

City of Whitehorse

Builders Permit and Code

Education webinar series

Session 01

Part 9 NBC overview and permit submission requirements

FINAL DRAFT

January 15, 2025

Presenter – Ken Kunka AScT, BCQ



FLYWHEEL
BUILDING SOLUTIONS

Workshop Series



As part of the City's commitment to improving the permit process and communication with building industry members, the city will be providing 5 online sessions to review local building regulations, the 2020 National Building Code and an overview on the building permit process.

Information presented does not directly represent the opinions of the City of Whitehorse or the Yukon Territory.

This presentation is conceptual and for informal educational purposes only. Material presented must not be considered complete or exhaustive. Code provisions have been generally represented and may not reflect all provisions.



Workshop Series



2025 Education Webinar Sessions

1. Jan 8 – Part 9 overview & what makes up a complete permit submission
2. Jan 22 – Excavation, Footings, Radon and Drainage,
3. Feb 5 – Framing including PWF S406-16,
4. Feb 19 - Fire Protection (Part 9.10),
5. March 5 – Building Envelopes & Mechanical Systems

Learning Objectives – Session 01



This session has been developed to assist building industry partners to gain a better understanding of the following topics:

- **Building Regulations**
 - Federal, Territory, Local Bylaws
- **National Building Code**
 - Divisions – A, B, C
 - Division B – Part 9 – Housing and Small Buildings
- **Permit process changes**
 - Application
 - Plan review – issuance
 - Site inspections
 - Occupancy



Construction Regulations



Three levels of government – four areas of construction regulations

Municipal Act

Local Bylaws

Building
Standards Act

National Building
Code(s) &
Standards



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BUILDING SOLUTIONS

Federal



Provincial or territorial ministries

Canada's Constitution gives the ten provinces and three territories jurisdiction over construction. Some cities also have this authority through a special relationship with their provincial authority.

To enact building and fire regulations, the provinces, territories, and municipalities pass legislation that references the relevant Codes Canada publications or provincial code.

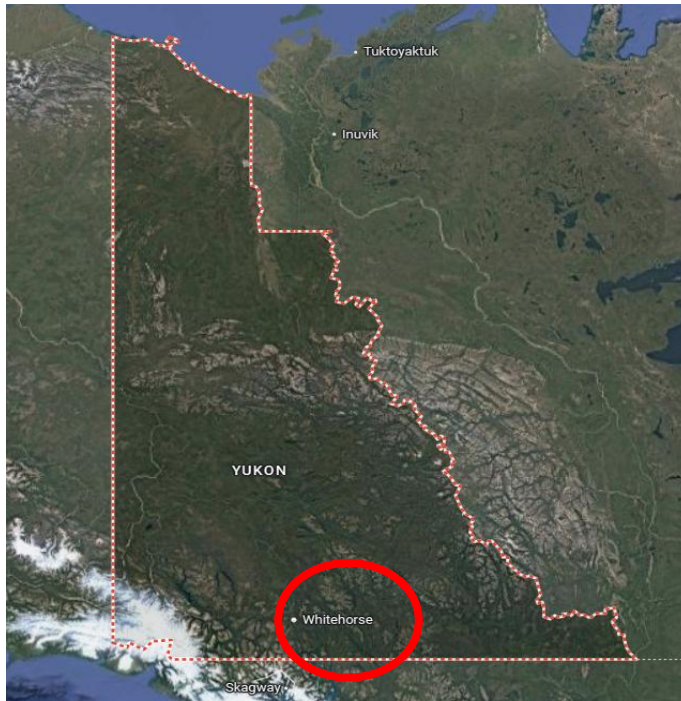
The provincial and territorial authorities having jurisdiction are responsible for:

- adopting and enforcing laws and regulations
- providing interpretation of such laws and regulations
- providing training and education in such laws and regulations
- establishing roles and responsibilities of trades people and professionals

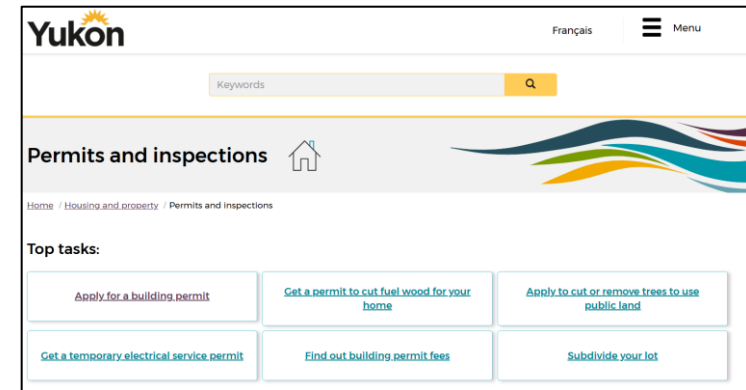


Yukon Territory – Building and Safety Standards

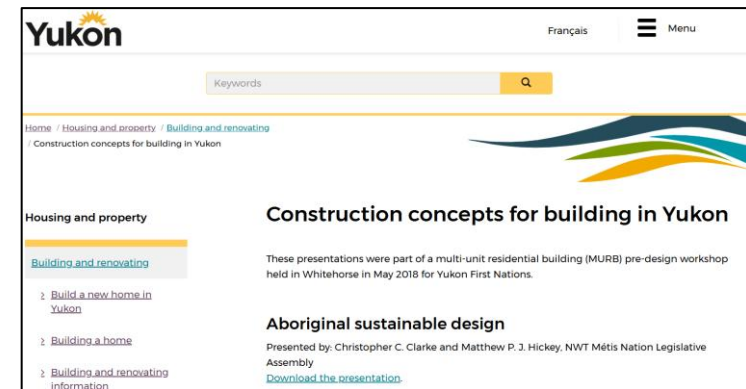
- Building Standards Act
- Municipal Act



Whitehorse has its own authority to regulate construction.

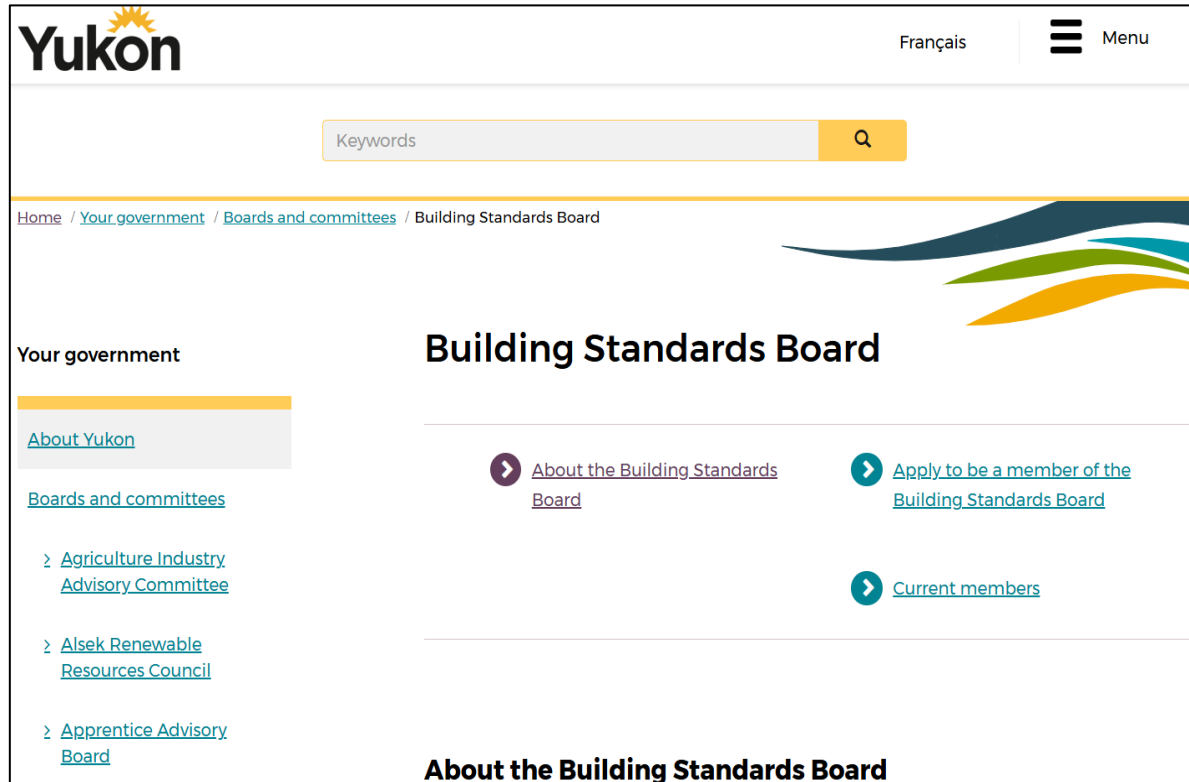


[Permits and inspections | Government of Yukon](#)



[Construction concepts for building in Yukon | Government of Yukon](#)

Yukon Territory – Building and Safety Standards



The screenshot shows the Yukon government website for the Building Standards Board. The header includes the Yukon logo, a search bar, and a menu. The main content area is titled 'Building Standards Board' and features three main links: 'About the Building Standards Board', 'Apply to be a member of the Building Standards Board', and 'Current members'. A sidebar on the left lists other government boards and committees, including the Agriculture Industry Advisory Committee, the Alsek Renewable Resources Council, and the Apprentice Advisory Board.

