

CP PROGRAM SEMINAR 2017



October 25, 2017



WELCOME



INTRODUCTION

PRESENTED BY

October 25, 2017

**Architectural Institute of BC
Engineers and Geoscientists of BC
City of Vancouver
City of Surrey**



AGENDA



Agenda

- **Welcome – Introduction - Teresa Coady**
- **Meet the GMs – Pat Ryan**
 - Kaye Krishna GM of Development, Buildings, & Licensing
 - Gil Kelly GM of Planning, Urban Design & Sustainability
 - Buildings Team
- **Upcoming CP Program Course**
 - **Welcome New CPs**
 - **Upcoming courses**
- **City of Surrey**
 - **How we differ – Jason Watt / John Milloy**
- **Your Associations & Digital Seals**
 - **AIBC – Maura Gatensby**
 - **EGBC – Peter Mitchell**
- **Notarius – Olivier Jaar**
- **Cladding Fires- Tavis McCauley**
- **Chief Building Official Updates**
 - **CoV response to BCBC changes – Pat Ryan**
 - **Independent peer review for Tall Wood Buildings and Base Isolation – Pat Ryan**

Agenda

- **Sprinkler Process – Pat Ryan**
- **BC Hydro / Work Safe – Pat Ryan**
- **Accessibility issues – Kevin Lau**
- **Site Safety Plan – Rick Cheung**
- **Code changes for energy and sustainability - MURBS – Greg McCall**

- **BREAK – 15 MIN**

- **Permitting Process Updates**
 - **Demolition & Abatement – David Jung**
 - **Addressing - Matthew Lam**
 - **Occupancy permits – Matthew Lam**
 - **CP Project Types – Matthew Lam**
 - **Engineering – Kevin Cavell**
 - **Process Updates – Kelly Anderson**
 - **POSSE Updates - Kelly Anderson**

- **General Questions & Answers**

- **Meeting Room 114 for one on one with**
 - **Notarius Questions**
 - **Posse Questions**

City of Vancouver



Meet the City of Vancouver Management Team

Patrick Ryan CBO, Director of Buildings

- Kaye Krishna - General Manager of Development, Buildings, & Licensing
- Gil Kelly - General Manager of Planning, Urban Design & Sustainability
- Buildings Team
 - Inspections & Trades
 - Saul Schwebs Assistant Director - Building & Trades Inspections
 - Wayne White Deputy City Electrician, Manager of Trades Inspection
 - Phil White Assistant Trades & Gas Safety Manager
 - Mike Collister Manager, Building Inspections & Enforcement

Cont'd...

Meet the City of Vancouver Management Team

➤ Building Review Branch

○ Matthew Lam, P.Eng. CP

Assistant Director Building Review,
Deputy CBO

○ Kelly Anderson, P.Eng. CP

Manager of Building Review,
Deputy CBO

○ Kevin Lau, P.Eng. CP

Code Policy Engineer,
Deputy CBO

○ Greg McCall, P.Eng.

Energy Policy Specialist

○ Hollie Benyosef

CP Coordinator

○ Mihajla Vitkovic, P.Eng. CP

Building Code Specialist

○ Calvin Wang, Architect AIBC,CP

Building Code Specialist

○ Tsvetanka Nedyalkova, Architect AIBC

Building Code Specialist

Cont'd...

Meet the City of Vancouver Management Team

- Erv Hildebrandt Technical Supervisor
- Barrie Smith Project Coordinator
- Wilson Hui Project Coordinator



CP Program Updates

Overview of Certified Professional (CP) Program

Teresa Coady, Architect AIBC, FRAIC – CP Program Manager

➤ History

- Initiated by the City of Vancouver in 1978; City of Vancouver Council passed the CP Bylaw in 1982
 - In 1991, Surrey City Council passed an amendment to the Surrey Building Bylaw to allow for an alternative plan and field review process using Certified Professionals
- **There are currently a total of 136 CPs in BC (13 retired)**

Overview of Certified Professional (CP) Program

Teresa Coady, Architect AIBC, FRAIC – CP Program Manager

➤ The 2017 CP Course

- Was delivered jointly by the Architectural Institute of British Columbia and Engineers and Geoscientists BC
 - 34 participants registered, 25 wrote the final exams
- **13 participants were successful in the 2017 CP exams**

Overview of Certified Professional (CP) Program

Teresa Coady, Architect AIBC, FRAIC – CP Program Manager

➤ **2017 CP course successful candidates are:**

- Ron Bijok, Architect AIBC
- Edward Chow, EIT
- Richard Dohmeier, Architect AIBC
- Mercedes Duifhuis, EIT

Cont'd...

Overview of Certified Professional (CP) Program

Teresa Coady, Architect AIBC, FRAIC – CP Program Manager

➤ **2017 CP course successful candidates are:**

- Gloria Grill, P.Eng.
- David Ho, P.Eng.
- Agata Malczyk, Architect AIBC
- Mary McMains, Intern Arch

Cont'd...

Overview of Certified Professional (CP) Program

Teresa Coady, Architect AIBC, FRAIC – CP Program Manager

➤ 2017 CP course successful candidates are:

- Jon Milloy, Building Inspector
- Sunny Nam, Architectural Technologist AIBC
- Juraj Novota, P.Eng.
- Mark Olsthoorn, P.Eng.
- (John) Wesley Lim, P.Eng.

2018 Advanced Code Knowledge (ACK) Course

Teresa Coady, Architect AIBC, FRAIC – CP Program Manager

➤ The 2018 Advanced Code Knowledge Course

- Will be delivered jointly by the Architectural Institute of British Columbia and Engineers and Geoscientists BC
- The ACK course will consist of 8 sessions running from **February 1, to April 25, 2018** (no classes March 21 and March 28 due to spring break)
- The cost is \$2,800
- Architects will receive 60 Core Learning Units
- Engineers will receive 60 PD Hours

➤ Registration is now open on the AIBC website:

- <http://aibc.memberpro.net/main/body.cfm?menu=events>

2019 Certified Professional (CP) Program

Teresa Coady, Architect AIBC, FRAIC – CP Program Manager

➤ The 2019 CP Course

- Will be delivered jointly in February 2019 by the Architectural Institute of British Columbia and Engineers and Geoscientists BC
- Will reference the 2018 BCBC (anticipated in April 2018)



Professional Associations

Maura Gatensby Architect AIBC CP

Practice Advisor

Peter Mitchell P. Eng.

Director of Professional Practice, Standards and Development

City of Surrey



CERTIFIED PROFESSIONAL PROJECTS IN THE CITY OF SURREY

Jason Watt, P.Eng., CP
Plan Review Section Manager
City of Surrey



Objective: to give a brief overview of the CP program in Surrey including new procedures and tips.

SURREY BUILDING BY-LAW 17850

➤ **Part 17 - Certified Professional Program**

- The Building By-law allows the CP program.
- Specifies requirements for CPs. CPs are required to be registered architects or engineers in BC, and have passed the CP course.
- Part 17 of the Building By-law: The Building Official may decertify a registered professional from practicing as a Certified Professional in the City for poor performance, no longer licensed, submitting inaccurate or misleading information, fails to disclose in a timely manner a significant change to design or construction of a building.
- http://www.surrey.ca/bylawsandcouncillibrary/BYL_reg_17850.pdf

BENEFITS OF THE CP PROGRAM

- Full BP submission is required but the permit can be phased (ie. excavation, foundation, above grade structure).
- CP Projects are expedited.

APPLICATION OF THE CP PROGRAM

- New buildings
- Existing and heritage buildings
 - code report
 - agreement with the City
- Part 9 buildings designed to Part 3 – can use Part 9 provisions identified in a code report and submitted as an alternative solution.
- The base building CP shall be involved in tenant improvements where the base building has not received occupancy. The base building RPs are also required to be involved in the TI if the base building has not received final occupancy.

CERTIFIED PROFESSIONALS ROLE

- CP provides assurance to the City that the design and construction substantially comply with the BCBC.
- CP acts in capacity of the City Building Official.
- Communicate info to the City and from the City to persons working on the project.
- Alternative solutions: Not for design errors.
- Ensure trade permits are in place (plumbing, elec, sprinkler).
- Must notify the City if an RP withdraws.
- Exterior signs require a separate permit.

COMMERCIAL BUILDING PERMITS WEBSITE

- <http://www.surrey.ca/city-services/1369.aspx>
- Contains information for all BP applications including fees.
- Contains the municipal insert for the CP program in surrey.
- Bulletins, forms etc.
- BP application checklist.
- CP code short checklist
- CP-1, CP-2, CP-3, CP-4, CP-4A, CP-5, CP-6, CP-7
- Project directory

DEVELOPMENT PERMIT

- A BP application may be made prior to the DP being issued if past 3rd reading and approved by the planning department.
- A building permit can not be issued until after the DP has been issued.
- CP to confer with architect to ensure BP drawings meet DP drawings. Any changes are required to be “bubbled” on the drawings.

FULL BUILDING PERMIT SUBMISSION

- We require a full building permit submission including a cheque for the plan processing fee (35% of the BP fee non-refundable)
- The application is assign to a plan reviewer and circulated to the various departments (PC is not coordinating):
 - engineering
 - electrical
 - mechanical
 - plumbing
 - fire department
 - drainage
 - sprinkler
 - alternative solutions

MECHANICAL REVIEWS

- Mechanical review: dust collectors, paint spray booths, commercial kitchen exhaust, sprinkler and standpipe systems.
- Sprinkler, standpipe, plumbing and electrical require a separate permit application after the BP has been issued (ie. trade permits).

SPRINKLER REVIEW PROCESS

Detailed sprinkler design drawings and calculations are required at the time of building permit application, and must be accepted prior to issuance of the building permit.

City bulletin:

<http://www.surrey.ca/files/SprinklerPermit.pdf>

EROSION AND SEDIMENT CONTROL PERMIT

- May be applied for prior to Building Permit.

PROJECT ADDRESS

- The DP address is often different than the BP address.
- Contact the addressing clerk to confirm the address prior to BP submission.

Bi-Directional Amplification (E-Comm)

- Larger buildings built with certain construction materials are required to have BDA information shown on the drawings and the building must be designed to easily accommodate BDA in the event testing reveals that it is required.



- http://www.surrey.ca/bylawsandcouncilibrary/BYL_reg_19108.pdf



THANK YOU!

City of Surrey Certified Professional Program



Field Reviews: A Collaborative Process

Jon Milloy, RBO

Building Section Supervisor

What are we building?

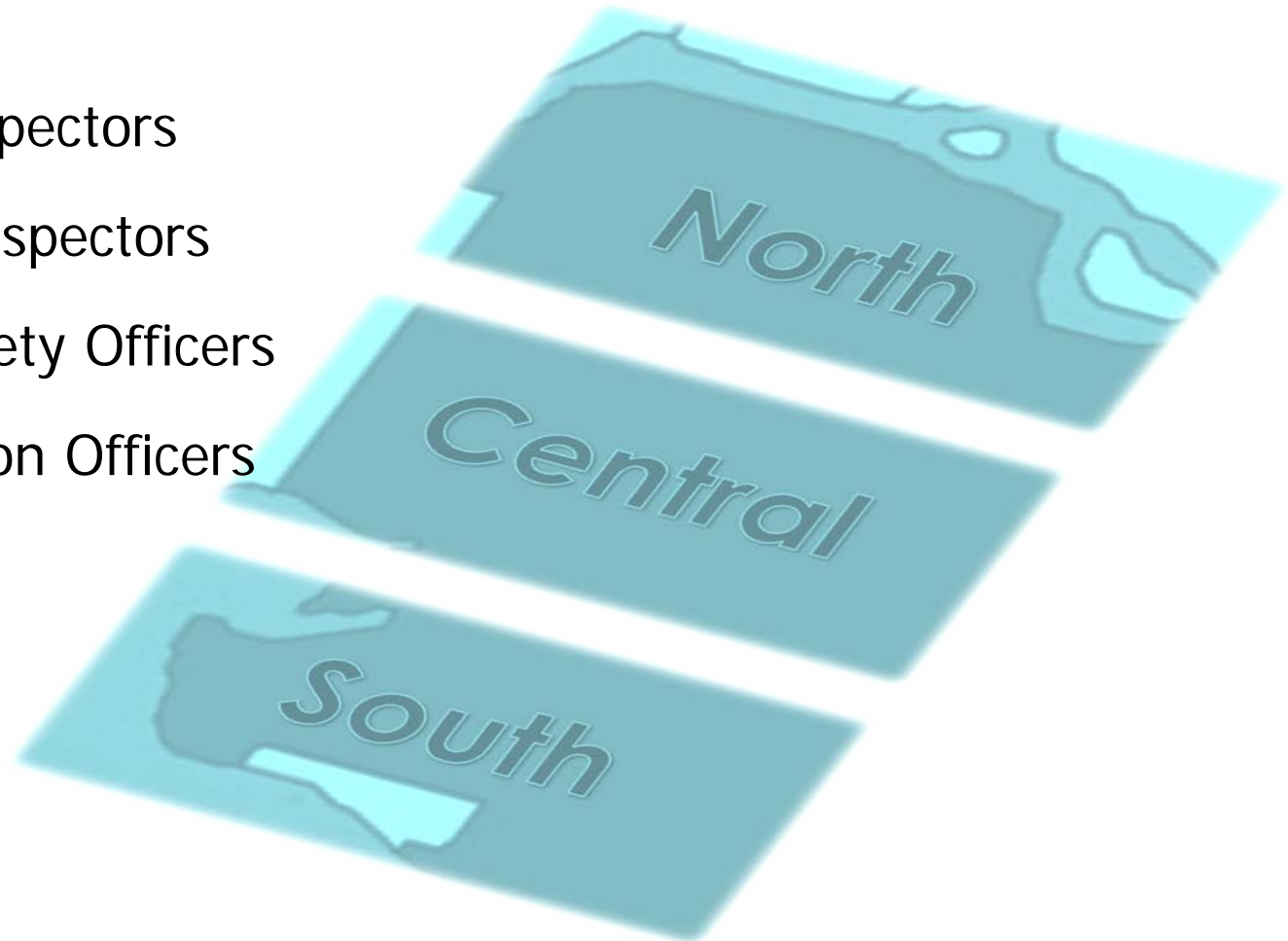


What are the issues?

- Revisions to Building Permits
- Building Official site progress reviews
- Final Building Approval Process
- Construction Site Fire Safety

Who are we?

