

Guide
to the
Letters of Assurance
in the
B.C. Building Code
2006

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Building & Safety Standards Branch
Ministry of Housing & Social Development
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GUIDE TO THE LETTERS OF ASSURANCE

BC BUILDING CODE 2006

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GLOSSARY

AHJ	<i>Authority Having Jurisdiction</i>
BCBC	British Columbia Building Code 2006
CRP	<i>Coordinating Registered Professional</i>
RPR	<i>Registered Professional of Record</i>
SRP	<i>Supporting Registered Professional</i>

FOREWORD

This Guide to the Letters of Assurance in the Building Code was jointly prepared by, and is endorsed by, the Architectural Institute of BC, the Association of Professional Engineers and Geoscientists of BC, the Building Officials' Association of BC, the Union of BC Municipalities, and the Building and Safety Standards Branch of the Province of British Columbia.

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1. PURPOSE OF THE GUIDE

The purpose of this Guide to Letters of Assurance in the BC Building Code is to foster the appropriate and consistent use and application of Building Code Letters of Assurance. It provides guidance on

- The scope and intent of BC Building Code Letters of Assurance
- Roles and responsibilities with respect to Letters of Assurance
- When and how Letters of Assurance should be completed

This Guide provides guidance only on BC Building Code requirements for Letters of Assurance. It does not address scope of practice or other issues for which the regulatory bodies for *registered professionals*, the AIBC and the APEGBC, are responsible.

2. DEFINED TERMS IN THE LETTERS OF ASSURANCE

Letters of Assurance, otherwise known as Schedules A, B, C-A and C-B, are legal accountability documents under Section 2.2.7 in Part 2 of Division C of the BC Building Code. All italicized words in the Letters of Assurance are defined terms in the BC Building Code and have the same meaning set out in that regulation.

3. SCOPE OF LETTERS OF ASSURANCE

BC Building Code 2006 Requirements for Design and Field Review

Section 2.2.7 in Part 2 of Division C of the BC Building Code specifies when Letters of Assurance are required.

2.2.7. Professional Design and Review

2.2.7.1. Application

- 1) The requirements of this Subsection apply to
 - a) *buildings* within the scope of Part 3 of Division B,
 - b) *buildings* within the scope of Part 9 of Division B that are designed with common egress systems for the occupants and require the use of *firewalls* according to Article 1.3.3.4. of Division A, or
 - c) the following, in respect of *buildings* within the scope of Part 9 of Division B other than *buildings* described in Clause (b),
 - i) structural components that are not within the scope of Part 9 of Division B (See Appendix A.),
 - ii) geotechnical conditions at *building* sites that fall outside the scope of Part 9 of Division B,
 - iii) sprinkler systems designed to NFPA 13, "Installation of Sprinkler Systems", or
 - iv) standpipe and hose systems designed to NFPA 14, "Installation of Standpipe and Hose Systems".

Building Code Letters of Assurance apply to all Part 3 *buildings*. Letters of Assurance do not apply to Part 9 *buildings*, except for Part 9 *buildings* or their components that fall within the scope of Subsection 2.2.7. in Part 2 of Division C.

Chapter 8 ("Application of Letters of Assurance to Part 9 Buildings") of this Guide provides additional information and guidance on aspects of Part 9 projects to which Letters of Assurance may apply.

Similarly, *alterations* to existing *buildings*, including tenant improvements, will require Letters of Assurance if the work involves components that fall within the scope of Subsection 2.2.7. in Part 2 of Division C. Additional information on the application of Building Code Letters of Assurance to *alterations* and tenant improvements to existing *buildings* is provided in Chapter 10 of this Guide ("Application of Letters of Assurance to Building Alterations").

Information on the application of Building Code Letters of Assurance to phased building permits and phased occupancies is provided in Chapter 11 of this Guide ("Application of Letters of Assurance to Phased Building Permits and Occupancies").

What Are Letters of Assurance

Letters of Assurance are legal accountability documents that are required under the Building Code, intended to clearly identify the responsibilities of key players in a construction project. Uniform, mandatory Letters of Assurance have been included as Schedules in the Building Code since December 1992.

The Building Code requires Letters of Assurance in specific instances to document the parties responsible for design and *field review* of construction, and to obtain their professional assurances that the work substantially complies with the requirements of the Building Code, and that the requisite *field reviews* have been completed.

Letters of Assurance, located in Division C of the BC Building Code, consist of the following Schedules:

Schedule A – Confirmation of Commitment by Owner and Coordinating Registered Professional

This assurance by the *owner* and the *coordinating registered professional* must be submitted to the *authority having jurisdiction* at the time of building permit application; submission of Schedule A is a necessary condition for issuing a building permit.

This Schedule confirms that the *owner* has retained a *coordinating registered professional* who will

- ascertain which disciplines are required on the project, and which *registered professionals of record* will need to be retained, and
- coordinate design and *field review* and functional testing of fire protection and life safety systems by all *registered professionals of record* on the project.



See Chapter 5 “Roles and Responsibilities For Letters of Assurance” for further details on the responsibilities of *owners* and *coordinating registered professionals* with respect to Schedule A.

Schedule B – Assurance of Professional Design and Commitment for Field Review & Summary of Design and Field Review Requirements

The Schedule B for each *registered professional of record* retained on the project must be submitted to the *authority having jurisdiction* along with Schedule A at the time of building permit application. Submission of the full suite of Letters of Assurance (one Schedule A, and a Schedule B for each discipline of *registered professional of record*) is a necessary condition for issuing a building permit.

The complete set of Schedules B serves to document all the registered professionals of record who have taken responsibility for the applicable discipline of a project.

Schedule B confirms that the *registered professional of record* signing and sealing it will be responsible for design and *field review* within the discipline(s) which he or she has initialed.

The Schedule B also serves to document some of the specific items within each discipline for which a *registered professional of record* will be undertaking design, *field review* and functional testing.



See Chapter 5 “Roles and Responsibilities For Letters of Assurance” for further details on the responsibilities of *coordinating registered professionals* and *registered professionals of record* with respect to Schedule B.

Schedule C-A – Assurance of Coordination of Professional Field Review

Before an occupancy permit is issued or a final inspection is made by the *authority having jurisdiction*, the *coordinating registered professional* must provide the *authority having jurisdiction* with a Schedule C-A.