Building Code Interpretations

The Yukon Territory is re-establishing the Building Standards Board in spring of 2025. For more information refer to [Building Standards Board | Yukon.ca](https://www.yukon.ca/building-standards-board)

About the Building Standards Board

The Board has territory wide jurisdiction and hears appeals regarding denials or cancellations of permits or interpretations of the building code. The Board may also advise on how local products and materials may be used to construct buildings and provide advice to the Minister on building standards and administration of the Act.

Authority: Building Standards Act, section 6

Type: advisory, adjudicative

Appointment process: order in council

Requirements: no legislated criteria required to join

Term: indeterminate

Meetings: as required

Department: Community Services

Honoraria: none

Municipal Act



- **265 - General jurisdiction to pass bylaws**

- (a) the safety, health, and welfare of people and the protection of persons and property, including fire protection, fireworks, other explosives, firearms, weapons or devices, ambulance services, emergency services and other emergencies;

- (h) subject to the **Building Standards Act**, building standards or codes, and regulation, the construction, demolition, removal, or alteration of any building or other structure;

- **266 - Exercising bylaw making power**

- Without restricting section 265, a **council** may in a bylaw passed under this Division

- (a) regulate, control, or prohibit;

- (b) deal with any development, activity, industry, business, or thing in different ways, divide each of them into classes and deal with each class in different ways;

- (c) provide for a system of licences, inspections, permits, or approvals, including any or all of the following.....



Building Standards Act



2 Building Code

- (1) Subject to subsections (3) and (4), the National Building Code is the building code.
- (2) Except as otherwise provided in this Act or the regulations, the construction, occupancy and use of a building, and the installation and use of any component, fixture or system of a building, must conform to
 - (a) this Act, the regulations and the building code;
 - (b) any permit issued under this Act; and
 - (c) any applicable requirement imposed under any other enactment.



Building Standards Act



3 Implementation and enforcement

The Minister may appoint inspectors to implement and enforce this Act.

4 Enforcement of building code in municipalities

The building code may be enforced in a municipality by inspectors appointed by the Minister under section 3 unless the council of the municipality declares by bylaw that the building code is **to be enforced in the municipality by inspectors appointed by the municipality.**

5 Enforcement of building code by Yukon First Nations

The building code may be enforced in the area under the jurisdiction of the governing body of a Yukon First Nation by inspectors appointed by the Minister under section 3 unless that governing body declares that the building code is to be enforced in that area by inspectors appointed by that governing body.



Poll question

- **What legal document provides the City of Whitehorse the ability to administer building permits?**
 - Building Standards Act
 - Municipal Act
 - Building and Plumbing Bylaw

Questions?

Local Bylaws - Building

City of Whitehorse – Building and Plumbing Bylaw 99-50

SCOPE

2. This bylaw applies to the design, construction and occupancy of new buildings, and the alteration, reconstruction, demolition, removal, relocation and occupancy of existing buildings.

3. The building code which applies to all work regulated by this bylaw within the City of Whitehorse is that prescribed by the Building Standards Act and the Regulations thereto.

CITY OF WHITEHORSE

BYLAW 2024-44

A bylaw to provide for the prevention of fires, the prevention of the spread of fire, and for the preservation of life and property within the City of Whitehorse

WHEREAS section 265 of the *Municipal Act*, Chapter 19, R.S.Y.T. 1998 provides that Council may pass bylaws for municipal purposes respecting the safety, health, and welfare of the people and the protection of persons and property, including fire protection, fireworks, other explosives, firearms, weapons or devices, ambulance services, emergency services and other emergencies;

AND WHEREAS section 266 of the *Municipal Act* provides that, without restricting section 265, Council may in a bylaw:

- (a) regulate, control or prohibit;
- (b) provide for a system of licenses, inspections, permits, or Approvals; and
- (c) provide for an appeal, the body that is to decide the appeal and related matters;

AND WHEREAS section 6 of the *Fire Prevention Act*, Chapter 67, R.S.Y.T. 1986 provides that the Chief or Acting Chief of the fire brigade of a municipality in which a fire brigade has been established is, by virtue of his office, a local assistant to the Fire Marshal and is subject to the direction of the Fire Marshal in carrying out the provisions of this Act within the boundaries of the municipality;

AND WHEREAS the City of Whitehorse Fire Department meets the definition of a Fire Brigade;

AND WHEREAS the City of Whitehorse deems it desirable to establish and operate a Fire Department to provide for the prevention and extinguishment of fires and for the preservation of life and property in emergency situations;

NOW THEREFORE the municipal Council of the City of Whitehorse ENACTS AS FOLLOWS:

Short Title

1. This bylaw may be cited as the "Emergency Services Bylaw".

Definitions

2. In this bylaw:

"ADULT" means a competent Person who is at least 18 years of age.

"APPROVAL" means the written approval of the Fire Chief.

"BUILDING CODE" means the current Building Code as enforced by the City of Whitehorse.

Building and Plumbing Bylaw 99-50

The Bylaw Governs the daily operations of the building department.

“AUTHORITY HAVING JURISDICTION” means an Inspector appointed by the City of Whitehorse to enforce the Building Standards Act and this bylaw, the employees of the City of Whitehorse, or both.

The Bylaw can be administered through

“ORDERS” means a direction in writing from the authority having jurisdiction to comply with the requirements of this bylaw.

“PERMITS” means an authorization in writing issued by the authority having jurisdiction to perform work regulated by this bylaw.

A permit can be considered a consent to conduct construction activity.

Building and Plumbing Bylaw 99-50

Permit = Consent to Build

- Ensure general compliance Code and City regulations
- Personal safety for family, patrons & guests
- Energy conservation
- Ensure long term sustainability of the community

Protect future owners (occupants – renters)

- **A Customer is every occupant and neighbour during the life span of that building.**

Creates a Level playing field – builders

- A community that doesn't enforce regulations provide a dis-service for those that do follow them.

Permits also help in recording construction activity statistics and partially offset operating costs of the building department.



You don't buy a permit.

Building and Plumbing Bylaw 99-50

GENERAL REQUIREMENTS

Note – commencing work starts at excavation or interior demo.

6. Unless a valid and subsisting permit has been issued by the authority having jurisdiction, no person shall:

- (1) commence or continue any work relating to building, or alter any part of a building or structure;
- (2) demolish the whole or any part of a building; or
- (3) relocate the whole or any part of a building within or into the City of Whitehorse.

7. When a building is damaged by fire, earthquake or other cause, this bylaw and the appropriate regulations in the **Emergency Services Bylaw** shall apply to the work necessary to reconstruct damaged portions of the building.

8. When an unsafe condition exists in or about a building, this bylaw and the appropriate regulations in the **Emergency Services Bylaw** shall apply to the work necessary to correct the unsafe condition.

9. No person shall change the occupancy or use of a building without obtaining from the authority having jurisdiction an Occupancy Approval which allows for the change of occupancy or use.

Building and Plumbing Bylaw 99-50

EXEMPTIONS

10. This bylaw does not apply to:
- (1) sewage, water, electrical, telephone, rail or similar utility systems located on or in a street or a public right-of-way,
 - (2) public utility towers and poles, television and radio or other communication aerials and towers, except for loads resulting from those located on or attached to buildings,
 - (3) flood control and hydro-electric dams and structures,
 - (4) mechanical or other equipment and appliances not specifically regulated in this bylaw, and
 - (5) accessory buildings not greater than 10m² in building area provided they are not intended for occupancy and do not create a hazard.