- 12 Building Inspectors
- 10 Plumbing Inspectors
- 9 Electrical Safety Officers
- 3 Fire Prevention Officers



Revisions to Building Permits

- CP to be aware of all significant revisions to Building Permits
 - Electrical
 - Mechanical

- Recent Examples
 - 17 changes to electrical drawings without CP knowledge
 - RWL routed through main electrical room without CP knowledge

- CP to review changes for possible life safety/accessibility implications

Progress Reviews

- “Monthly” reports from Certified Professional
- Project specific schedule more appropriate
- Inspector contact information
- Pre-construction meetings

Final Building Approval

- **Trade Permits!**
- Tenant Improvements
- Final Document submission
- Fire and Life Safety system testing
- Coordinated “Group” Final review
- Partial Occupancy Approval Process

Construction Fire Safety



Construction Fire Safety



"Quattro"
October 1, 2008

Construction Fire Safety

- Owner's responsibility (or "Agent")
- Part 8 of BC Building Code
- Section 5.6 of BC Fire Code
- Construction Fire Safety Plan
- SFS Order to Comply
- Stop Work Order



Construction Fire Safety

SURREY FIRE SERVICE

Construction Fire Safety Plan Bulletin



The B.C. Fire Code requires building owners/contractors to comply with the requirements of the BC Fire Code 5.6 Construction and Demolition Sites



CITY OF SURREY FIRE SERVICE

This bulletin is provided by the Surrey Fire Service to assist owners, contractors, and workers on the requirements of a Construction Fire Safety Plan (CFSP). The document is intended to provide a brief overview of existing information that has previously been developed. Each site and construction project will have site specific issues that will need to be addressed in the CFSP.

During the construction phase, a building is at its most vulnerable state. A CFSP is a part of a system that is intended to protect the building during this vulnerable stage. Once a building is completed, there are a number of life safety systems in place to protect the building and its occupants. These include fire alarm systems, sprinklers, and fire compartmentalization. During construction these fire safety measures may or may not be installed or fully operational. Therefore, the CFSP must address hazards that could be present during construction.

The leading causes of fire in buildings under construction or demolition are:

- Incendiary/suspicious events.
- Smoking on site.
- Open flames/embers.

Fire Prevention Branch

- www.surrey.ca
- 604.543.6780



jdmilloy@surrey.ca



Notarius

Agenda

Olivier Jaar, M.Sc. Notarius

- Who is Notarius?
- Partners and Ecosystem
- Solutions
- Legal Reliability
- Professional Guidelines
 - Engineers & Geoscientists British Columbia
 - Architectural Institute of British Columbia
- Benefits of Digitally Signed Documents
- Demonstrations

Background

Created by the Quebec Board of Notaries as a Not-for-Profit Organization in 1996

- **First goal** - digital transformation from paper to electronic documents.
- **Second goal** - provide a complete solution to the Ministry of Natural Resources to dematerialize the submission of documents to the Land Titles Registry.
- **The solution** - putting together one of the first Canadian PKI Certificate Authority.

Background

Notarius is the **only Canadian company** that provides digital signatures recognized by Adobe (**Adobe Approved Trust list - AATL**) and Microsoft (**WebTrust**).

In 2007, the Notarius Public Key Infrastructure (PKI) was the **first in North America** to be certified ISO 27001 (Information Security Management).

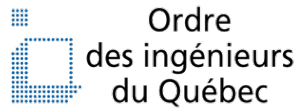
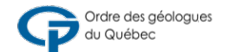
Notarius is a member of leading organizations in the fields of trusted third parties and documentary sustainability (**FNTC, DIACC and the PDF Association**).

Carbon neutral since 2013!



Notarius digital signatures sign over 2 million documents per year.

Partners



Ecosystem

Engineering



Governments



Government Agencies



Cities



Solutions



certifiO is the digital certificate issuance service.

Available:

- Professionals
- Employees
- Departments
- Organizations



consignO is the PDF processing/signing solution.

Available:

Desktop software solution and cloud base dversion that is free for signers.



verifiO is the server based batch validation service of PDF document and digital signatures.

Available:

- Server Automation

Legal Reliability

Most jurisdictions recognize the use of electronic or digital signatures. Since legislation was instituted in early 2000's, wording is very generic.

Key points are as follows:

- **Unique to the person using it;**
- **Under the sole control of the person using it;**
- **Capable of verification;**
- **Guaranties the integrity of the signed data.**

Legal Reliability



Origin

- Who signed?
- When did they sign?
- Do they have the right role or professional status?



Integrity

- Has the document been tampered with?



Authenticity

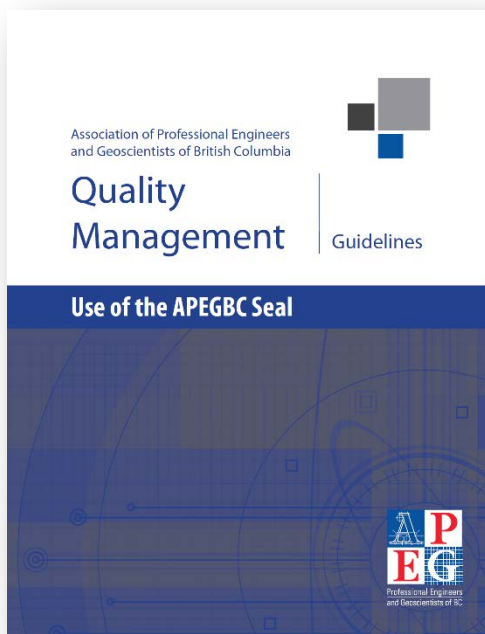
- Does the electronic document carry its own proof?



Longevity

- Will you, a 3rd party or courts trust the document over time?

OQM Guidelines (EGBC)



Engineers & Geoscientists BC has chosen to control use of seal for digital authentication, in the same manner as the wet stamp.

Guidelines for use of seal can be found in OQM documentation from Engineers & Geoscientists BC .

Section 3.6 outlines how to apply seal and signature.

Engineers & Geoscientist BC - Where to Apply Seal?

3.6.2.3 Refer to Figure 3 for examples of how to apply professional *seals*.

FIGURE 2: WHERE TO APPLY PROFESSIONAL SEALS	
TYPE OF DOCUMENT	LOCATION
Drawings	In allotted space in title block or in lower right corner of each drawing
Specifications	On first page or cover sheet of section to which the <i>seal</i> applies or, if responsible for overall specification, on cover sheet for 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 <i>documents</i>	Next to the title of the author or signature whether at the beginning or end of the <i>document</i>
Digital files	Use an <i>electronic seal</i> and signature only in combination with digital certification technology confirmed to meet APEGBC best practices (see best practices for use of electronically applied <i>seals</i> later in this QM Guideline) in locations appropriate to the type of <i>document</i>

Engineers & Geoscientist BC - How to Digitally Seal a Document?

3.6.6 Options for using *electronic seals* and *digital certificate* technology

3.6.6.1 *APEGBC professionals* may use *electronic seals* with *digital certificate* technology in one of the following ways:

- 1. Create or purchase an electronic version of their *seal* from *APEGBC* and use an *APEGBC*-endorsed *digital certificate* service provider such as **Notarius, Inc.****
2. Create or purchase an electronic version of their *seal* and use their choice of a *digital certificate* service provider that has been confirmed to *APEGBC* by an independent consultant (paid for by the *APEGBC professional* or their *organization*) to meet the *APEGBC* best practices as listed below.

Engineers & Geoscientist BC - How to Digitally Seal a Document?

3. Purchase an electronic version of their seal from APEGBC and use their choice of a digital certificate service provider that has NOT been independently confirmed to meet the APEGBC best practices.

3.6.6.2

With option 3, APEGBC will not be able to confirm to those receiving such documents electronically that they have an appropriate level of security, protection of Document integrity, and proof of authenticity, that are equivalent to a hard copy document sealed with the APEGBC professional's ink stamp with handwritten signature and date.

3.6.8 Unacceptable *seals*

3.6.8.1 *APEGBC* does not approve the use of other types of *seals*, including but not limited to, stick-on *seals*, photocopied *seals*, *electronic seals* in electronic files without digital certification, and electronically scanned images of ink *stamp seals* applied to originally *sealed documents*.

3.6.8.2 **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 **not approved by *APEGBC***.

Guidelines (AIBC)



Bulletin 60: Signature, Seal and Delivery of Electronic Documents

December 2016

1.0 Background and Authority

- 1.1 Any document required to be sealed by an architect and transmitted electronically must be signed, sealed and filed with a digital signature as described in this bulletin. No other means of sealing an electronically transmitted document is acceptable.
- 1.2 This bulletin was first adopted by AIBC Council in November 2009 in response to a council position on electronic seals in January 2008, with current revisions adopted in November 2016. It contains guidance and establishes professional standards on the use of digital signature technology to sign, seal and deliver documents electronically pursuant to Section 7(2)(b) of the *Architects Act* and Bylaw 24.2 and its related council policy in the *Code of Ethics and Professional Conduct*.
- 1.3 Prior to issuance of this bulletin in 2009, the AIBC had not mentioned the application of a digital image of an architect's professional seal to documents requiring a signature and seal. The architect's concern related to public protection, regulatory requirements of the *Architects Act*, security of the seal, and document integrity. As a result, any document requiring an architect's seal had to be physically printed out and then dated, signed and hand sealed.
- 1.4 Modern legislation (the *Electronic Transactions Act*) is in place in British Columbia that makes electronic documents as enforceable as printed documents, and allows for digital production and electronic delivery of architectural instruments of service. These modern concepts related to electronic documents and transactions can be applied to the *Architects Act*, allowing "electronic signature, seal and delivery", in lieu of adequate measures set in place to ensure:
 - the security and verification of electronic documents; and
 - the regulation of use and revocation of an architect's seal.
- 1.5 The AIBC has selected digital document certification technology for use by architects. Along with the Association of Professional Engineers and Geoscientists of British Columbia (APEGCBC), the AIBC has contracted certification services through Notarius, a not-for-profit certification provider founded by the Quebec Society of Notaries Public.

The *Architects Act* and AIBC Bylaws require certain documents to be dated, signed and sealed or stamped by the architect. Until now, this meant the application of a physical image of the seal to ink stamp. The use of electronic, the term "seal" will be used to refer either to the mirrored seal or the inked stamp.

page 1 of 7

AIBC has chosen to control use of seal for digital authentication, in the same manner as the wet stamp for paper authentication.

Practice Bulletin 60: Signature, Seal and Delivery of Electronic Documents

Guidelines (AIBC)

1.6 Applying an image (picture) of an architect's professional seal and signature is not the same as digitally signing and sealing that document with a digital certificate. An image alone of a seal is not secure, and any such document is vulnerable to being seamlessly modified by others without the issuing architect's knowledge. It is fundamental to the protection of the public that the architectural seal applied by an architect is secure, i.e. that it can be reasonably relied upon as being accurate and not having been tampered with. **For electronically transmitted documents, the only acceptable means of signing and sealing is with the Notarius digital certificate*.**

Note: *issued by AIBC.

Benefits of Digitally Signed Documents

1. Gains in productivity
2. Direct and indirect costs savings
3. Reduction / elimination of paper archives
4. Prevention of losses / accidents
5. Retention of visual quality
6. Reduction of environmental footprint
7. Enhanced control over document reception (automation)



Signed and all signatures are valid.

Signature Panel

Signatures

Validate All

Rev. 1: Signed by Olivier Jaar -- Notarius <olivierjaar@notarius.com>

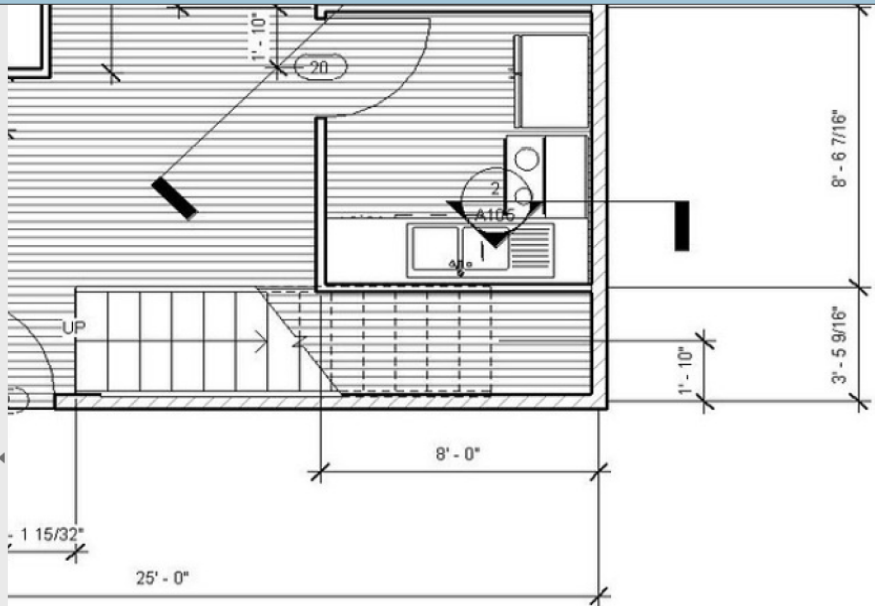
Signature is valid:
 Source of Trust obtained from Adobe Approved Trust List (AATL).
 Document has not been modified since this signature was applied
 Signed by the current user
 The signature includes an embedded timestamp.
 Signature is LTV enabled

Signature Details
 Last Checked: 2017.06.07 00:14:04 -04'00'
 Field: Signature1 on page 1
[Click to view this version](#)

Rev. 2: Signed by Olivier Jaar -- Notarius <olivierjaar@notarius.com>

Signature is valid:
 Source of Trust obtained from Adobe Approved Trust List (AATL).
 Document has not been modified since this signature was applied
 Signed by the current user
 The signature includes an embedded timestamp.
 Signature is LTV enabled

Signature Details
 Last Checked: 2017.06.07 00:15:39 -04'00'
 Field: Signature2 on page 1
[Click to view this version](#)



CITY OF CALGARY
PLANNING, DEVELOPMENT & ASSESSMENT
 FOR CONDITIONS SEE ATTACHED
 "PERMIT CONDITIONS"

DATED 7 June 2017

EXAMINED BY Olivier Jaar
D00006893

B.P. No. 74646811



No.	Description	Date

Floor 1 Plan		A103
Project number	Project Number	
Date	Issue Date	
Drawn by	Peter Illig	
Checked by	Checker	
Scale 1/4" = 1'-0"		



Signed and all signatures are valid.



Signatures

Validate All

Rev. 1: Signed by Olivier Jaar -- Notarius <olivier.jaar@notarius.com>

Signature is valid:

Source of Trust obtained from Adobe Approved Trust List (AATL).

Document has not been modified since this signature was applied

Signed by the current user

The signature includes an embedded timestamp.