Schedule C-A provides assurance that the *coordinating registered professional* has done what he or she undertook to do on the Schedule A, specifically:

- coordinate the design and *field reviews* of the *registered professionals of record* retained on the project, and
- coordinate the functional testing of the fire protection and life safety systems to demonstrate that they substantially comply with:
 - the BC Building Code, except for construction safety aspects, and
 - the *registered professionals’ of record* project designs (i.e., with the plans and documents submitted for building permit application).



See Chapter 5 “Roles and Responsibilities For Letters of Assurance” for further details on the responsibilities of *owners* and *coordinating registered professionals* with respect to Schedule C-A.

See Chapter 11 “Application of Letters of Assurance to Phased Building Permits and Occupancies” for information on the acceptable use of Letters of Assurance when occupancy permits are sought for portions of a building project.

Schedule C-B – Assurance of Professional Field Review and Compliance

A separate Schedule C-B must be completed for each Schedule B and submitted to the *authority having jurisdiction* before the *authority having jurisdiction* issues an occupancy permit or makes a final inspection.

Schedule C-B provides assurance that the *registered professional of record* for that discipline has done what he or she undertook to do on the Schedule B, specifically:

- completed *field review* of the components under the respective Schedule B discipline
- provides assurance that the items outlined on Schedule B substantially comply
 - with the BC Building Code, except for construction safety aspects, and
 - with the *registered professional of record's* design (i.e., with the plans and documents attached to the building permit application).



See Chapter 5 “Roles and Responsibilities For Letters of Assurance” for further details on the responsibilities of *coordinating registered professionals* and *registered professionals of record* with respect to Schedule C-B.

See Chapter 11 “Application of Letters of Assurance to Phased Building Permits and Occupancies” for information on the acceptable use of Letters of Assurance when occupancy permits are sought for portions of building project.

What Letters of Assurance Are Not

The Schedules outlined above are the full extent of BC Building Code Letters of Assurance. Other types of accountability documents, including those commonly referred to as “Owner’s Undertaking Letters”, “Schedule D” or “Schedule E”, or are **not** required under the BC Building Code and should not be confused with BC Building Code Letters of Assurance. Similarly BC Building Code Letters of Assurance should not be confused with other accountability documents that may be employed between *registered professionals of record* and supporting *registered professionals*, or by *authorities having jurisdiction* on matters that are outside the scope of Section 2.2.7 in Part 2 of Division C of the BC Building Code 2006 (Refer to Section 4 in this Guide).

These additional accountability documents may include written commitments by *registered professionals* with respect to enhanced building envelope services, professional liability insurance, and structural concept review, as well as some standardized forms of written commitment for use between *registered professionals of record and supporting registered professionals* such as Schedules S-B and S-C prepared by AIBC and APEGBC for use by supporting *registered professionals*. These schedules, and guidance on their use, can be obtained from AIBC or APEGBC.

These other forms of written commitment are not part of the BC Building Code 2006 requirements for Letters of Assurance, and are not addressed in this guide. Questions regarding them should be addressed to the AIBC or the APEGBC, the regulatory bodies for *registered professionals*.

BC Building Code Letters of Assurance do not replace any third party monitoring activities (e.g., plan reviews and site inspections) that may be provided by *authorities having jurisdiction*.

4. THE COMMUNITY CHARTER, AND OTHER MEANS OF ACHIEVING ACCOUNTABILITY

Authorities having jurisdiction are accorded specific powers with respect to building regulation under the *Local Government Act* and the *Community Charter*. (The *Local Government Act* and the *Community Charter* do not apply to the City of Vancouver. Refer to the Vancouver Charter for the City of Vancouver's building regulation authority).

The *Community Charter* and the *Local Government Act* authorize *local governments* to require means of accountability on specific matters that are not addressed within the BC Building Code. Local governments may, on the basis of site conditions, complexity of developments, or aspects of developments, require by bylaw that applicants for building permits provide "certification" from a *registered professional* that plans submitted with a permit application comply with the BC Building Code or other laws with respect to safety.

Under the applicable legislation, local governments may also require the involvement of registered professionals in matters such as land subdivision, development permits and building permits. Local governments may require documentation (e.g. a geotechnical report) from qualified professionals using similar language and format to the BC Building Code Letters of Assurance. **The BC Building Code Letters of Assurance cannot be used for these purposes.**

BC Building Code Letters of Assurance only apply to projects, or components of projects, that fall within the scope of Section 2.2.7 in Part 2 of Division C of the BC Building Code 2006.

Questions regarding means of accountability that are outside the scope of BC Building Code Letters of Assurance should be directed to the relevant local government and the relevant *registered professional* regulatory body.

5. ROLES AND RESPONSIBILITIES FOR LETTERS OF ASSURANCE

Key Players in Design and Field Review

Most building projects described in Section 2.2.7 in Part 2 of Division C involve more than one *registered professional*, and often more than one *registered professional* within a single discipline. Each *registered professional* is responsible for the design and *field review* of the components of the plans and supporting documents prepared by them.

The following diagrams provide an overview of the functional relationships between the three tiers of *registered professional* that may be retained on a given project:

- the *coordinating registered professional*
- the *registered professionals of record* for each discipline
- the supporting *registered professionals* who may be retained within a discipline

The *coordinating registered professional* is responsible for coordinating design and *field reviews* by all the various *registered professionals of record* retained on the project, and advising the constructor and the RPRs that *field review* reports should be available on-site for examination by the *authority having jurisdiction*.

The *registered professional of record* is responsible for the design and *field review* of the components of the plans and supporting documents prepared by them. The RPR is also responsible for reviewing the shop drawings prepared under the direction of any supporting *registered professionals* within that discipline, and either performing the *field review* of those components or satisfying him or herself that the necessary *field reviews* have been performed by the supporting *registered professional*.