Required Inspections

44. The following stages of work are required to be inspected and approved prior to continuing or covering:
- (1) Siting and Foundation/Water and Sewer Service
 - (2) Foundation and Damp-proofing/Plumbing Rough-in Under Slab
 - (3) Framing, Insulation and Vapour Barrier/Rough-in with Test On
 - (4) Chimney, Heating and Mechanical Systems/Water Turn On and Frost Protection
 - (5) Occupancy and/or Final/Final Plumbing



Building and Plumbing Bylaw 99-50

OBLIGATIONS OF OWNER

39. Every owner shall ensure that the plans and specifications on which the issue of the building permit was based are available at the site of the work for inspection during working hours by the authority having jurisdiction, and that the permit, or a true copy thereof, is posted conspicuously on the site during the entire execution of the work.
40. Every owner shall allow the authority having jurisdiction to enter any building or premises at any reasonable time for the purpose of administering or enforcing this bylaw, or if there is reason to believe an unsafe condition exists.

OBLIGATIONS OF CONSTRUCTOR

56. Every constructor is responsible for ensuring that no excavation or other work is undertaken on public property and that no building is erected or materials stored in whole or in part thereon without approval having first been obtained in writing from the appropriate authority.
57. Every constructor is responsible jointly and severally with the owner for any work actually undertaken.



Building and Plumbing Bylaw 99-50

OBLIGATION OF AUTHORITY HAVING JURISDICTION

58. The authority having jurisdiction is responsible for the administration and enforcement of this bylaw, and shall be deemed for the purposes of this bylaw and section 4 of the *Building Standards Act*, Inspectors appointed by the municipality.
59. The authority having jurisdiction shall keep copies of all applications received, permits and orders issued, inspections and tests made and of all papers and documents connected with the administration of this bylaw for such time as is required by law.
60. The authority having jurisdiction shall issue in writing such notices or orders as may be necessary to inform the owner of a contravention of this bylaw.
61. The authority having jurisdiction shall, when requested to do so, answer such relevant questions as may be reasonable with respect to the provisions of this bylaw, but shall not be required to assist in the laying out of any work or to act in the capacity of an engineering or architectural consultant.
62. The authority having jurisdiction shall issue a permit to the owner when, to the best of its knowledge, the applicable conditions as set forth in this bylaw and other related bylaws (i.e. Zoning Bylaw, Emergency Services Bylaw, Sewer and Storm Utility Bylaw and Water Utility Bylaw) and the general application, have been met.

APPEALS

79. A decision of the authority having jurisdiction may be appealed in accordance with the provisions of the *Building Standards Act*.



Building and Plumbing Bylaw 99-50

Required involvement of a Registered Professional – Architect - Engineer

54. Every owner who undertakes to construct or have constructed a building within the scope of Part 4 of the current edition of the *National Building Code of Canada* shall ensure that an architect, professional engineer or both are retained to undertake:

- (1) the design of the building; and
- (2) a general review to determine compliance with the design during construction.

55. Where the dimensions of a structural component are not provided in Part 9 of the *National Building Code of Canada* for use in a building within the scope of that part, and such dimensions are to be determined on the basis of calculation, testing or other means of evaluation, the owner shall:

- (1) retain the services of a designer competent to undertake such work; or
- (2) provide evidence to show that the member size has been determined in conformance with engineering practice accepted by the authority having jurisdiction where the nature or complexity of the work does not warrant retaining the services of a professional designer.

67. Where the site conditions, the size or complexity of a building, part of a building or building component warrant, the authority having jurisdiction may require:

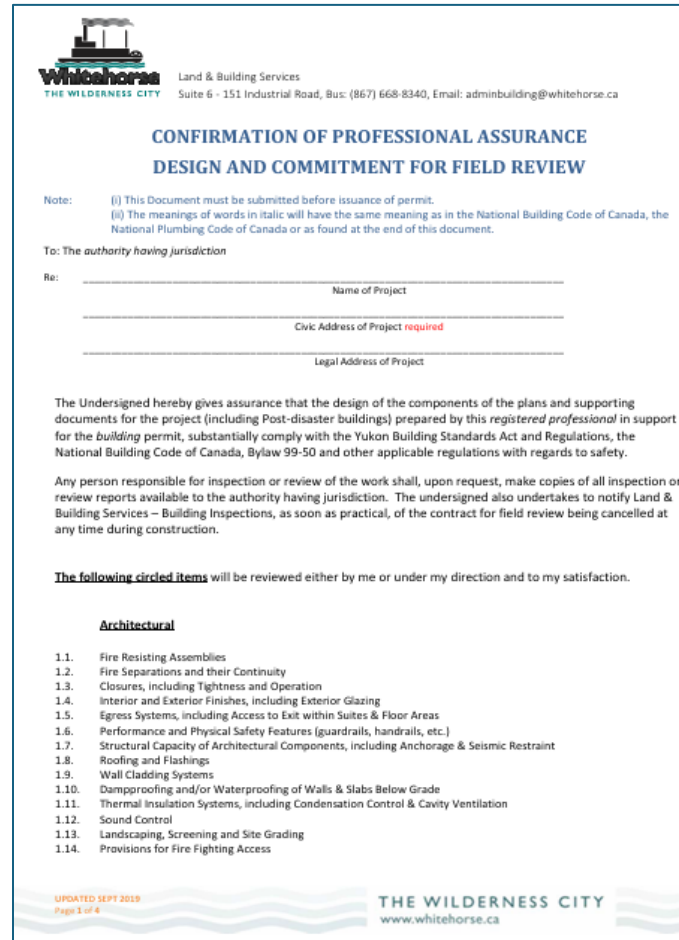
- (1) appropriate plans, specifications and related documents to bear the seal or stamp of an architect or engineer; and
- (2) the work be reviewed during construction by the designer or other competent person.



Professional Design and Reviews

As outlined in Section 54 of the Bylaw, all Registered Professionals (RPs) shall provide a:

- Confirmation of Professional assurance design and commitment for field reviews – at BP Application
- Confirmation of professional assurance field review and compliance form – prior to Occupancy.



Whitehorse Land & Building Services
THE WILDERNESS CITY Suite 6 - 151 Industrial Road, Bus: (867) 668-8340, Email: adminbuilding@whitehorse.ca

CONFIRMATION OF PROFESSIONAL ASSURANCE DESIGN AND COMMITMENT FOR FIELD REVIEW

Note: (i) This Document must be submitted before issuance of permit.
(ii) The meanings of words in *italics* will have the same meaning as in the National Building Code of Canada, the National Plumbing Code of Canada or as found at the end of this document.

To: The authority having jurisdiction

Re: _____
Name of Project

Civic Address of Project *required*

Legal Address of Project

The Undersigned hereby gives assurance that the design of the components of the plans and supporting documents for the project (including Post-disaster buildings) prepared by this *registered professional* in support for the *building permit*, substantially comply with the Yukon Building Standards Act and Regulations, the National Building Code of Canada, Bylaw 99-50 and other applicable regulations with regards to safety.

Any person responsible for inspection or review of the work shall, upon request, make copies of all inspection or review reports available to the authority having jurisdiction. The undersigned also undertakes to notify Land & Building Services – Building Inspections, as soon as practical, of the contract for field review being cancelled at any time during construction.