Signature is LTV enabled

Signature Details

Last Checked: 2017.06.07 00:14:04 -04'00'

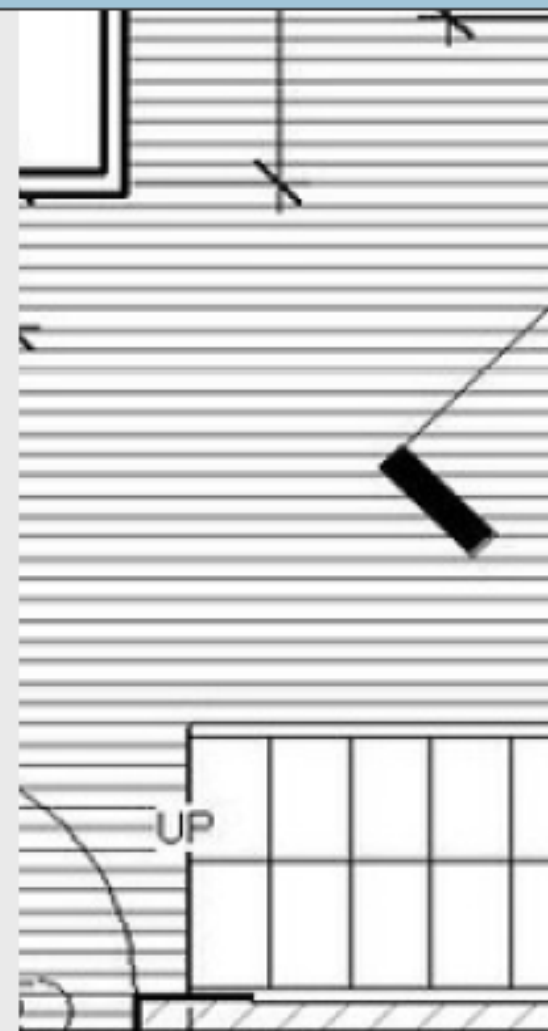
Field: Signature1 on page 1

[Click to view this version](#)

Rev. 2: Signed by Olivier Jaar -- Notarius <olivier.jaar@notarius.com>

Signature is valid:

Source of Trust obtained from Adobe Approved Trust List (AATL).





Signatures



Validate All

Rev. 1: Signed by Olivier Jaar -- Notarius <olivier.jaar@notarius.com>

Signature is valid:

Source of Trust obtained from Adobe Approved Trust List (AATL).

Document has not been modified since this signature was applied

Signed by the current user

The signature includes an embedded timestamp.

Signature is LTV enabled

Signature Details

Last Checked: 2017.06.07 00:14:04 -04'00'

Field: Signature1 on page 1

[Click to view this version](#)

Rev. 2: Signed by Olivier Jaar -- Notarius <olivier.jaar@notarius.com>

Signature is valid:

Source of Trust obtained from Adobe Approved Trust List (AATL).

Document has not been modified since this signature was applied

Signed by the current user

The signature includes an embedded timestamp.

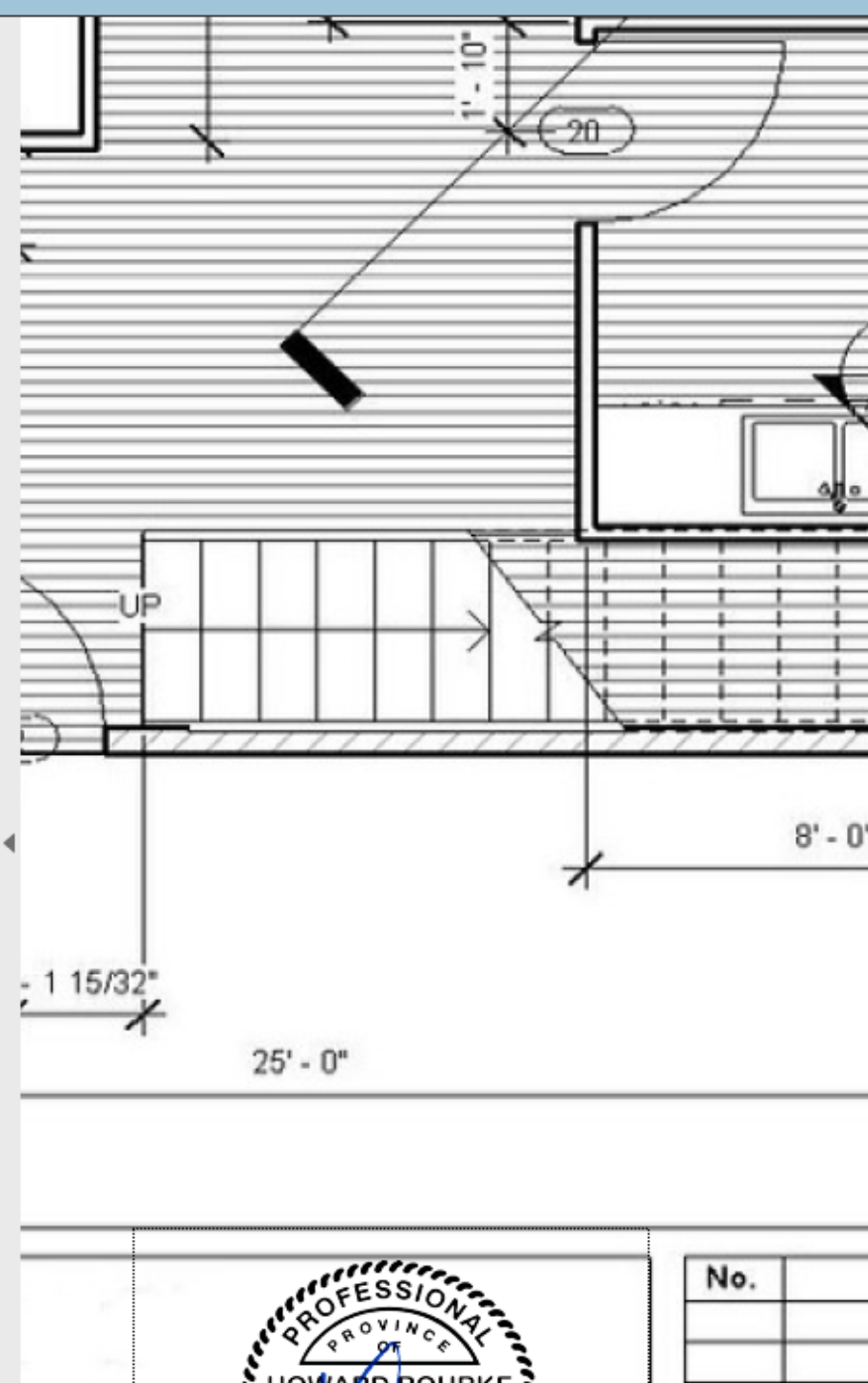
Signature is LTV enabled

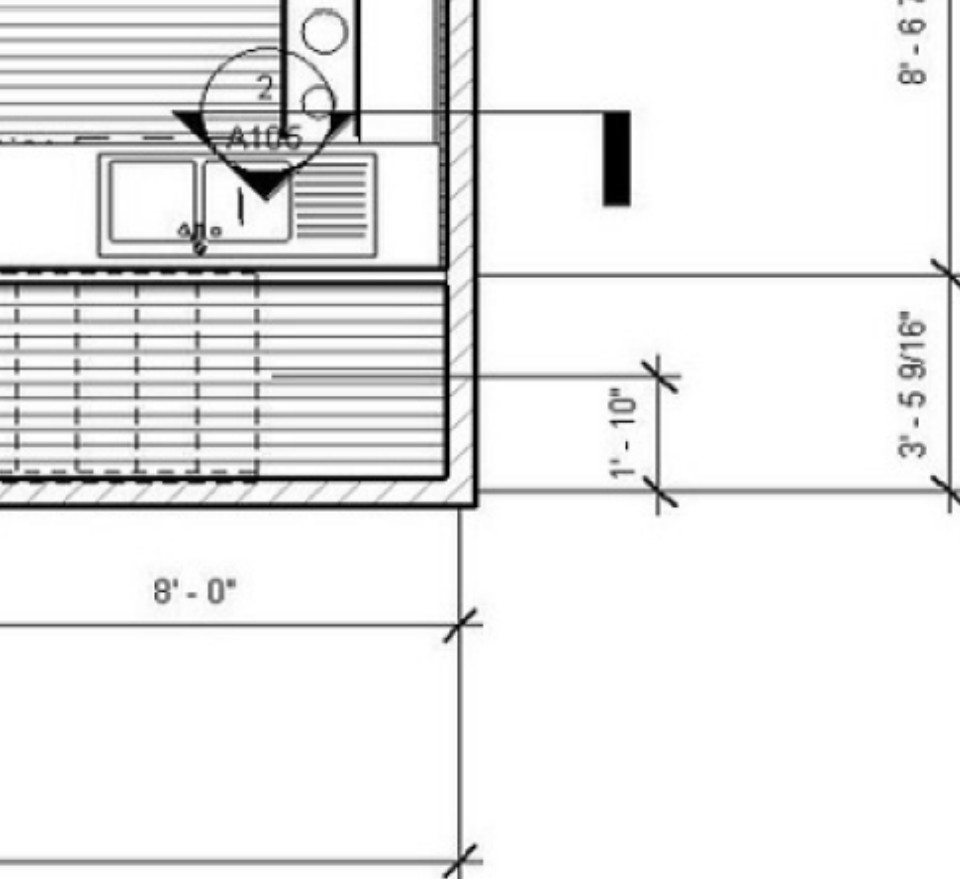
Signature Details

Last Checked: 2017.06.07 00:15:39 -04'00'

Field: Signature2 on page 1

[Click to view this version](#)





CITY OF CALGARY
PLANNING, DEVELOPMENT & ASSESSMENT

FOR CONDITIONS SEE ATTACHED
 "PERMIT CONDITIONS"

DATED 7 June 2017

EXAMINED BY Olivier Jaar
D00006893

B.P. No. 74646811

No.	Description	Date

Floor 1 Plan		
Project number	Project Number	A103
Date	Issue Date	
Drawn by	Peter Illig	
Checked by	Checker	
		Scale 1/4" = 1'-0"



Signed and all signatures are valid.

Signature Panel

Signatures

Validate All

Rev. 1: Signed by Olivier Jaar -- Notarius <olivierjaar@notarius.com>

Signature is valid:
Source of Trust obtained from Adobe Approved Trust List (AATL).
Document has not been modified since this signature was applied
Signed by the current user
The signature includes an embedded timestamp.
Signature is LTV enabled

Signature Details

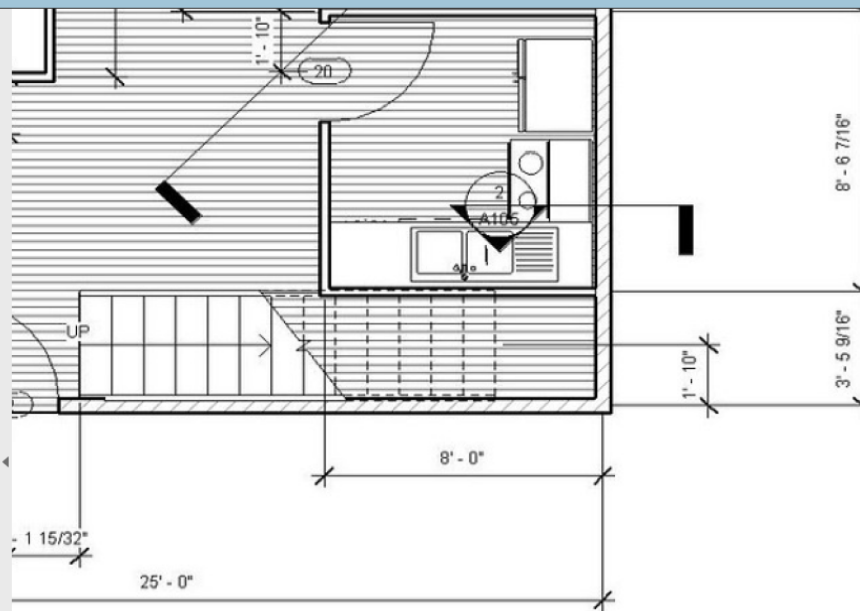
Last Checked: 2017.06.07 00:14:04 -04'00'
Field: Signature1 on page 1
[Click to view this version](#)

Rev. 2: Signed by Olivier Jaar -- Notarius <olivierjaar@notarius.com>

Signature is valid:
Source of Trust obtained from Adobe Approved Trust List (AATL).
Document has not been modified since this signature was applied
Signed by the current user
The signature includes an embedded timestamp.
Signature is LTV enabled

Signature Details

Last Checked: 2017.06.07 00:15:39 -04'00'
Field: Signature2 on page 1
[Click to view this version](#)



CITY OF CALGARY
PLANNING, DEVELOPMENT & ASSESSMENT
 FOR CONDITIONS SEE ATTACHED
 "PERMIT CONDITIONS"

DATED 7 June 2017

EXAMINED BY Olivier Jaar
D00006893

B.P. No. 74646811



No.	Description	Date

Floor 1 Plan		A103
Project number	Project Number	
Date	Issue Date	
Drawn by	Peter Illig	
Checked by	Checker	
Scale 1/4" = 1'-0"		

Questions?
Come meet me **this afternoon!**

Olivier Jaar, M.Sc.

olivier.jaar@notarius.com

1.888.588.0011, ext. 1282



Cladding Fires



Cladding Fires

Combustible Exterior Wall Construction
Tavis McAuley | Architect AIBC, CP



Chief Building Official Updates

Building By-law Changes

Tall Wood & Irregular Structures

Sprinkler Process

BC Hydro / Work Safe

Accessibility

Site Safety Plan

Code Changes for Energy & Sustainability -MURBS

Chief Building Official Updates

➤ Building By-law Changes

➤ CBO's office has prepared a series of insert pages that encompass the BC Building Code revisions up to Revision 11 (2017Apr07)

➤ Changes:

- Generally housekeeping and alignment with current City policies, or
- Energy efficiency related (more on this later).

Building By-law insert pages available on the CBO's webpage:

<http://vancouver.ca/your-government/vancouver-building-bylaw.aspx>

Chief Building Official Updates

➤ **Forthcoming BC Building Code**

- The Province has indicated they are working towards the release of a new Building Code.
 - As has been the recent tradition, Building Branch currently expect to adopt the forthcoming BC Building Code as the base document as our Building By-law.
 - However, we have not yet assessed how the Unique to Vancouver provisions will be affected.
 - Expecting to do minimal changes from current VBBL.

- The Building Review Group is committed to sharing our experiences with the province in the interests of providing greater consistency and addressing coming challenges.

Chief Building Official Updates

➤ Tall Wood & Irregular Structures

➤ Many Challenges:

- Unique and complex designs.
- Materials or systems not covered by current VBBL provisions.
- Bulletin to be developed

➤ To facilitate timely review, the City intends to implement a modified Peer review process.

- Third party independent review of structural design and fire risk.
- Company works in tandem with design team providing oversight and advice and enhances – simplifies Alternative Solution process.
- Successfully done for Lord Strathcona Elementary Seismic Base isolation and others.....

➤ Key Advantages:

- Better addresses the complex nature of these structures.
- Provides the City and designers with greater confidence in the design, materials, and system used.
- Provides an allowance for state-of-the-art solutions.
- Can provide feedback leading to improved designs.

Chief Building Official Updates

➤ **Sprinkler Process**

- Bulletin 2016-007-BU/SP issued last year.
- Required design professional early in process or design within 60 days of building permit issuance
 - Extensive consultation with industry, designers, EGBC, AIBC, CP's, UDI, and contractors
 - Coordinated with City of Surrey
 - January – informal enforcement and warnings
 - September – stop work for entire project
 - Generally seeing significant increase in compliance.
- Appears that industry is starting to see increasing benefits.
 - Level Playing Field
 - Concerns are being identified and addressed sooner.
 - More meaningful discussion occurring.