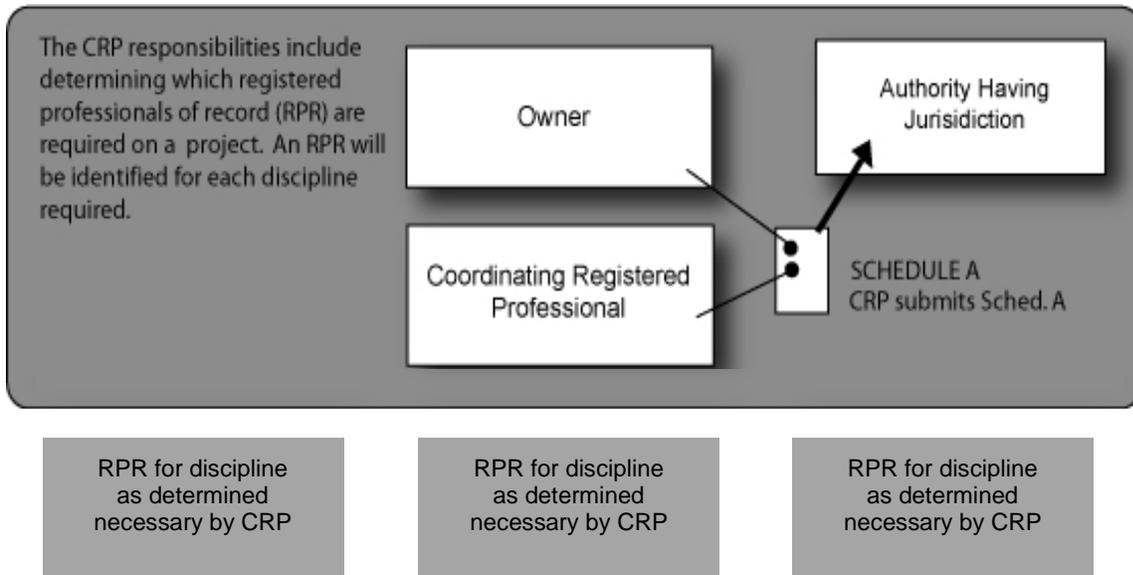
The *registered professionals of record* document their commitment to provide *field review*, and provide assurance that *field reviews* within their particular disciplines have been completed by submitting Letters of Assurance (Schedules B and C-B) to the *coordinating registered professional*.

Supporting *registered professionals* do not complete BC Building Code Letters of Assurance, but, at the discretion of the RPR, may be required to provide the RPR for that discipline with *field review* reports or other appropriate documentation such as Schedules S-B and S-C showing that they have reviewed the work related to their design and have determined that it substantially complies with applicable Code requirements and with their design.

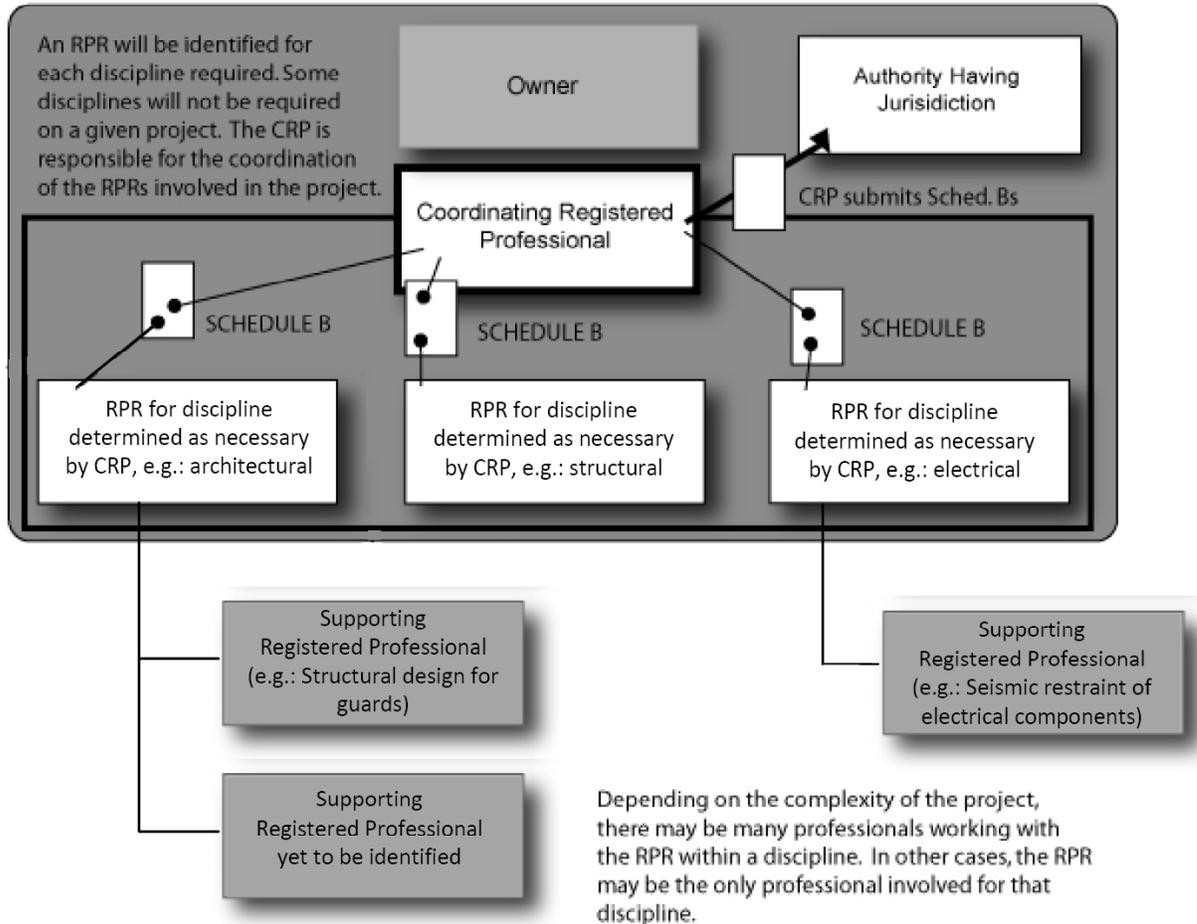
Schedules S-B and S-C have been developed cooperatively by the AIBC and the APEGBC for use by supporting *registered professionals*, and their use is strongly encouraged.

Field review is a defined term in the BC Building Code. It refers to a review of the work at a project or fabrication site that a *registered professional* in his or her professional discretion considers necessary to ascertain whether the work substantially complies with the design plans and supporting documents.