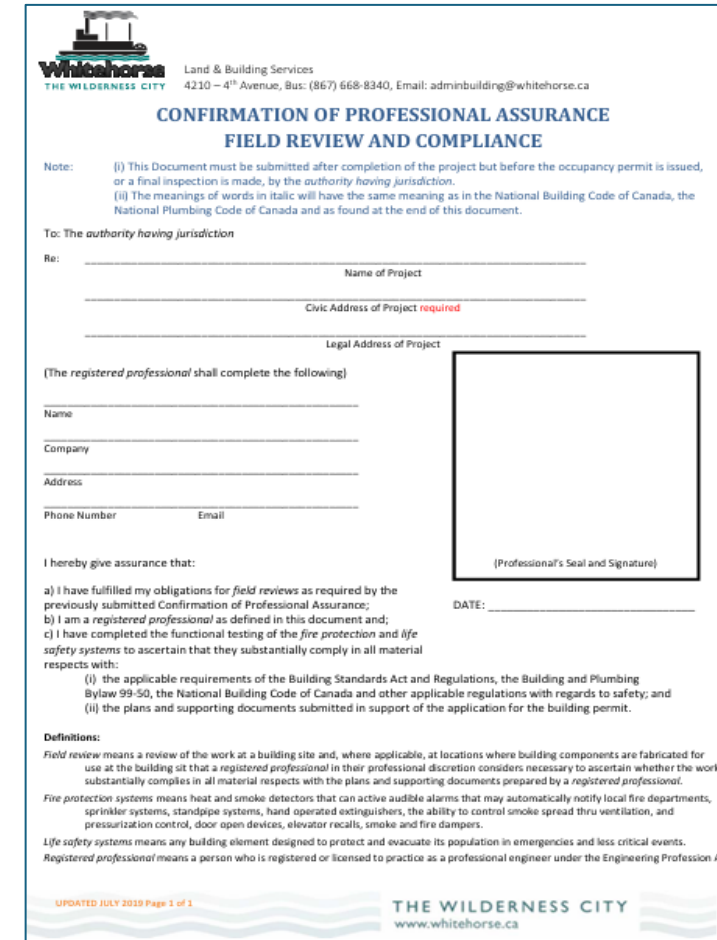
The following **circled items** will be reviewed either by me or under my direction and to my satisfaction.

Architectural

- 1.1. Fire Resisting Assemblies
- 1.2. Fire Separations and their Continuity
- 1.3. Closures, including Tightness and Operation
- 1.4. Interior and Exterior Finishes, including Exterior Glazing
- 1.5. Egress Systems, including Access to Exit within Suites & Floor Areas
- 1.6. Performance and Physical Safety Features (guardrails, handrails, etc.)
- 1.7. Structural Capacity of Architectural Components, including Anchorage & Seismic Restraint
- 1.8. Roofing and Flashings
- 1.9. Wall Cladding Systems
- 1.10. Dampproofing and/or Waterproofing of Walls & Slabs Below Grade
- 1.11. Thermal Insulation Systems, including Condensation Control & Cavity Ventilation
- 1.12. Sound Control
- 1.13. Landscaping, Screening and Site Grading
- 1.14. Provisions for Fire Fighting Access

UPDATED SEPT 2019
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THE WILDERNESS CITY
www.whitehorse.ca



Whitehorse Land & Building Services
THE WILDERNESS CITY 4210 – 4th Avenue, Bus: (867) 668-8340, Email: adminbuilding@whitehorse.ca

CONFIRMATION OF PROFESSIONAL ASSURANCE FIELD REVIEW AND COMPLIANCE

Note: (i) This Document must be submitted after completion of the project but before the occupancy permit is issued, or a final inspection is made, by the authority having jurisdiction.
(ii) The meanings of words in *italics* will have the same meaning as in the National Building Code of Canada, the National Plumbing Code of Canada and as found at the end of this document.

To: The authority having jurisdiction

Re: _____
Name of Project

Civic Address of Project *required*

Legal Address of Project

(The registered professional shall complete the following)

Name _____
Company _____
Address _____
Phone Number _____ Email _____

I hereby give assurance that:

a) I have fulfilled my obligations for *field reviews* as required by the previously submitted Confirmation of Professional Assurance;
b) I am a *registered professional* as defined in this document and;
c) I have completed the functional testing of the *fire protection and life safety systems* to ascertain that they substantially comply in all material respects with:
(i) the applicable requirements of the Building Standards Act and Regulations, the Building and Plumbing Bylaw 99-50, the National Building Code of Canada and other applicable regulations with regards to safety; and
(ii) the plans and supporting documents submitted in support of the application for the building permit.

DATE: _____

Definitions:
Field review means a review of the work at a building site and, where applicable, at locations where building components are fabricated for use at the building at that a *registered professional* in their professional discretion considers necessary to ascertain whether the work substantially complies in all material respects with the plans and supporting documents prepared by a *registered professional*.
Fire protection systems means heat and smoke detectors that can activate audible alarms that may automatically notify local fire departments, sprinkler systems, standpipe systems, hand operated extinguishers, the ability to control smoke spread thru ventilation, and pressurization control, door open devices, elevator recalls, smoke and fire dampers.
Life safety systems means any building element designed to protect and evacuate its population in emergencies and less critical events.
Registered professional means a person who is registered or licensed to practice as a professional engineer under the Engineering Profession Act


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Confirmation of PA and Letters of Comp

Where there are more than one RP involved in a project, all RP's are to be accounted for at time of application on the Project Contact List and to confirm final sign of at the end of the project



Whitehorse
 6-151 Industrial Rd.
 Whitehorse, YT Y1A 2V3
 Land & Building Services
 Ph: 668-8340 Fax: 668-8395
 adminbuilding@whitehorse.ca

Project Contact List

Project Coordinator/
 Primary Contact Person _____
 Contact Number _____
 Email _____

General Contractor _____
 Contact Number _____
 Email _____

Please list General Contractor, all Sub-Contractors and Professionals to be utilized during the construction of this project as required by Bylaw 99-50: *(PLEASE NOTE: Failure provide or update this information may result in delays in granting approvals. If you require more space you may submit your own document with the required information)*

Sub-contractor	Company Name	Contact Person	Bus License #	Contact #	Email

Design/Engineer	Company Name	Bus License #	Contact Person	Contact #	Email
Architect					
Structural Eng.					
Mechanical Eng.					
Electrical Eng.					
Other					

Signature of General Contractor/Project Coordinator

Date

As per Business License Bylaw 2017-24 – "No person shall operate any business within or partly with the city without first having obtained a City of Whitehorse Business License."

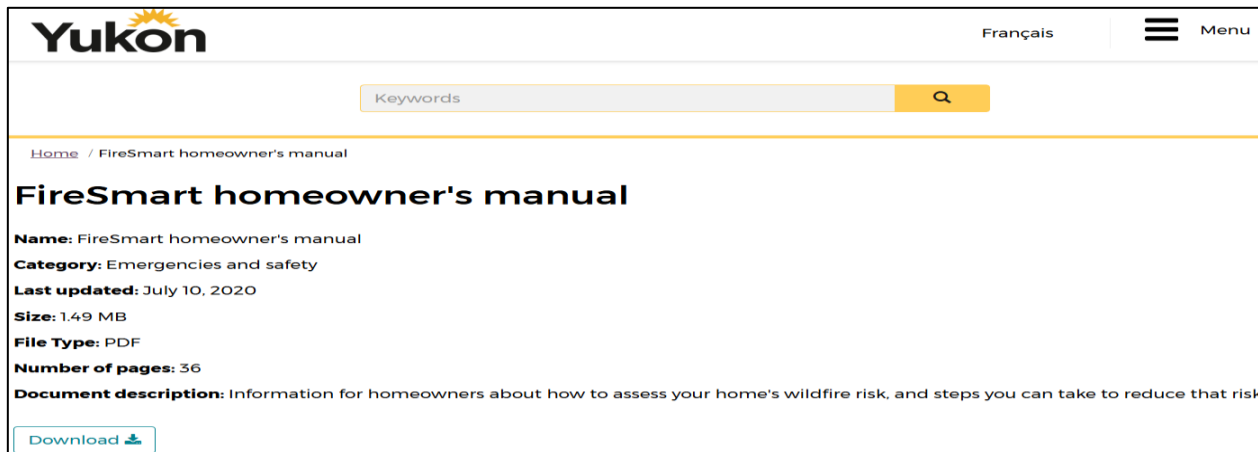
Building and Plumbing Bylaw 99-50

[yg_firesmart_homeowne
rmanual_eng_wr.pdf](#)

85. Country Residential Forest Fuel Modification *(Bylaw 2007-27, June 25, 2007)*

All new residential construction in the Country Residential 1 and Country Residential 2 zones shall complete fuel modification in Fire Smart priority zones 1 and 2 as described in the **Fire Smart manual**. Fuel modification shall be completed within two years of obtaining occupancy. This work is not required for house additions, renovations or for the construction of accessory buildings. This section applies only to new lots purchased after July 1, 2007. *(Bylaw 2013-43, August 12, 2013)*

NON-COMBUSTIBLE ZONE / HOME 0 - 1.5 METRES
ZONE 1 / YARD 1.5 - 10 METRES
ZONE 2 / YARD 10 - 30 METRES



The screenshot shows the Yukon website interface. At the top left is the Yukon logo. To the right are links for 'Français' and a 'Menu' icon. Below this is a search bar with the placeholder text 'Keywords' and a magnifying glass icon. The main content area displays the breadcrumb 'Home / FireSmart homeowner's manual' followed by the title 'FireSmart homeowner's manual'. Below the title, there are several metadata items: 'Name: FireSmart homeowner's manual', 'Category: Emergencies and safety', 'Last updated: July 10, 2020', 'Size: 1.49 MB', and 'File Type: PDF'. The 'Number of pages: 36' is also listed. A 'Document description' follows, stating: 'Information for homeowners about how to assess your home's wildfire risk, and steps you can take to reduce that risk.' At the bottom of the page is a 'Download' button with a download icon.