Chief Building Official Updates

➤ BC Hydro/Work Safe Process

- General Heads Up!
- Work Safe and Hydro initiative to focus on unsafe work near power lines
- Resulting in Stop Work orders and delays
- Need to ensure power line measures are included in construction safety plans
- Also need to allow for future work on a building.



Chief Building Official Updates

➤ **Accessibility**

- Path to the accessible floor often not accessible
 - Ongoing work with the Planning group.
 - Likely no final solution this code cycle.

- Adaptability (3.8.5)
 - Recognize that the requirements still need adjustment for clarification or practical reasons.
 - Will be reviewed again with the new code cycle and in conjunction with existing work with planning.

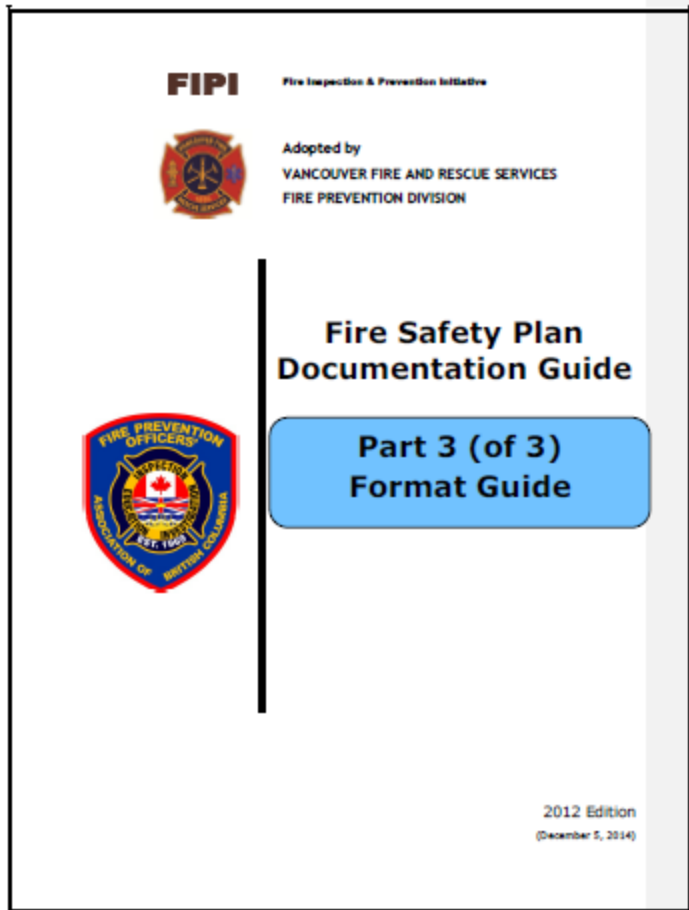
Fire Safety Plans

Rick Cheung

Fire & Rescue Services - Fire Prevention

Changes - Fire Safety Plans

Fire Safety Plans



- New Bulletin FI-2017-004 soon to be issued
 - Effective January 1, 2018
 - All fire safety plans must use the Vancouver template
 - FPOABC template customized for Vancouver

Fire Safety Plans

➤ Important changes

- FSP must be completed prior to building occupancy, including shell occupancy
- All persons assigned supervisory duties at the time of occupancy shall be designated by the owner and named and have contact information contained in the FSP

➤ Copies of the following to be included in the FSP

- Building Permit Data Sheet
- Sprinkler Permit Data Sheet
- Alternative Solutions Summary Sheet together with Location Drawings
- Fire Alarm Sequence of Operations

Fire Safety Plans

- Initial approved FSP must be stamped “accepted” by VFRS
- Hardcopy of stamped FSP to be kept in an acceptable FSP box at the principal entrance of the building.
 - Box may be padlocked to prevent tampering.



Vancouver's Building By-Law
Part 10 Requirements for MURBs (1 – 6 Storeys)

Effective March 1, 2018

MURBs (Multi-unit Residential Bldgs) – March 1, 2018

MURBs 1 - 6 Storeys
Prescriptive Path for Compliance

MURBs 4 - 6 Storeys
Performance (modelled) Path for Compliance

MURBs (Multi-unit Residential Bldgs) – March 1, 2018

MURBs 1 - 6 Storeys
Prescriptive Path for Compliance

Envelope (Effective R/RSI values) & Airtightness

Components	By-Law Item	MURB 1 - 3 Storeys (includes townhomes)	MURB 4 - 6 Storeys
Full Attic (R/RSI)	10.2.2.5 & 6	R48 / 8.5	
Flat or Cathedral Roof (R/RSI)	10.2.2.5 & 6	R30 / 5.28	
Walls – above and below Grade (R/RSI)	10.2.2.5 & 6	R22 / 3.85	
Concrete Slab – at or below Grade (R/RSI)	10.2.2.5 & 6	R14.2 / 2.5	R12 / 2.1 (Nominal)
Balcony and Slab Edge (R/RSI)	10.2.2.6	R2.4 / 0.42	
Airtightness	10.2.2.20	Testing + 3.5 ACH @ 50 pascals	Testing + 2 L/s/m ² @ 75 pascals

Fenestration (U values - W/(m²K))

Components	By-Law Item	MURB 1 - 3 Storeys (includes townhomes)	MURB 4 - 6 Storeys
Windows and Sliding Glass Doors	10.2.2.7	1.4	
Doors – with or without Glazing	10.2.2.7	1.80	
Doors - with required Fire Resistance Rating	10.2.2.7	Exempt	
Roof Access Hatch	10.2.2.7	2.9	
Tubular Daylighting Services	10.2.2.7	2.6	
Skylights, Roof Windows	10.2.2.7	2.4	
Curtain Wall and Window Wall Assemblies	10.2.2.7	1.4	

Mechanical Efficiencies/Operations

Components	By-Law Item	MURB 1 - 3 Storeys (includes townhomes)	MURB 4 - 6 Storeys
Domestic Hot Water	10.2.2.12	78%	
Boiler	10.2.2.13	92%	
Furnace / Make up air	10.2.2.14	92%	
Fireplaces	10.2.2.15	Direct Vent + Electronic Ignition + 6hr Timer (pilot light shutoff)	
Domestic Heat Recovery Ventilator	10.2.2.17	65%	

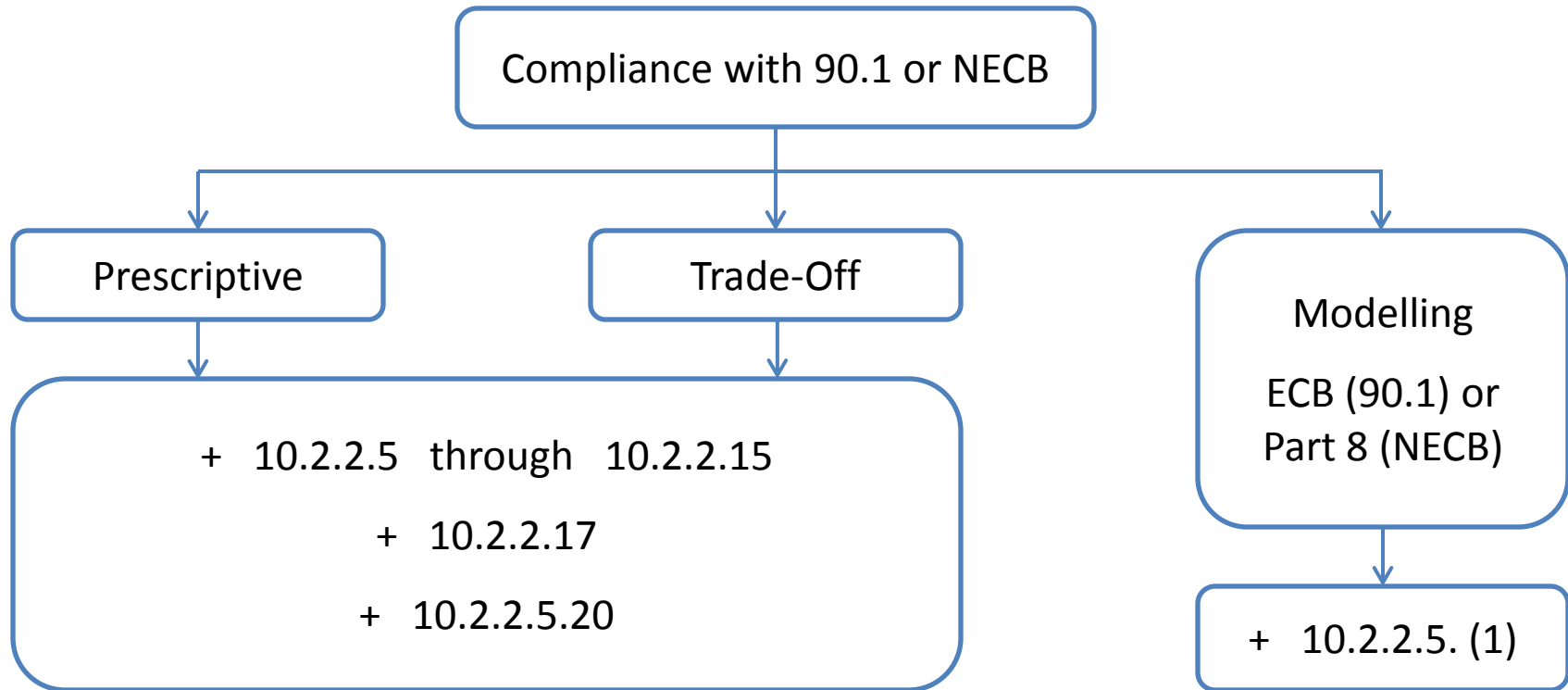
Other Requirements for MURBs (10.2.2.8 through 11)

Components	By-Law Item	MURB 1 - 3 Storeys (includes townhomes)	MURB 4 - 6 Storeys
Building Envelope Vestibules	10.2.2.8	Required for access to building, but not for service entrances or individual residential suites.	
Building Services Submetering	10.2.2.9	Intent is to assess energy use/performance of building. Meters hot water & natural gas.	
Lighting Controls in Residential Buildings	10.2.2.10	Bldgs > 20 suites: Occupancy based lighting sensor controls + master off switch at suite exit.	
Hot Water Tank Piping	10.2.2.11	RSI 0.35 piping insulation for last meter of HW piping to tank, and first 3m from heaters, and HW recirc plumbing system. + Principal shower to have double walled construction Drain Water Heat Recovery (DWHR) system with minimum 42% efficiency. (Townhomes with electric DHW are exempt from DWHR)	

MURBs 4-6 Storeys – Performance Path for Compliance

MURBs 4 - 6 Storeys
Performance (modelled) Path for Compliance

MURBs 4-6 Storeys – Performance Path for Compliance



Components	By-Law Item	Total EUI (max)	TEDI (max)	GHGI (max)
Proposed Building	10.2.2.5. (1)	110 kWh/m ²	25 kWh/m ²	5.5 kg/m ²

MURBs 4-6 Storeys – Performance Path for Compliance

Questions?

BREAK
15 minutes



Permitting Process Updates





Demolition & Abatement

Demolition Permit Process

David Jung Manager Service Centre

➤ Demolition Permit Steps

- Step 1: City of Vancouver Demolition Permit website
- <http://vancouver.ca/home-property-development/demolition-permit.aspx>
- Step 2: Determine which demo checklist
- Step 3: Determine if there are zoning restrictions or related DP/BP for new development
- Step 4: Determine if you need to meet Green Demolition Bylaw
- Step 5: Determine if engineered demolition plan is required
- Step 6: Understand Landscape, Environmental and Engineering requirements
- Step 7: Understanding time line and sequence of permit issuance

Demolition Permit Process

Step 1: Website for Demolition Permit <http://vancouver.ca/home-property-development/demolition-permit.aspx>

The screenshot shows the City of Vancouver website interface. At the top left is the City of Vancouver logo. To its right is a navigation menu with items: Green Vancouver, Your government, About Vancouver, Parks, recreation, and culture, Home, property, and development (highlighted), People and programs, Streets and transportation, and Doing business. A search bar and a 3-1-1 phone icon are also present. Below the navigation is a breadcrumb trail: Home > Home, property, and development > Building and renovating > Permits and regulations > Apply for and manage your permit > Demolition permit. The main content area is titled 'Demolition permit' and includes social media icons. The text explains that a demolition permit is required to take down a building in Vancouver and that requirements depend on the building type. A section titled 'The City is here to help' provides information on how to find requirements and offers direct contact for assistance. A form asks 'What type of building do you want to demolish or deconstruct?' with radio button options for House, Multi-family home, and Commercial / industrial building. A 'Next' button is located below the form. On the right, a blue box contains contact information for the Development and Building Services Centre, including phone number (604-873-7611), location (515 West 10th Avenue, Vancouver, BC V5Z 4A8), and hours.

Home, property, and development

- Waste disposal and recycling
- Property tax
- Empty Homes Tax
- Utility and landfill bills
- ▾ Building and renovating
 - Green building and renovating
 - ▾ Permits and regulations
 - When you need a permit
 - Permit appointments
 - Risks of working without a permit
 - ▾ Apply for and manage your permit
 - Alternative solutions
 - Anchor rod permit
 - Building permit
 - ▾ Demolition permit

Demolition permit

In order to take down a building in Vancouver, you need a demolition permit. Requirements to reuse and recycle demolition materials depend on the type of building you are taking down.

The City is here to help

Using the tools and information below, you can find out what the requirements are for your situation. However, if you're still not sure what is required for your project, you can contact us directly. Our staff can help you determine what permits you need, and help navigate you through the process.

What type of building do you want to demolish or deconstruct?

- House
- Multi-family home
- Commercial / industrial building

Contact the Development and Building Services Centre about building and zoning

Phone
604-873-7611

Location and mailing address
Development and Building Services Centre
Ground floor
515 West 10th Avenue
Vancouver, BC V5Z 4A8

Hours

Next

Demolition Permit Process

Step 2: Determine which demo checklist

- 2 Types:
- Demolition/Deconstruction of One & Two Family Dwellings
- <http://vancouver.ca/files/cov/demolition-deconstruction-of-one-and-two-family-dwellings-2017.pdf>
- Demolition of All Buildings, except for One- or Two-Family Dwellings
- http://vancouver.ca/files/cov/demo_commercial_or_industrial.pdf

Demolition Permit Process

Step 3: Determine if there are zoning restrictions or related DP/BP for new development

- For demolition of 1 & 2 family in RS & FSD zones and for Heritage listed buildings, demolition permit cannot be issued until development permit for the new development is issued.
- For demolition of residential rental, demolition permit cannot be issued until development permit for new development is issued. Tenant Relocation and Protection Policy may be applicable.
- If DP is under review, issuance of the demolition permits may need to be coordinated.