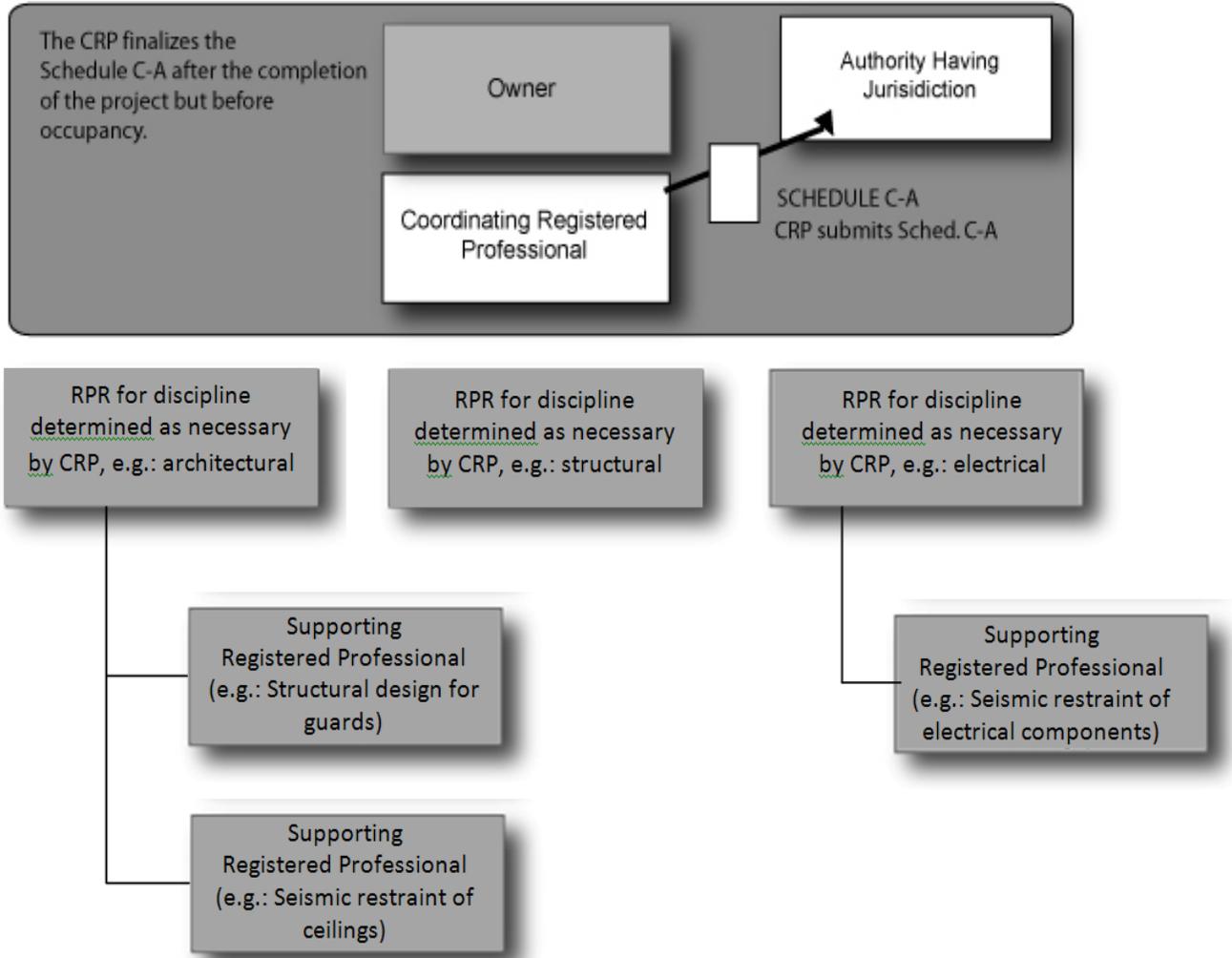
Schedule A – Functional Relationships



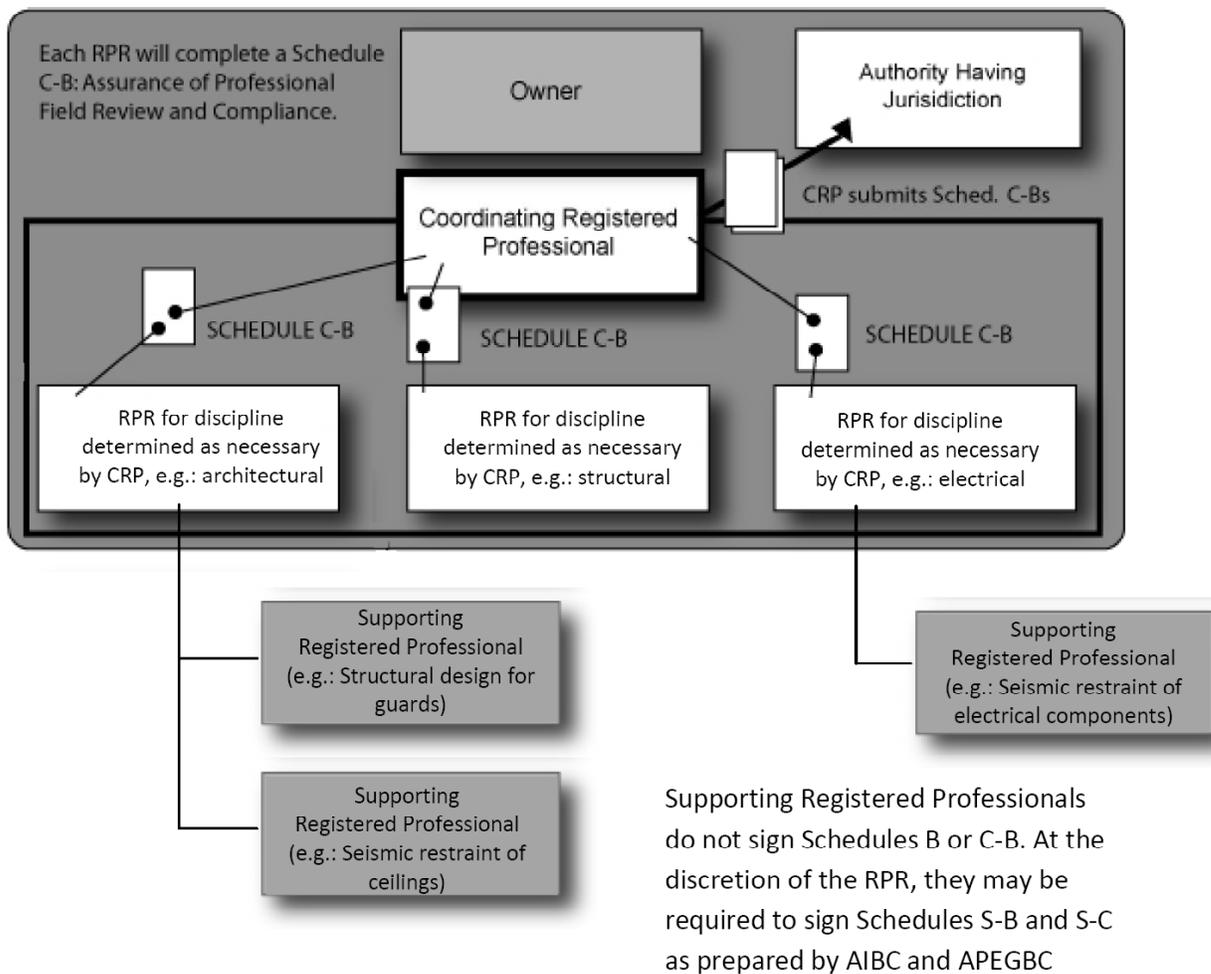
Schedule B – Functional Relationships



Schedule C-A – Functional Relationships



Schedule C-B – Functional Relationships



Owners

The term “*owner*” in the BC Building Code refers to the person, firm or corporation who controls the property under consideration.

See Chapter 10 (“Application of Letters of Assurance to Building Alterations”) for information on the tenant’s roles and responsibilities during tenant improvements.

Except as noted below, for any project that requires Letters of Assurance, the *owner* is responsible for retaining a *coordinating registered professional* and completing a Schedule A before the building permit is issued.

- Some Part 9 buildings as described in Clause 2.2.7.1.(1)(c) may not require a CRP if the extent of work is relatively simple and the designs of the various RPRs have limited interaction,
- Renovations and tenant improvements may not require a CRP if the work is relatively simple and the designs of the various RPRs have limited interaction,
- The RPR should review the project specific requirements with the AHJ to determine if a CRP is required for such projects.

By signing Schedule A, the *owner* confirms that he or she

- is either the *owner* of the property in question or is the authorized agent of the *owner*. An agent’s letter of appointment must be attached
- has retained the *coordinating registered professional* to coordinate the design work and *field reviews* of the project
- will notify the *authority having jurisdiction* immediately if that *coordinating registered professional* ceases to be retained on the project, even if the firm does not change, and
- will ensure that work on the project ceases until another *coordinating registered professional* has been retained and a new Schedule A has been submitted

The *owner* is responsible for ensuring that the *authority having jurisdiction* receives all Schedules C-A and C-B after completion of the project and before the final inspection by the *authority having jurisdiction*, per Clause 2.2.7.2.(1)(b) in Part 2 of Division C. Typically, the *coordinating registered professional* collects all Schedules and submits them to the *authority having jurisdiction* on the *owner’s* behalf.

Coordinating Registered Professionals

The *coordinating registered professional* is responsible for coordinating all *registered professionals of record* for the project in order to meet the objectives of the BC Building Code, except for construction safety aspects. This coordination must be undertaken continuously throughout the duration of the design and construction process. The *coordinating registered professional* is responsible for coordinating the work of each *registered professional of record*, and for the review and coordination of design documents prepared by the RPRs throughout the term of the project. The *coordinating registered professional* is the contact point between the *authority having jurisdiction*, the *owner*, and each *registered professional of record*, and, as such, is responsible for facilitating communication between the various parties.

Each individual *registered professional* is responsible for his or her own design and *field review*.

It is the *coordinating registered professional's* responsibility to review that all Letters of Assurance for the project are completed correctly. The *coordinating registered professional* submits the completed Letters of Assurance to the *authority having jurisdiction* on the *owner's* behalf.

By signing Schedule A, the *coordinating registered professional* confirms that he or she