The cover of the 'FireSmart begins at home' Homeowner's FireSmart manual. The top half features a photograph of a residential street with houses and trees, set against a backdrop of mountains and a dramatic, cloudy sky. The Yukon logo is in the top right corner. The bottom half of the cover has a yellow background with the text 'FireSmart begins at home' in large white font. Below this, a dark blue banner contains the text 'Homeowner's FireSmart manual' in white. At the very bottom, the website addresses 'Yukon.ca/Wildfires | FireSmartCanada.ca' are listed.

Other Bylaws that play a part in development

- Development Agreement Regulations Bylaw
- Development Cost Charge Bylaw
- Easement Authority Bylaw
- Emergency Services Bylaw
- Fees and Charges Bylaw
- Heritage Bylaw
- Municipal Offences Bylaw
- Road Closure Construction and Storage Bylaw
- Storm & Sewer Utility Bylaw
- Smoke Alarm Bylaw
- Subdivision Control Bylaw
- Water Utility Bylaw
- Zoning Bylaw



Housing Development Incentives Policy

Policy Number: 2024-03
Approved by: Council Resolution 2024-05-03 dated March 11, 2024
Effective date: March 11, 2024
Department: Planning and Sustainability Services

PURPOSE
This policy provides eligibility criteria, financial benefits, and approval process for development incentives awarded by the City.

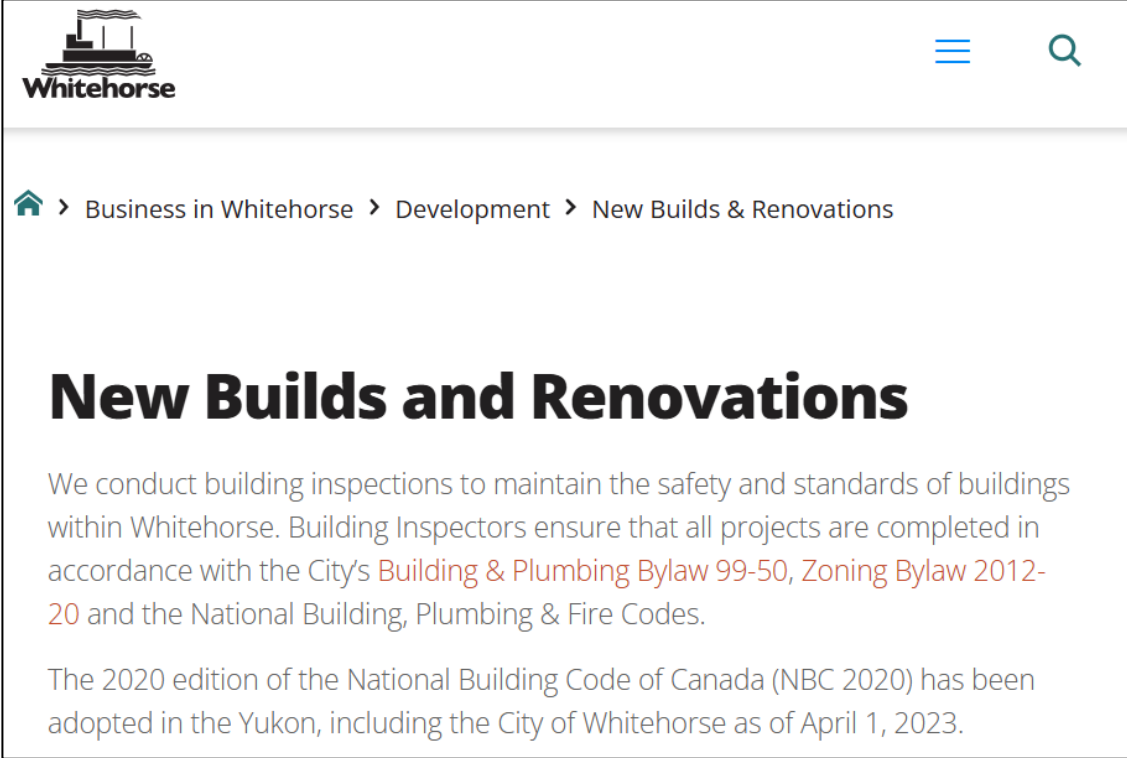
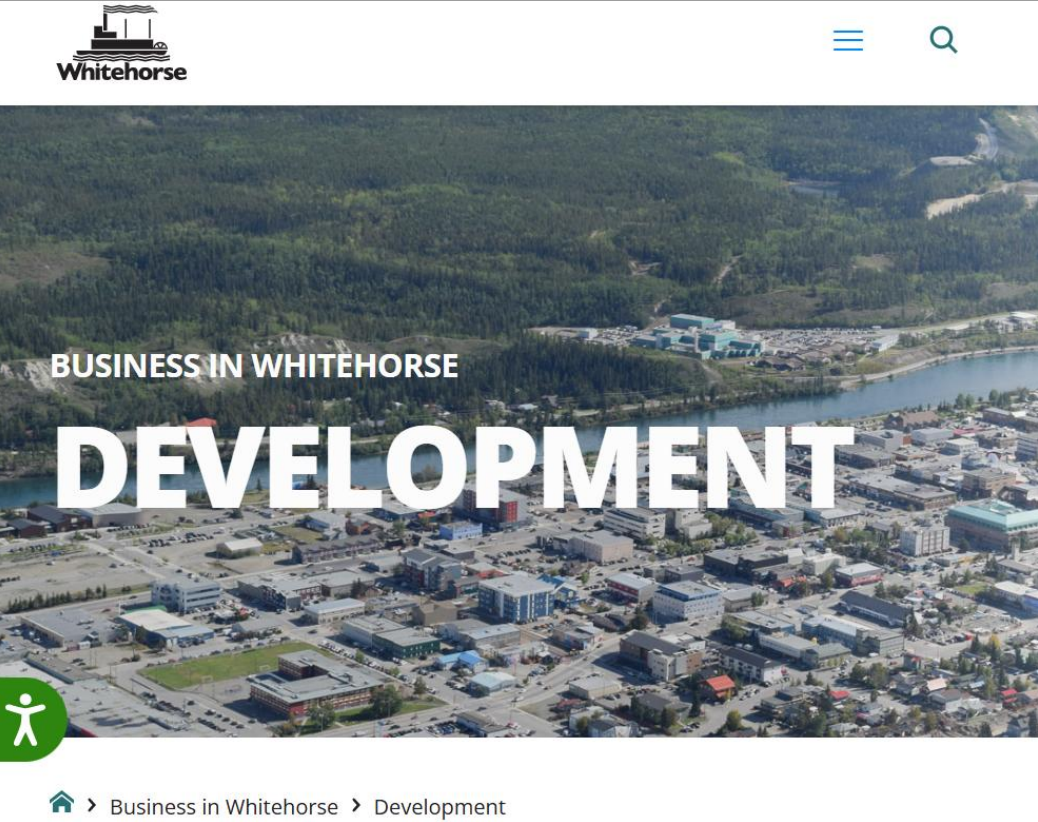
POLICY STATEMENT
Creating attainable housing for citizens is a priority for the City, which will be achieved in part through adding increased housing stock to the market via incentivizing particular development projects that provide Rental Housing or other Supportive Housing initiatives. The City will provide financial incentives for projects that provide Rental or Supportive Housing and assistance to Non-government and Non-profit Organizations. For greater certainty, in the case of a mixed-use development, the City will only provide financial incentives for residential components of the building.

BACKGROUND
There is currently a need for attainable housing of all types in the city. These needs can be addressed through a variety of housing-supply options including mixed-use, apartments, secondary suites, and other types of housing developments. Some aspects of the housing continuum are being adequately supplied by the market, while others are not. The City does not provide housing directly, but it has a role in land development, permitting and taxation whereby it may encourage development that is not being provided under existing market conditions.