Demolition Permit Process

Step 4: Determine if you need to meet Green Demolition Bylaw

- Pre 1940 character requires 90% waste diversion
- Pre 1940 non-character requires 75% waste diversion
- Rezoning requirements may require 75 to 90% waste diversion
- Green Demo Deposit: \$14,650 deposit + \$350 application fee
- Note: Changes coming in 2018 to expand Green Demolition to pre 1950 homes and eventually require all homes to require minimum 75% waste diversion thereafter.

Demolition Permit Process

Step 5: Determine if engineered demolition plan is required

- Signed and sealed by PEng will be required for demolition of all buildings greater than 3 storeys in building height, over 600 sqm in building area, constructed with pre-stressed concrete, located on sloped or unstable sites or an excavation depth over 1.2 m
- <http://bulletins.vancouver.ca/2012/2012-001.pdf>

Demolition Permit Process

Step 6: Understand Landscape, Environmental and Engineering requirements

- Landscape: show all tree protection barriers and trees proposed for removal on the site/survey plans with an arborist report
- Environmental: include Qualified Professional Declaration for Salvage and Abatement and Green Demolition compliance forms
- Engineering: Damage deposit and/or Street Crossing Permit may be required. Work on/near the property may require a Street Occupancy Permit (Hoarding) Permit. Traffic Management Plan is required for larger/complex demolition work

Demolition Permit Process

Step 7: Understanding time line and sequence of permit issuance

- Apply for demolition permit through Services Centre unless demolition is tied to new 1 & 2 family dwellings.
- Currently taking about 4 weeks from intake to scheduled review date for permits processed through the Services Centre.
- On review date ensure you have tree protection barriers up and inspected by DBI and Engineering fees are paid.
- Salvage and Abatement (S&A) permit issued first.
- Once S&A work has been completed submit documents to Environmental Services.
- Applicant to contact project coordinator that S&A work has been completed to have the demolition permit issued.

Demolition Permit Process

Questions on Demolition and Salvage & Abatement Permits?

Contact the Development and Building Services Centre in person, by phone (604)873-7611 or by email CSG.EnquiryCentre@vancouver.ca.

**Addressing
CP Project Types
Occupancy Permits**

Addressing



- ✓ **Full addressing clearance will be at stage 1**
- ✓ **Submit architectural drawings at application (upload to POSSE)**
- ✓ **Addressing review group will be opened by BRB staff**

○ Addressing Plans:

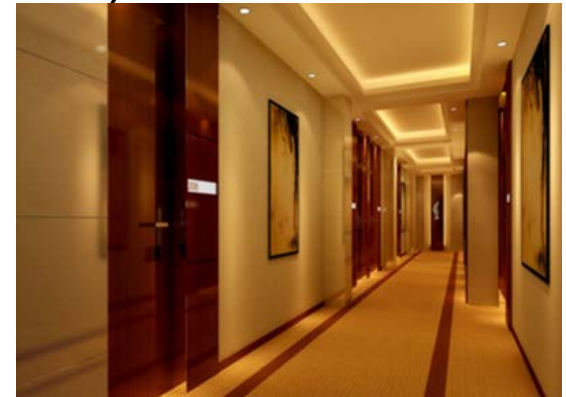
- Full floor plans of every level including underground parking, roof plans
- Landscape plans to provide site context & access paths
- Elevations & sections are helpful, especially for sloping sites or double height areas
- Identify opened and unopened streets, greenways (pedestrian or others)
- Label plans as “Issued for Addressing Review”; not “Draft” nor “Not for Construction”

**ISSUED FOR
ADDRESSING
REVIEW**

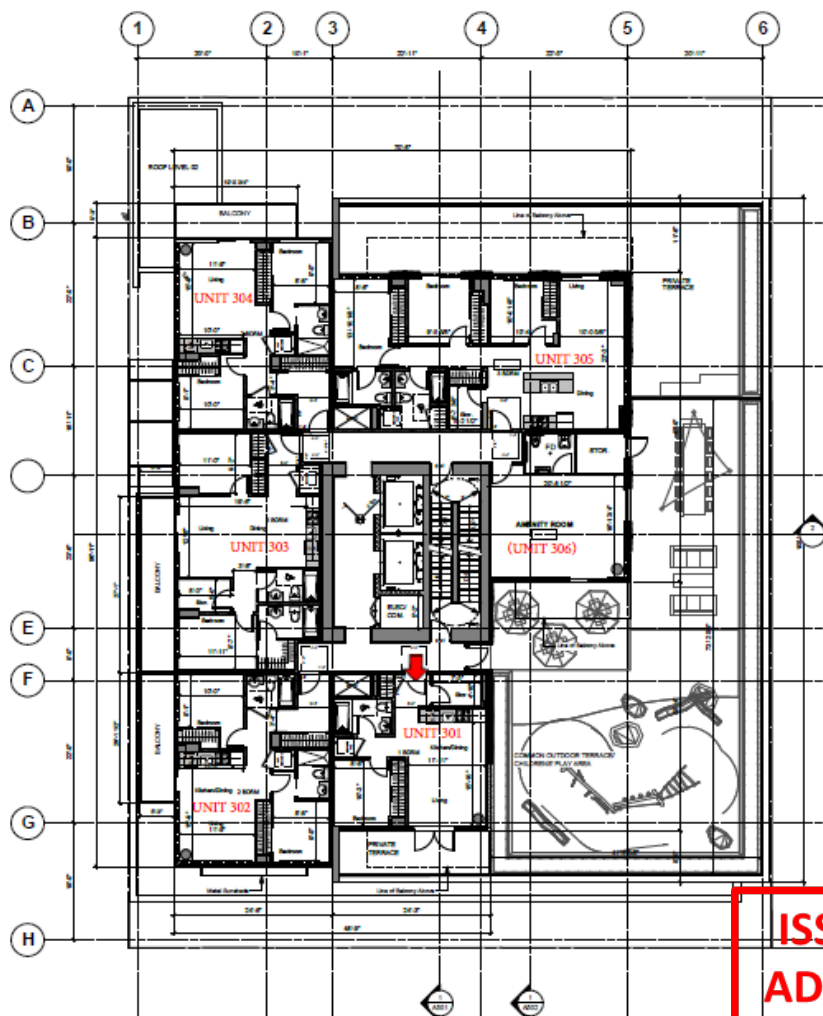
Addressing

- ✓ **Full Construction architectural drawings to clearly show approved addresses and uses**
- ✓ **BRB staff confirm addressing of the full construction architectural drawings with stage 1 addressing plans – fees will be charged for all changes**
- ✓ **Final Design Drawings must show all addresses as approved; will be sent to Addressing for verification and fees will be charged for changes**

- Addressing Sequencing
 - Suites are numbered **clockwise** from the elevator
 - Incrementing number, as per Division C, Section 1.10
 - City Bulletin 2015-005-BU: Addressing & Suite Numbering
- Complicated arrangements: contact the assigned BRB Staff to review with Addressing Coordinator
- Address assignments are prescribed by CBO's authority and the VBBL under Div.C, Section 1.10 (Addressing Buildings and Parcels of Land)



Addressing



**ISSUED FOR
ADDRESSING
REVIEW**

Unique Cases

➤ Guest Suites

- Bookable “visitor’s dwelling units” in an apartment building



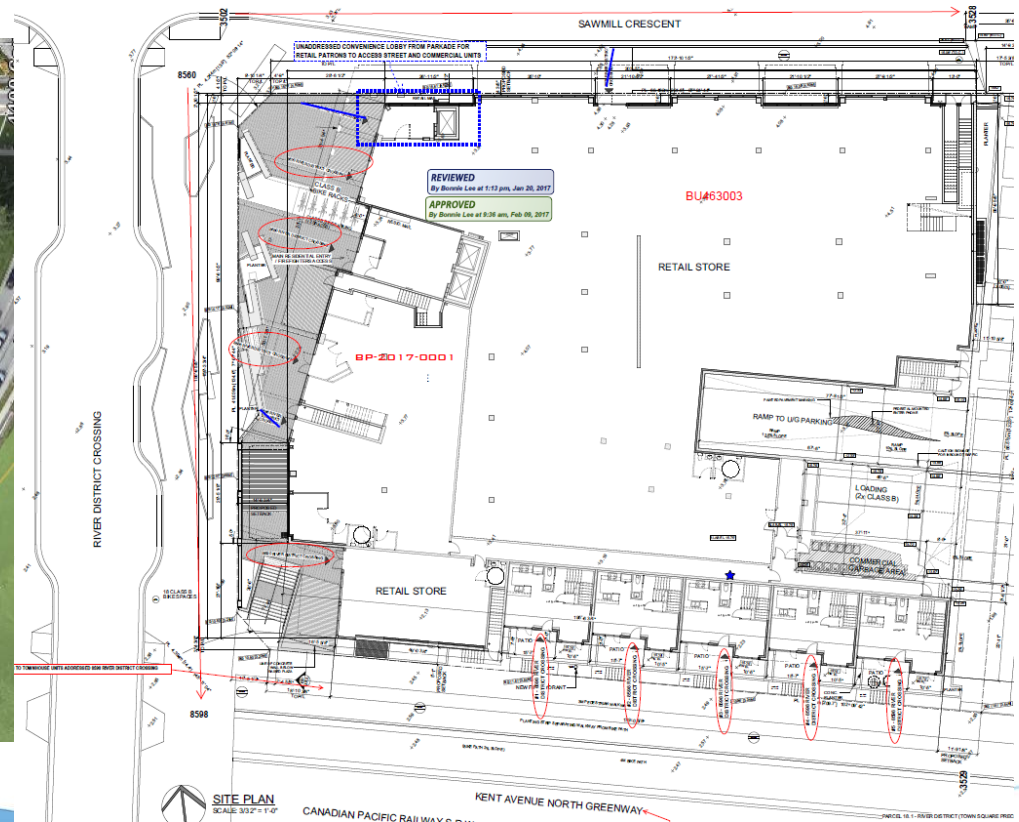
- Provide unit # and identify as “guest suite”



Addressing

➤ Lane-Orientated

- Infills, lock-off suites & cut-off portions
- Assigned a fronting or flanking street address
- Sole reliance on lane access is not acceptable
- Hence an **ON-SITE** pedestrian path required



Addressing

➤ Lane-Orientated

- Infills, lock-off suites & cut-off portions
- Assigned a fronting or flanking street address
- Sole reliance on lane access is not acceptable
- Hence an **ON-SITE** pedestrian path required



Questions to consider:

- Who is responsible to remove snow in the City lane?
- How do I even get to my lane-orientated unit in this situation?
- Who is liable if I fall or get hit by a vehicle?

Addressing

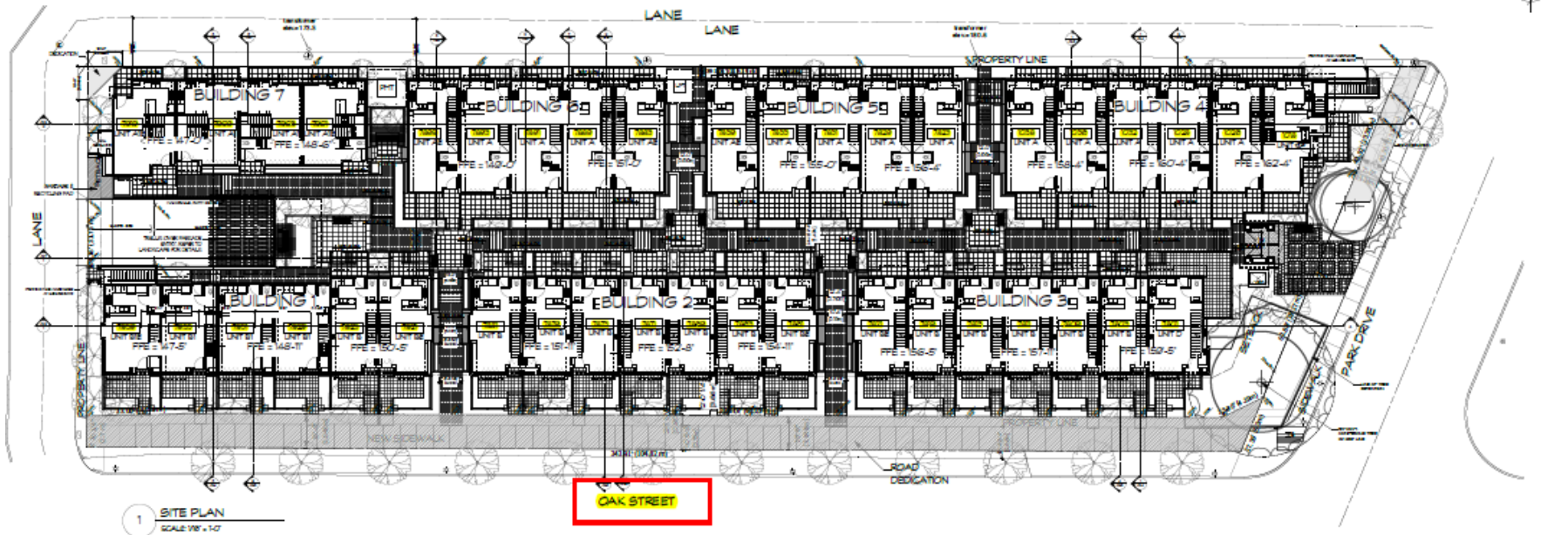
- Townhouse Clusters
 - Assigned based on point of entry