- will coordinate the design work and *field reviews* of all *registered professionals of record* retained for the project in order to ascertain that the design substantially complies with the BC Building Code, except for construction safety aspects
- will notify the *authority having jurisdiction* immediately if he or she ceases to be retained on the project
- will provide the *authority having jurisdiction* with the Schedule B for each *registered professional of record* retained on the project
- will notify the *authority having jurisdiction* immediately if any *registered professional of record* ceases to be retained on the project, even if the firm employing the *registered professionals* does not change

The *coordinating registered professional* is responsible for making sure that a *registered professional of record* for each discipline completes a Schedule B and a Schedule C-B at the appropriate times during the project. The *coordinating registered professional* must initial each of these Schedules, and submit them, on behalf of the *owner*, to the *authority having jurisdiction*.

By signing Schedule C-A at the end of the project, the *coordinating registered professional* confirms that:

- he or she has fulfilled his or her responsibilities for coordination of *field review* by all the *registered professionals of record*
- he or she has fulfilled his or her responsibilities for coordination of the functional testing of fire protection and life safety systems (see A-2.7.7.3. in Appendix A of Division C - Section 1.0 for further details), and
- he or she has collected the appropriate Schedules C-B from the RPRs to confirm that these systems substantially comply with both the BC Building Code and with the plans and supporting documents that were submitted with the building permit application



A-2.2.7.3.in Appendix A of Division C of the BC Building Code – Section 3.2.1 provides further guidance on the roles and responsibilities of the *coordinating registered professional*.

Registered Professionals of Record and Supporting Registered Professionals

The *registered professional of record* is the *registered professional* retained by the *owner* for the provision of the main part of the professional services within a particular discipline. The *registered professional of record* is also responsible for the review of the design documents prepared by any supporting *registered professionals* retained on the project ***within that discipline***.

The *registered professional of record* for each discipline must complete a Schedule B at the time of building permit application. By signing Schedule B, the *registered professional of record*:

- Identifies the professional discipline (i.e., architectural, structural, mechanical, plumbing, fire suppression systems, electrical, or geotechnical) for which he or she will be responsible (see A-2.2.7.3. of Appendix A of Division C - Section 3 for further details)
- Confirms that the designs that he or she has prepared substantially comply with the requirements of the BC Building Code, except for construction safety aspects (see A-2.2.7.3. of Appendix A of Division C - Section 1.0 for further details)
- Confirms that he or she will take responsibility for the *field review* during construction within their discipline
- Confirms his or her responsibility for determining that *field review* has been undertaken on the work of any supporting *registered professionals* retained on the project within that discipline
- Commits to notifying the *authority having jurisdiction* immediately if he or she ceases to be retained on the project, even if the firm does not change

Except under special circumstances, only one Schedule B and Schedule C-B should be completed and submitted by one *registered professional of record* for each discipline.