DEFINITIONS
"City" means the municipality of the City of Whitehorse.
"Council" means the municipal Council for the City of Whitehorse.
"Development Cost Charge (DCC)" means the charge levied by the City against a new development to acquire sufficient funds to assist with the expansion of municipal services or facilities and other growth related infrastructure. DCCs are enacted through the Residential Development Cost Charges Bylaw and the value is set out in the Fees and Charges Bylaw.
"Development Fees" means the fees associated with a project including, but not limited to, the costs of development and building permit applications, inspections, water and sewer connection, and the development incentive application. For the purposes of this

When in doubt – reach out

Development - City of Whitehorse



Poll question

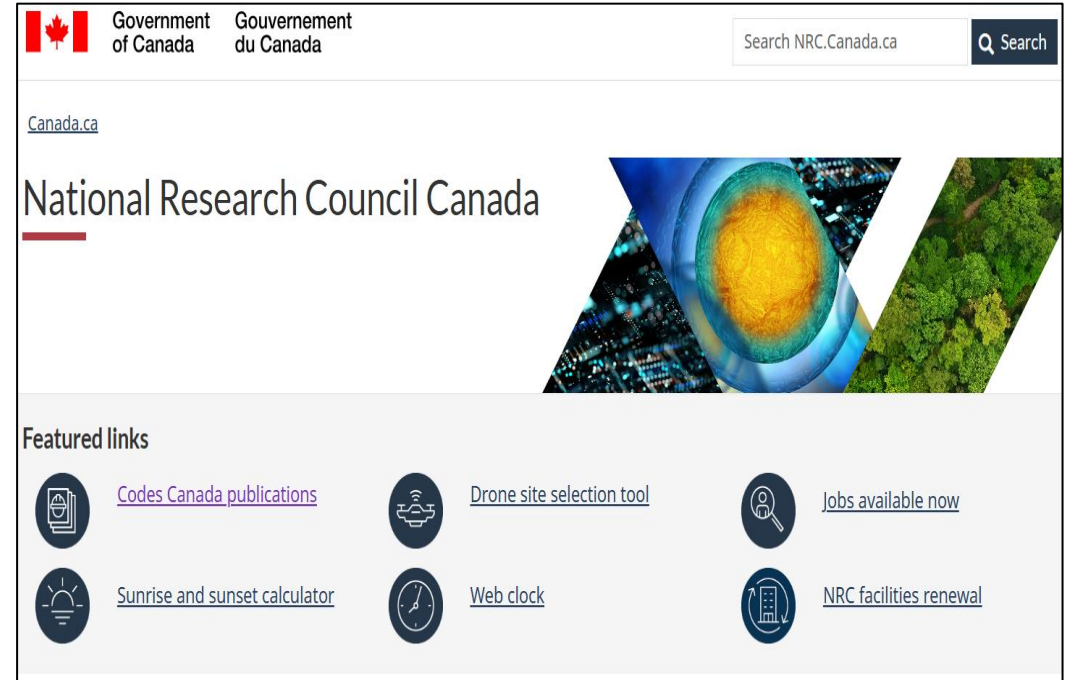
What legal document must be provided by a Registered Professional at time of building permit application?

- Project Contact List
- Confirmation of Professional Assurance of Field Review and Compliance
- Confirmation of Professional Assurance Design and Commitment for Field Review.

Questions

National Codes and Standards

Provincial and territorial governments have legislative authority over building design and construction within their jurisdictions and they adopt, or adapt, the National Model Construction Codes into their regulation for them to come into effect in their jurisdiction. The federal government works through a collaborative structure with the provinces and territories to develop the Model Code for their use.



[Home - National Research Council Canada](#)

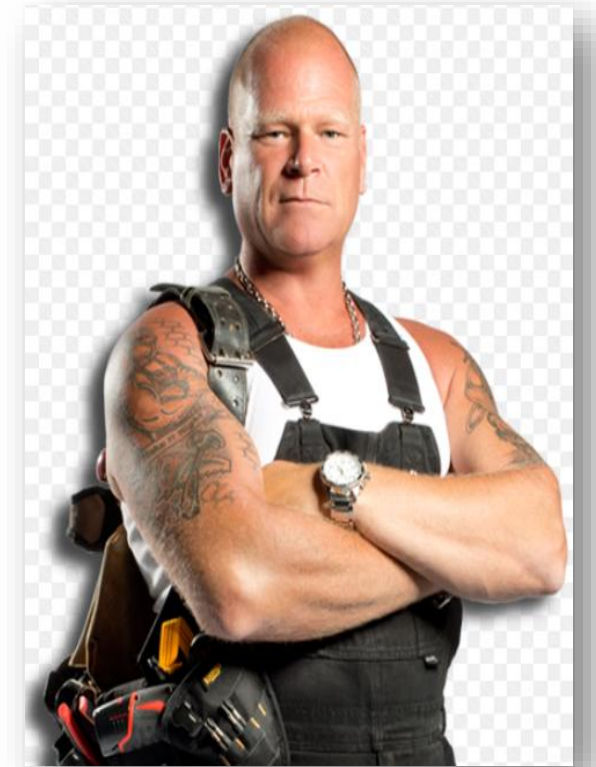
Codes are Minimum Standards

Codes are minimum standards.

Codes - Created from/for Worst case scenarios

- Which is severe illness or death (Structure, Health & Safety)

But now so much more – accessibility, energy efficiency, climate change, etc.



“They are the worst you can build to!” So, if we are not building to code then (Mike Holmes)



FLYWHEEL
BUILDING SOLUTIONS

National Codes and Standards

 Government of Canada / Gouvernement du Canada

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National Building Code of Canada 2020

i Direct access to codes and user's guides in electronic format!

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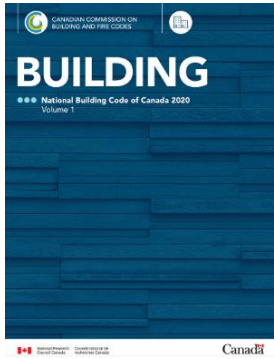
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FLYWHEEL
BUILDING SOLUTIONS

2020 National Building Code

The NBC is made up of two volumes



Volume 1

Preface	
Relationship of the NBC to Standards Development and Conformity Assessment	
Canadian Commission on Building and Fire Codes and Standing Committees	
Division A	Compliance, Objectives and Functional Statements
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Part 3	Functional Statements
Division B	Acceptable Solutions
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Part 2	Farm Buildings
Part 3	Fire Protection, Occupant Safety and Accessibility
Part 4	Structural Design
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Volume 2

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Objective-Based Code Format

Relying now more on objective and functional statements to achieve minimum standards.

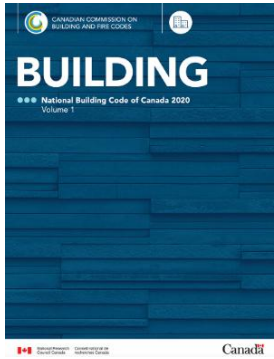


2020 National Building Code

It is then broken down into 3 main Divisions

Division A

Code, Objective and Functional Statements



Division B

Acceptable Solutions

- 1)** Compliance with this Code shall be achieved by
 - a) complying with the applicable acceptable solutions in Division B (see Note A-1.2.1.1.(1)(a)), or
 - b) using alternative solutions that will achieve at least the minimum level of performance required by Division B in the areas defined by the objectives and functional statements attributed to the applicable acceptable solutions (see Note A-1.2.1.1.(1)(b)).

Division C

Administration Provisions

Code Numbering System

3	Part
3.5.	Section
3.5.2.	Subsection
3.5.2.1.	Article
3.5.2.1.(2)	Sentence
3.5.2.1.(2)(a)	Clause
3.5.2.1.(2)(a)(i)	Subclause



2020 NBC – Division A

Division A defines the scope of the NBC and presents the objectives that the Code addresses and the functions the building must perform to help to satisfy those objectives.

Division A cannot be used on its own as a basis for designing and constructing a building, or for evaluating a building's compliance with the Code.

Includes

- Standards references such as - S406-16 Permanent Wood Foundations
- Defined terms
- **Objective and Functional Statements**

Division A – Functional and Objective statements

Example of how a code item is developed – why is it in the Code.