Addressing

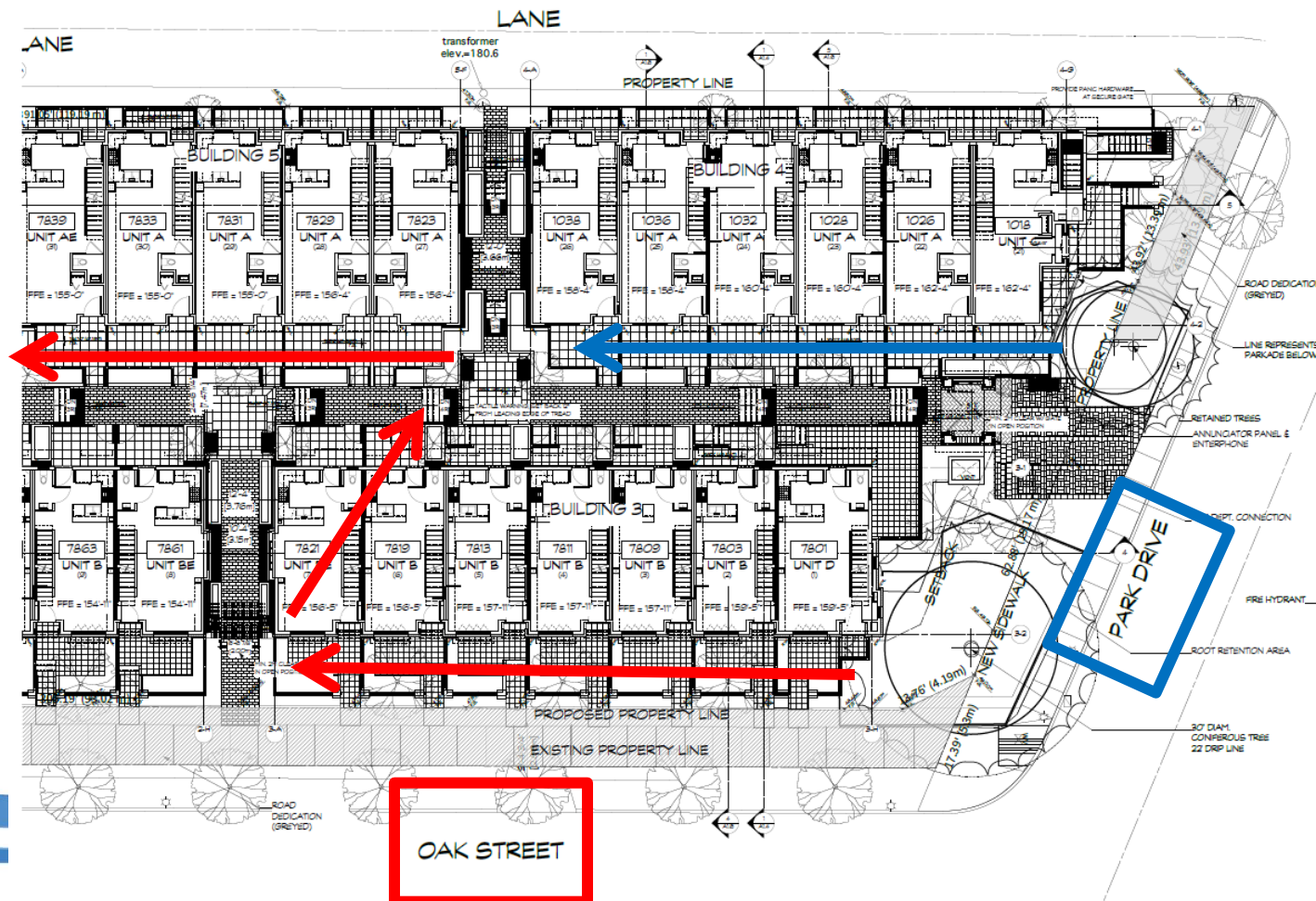
- Townhouse Clusters
 - Assigned based on relative point of entry from street
 - Example 1000 Block Park Drive

BU468678 1018 Park Drive (Main/Primary site)



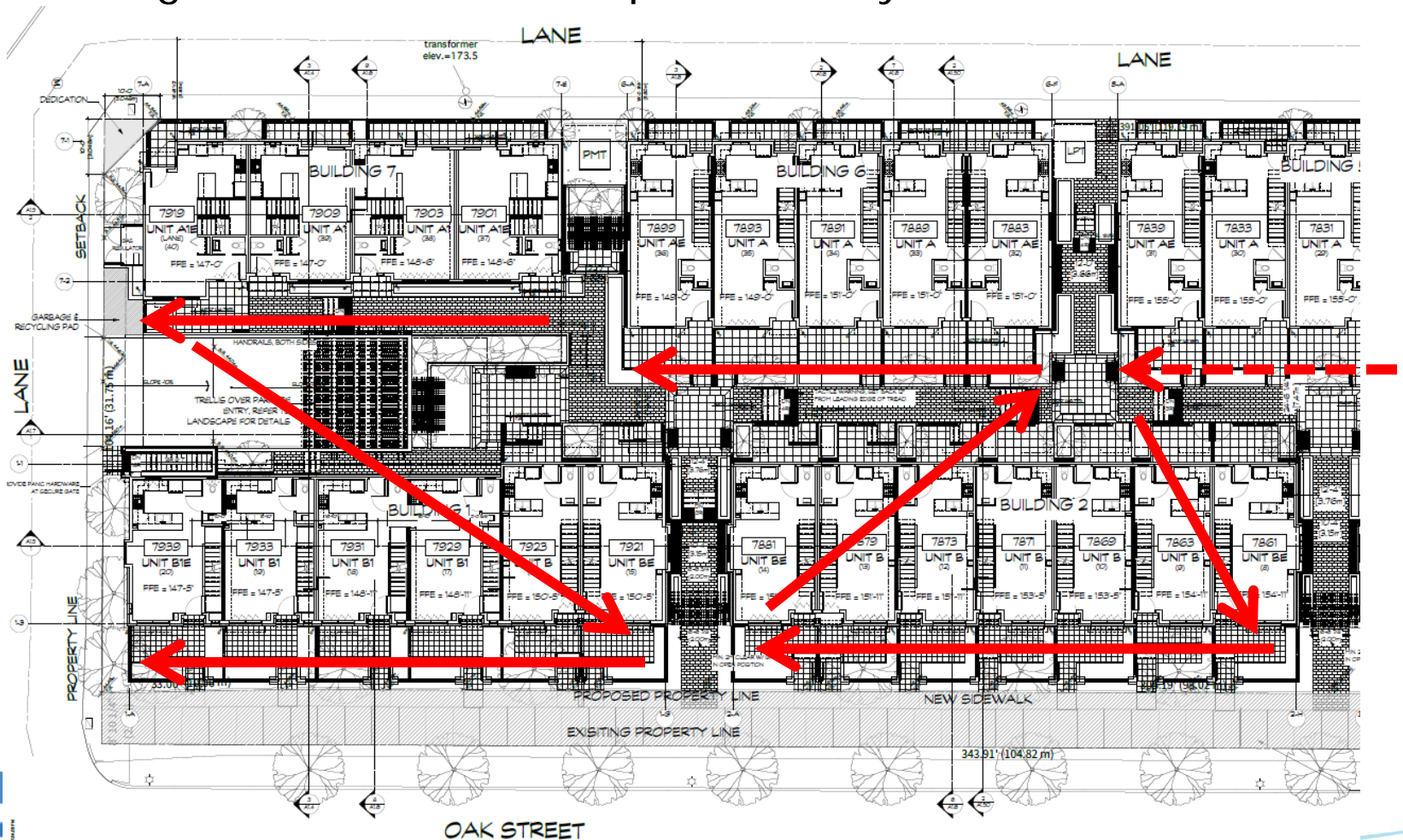
Addressing

- Townhouse Clusters
 - Assigned based on relative point of entry from street



Addressing

- Townhouse Clusters
 - Assigned based on relative point of entry from street



CP Project Types – What's in & out



- ✓ New Construction [§ 2.2 of manual]
 - Under scope of Sentence 1.3.3.2.(1) of Division A
- ✓ Existing & Heritage Buildings [§ 2.3 of manual]
 - Due to variable conditions and permit history → meet with AHJ to confirm acceptance in principle of upgrade levels
 - No pre-acceptance required if FULLY upgrading building
- ✗ Outdoor Patios (unless DP approval and included with CP TI application)
- ✗ Single and Two Family Dwellings (including multiple on a single site)
- ✗ Tenant Improvements (eligible for TIPS, Field Reviews)
- ✗ Projects with no significant code complexity

**Occupancy Permit Submission Document
Checklist Amendments
(Attachment 11 in CP Manual)**

Occupancy Permits

Matthew Lam Asst. Director BRB

Occupancy Permit Submission Document Checklist (Attachment 11 in CP Manual)

Legend:

- COC = City Occupancy Clerk
- CPC = CP Coordinator
- DBI = District Building Inspector
- VFRS = Vancouver Fire & Rescue Service
- EUD = Energy Utilization Department







Document	Action by	Submit Prior to City Demonstration	Submit Prior to City Final	Mandatory Submissions to City	Submissions to RP/CRP/CP Optional to City
1. Occupancy Permit Application					
Occupancy Permit Application	CP	3 weeks		to COC	
Test Protocol	CP	24 hours		to DBI	
Fire Safety Plan	Owner	2 weeks		to VFRS	
2. Final Design Drawings (one copy signed and sealed by RP, labelled as "Final Design Drawings", c/w CP stamp, signature & date)					
Record drawing transmittal	CP		1 week	to CPC	
Architectural	Architect		1 week	to CPC	
c/w Alternative solutions on front page	CRP		1 week	to CPC	
Guards/handrails	Guard contractor		1 week	to CPC	
Structural	Structural engineer		1 week	to CPC	
Mechanical	Mechanical engineer		1 week	to CPC	
Plumbing	Plumbing engineer		1 week	to CPC	
Fire suppression	Fire suppression engineer		1 week	to CPC	
Electrical	Electrical engineer		1 week	to CPC	
Geotechnical (if changes made)	Geotechnical engineer		1 week	to CPC	
3. Schedules S-B Letters of Assurance - For Design during Construction (one original signed and sealed)					
Upper windows	Trade contractor				to RP/CRP/CP
Storefront windows	Trade contractor				to RP/CRP/CP
Wall cladding	Trade contractor				to RP/CRP/CP

Occupancy Permits

Matthew Lam Asst. Director BRB

Occupancy Permit Submission Document Checklist (AMENDED) (Attachment 11 in CP Manual)

Legend:

-  COC = City Occupancy Clerk
-  FDPC = Final Design Drawing Project Coordinator
-  DBI = District Building Inspector
-  VFRS = Vancouver Fire & Rescue Service

Document	Action by	Submit Prior to City Demonstration	Submit Prior to City Final	Mandatory Submissions to City	Submissions to RP/CRP/CP Optional to City
1. Occupancy Permit Application					
Occupancy Permit Application	CP	3 weeks		to COC	
Test Protocol	CP	24 hours		to DBI	
Fire Safety Plan	Owner	2 weeks		to VFRS	
2. Final Design Drawings (one copy signed and sealed by RP, labelled as "Final Design Drawings", c/w CP stamp, signature & date)					
Record drawing transmittal	CP		4 weeks	to FDPC	
Architectural	Architect		4 weeks	to FDPC	
c/w Alternative solutions on front page	CRP		4 weeks	to FDPC	
Guards/handrails	Guard contractor		4 weeks	to FDPC	
Structural	Structural engineer		4 weeks	to FDPC	
Mechanical	Mechanical engineer		4 weeks	to FDPC	
Plumbing	Plumbing engineer		4 weeks	to FDPC	
Fire suppression	Fire suppression engineer		4 weeks	to FDPC	
Electrical	Electrical engineer		4 weeks	to FDPC	
Geotechnical (if changes made)	Geotechnical engineer		4 weeks	to FDPC	
3. Schedules S-B Letters of Assurance - For Design during Construction (one original signed and sealed)					
Upper windows	Trade contractor				to RP/CRP/CP
Storefront windows	Trade contractor				to RP/CRP/CP
Wall cladding	Trade contractor				to RP/CRP/CP

Occupancy Permits

Matthew Lam Asst. Director BRB

Current Checklist



	Verification report	Trade contractor	24 hours		to DBI
	per CoV Bulletin 2000-022-EL				
	ULC Certificate "Central Station Fire Protective Signalling Service" with site specific certificate	Trade contractor	24 hours		to DBI
8. Energy Utilization Conformance Letters					
	Transmittal to Energy Utilization Dept.	CP		1 week	to EUD
	Building envelope (insulation, vapor barrier)	Architect		1 week	to EUD
	Mechanical equipment	Mechanical engineer		1 week	to EUD
	Lighting	Electrical engineer		1 week	to EUD
9. Alternative Solutions					
	Cover letter with list of Alternative Solutions	CP		24 hours	to DBI
	Letter of conformance with Alternative Solutions	Alternative Solutions		24 hours	to DBI

Occupancy Permits

Matthew Lam Asst. Director BRB

Current Checklist

	Verification report	Trade contractor	24 hours		to DBI
	per Gov Bulletin 2000-022-EL				
	ULC Certificate "Central Station Fire Protective Signalling Service" with site specific certificate	Trade contractor	24 hours		to DBI
8. Energy Utilization Conformance Letters					
	Transmittal to Energy Utilization Dept.	CP		1 week	to EUD
	Building envelope (insulation, vapor barrier)	Architect		1 week	to EUD
	Mechanical equipment	Mechanical engineer		1 week	to EUD
	Lighting	Electrical engineer		1 week	to EUD
9. Alternative Solutions					
	Cover letter with list of Alternative Solutions	CP	24 hours		to DBI
	Letter of conformance with Alternative Solutions	Alternative Solutions	24 hours		to DBI

4 weeks


to FDPC

Amended Checklist

	Verification report	Trade contractor	24 hours		to DBI
	per Gov Bulletin 2000-022-EL				
	ULC Certificate "Central Station Fire Protective Signalling Service" with site specific certificate	Trade contractor	24 hours		to DBI
8. ASHRAE 90.1 Conformance Letters					
	Transmittal to Final Design Drawings PCs	CP		4 weeks	to FDPC
	ASHRAE 90.1 Checklist w/Occupancy Permit Stage	Architect/Engineer		4 weeks	to FDPC
	Revised Deliverables Compliance Documents	Architect/Engineer		4 weeks	to FDPC
9. Alternative Solutions					
	Cover letter with list of Alternative Solutions	CP	24 hours		to DBI
	Letter of conformance with Alternative Solutions	Alternative Solutions	24 hours		to DBI

AMENDED Final Design Drawings Checklist (Attachment 12 in CP Manual)

- Includes ASHRAE confirmation or revised checklists



CITY OF VANCOUVER

DEVELOPMENT, BUILDINGS and LICENSING
Building Review Branch

CERTIFIED PROFESSIONAL PROGRAM - FINAL DESIGN DRAWINGS CHECKLIST

PROPERTY ADDRESS: _____ BUILDING PERMIT NO.: _____

ITEM	COMMENTS	
DE Compliance Letter		<input type="checkbox"/>
ASHRAE Checklist - Applicable forms for OC	(Bottom of page 2 of ASHRAE checklist)	<input type="checkbox"/>
Architectural Drawings		<input type="checkbox"/>
Structural Drawings		<input type="checkbox"/>
Excavation/ Shoring Drawings (showing permanent anchors)		<input type="checkbox"/>
Electrical Drawings		<input type="checkbox"/>
Sprinkler Drawings		<input type="checkbox"/>
Mechanical Drawings		<input type="checkbox"/>
Plumbing Drawings		<input type="checkbox"/>
Guard-Rail Shop Drawings		<input type="checkbox"/>
Drawings marked "Final Design Drawings"		<input type="checkbox"/>
CP Stamp (Date and Signed)		<input type="checkbox"/>
P. Eng. / Arch. Seal & Signature		<input type="checkbox"/>
Annotations on Drawings		<input type="checkbox"/>
P. Eng. / Arch. / CP Initialed		<input type="checkbox"/>
Permanent Markups		<input type="checkbox"/>
Related Development Permit(s) / Minor Amendment(s) / BP Revision Nos.	(Attach summary sheet if necessary)	<input type="checkbox"/>
Related Alternative Solutions (attach sheet if needed)		<input type="checkbox"/>
Related Occupancy Permit Application(s)	Final: _____ Partial: see below	<input type="checkbox"/>
MOC Certificate: Issued / Not Req.		<input type="checkbox"/>
Other Building Permit Conditions (e.g. legal agreements)		<input type="checkbox"/>
Change Notice Required		<input type="checkbox"/>
Addressing Check		<input type="checkbox"/>