A-2.2.7.2.(1)(b) in Appendix A of Division C of the BC Building Code, provide further guidance on the roles and responsibilities of *registered professionals of record*.

Authorities Having Jurisdiction

Authorities having jurisdiction collect signed and sealed Letters of Assurance from the *coordinating registered professionals* at the appropriate times during the building project. Although, in the first instance, the *coordinating registered professional* is responsible for delivering the Letters of Assurance appropriately and correctly completed, the *authority having jurisdiction* should confirm that they have been completed properly—i.e., that no information is missing; items have not been struck out unless they do not apply to the project; and that they do not contain inappropriate notations or qualifications, such as ‘interim’, ‘partial’, with ‘expiration dates’ or noting of deficiencies (refer to Chapter 11 of this Guide for appropriate annotations for phased building permits or phased occupancies).

Authorities having jurisdiction must not request or accept BC Building Code Letters of Assurance on projects that are outside the scope of Section 2.2.7. in Part 2 of Division C

6. HOW TO COMPLETE AND SUBMIT LETTERS OF ASSURANCE

Letters of Assurance are legal documents, and as such, carry legal implications for the *owners* and *registered professionals* who complete them. The Letters of Assurance and this Guide were developed in close consultation with the Union of BC Municipalities, the Building Officials' Association of BC, the Architectural Institute of BC, and the Association of Professional Engineers and Geoscientists of BC, to confirm appropriate accountability in protecting public safety while not imposing inappropriate risks or liabilities on the *registered professionals* who submit them. The precise wording of the Schedules is extremely critical. **BC Building Code Letters of Assurance should not be altered or used for purposes for which they were not intended.**

Each Schedule contains precise instructions for its completion. Schedules must be completed according to these instructions.

Registered professionals of record completing Schedule B may cross off and initial any items that do not apply to **that project**. For example, crossing off 'elevators' on a project which does not have any elevators.

An item must not be crossed off if it applies to the project, even if the registered professional of record does not consider it to be part of his or her responsibility. No other items on Letters of Assurance may be crossed off, and their language may not be altered or qualified in any way, except as noted below:

- Refer to Chapter 7 of this Guide for qualifications that may be appropriate when there are changes to the CRP or RPR,
- Refer to Chapter 8 of this Guide for qualifications that may be appropriate to identify the applicable portions of Part 9 buildings,
- Refer to Chapter 10 of this Guide for qualifications that may be appropriate to identify the applicable portions of a building for alterations or tenant improvements to existing buildings,
- Refer to Chapter 11 of this Guide for qualifications that are acceptable for phased building permits and phased occupancies.

Letters must be submitted to the *authority having jurisdiction* by the *coordinating registered professional* at the times indicated on the Letters themselves. The only exceptions are Schedules B when a *registered professional of record* is retained after the building permit has been issued (e.g. fire suppression system design).

In such cases, the *coordinating registered professional* must obtain and submit a Schedule B as soon as the *registered professional of record* has completed their plans and supporting documents, as well as perform the necessary coordination of this 'late' discipline with the other disciplines

7. DEALING WITH CHANGES AFTER LETTERS OF ASSURANCE ARE SUBMITTED

When An Additional Registered Professional Becomes Involved

The *coordinating registered professional* must advise the *owner* and the *authority having jurisdiction* immediately of any additions to the *registered professionals of record* that occur after Letters of Assurance have been submitted. For example, if it was initially believed that no fire suppression system would be necessary, and then subsequently it is determined that one will be installed.

If a new *registered professional of record* is retained by the *owner* during a project, the *coordinating registered professional* is responsible for obtaining a completed Schedule B from the new *registered professional of record*, once the new RPR's plans and supporting documents are complete, and to submit it to the *authority having jurisdiction* on the *owner's* behalf.

If the additional *registered professional* is a supporting *registered professional* within a discipline, he or she does not complete Letters of Assurance. Rather, the *registered professional of record* for that discipline is responsible for obtaining appropriate alternate documentation of the new supporting *registered professional's* design and *field review* responsibilities (e.g. Schedules S-B and S-C prepared by AIBC and APEGBC). The *registered professional of record* must keep this documentation available for review by the *coordinating registered professional* and the *authority having jurisdiction*, upon request.

When There is a Change of Coordinating Registered Professional or Registered Professional of Record During Construction

The Letters of Assurance were developed on the principle that the CRP and the RPRs maintain their involvement throughout the entire design and field review process. It was contemplated that the CRP who signs the Schedule A be the same CRP who signs the Schedule C-A. It is also contemplated that the RPR who signs a Schedule B be the same RPR who signs the Schedule C-B. In order to maintain clear divisions of responsibility and to avoid accountability gaps, this fundamental principle is the preferred approach for all projects.

There may be rare circumstances where this principle cannot be implemented due to a variety of causes. For example:

- The original CRP or RPR is no longer available due to illness or death
- The original CRP or RPR is no longer available due to moving out of the country
- The professional services contract between the owner and the original CRP or RPR is terminated
- The original CRP or RPR transfers to a different firm and the owner maintains the professional services contract with the original firm. This original firm then assigns a new RPR to continue with the field review services.

If any of the above mentioned circumstances occurs, as required by Article 2.2.7.4. in Part 2 of Division C, work must stop, the *authority having jurisdiction* must be notified, and the transition of responsibilities to the new *registered professional of record* must be clarified and documented on new Letters of Assurance before work can resume.

If there is a change in the CRP during construction, the incoming CRP must complete and submit a new Schedule A to the AHJ. This new Schedule A may require some annotations to clearly delineate the division of responsibility between the outgoing CRP and the incoming CRP.

If there is a change in the RPR during construction, the incoming RPR must complete and submit a new Schedule B to the CRP for submission to the AHJ. This new Schedule B may require some annotations to clearly delineate the division of responsibility between the outgoing RPR and the incoming RPR.

The form of the annotations on the new Schedules A & B will vary depending upon the project specific status.

In some of the circumstances noted above, the original outgoing CRP or RPR may remain available for consultation with the incoming CRP or RPR. In this case, the continuity of information flow is maintained and there is little likelihood of any accountability gaps in the project. Obviously this is the preferred approach to dealing with changes in CRP or RPR during construction.

On the other hand, there will be circumstances where the original outgoing CRP or RPR is not available for consultation with the incoming CRP or RPR. In this case, it is much more challenging to address the division of responsibilities between the outgoing and incoming CRP or RPR.