9.8.2.2. Height over Stairs
1) The clear height over stairs shall be measured vertically, over the clear width of the stair, from a straight line tangent to the tread and landing nosings to the lowest point above. (See Note A-3.4.3.4.)
2) Except as provided in Sentences (3) and (4) and Article 9.8.4.7., the clear height over stairs shall not be less than 2 050 mm.
3) Except as provided in Article 9.8.4.7., the clear height over stairs serving a single <i>dwelling unit</i> or a house with a <i>secondary suite</i> including their common spaces shall not be less than 1 950 mm.
4) The clear height over stairs that are located under beams and ducting in <i>secondary suites</i> shall not be less than 1 850 mm.

9.8.2.2. Height over Stairs	
(2)	[F30-OS3.1] [F10-OS3.7]
(3)	[F30-OS3.1] [F10-OS3.7]
(4)	[F30-OS3.1] [F10-OS3.7]

Functional Statements

1) The objectives of this Code are achieved by measures, such as those described in the acceptable solutions in Division B, that are intended to allow the building or its elements to perform the following functions (**see Note A-3.2.1.1.(1)**):

Functional Statements

F10 To facilitate the timely movement of persons to a safe place in an emergency.

F30 To minimize the risk of injury to persons as a result of tripping, slipping, falling, contact, drowning or collision.

When you see a reference like **Note A-3.2.1.1.(1)** – it is directing you to the Appendix notes for further explanation.



Division A – Functional and Objective statements

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9.8.2.2. Height over Stairs	
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(3)	[F30-OS3.1] [F10-OS3.7]
(4)	[F30-OS3.1] [F10-OS3.7]

Objective Statements

OS3 Safety in Use

An objective of this Code is to limit the probability that, as a result of the design or construction of the building, a person in or adjacent to the building will be exposed to an unacceptable risk of injury due to hazards. The risks of injury due to hazards addressed in this Code are those caused by

OS3.1– tripping, slipping, falling, contact, drowning or collision

OS3.7– persons being delayed in or impeded from moving to a safe place during an emergency (see Note A-2.2.1.1.(1))



2020 NBC – Division B – Acceptable Solutions

The term “**acceptable solutions**” refers to the technical requirements contained in the Code. It reflects the principle that building codes establish an acceptable level of risk or performance and underlines the fact that a code cannot describe all possible valid design and construction options. **Acceptable solutions represent the minimum level of performance that will satisfy the NBC's objectives and that is acceptable to an authority that adopts the NBC into law or regulation.**

Most of the requirements in Division B—the **acceptable solutions**—are linked to at **least one objective and functional statement found in Division A**. These linkages play an important role in allowing objective-based codes to accommodate innovation.

Division B	Acceptable Solutions
Part 1	General
Part 2	Farm Buildings
Part 3	Fire Protection, Occupant Safety and Accessibility
Part 4	Structural Design
Part 5	Environmental Separation
Part 6	Heating, Ventilating and Air-conditioning
Part 7	Plumbing Services
Part 8	Safety Measures at Construction and Demolition Sites
Appendix C	Climatic and Seismic Information
Appendix D	Fire-Performance Ratings

Volume 2	
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Climatic Data overview

Whitehorse is in Climatic Zone 7B
(6000 to 6999 HDD)

- Climatic data is found in Appendix C

[Illustrated Guide - Energy Efficient Houses - Zone 7B-8-North](#)

Division B	Acceptable Solutions
Part 1	General
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Appendix C	Climatic and Seismic Information
Appendix D	Fire-Performance Ratings

Frost protection depths vary in different soil conditions but typically at 2.4m

Province and Location	Elev., m	Design Temperature				Degree-Days Below 18°C	15 Min. Rain, mm	One Day Rain, 1/50, mm	Ann. Rain, mm	Moist. Index	Ann. Tot. Ppn., mm	Driving Rain Wind Pressures, Pa, 1/5	Snow Load, kPa, 1/50		Hourly Wind Pressures, kPa	
		January		July 2.5%									S _s	S _t	1/10	1/50
		2.5% °C	1% °C	Dry °C	Wet °C											
Whitehorse	655	-41	-43	25	15	6580	8	43	170	0.5	275	40	2.0	0.1	0.29	0.38
Fort St. John	685	-35	-37	26	18	5750	15	72	320	0.5	475	100	2.8	0.1	0.29	0.39
Kelowna	350	-17	-20	33	20	3400	12	43	260	0.3	325	80	1.7	0.1	0.30	0.40

Seismic Data overview

Seismic data is found in Appendix C – Table C-3

Note – This will become more important as the code updates in 2025/26.

Seismic Hazard for Part 9

Table C-3 lists the seismic hazard values to be used in the application of the prescriptive requirements in Part 9 relating to lateral loads due to earthquake (these values are the same as those listed in Table C-3 of the NBC 2015). Seismic hazard values for localities not listed in Table C-3 can be obtained from the “2015 – 2005 National Building Code of Canada seismic hazard values” page on NRCan's Earthquakes Canada website by selecting “2015” from the “Building code year” pull-down menu.

Seismic Hazard for Part4

The seismic hazard values to be used for the design of buildings under Part4 can be obtained from the 2020 National Building Code of Canada Seismic Hazard Tool ([Link - Seismic Hazard Tools](#))

Table C-3 (Continued)

Province and Location	S _a (0.2) for Seismic Design in Part 9
Yukon	
Aishihik	0.446
Dawson	0.396
Destruction Bay	1.54
Faro	0.271
Haines Junction	0.973
Snag	0.502
Teslin	0.284
Watson Lake	0.304
Whitehorse	0.334
Ucluelet	1.48
Vancouver Region	
Burnaby (Simon Fraser Univ.)	0.768
Cloverdale	0.800
Kelowna	0.143



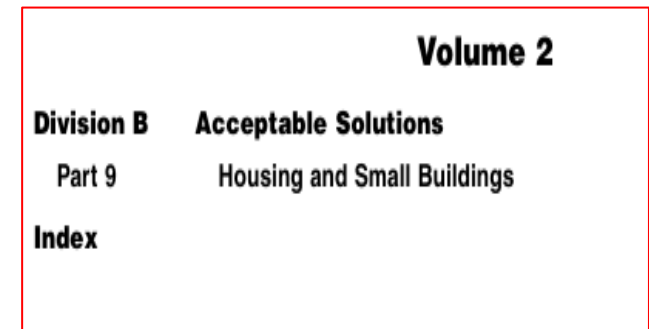
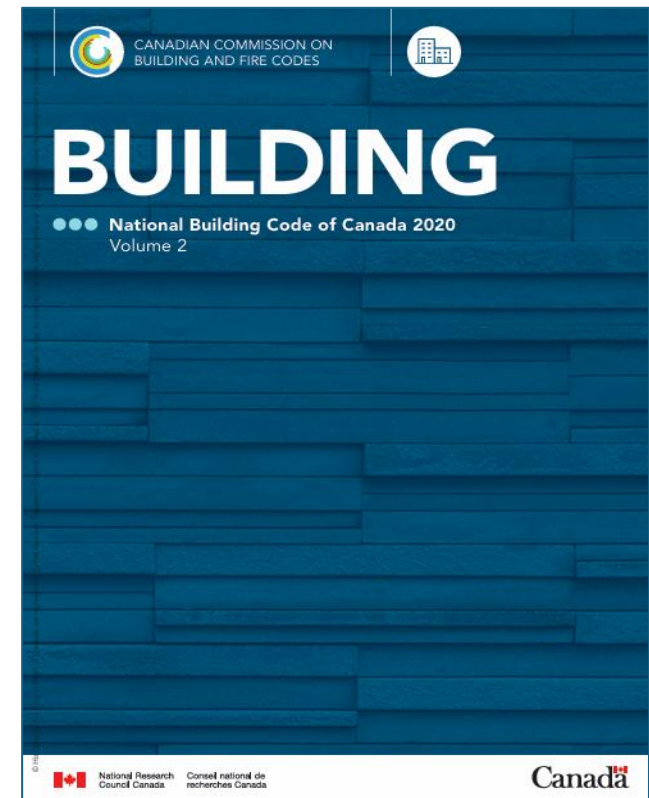
2020 NBC – Division B – Part 9

Volume 2 - Part 9 – Housing and Small Buildings

There are 37 Sections within Part 9

Major Areas of focus in our 5 sessions are listed: (9.1 to 9.4 in today's session)