Additional Comments: → → (Note: 1 issued after redlining; no changes and original drawings are final design; 1 added on 2011-10-15)

SIGNED-OFF BY BRB STAFF: _____ ENTIRE BUILDING; IF PARTIAL: _____
(+ refer to partial clearance below with corresponding OC permit no and scope of approval)


Partial OC Permit No.	Partial Scope	Cleared By & Date

PACKAGE RECEIVED DATE	REQUESTED OCCUPANCY DATE	PROCESSED BY	DATE

453 West 12th Avenue Vancouver BC V5Y 1V4 vancouver.ca Oct 15/17

AMENDED Final Design Drawings Checklist (Attachment 12 in CP Manual)

- Includes ASHRAE confirmation or revised checklists
- Identifies all applicable DPs, MAs & BP revisions



CITY OF VANCOUVER

DEVELOPMENT, BUILDINGS and LICENSING
Building Review Branch

CERTIFIED PROFESSIONAL PROGRAM -- FINAL DESIGN DRAWINGS CHECKLIST

PROPERTY ADDRESS: _____ BUILDING PERMIT NO.: _____

ITEM	COMMENTS	
DE Compliance Letter		<input type="checkbox"/>
ASHRAE Checklist (Applicable forms for OC)	(Bottom of page 2 of ASHRAE checklist)	<input type="checkbox"/>
Architectural Drawings		<input type="checkbox"/>
Structural Drawings		<input type="checkbox"/>
Excavation/ Shoring Drawings (showing permanent anchors)		<input type="checkbox"/>
Electrical Drawings		<input type="checkbox"/>
Sprinkler Drawings		<input type="checkbox"/>
Mechanical Drawings		<input type="checkbox"/>
Plumbing Drawings		<input type="checkbox"/>
Guard-Rail Shop Drawings		<input type="checkbox"/>
Drawings marked "Final Design Drawings"		<input type="checkbox"/>
CP Stamp (Date and Signed)		<input type="checkbox"/>
P. Eng. / Arch. Seal & Signature		<input type="checkbox"/>
Annotations on Drawings P. Eng. / Arch. / CP Initialed		<input type="checkbox"/>
Permanent Markups		<input type="checkbox"/>
Related Development Permit(s) / Minor Amendment(s) / BP Revision Nos.	(Attach summary sheet if necessary)	<input type="checkbox"/>
Related Alternative Solutions (attach sheet if needed)		<input type="checkbox"/>
Related Occupancy Permit Application(s)	Final: Partial: see below	<input type="checkbox"/>
MOC Certificate: Issued / Not Req.		<input type="checkbox"/>
Other Building Permit Conditions (e.g. legal agreements)		<input type="checkbox"/>
Change Notice Required		<input type="checkbox"/>
Addressing Check		<input type="checkbox"/>

Additional Comments: → → (Note: 1 issued after redlining; no changes and original drawings are final design; 1 added on 2011-10-15/16)

SIGNED-OFF BY BRB STAFF: _____ ENTIRE BUILDING; IF PARTIAL: _____
(+ refer to partial clearance below with corresponding OC permit no and scope of approval)


Partial OC Permit No.	Partial Scope	Cleared By & Date

PACKAGE RECEIVED DATE:	REQUESTED OCCUPANCY DATE:	PROCESSED BY:	DATE:

453 West 12th Avenue Vancouver BC V5Y 1V4 vancouver.ca Oct 15/17

AMENDED Final Design Drawings Checklist (Attachment 12 in CP Manual)

- Includes ASHRAE confirmation or revised checklists
- Identifies all applicable DPs, MAs & BP revisions
- Tracks partial OC clearances
- CP can use as a submission checklist to prepare package and complete the form accordingly


DEVELOPMENT, BUILDINGS and LICENSING
Building Review Branch

CERTIFIED PROFESSIONAL PROGRAM -- FINAL DESIGN DRAWINGS CHECKLIST

PROPERTY ADDRESS: _____ BUILDING PERMIT NO.: _____

ITEM	COMMENTS
DE Compliance Letter	
ASHRAE Checklist & Applicable forms for OC	(Bottom of page 2 of ASHRAE checklist)
Architectural Drawings	
Structural Drawings	
Excavation/ Shoring Drawings (showing permanent anchors)	
Electrical Drawings	
Sprinkler Drawings	
Mechanical Drawings	
Plumbing Drawings	
Guard-Rail Shop Drawings	
Drawings marked "Final Design Drawings"	
CP Stamp (Date and Signed)	
P. Eng. / Arch. Seal & Signature	
Annotations on Drawings P. Eng. / Arch. / CP Initialed	
Permanent Markups	
Related Development Permit(s) / Minor Amendment(s) / BP Revision Nos.	(Attach summary sheet if necessary)
Related Alternative Solutions (attach sheet if needed)	
Related Occupancy Permit Application(s)	Final: Partial: see below
MOE Certificate: Issued / Not Req.	
Other Building Permit Conditions (e.g. legal agreements)	
Change Notice Required	
Addressing Check	

Additional Comments: _____
(Note: 1 based after redlining; no changes and original drawings are final design; 1 added on 2011-10-18)

SIGNED-OFF BY BRB STAFF: _____ ENTIRE BUILDING; IF PARTIAL

(+ refer to partial clearance below with corresponding OC permit no and scope of approval)

Partial OC Permit No.	Partial Scope	Cleared By & Date

PACKAGE RECEIVED DATE:	REQUESTED OCCUPANCY DATE:	PROCESSED BY:	DATE:

453 West 12th Avenue Vancouver BC V5Y 1V4 vancouver.ca Oct 15/17

Occupancy Submission Reminder

ASHRAE CHECKLIST
at bottom of Page 2
under all compliance
paths: prescriptive,
trade-off, or ECB.

<input type="checkbox"/> Energy Statements on Drawings	<input type="checkbox"/> Lighting Compliance Documentation
	<input type="checkbox"/> Trade-off Items: <input type="text"/>
Sect 11) ECB Info	Completed ASHRAE 90.1 Compliance Documents and other requirements;
	<input type="checkbox"/> ECB Modeling Output: (as per ECB Compliance Report pages 1 & 2)
	<input type="checkbox"/> LEED Letter Template (EAc1)
	<input type="checkbox"/> Exempted Assemblies (1%) Assembly Area Exempted: <input type="text"/>
	<input type="checkbox"/> Adj assembly R values include exempted assembly R values
	<input type="checkbox"/> Completed CoV Building Energy and GHG Emissions Calculator Form

OCCUPANCY PERMIT STAGE

Check one only;

Building Permit stage submission of Deliverables is complete and accurate - No Revisions Required

or

Submitting revised Deliverables
(Submit only the documentation that differs from Building Permit stage Deliverables)

List All Revised and Resubmitted Deliverables Using Drop-Down Boxes Below;

ASHRAE 90.1 Section	Revised Documentation
Building Envelope	ECB - ECB Modeling Output, with completed CoV Building Energy and GHG Emissions Calculator

vancouver.ca/home-property-development/large-building-energy-requirements-forms-checklists.aspx DOC/2012/15550 Version 150213-2

[Checklist \(p2 - Prescriptive\)](#)
[Checklist \(p2 - Trade-Off\)](#)
[Checklist \(p2 - ECB\)](#)
[Bldg Energy & GHG](#)

46	Rezoning Projects - LEED	<input type="checkbox"/>	Completed LEED Letter Template (EAc1)
47			
48	"Addition" Projects only	<input type="checkbox"/>	Completed 90.1-2010 Checklist for Alterations to
49			
50			
51			
52	OCCUPANCY PERMIT STAGE		
53			
54	Check one only;		
55			
56	<input type="checkbox"/> Building Permit stage submission of Deliverables is complete and accurate - No Revision		
57	or		
58	<input checked="" type="checkbox"/> Submitting revised Deliverables		
59	(Submit only the documentation that differs from Building Permit stage Deliverables)		
60			
61	List All Revised and Resubmitted Deliverables Using Drop-Down Boxes Below;		
62			
63	ASHRAE 90.1 Section	Revised Documentation	
64	HVAC	HVAC - Prescriptive Requirements (Part III, pages 1 & 2)	
65	Lighting	Lighting Compliance Documentation	
66			
67			
68			
69			
70			
71			
72			
73	vancouver.ca/home-property-development/large-building-energy-requirements-forms-checklists.aspx	DOC/2012/15550	Version 150213-2
74			
	Checklist (p1 - All Paths) Sample (NC w Rz and NE) Checklist (p2 - Prescriptive) Checklist (p2 - Trade-Off)		
	Ready		

Engineering Reviews

Effective November 1, 2017

SHORING & EXCAVATION – SHOTCRETE REMOVAL

- Increased conflicts between utilities and shotcrete in street
 - Costly to remove
 - Implications to underground structure when removing in future if not properly installed
- Revisions to City's process:
 - New DP condition to consider installation and removal of shotcrete
 - Revisions to City standards to require at completion:
 - Sealed as built drawings
 - Photo evidence of removal

ENGINEERING DESIGN AND CONSTRUCTION STANDARDS UPDATE

- McElhanney has been contracted to create an Engineering Department:
 - Design Manual (Including Submission Requirements)
 - Supplementary MMCD Construction Specifications
 - Supplementary MMCD Standard Detail Drawings

- To:
 - Concisely communicate current and accepted practices
 - Create a single source for Engineering standards
 - Eliminating inconsistencies between existing manuals (currently unique per discipline)

MANUALS TO BE READY FOR USE IN 2018

CONSTRUCTION STREET USE

- Increased demands on City Street – reduced capacity during construction
- Revisions to City's process:
 - New DP condition to contact Engineering in DP stage for permissible street use
 - Traffic Management Plan Review
 - Coordination with major City projects
 - Holiday Street Use restrictions – effective Dec 8 – Jan 2

Process Updates

Kelly Anderson Manager Building Review Branch

Submission Forms

Application and Permit Withdrawals

Refunds

Revisions

Neighbour Notification

Partial Occupancy Permits

POSSE Updates

CP Submission Forms

- <http://vancouver.ca/home-property-development/certified-professional-program.aspx>
- Nearly all forms have been converted to fillable PDFs
- Newsletters provide updates on amended forms

Forms, resources, and newsletters | Permit process | Advisory committee | Contact and become a CP

Show all | Hide all

Forms for 2014 VBBL

Certified Professional letters (effective January 1, 2015)

- Schedule CP-1 confirmation of commitment by owner and certified professional (620 KB)
- Schedule CP-2 confirmation of completion of code coordination (890 KB)
- Schedule CP-3 confirmation of tenant improvement compatibility (900 KB)

Letters of Assurance

- Schedule A (111 KB)
- Schedule B (64 KB)
- Schedule C-A (75 KB)
- Schedule C-B (120 KB)
- Schedule D-1 (26 KB)
- Schedule D-2 (41 KB)
- Schedule E-1: Owner's Undertaking Letter (106 KB)
- Schedule E-2: Owner's Undertaking Letter for tenant improvements (87 KB)
- Schedule E-3: Tenant's Undertaking Letter for tenant improvements (86 KB)

Building permit application stage

- Authorized staged construction (150 KB)
- Authorized staged construction drawing list (130 KB)

CITY OF VANCOUVER

How to ... Search..... 3-1-1

Green Vancouver | Your government | About Vancouver | Parks, recreation, and culture | Home, property, and development | People and programs | Streets and transportation | Doing business

Home > Home, property, and development > Building and renovating > Permits and regulations > Chief Building Official > Certified Professional Program

Home, property, and development

- Waste disposal and recycling
- Property tax
- Empty Homes Tax
- Utility and landfill bills
- Building and renovating
 - Green building and renovating
 - Permits and regulations
 - When you need a permit
 - Permit appointments
 - Risks of working without a permit
 - Apply for and manage your permit
 - Application forms and checklists
 - Regulations, bulletins, and advisories
 - Concerns about construction work
 - Statistics on construction activity
 - Garbage and recycling storage facilities
 - Chief Building Official

Certified Professional Program

The City of Vancouver has an alternate permit process known as the Certified Professional (CP) Program. The program facilitates the issuance of building permits for new or existing buildings by taking on a review and inspection role on behalf of the City.

Under the Certification of Professionals Bylaw, the City can issue a building permit on the certification of a recognized registered professional architect or engineer.

- Read the Certification of Professionals (CP) Bylaw (120 KB)

How certified professionals expedite the permit process

Under the CP permit process, permit issuance can be staged, allowing construction to start earlier than otherwise – an advantage to building owners wanting to expedite their projects.

All required City approvals, such as the development permit, must be in place prior to issuance of a particular stage. Certified professionals don't replace registered professionals normally involved in a construction project. CPs provide an additional level of Building Bylaw review traditionally carried out by City staff.

Forms, resources, and newsletters | Permit process | Advisory committee | Contact and become a CP

Show all | Hide all

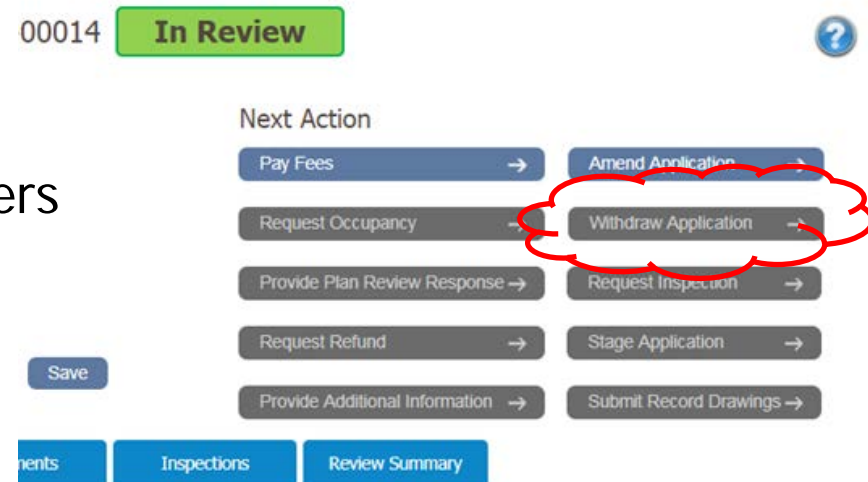
- Forms for 2014 VBBL
- Forms for 2007 VBBL
- Resources
- Newsletters

Application and Permit Withdrawals

- Permit applications and issued permits can be withdrawn/cancelled provided work has not yet started on site
- Send a CP-stamped letter to CP.Process@vancouver.ca
 - Request withdrawal
 - Include all relevant permit numbers and addresses
 - Confirm that no work has been done on site

➤ Don't use the **Withdraw Application** button in POSSE – please!