Wherever possible, the outgoing CRP or RPR should provide to the incoming CRP or RPR all of their field review reports and other relevant documents.

Each project will have unique requirements depending upon the circumstances of the change in personnel. The incoming CRP or RPR should consult with the AHJ to determine the appropriate course of action with respect to the submission of their new Schedules B and C-B.

When There is a Change of Supporting Registered Professional During Construction

The same principle and process applies to changes of supporting *registered professionals* during the course of the project, except that supporting registered professionals within a discipline do not complete Letters of Assurance.

8. APPLICATION OF LETTERS OF ASSURANCE TO PART 9 BUILDINGS

Letters of Assurance are generally not intended to apply to Part 9 *buildings*. Only those Part 9 *buildings* or their components that fall within the scope of Section 2.2.7. in Part 2 of Division C are subject to Letters of Assurance.

For example, Letters of Assurance are required for a structural component in a Part 9 *building* that falls within the scope of Part 4 of Division B. Letters of Assurance are required for that structural component only. Beams with point loads, girder trusses, trusses with spans greater than 12.2 meters and proprietary engineered products are some examples of structural components that may exceed the scope of Part 9 of Division B and will require a *registered professional* to assume responsibility for the substantial code compliance of such components.

If a Part 9 *building* contains numerous Part 4 components, many AHJs require that the scope of the letter of assurance include the structural design and field review for the entire building. The RPR should review with the AHJ with respect to the local requirements for such circumstances.

Factory-Built Roof Trusses

Factory-built roof trusses that are designed under Article 9.23.13.11 in Part 9 of Division B of the BC Building Code do not require Letters of Assurance from the truss designer. However, in some cases *authorities having jurisdiction* request a written commitment from a *registered professional* that the girder reactions and loads are satisfactory. These written commitments should not take the form of BC Building Code Letters of Assurance.

Factory-built roof trusses that do not fall within the limits defined in Article 9.23.13.11. in Part 9 of Division B are within the scope of Part 4 of Division B and require Letters of Assurance.

Beams

Uniformly loaded steel beams and glued-laminated floor beams which can be sized from Table 9.23.4.3 and Table A-11 in Part 9 of Division B, Appendix A respectively do not require Letters of Assurance from the beam designer. In some cases, *authorities having jurisdiction* request a written commitment from a *registered professional* that the beams have been designed according to Tables 9.23.4.3 and A-11. These written commitments are not required under the BC Building Code 2006, and must not take the form of BC Building Code Letters of Assurance.

Beams with non-uniform or concentrated loads fall within the scope of Part 4 of Division B and require Letters of Assurance.

Alterations

Alterations to Part 9 *buildings*, particularly to commercial *buildings* that are subject to changes of use or occupancy, may sometimes trigger the need for Letters of Assurance. More information on the possible implications of building *alterations* is provided in Chapter 10 “Application of Letters of Assurance to Building Alterations and Tenant Improvements”.

9. APPLICATION OF LETTERS OF ASSURANCE TO GEOTECHNICAL COMPONENTS

For Part 3 buildings, a subsurface investigation by a *registered professional of record* is mandated by Sentence 4.2.2.1.(1) in Part 4 of Division B. The *coordinating registered professional* will submit to the AHJ Schedule B from the *registered professional of record* for the geotechnical discipline at the time of building permit application. Due to the uncertain nature of geotechnical conditions, the geotechnical design may be based on initial subsurface investigation. During the *field review* process the initial geotechnical design may have to be altered to suit the site conditions. The *coordinating registered professional* will submit Schedule C-B from the *registered professional of record* for the geotechnical discipline at the time of occupancy application.

For Part 9 buildings, in accordance with Sub-clause 2.2.7.1.(1)(c)(ii) in Part 2 of Division C, a subsurface investigation by a *registered professional of record* is only required when the geotechnical conditions at the building site fall outside the scope of Part 9 in Division B. This would include any of the following conditions:

- the allowable bearing pressure is less than 75 kPa
- *foundations* that are supported on compacted fill that exceeds 300 mm in thickness
- *foundations* that are supported on permafrost
- *foundations* that may be subject to slope stability
- underpinning
- *deep foundations*
- *foundation* walls that exceed the criteria of Subsection 9.15.4. in Part 9 of Division B, or
- retaining walls that are subject to lateral earth pressure, other than *foundation* walls, where the retained height exceeds 1.5 m

Due to the uncertain nature of geotechnical conditions, the conditions noted above may not become apparent until after the excavation has commenced. In such a case, the *registered professional of record* for the geotechnical discipline will undertake their subsurface investigation, provide the builder with the appropriate geotechnical design and submit their Schedule B to the CRP for submission to the *authority having jurisdiction* upon completion of their design. The RPR will conduct *field reviews* during construction and submit their Schedule C-B to the CRP for submission to the *authority having jurisdiction* prior to occupancy.

10. APPLICATION OF LETTERS OF ASSURANCE TO BUILDING ALTERATIONS AND TENANT IMPROVEMENTS

While it is difficult to make definitive statements about when the Letters of Assurance are required on existing buildings, BC Building Code requirements for Letters of Assurance are not intended to apply to simple building *alterations* such as simple tenant improvements. Only when a building *alteration* or tenant improvement falls within the scope of Section 2.2.7 in Part 2 of Division C are Letters of Assurance required.

Simple building *alterations* that meet all of the following criteria typically do not require Letters of Assurance:

- no significant construction is involved
- the improvements involve no structural, mechanical or electrical components that would require the retention of a *registered professional*
- the improvements involve no fire and life safety components or any access requirements for persons with disabilities

Letters of Assurance are typically required for:

- *Alterations*, including tenant improvements, to Part 3 buildings that involve changes to *fire separations*, or significant changes to egress systems
- *Alterations*, including tenant improvements, to Part 9 buildings that involve components that fall outside the scope of Part 9 of the BC Building Code as described in Clause 2.2.7.1.(2)(c) in Part 2 of Division C

Building *alterations* or tenant improvements that are associated with a “change in use or occupancy”, such as *alterations* to a Part 3 *building*, or change in use or occupancy to a Part 9 building which will make it a Part 3 buildings, might trigger significant BC Building Code requirements not only for the *alteration* itself but also for the upgrading of the base *building*. This should be determined at the earliest opportunity and will require Letters of Assurance from a *coordinating registered professional* and from each *registered professional of record*.

