAL OF RECORD	SINGLE DISCIPLINE – MULTIPLE PROFESSIONALS OF RECORD	MULTIPLE DISCIPLINES	
DOCUMENT PREPARED BY A NON-BC PROFESSIONAL Document prepared by an Engineering/Geoscience Professional in another jurisdiction who is not licensed to practice in BC	No	Seal as per originally issued Document only after sufficient review of the project/works and Document, to assume full responsibility for both	Seal as per originally issued Document only after sufficient review of the project/works and Document, to assume full responsibility for both	Seal as per originally issued Document only after sufficient review of the project/works and Document, to assume full responsibility for both	Yes, if Sealed
DOCUMENT NOT PREPARED UNDER DIRECT SUPERVISION Document prepared by someone not under the Direct Supervision of the Engineering/Geoscience Professional	No	Seal as per originally issued Document only after sufficient review of project/works and Document, to assume full responsibility for the Document including altering or revising the Document	Seal as per originally issued Document only after sufficient review of project/works and Document, to assume full responsibility for the Document including altering or revising the Document	Seal as per originally issued Document only after sufficient review of project/works and Document, to assume full responsibility for the Document including altering or revising the Document	Yes, if Sealed
TRANSLATED DOCUMENTS⁸ Document containing the same information in more than one language	No	Seal as per originally issued Document Seal translated Documents only if fluent in language to which Document translated	Seal as per originally issued Document Seal translated Documents only if fluent in language to which Document translated	Seal as per originally issued Document Seal translated Documents only if fluent in language to which Document translated	Yes, if Sealed
DOCUMENTS IN MULTIPLE LANGUAGES⁹	No	Seal in multiple languages only if fluent in those languages	Seal in multiple languages only if fluent in those languages	Seal in multiple languages only if fluent in those languages	Yes, if Sealed

⁸ Refer to Section 3.4.6 of this QM guideline for further information about Sealing translated Documents

⁹ Refer to Section 3.4.6 of this QM guideline for further information about Sealing Documents in multiple languages.