- Permits required in response to Orders may not be withdrawn/cancelled



Refunds

- At the conclusion of a project, use the Permit Fee Refund Request Form
- Fillable PDF, available under Building Occupancy Stage

- [Attachment 13 development clearance tenant improvement review confirmation letter](#) 📄 (3/0 KB)

Building construction stage

- [Monthly progress report](#) 📄 (120 KB)

Building occupancy stage

- [Final design drawings checklist](#) 📄 (140 KB)
- [Occupancy permit submission documents checklist](#) 📄 (180 KB)
- [Permit fee refund request form \(download where applicable\)](#) 📄 (144 KB) ←

Other forms

- [AL-1 application form available here](#)
- [Building permit data sheet](#) 📄
- [Structural concept review checklist](#) 📄

+ [Forms for 2007 VBBL](#)

+ [Resources](#)

+ [Newsletters](#)

Refunds

- Add company letterhead, CP stamp
- Send to occupancy@vancouver.ca
- From the CP Manual: “There will be no refund for alterations to existing buildings due to the increased complexity and staff time required.”

City of Vancouver
515 West 10th Avenue
Vancouver, BC

Attention: Occupancy Clerk - CP REFUNDS
email: occupancy@vancouver.ca

Reference information: **CP REFUND REQUEST**

Project Address:

Permit Number(s):

Final Full Occupancy Permit Number:

The above CP project has received its final occupancy permit. As such, please process any CP refund remaining from the permit fees to:

Thank you,

Revisions

- **All** changes to designs, before or after permit issuance, must be brought to the attention of the CP
- The CP is responsible for consulting with the City on whether or not a change should be documented with a drawing resubmission or formal permit revision
- All revisions and resubmissions must be recirculated to the applicable City review groups (e.g. Engineering must review changes to soil anchors below streets/lanes)

Neighbour Notification

- Crane swing
 - Verification of neighbour notification/permission for crane overswing is no longer required for permit submission
 - We strongly recommend that owners secure agreements with their neighbours!

- Snow drift
 - Verification of neighbour *notification* of increased snow drift on their roof as a result of new construction is required for permit submission

Neighbour Notification

- Permanent encroachment (soil anchors, underpinning, etc.)
 - Verification of neighbour *permission* for permanent encroachment on their property is required for permit submission
 - Can be a letter from the neighbour acknowledging permission or a countersignature on a letter from the Owner requesting permission
 - Legal agreements should be in place prior to encroachment occurring but the City does not need to receive or review

Engineering Relocation

- Effective “soon”, several Engineering Branches will be relocating to Marine Gateway
- Drawing circulation and distribution must be rethought!
- **Effective November 1st** all drawings to be submitted to Engineering must be uploaded to POSSE with your permit application
 - *application form*
 - *addressing plans*
 - *electrical checklists*
 - ***excavation & shoring drawings***
- Maximum 150MB file size, digitally sealed, appropriately named
- Original sealed hard copies of the *same drawings* must be submitted at intake

1.7.3. PARTIAL OCCUPANCY PERMIT FOR BUILDING UNDER CONSTRUCTION

1.7.3.1. Partial Occupancy Permit

- 1) The Chief Building Official may issue a partial occupancy permit for part of a building which is under construction if, in the opinion of the Chief Building Official, such partial occupancy would not jeopardize life or property.
- 2) The Chief Building Official may impose conditions on a partial occupancy permit.
- 3) The Chief Building Official may revoke a partial occupancy permit if the permit holder fails to comply with the conditions imposed by the Chief Building Official.
- 4) The Chief Building Official may revoke a partial occupancy permit if the owner fails to comply with any permit relating to the building.

Partial Occupancy Permits

- Increasingly owners and developers are requesting numerous partial occupancy permits on all types of projects
 - Creates confusion and inconsistency around occupancy sequence
 - Becoming apparent that partial occupancy is becoming a strategy for delaying occupancy submission requirements or for meeting financial requirements
 - Increases process and workload for staff, which delays other permits
 - Increases process and workload for CPs
- Process for partial OCs is outlined in section 8.6 and Attachment 8 of the CP Practice and Procedure Manual

Partial Occupancy Permits

- Proposed sequencing for partial occupancy permits needs to be discussed with the District Building Inspector at least one month in advance of the first anticipated occupancy
 - Longer is recommended for large or complex projects
 - Approval is required
- Proposal must be reasonable:
 - All life safety systems complete
 - Building shell complete in and above occupied areas
 - Logical separation between occupied and in-progress areas (fire separations, signage, safety barricades, appropriate occupant access)
 - Significant portions of the building to be occupied simultaneously

Partial Occupancy Permits

- Proposal submission to include:
 - Drawings and schedule of proposed occupancy sequencing
 - Commitment to complete full occupancy by a specific date
 - Life safety drawings and/or construction safety plan
 - Clarification/status of other obligations (legal agreements, letters of credit, etc.)

- If leaving out a single unit or similar small portion of the building:
 - Revise the BP to convert that portion to “shell”
 - Obtain full occupancy
 - Follow up with a new permit (TI) to complete that space

- Consider multiple components:
 - OC is related to individual BPs – a partial OC in one tower doesn't apply to the other(s)

Partial Occupancy Permits

- Each occupancy permit application submission will include all Schedule Cs, annotated in accordance with the *Guide to the Letters of Assurance in the BC Building Code 2006*
- The City will not accept partial occupancy permits for work that is actually complete or close to it in order to avoid submitting paperwork or completing inspections

POSSE Enhancements

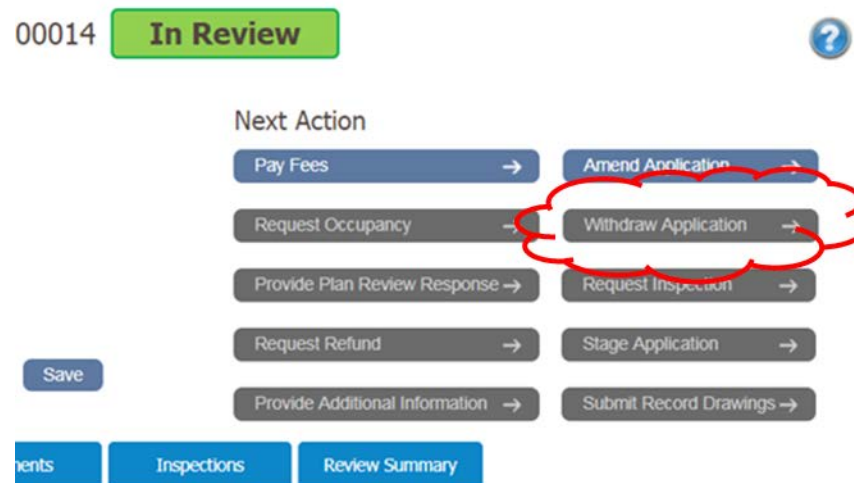
1. POSSE Support

- POSSE Support Line (604-873-7001) is no longer supported by IT
- For first line troubleshooting contact the CP Coordinator at CP.Process@vancouver.ca or 604-873-7406
- For permit-specific questions, continue to contact your assigned Project Coordinator or Code Specialist

POSSE Enhancements

2. “Withdraw Application”

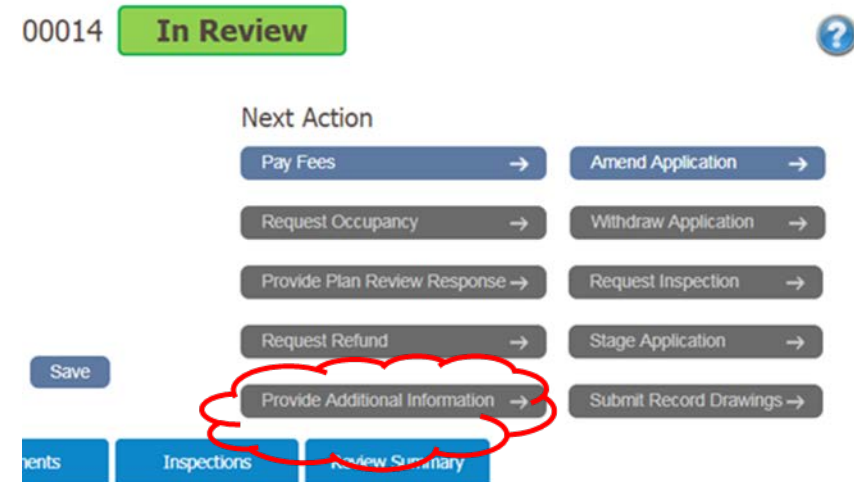
- Button is not to be used and will be deactivated
- Contact CP.Process@vancouver.ca for all withdrawals/cancellations



POSSE Enhancements

3. Uploading documents after initial submission

- Currently scheduled to be effective November 27
- New “Provide CP Documents” button will allow submission of additional documents at any time while the permit is in review
- This is not a substitute for formal submission of subsequent stages
- PC/Code Specialist will be notified of additional documentation – call or email to follow up for the first while
- Continue to submit drawings in hard copy



4. Applicant designation on subjobs of CP projects

- Applications opened as subjobs of existing permits or applications automatically populate with the same applicant as the parent job
- If the applicant is incorrect, then staff can and should correct
- Contractors, owners, etc. opening related permits should ensure that applicant information is correct so that the proper party receives notifications and has online access

5. Online notification settings

- Currently available
- Notifications of permit status can be managed via online account settings
- Standard notifications are sent at multiple milestones that can be customized in your account settings
- Specific notifications are sent at the following milestones:
 - New permit application opened
 - Permit issued
 - Fees applied to the application
 - Inspection completed
 - Additional information is required for further review

POSSE Enhancements

Y OF
COUVER

itions
s
:CP
:LDH
:TIPS
it

ication
mit
it
:inquiry

ermit
t
. Permit
nit

[Content](#) | [Index](#) | [Search](#)

- [-] [U] [Register Your Account](#)
 - [+] Create Your Account
 - [+] Activate Your Account
 - [+] Complete Your Profile
 - [+] Add a Mailing Address
- [-] [U] [My Profile](#)
 - [+] Edit Profile
 - [+] **Change Password**
 - [+] **Edit Email Notifications**
 - [+] Adding Your Contractor Card
 - [+] Update Your Contractor Card at Renewal Time
- [-] [U] [Managing Your Applications](#)
 - [+] My Activities
 - [+] My Inspections
 - [+] My Projects
 - [+] My Payments
- [+] Pay Outstanding Fees
- [-] [U] [Submitting Applications](#)
 - [+] Add Owner/Tenant and Contractor
 - [+] Contractor
 - [+] Locations
 - [+] Can't Find Address in Online System
 - [+] Contacts
 - [+] Documents to Attach
 - [+] Errors on Application
 - [+] Fees
 - [+] Confirmation

POSSE Enhancements

Card
Card at Renewal Time

Contractor

Online System

Edit Email Notifications

To check or update email notifications that you would like to receive when an update is made to your application, follow the following steps:

1. Click on the **My Emails** tab.

Profile

My Profile **My Emails**

Change Password

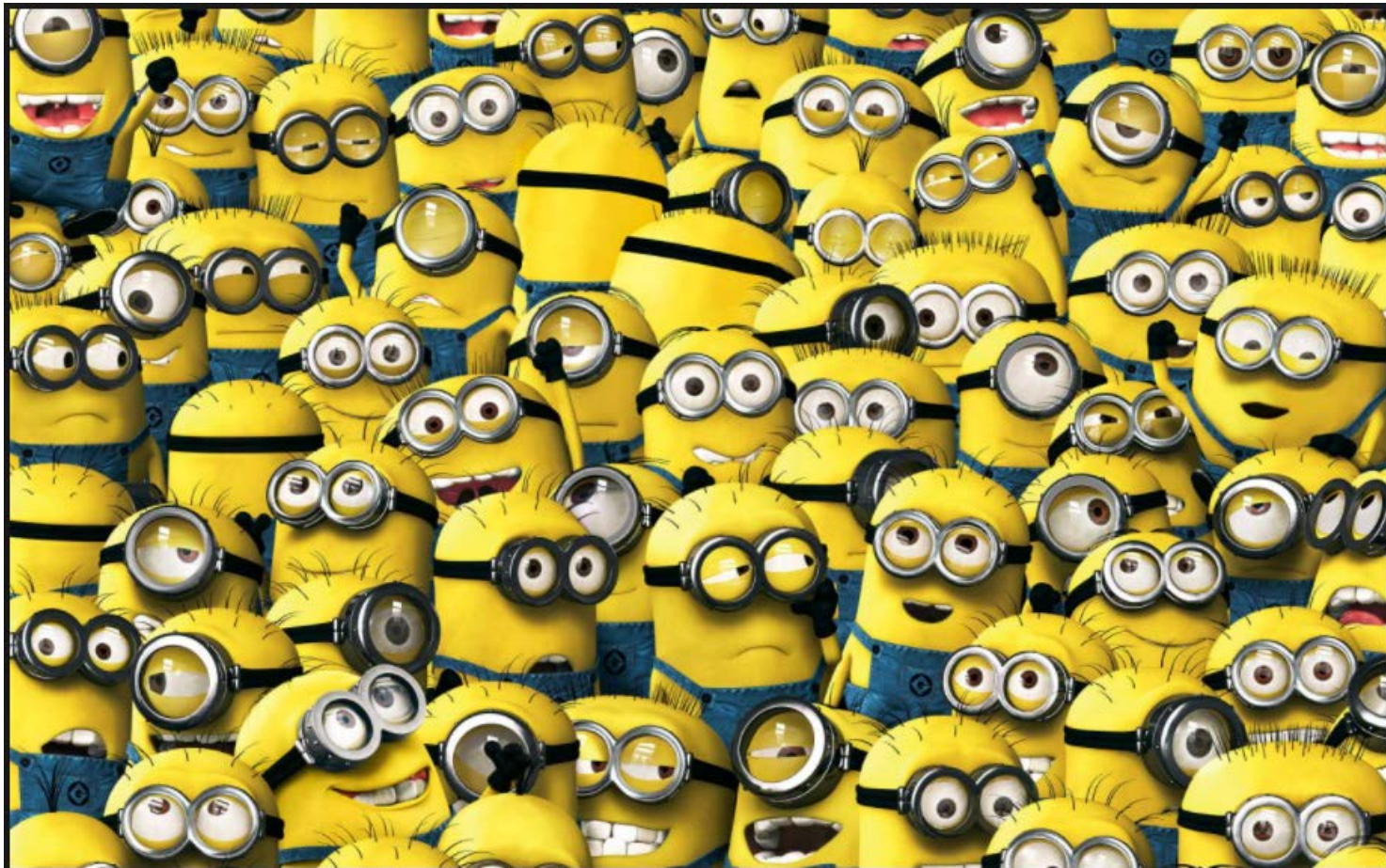
2. Check or uncheck the type of email notifications that you would like to receive (not a complete bottom).

Action Completion Emails

To receive automatic email notifications when key steps in your application process are completed, choose from these options.

Receive email when action is complete:	Receive Email?
Amend Fire Services Permit	<input checked="" type="checkbox"/>
Amend Permit	<input type="checkbox"/>
Cancel Permit	<input checked="" type="checkbox"/>
Complete Permit	<input checked="" type="checkbox"/>
Create Inspection	<input checked="" type="checkbox"/>

GENERAL QUESTIONS AND ANSWERS



DEMOS

Meeting Room 114 in this building
Demos for Notarius and Posse