By signing and sealing a Letter of Assurance with respect to a building *alteration* or tenant improvement, a *registered professional* is providing assurance that the *alteration* substantially complies with the BC Building Code, and has not created a non-conformity or substantially increased the level of non-conformity of the existing *building*.

11. APPLICATION OF LETTERS OF ASSURANCE TO PHASED BUILDING PERMITS AND PHASED OCCUPANCIES

Acceptable Use of Letters of Assurance for Phased Building Permits

Some authorities having jurisdiction allow phased building permit applications in order to accommodate fast-tracked projects (e.g. excavation and shoring phase, foundation phase, full building permit phase). In this instance the design of the full project may not be complete at the time of building permit application for the initial phases.

Since Schedule B refers to “plans and supporting documents prepared by this *registered professional of record*”, it is appropriate that Schedules B only be submitted to the *authority having jurisdiction* once the plans and supporting documents are complete.

For example, for an excavation and shoring phase, the only Letters that should be submitted for the building permit would be the Schedule A from the *owner* and *CRP*, and the Schedule B from the *RPR* for the geotechnical discipline.

For a subsequent foundation permit phase, the only Letter that should be submitted for the building permit is the Schedule B from the *RPR* for the structural discipline. This Schedule B should be clearly annotated “For Foundations Only”, since the only plans and supporting documents that accompany this permit application are the structural foundation drawings.

For the subsequent full building permit, the *RPR* for the structural discipline will submit another Schedule B with no annotations.

The *CRP* should review with the *authority having jurisdiction* their procedures for phased building permit applications. Some AHJs require the submission of plans and supporting documents for the entire project before considering the issuance of phased building permits. Obviously there is some risk associated with proceeding with pouring concrete foundations prior to having a complete set of plans and supporting documents and Letters of Assurance from all disciplines that demonstrate substantial code compliance for the entire project.

Acceptable Use of Letters of Assurance for Phased Occupancy

Phased, or partial, occupancy sometimes occurs when a discrete or stand-alone portion of a *building* or project has been completed with respect to the drawings and supporting documents that were submitted in support of the building permit application.

Owners, coordinating registered professionals and authorities having jurisdiction should discuss the potential for project phasing early in the design process to ensure that the *coordinating registered professional and registered professionals of record* will be able to issue Schedules C-A and C-B for discrete or stand-alone portions of the project.

There are two possible approaches regarding building permits to accommodate phased occupancies:

- If the discrete portions of the project for which phased occupancies are known at the building permit application stage, then the authority having jurisdiction could issue discrete building permits for each portion of the project to match the phased occupancies. The CRP and RPRs could then provide separate Schedules A, B, C-A and C-B for each discrete portion of the project. In this case the Schedules would not require any “qualifications”.
- If the discrete portions of the project are not known at the building permit application stage, and a single building permit is issued for the entire project, then the Schedules C-A and C-B could be annotated to clearly identify the portion of the project that is included in the phased occupancy.

For this second approach, if phased or partial occupancy is sought for portions of a project under a single building permit, Schedules C-A and C-B may only be issued where:

- the segment of the project for which occupancy is sought is clearly defined in the ‘Address of Project’ section of the Schedules C-A and C-B,
- the work for the segment of the project for which occupancy is sought substantially complies in all material respects with the Building Code and with the drawings and supporting documents that were submitted in support of the building permit application,
- the segment of the project for which occupancy is sought has complete and inherent integrity with respect to fire and life safety, and
- any project segments that are excluded from the Schedules C-A and C-B are clearly protected from premature use and will have no adverse effect on the safe occupancy of the earlier part

Once all work on the project has been completed and before the final occupancy permit is issued, final Schedules C-A and C-B must be submitted, with no annotations, covering the entire project to which the single building permit applied.

Unacceptable Use of Letters of Assurance for Phased Occupancy

Letters of Assurance may not be issued for any segment of a project that does not substantially comply with Code requirements or with the drawings and supporting documents that were submitted in support of the building permit application. If deficiencies remain, the Letters of Assurance should not be issued.

12. APPLICATION OF LETTERS OF ASSURANCE TO PART 10 REQUIREMENTS

The successful application of Part 10 of Division B energy and water efficiency requirements will mean that a range of professionals will have accountability for design, *field review* and testing

Ongoing coordination between the *CRP* and the *registered professionals of record* will be necessary. The Letters of Assurance which take effect on September 1, 2010 have been modified to explicitly reference these new Part 10 provisions. *Registered professionals of record* must indicate that the building incorporates these new Part 10 of Division B requirements, just as they do any other Part of the Code.

13. ANCHORAGE AND SEISMIC RESTRAINT

Schedule B includes a requirement for anchorage and seismic restraint of non-structural elements in buildings, including architectural, mechanical, plumbing, fire suppression and electrical components. Since the *RPRs* for these disciplines are usually not trained or experienced in structural design, they commonly require the involvement of supporting *RPs* to undertake the structural design and field review of the anchorage and seismic restraint. The recommended practice by AIBC and APEGBC is for these supporting *RPs* to submit Schedules S-B and S-C, as prepared by AIBC and APEGBC, to the *RPR* for that particular discipline.

The supporting *RP* can only take responsibility for the anchorage and seismic restraint components that they design. They are responsible for the structural capacity of the seismic restraint bracing and the attachment of this bracing to the base building structure. They are also responsible for verifying with the *RPR* of the structural discipline that the base building structure can adequately support the seismic loads induced by this bracing. They are not responsible for the structural capacity of the internal components within a piece of equipment that is being braced. For example, the structural integrity of the internal components of an air handling unit is the responsibility of the manufacturer of that piece of equipment, not the supporting *RP* who designs the anchorage and seismic restraint systems.

14. ALTERNATIVE SOLUTIONS

As described in Article 1.2.1.1. in Part 1 of Division A compliance with the BC Building Code can be achieved by either complying with the acceptable solutions described in Division B, or by alternative solutions that fulfill the objectives and functional statements described in Subsection 1.1.2. of Division B.

The BC Building Code Letters of Assurance have not been developed to address the design approach using the acceptable solutions described in Division B. These Letters are not an appropriate form of accountability for alternative solutions.

The *RPs* who prepare alternative solutions for a project should consult with the *authority having jurisdiction* for the project to determine the appropriate form of accountability documentation that is required within that jurisdiction.