- **9.1 Application**
- **9.2 Application and Definitions**
- **9.3. Materials, Systems and Equipment**
- **9.4. Structural Requirements (Note Building Bylaw – Professional involvement)**
- 9.12. Excavation
- 9.13. Dampproofing, Waterproofing and Soil Gas Control
- 9.15. Footings and Foundations
- 9.23. Wood-Frame Construction
- 9.25. Heat Transfer, Air Leakage and Condensation Control
- 9.27. Cladding
- 9.32. Ventilation
- 9.33. Heating and Air-conditioning
- 9.36. Energy Efficiency



FLYWHEEL
BUILDING SOLUTIONS

Section 9.1 to 9.3 – 2020 NBC

- 9.1.2.1 Floor Area Limits for Secondary Suites
 - Size limits
 - Note size limits in the Zoning Bylaw.
- 9.3.1. – Concrete
 - reinforcing bars are not specified in the Code other than for ICF.
 - The design of reinforcing other than for ICF shall be by a RP.
- 9.3.1.2.(4) – Prescriptive requirements to install flat insulating concrete forms – ICF.
- Other potential considerations such as:

9.3.1.3. Concrete in Contact with Sulphate Soil

1) Concrete in contact with sulphate *soil*, which is deleterious to normal cement, shall conform to the requirements in Clause 4.1.1.6 of CSA A23.1, “Concrete materials and methods of concrete construction.”

Section 9.3. Materials, Systems and Equipment

Concrete cold weather requirements

- To review conditions that may require heating and hoarding
- Engineer to confirm

9.3.1.8. Admixtures

1) Admixtures shall conform to ASTM C260, "Standard Specification for Air-Entraining Admixtures for Concrete," or ASTM C494/C494M, "Standard Specification for Chemical Admixtures for Concrete," as applicable.

9.3.1.9. Cold Weather Requirements

- 1)** When the air temperature is below 5°C, concrete shall be
- a) kept at a temperature of not less than 10°C or more than 25°C while being mixed and placed, and
 - b) maintained at a temperature of not less than 10°C for 72 h after placing.
- 2)** No frozen material or ice shall be used in concrete described in Sentence (1).



Section 9.4. Structural Requirements

- **Note city changes for Engineering requirements – Note Bylaw 99-50.**

9.4.2. Specified Loads

9.4.2.1. Application

(See Note A-9.4.2.1. and 9.4.2.2.)

1) This Subsection applies to light-frame constructions whose wall, floor and roof planes are generally comprised of frames of small repetitive structural members, and where

- a) the roof and wall planes are clad, sheathed or braced on at least one side,
- b) the small repetitive structural members are spaced not more than 600 mm o.c.,
- c) the clear span of any structural member does not exceed 12.2 m,
- d) the maximum deflection of the structural roof members conforms to Article 9.4.3.1.,
- e) the maximum total roof area, notwithstanding any separation of adjoining buildings by firewalls, is 4 550 m², and
- f) for flat roofs, there are no significant obstructions on the roof, such as parapet walls, spaced closer than the distance calculated by

$$D_o = 10 (H_o - 0.8S_s/\gamma)$$

where

D_o = minimum distance between obstructions, m,

H_o = height of the obstruction above the roof, m,

S_s = ground snow load, kPa, and

γ = specific weight of snow taken as 4.0 kN/m³ or 0.43 S_s + 2.2 kN/m³, whichever is lesser.

Building and Plumbing Bylaw 99-50

55. Where the dimensions of a structural component are not provided in Part 9 of the *National Building Code of Canada* for use in a building within the scope of that part, and such dimensions are to be determined on the basis of calculation, testing or other means of evaluation, the owner shall:

- (1) retain the services of a designer competent to undertake such work; or
- (2) provide evidence to show that the member size has been determined in conformance with engineering practice accepted by the authority having jurisdiction where the nature or complexity of the work does not warrant retaining the services of a professional designer.

67. Where the site conditions, the size or complexity of a building, part of a building or building component warrant, the authority having jurisdiction may require:

- (1) appropriate plans, specifications and related documents to bear the seal or stamp of an architect or engineer; and
- (2) the work be reviewed during construction by the designer or other competent person.

Section 9.4. Structural Requirements - Roofs

• 9.4.2.2 – Specific Snow Loads

- Whitehorse **Specific snow load**

- $S = 1.9 \text{ kPa (40 psf)}$

- $S = (0.45 \times 2.0) + 0.1$

$$S = C_b S_s + S_r$$

Snow Load, kPa, 1/50	
S_s	S_r
2.0	0.1

NOTE

9.4.2.3. – Balconies, decks and other exterior platforms - What takes precedence for loads – 1.9kPa or **roof Snow load**

- **Same**

Note that these values may increase in the new 2025 NBC due to climatic changes.

where

- S = specified snow load,
- C_b = basic snow load roof factor, which is 0.45 where the entire width of the roof does not exceed 4.3 m and 0.55 for all other roofs,
- S_s = 1-in-50-year ground snow load in kPa, determined according to Subsection 1.1.3., and
- S_r = associated 1-in-50-year rain load in kPa, determined according to Subsection 1.1.3.



Section 9.4. Structural – Solar Panels (Part 4)

• Roofs with solar panels

4.1.6.16.

Division B

4.1.6.16. Roofs with Solar Panels

(See Note A-4.1.6.16.)

- 1) Where solar panels are installed on a roof, the snow loads, S , shall be determined in accordance with Sentences (2) to (6) or with the requirements for roofs without solar panels, whichever produces the most critical effect.
- 2) For the purposes of this Article, solar panels shall be classified as
 - a) Parallel Flush, where the panels are installed parallel to the roof surface with their upper surface less than or equal to $C_b C_w S_s / \gamma$ above the roof surface,
 - b) Parallel Raised, where the panels are installed parallel to the roof surface with their upper surface greater than $C_b C_w S_s / \gamma$ above the roof surface, or
 - c) Tilted, where the panels are installed at an angle to the roof surface with their highest edge greater than $C_b C_w S_s / \gamma$ above the roof surface.
- 3) For sloped roofs with solar panels, the snow loads, S , shall be determined in accordance with the requirements for roofs without solar panels, except that the slope factor, C_s , shall be
 - a) taken as 1.0 for roof areas extending upslope from the downslope edge of a panel or array of panels at an angle of 45° from each side edge of the panel or array, and
 - b) as specified in Sentences 4.1.6.2.(5) to (7) for all other roof areas.(See Note A-4.1.6.16.(3).)
- 4) For sloped roofs with Parallel Flush solar panels, the snow loads, S , shall be determined in accordance with the requirements for roofs without solar panels, except that

A-4.1.6.16.(4)(b) Snow Loads for a Sloped Roof with Parallel Flush Solar Panels Where $w_g \geq w_p$. Figure A-4.1.6.16.(4)(b) shows the snow loads for a sloped roof with Parallel Flush solar panels where the gap width, w_g , between the panels is greater than or equal to the panel width, w_p .

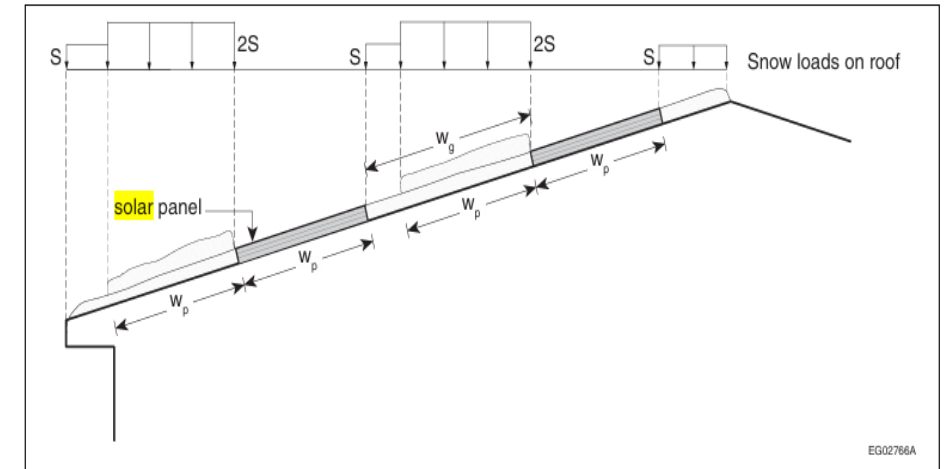


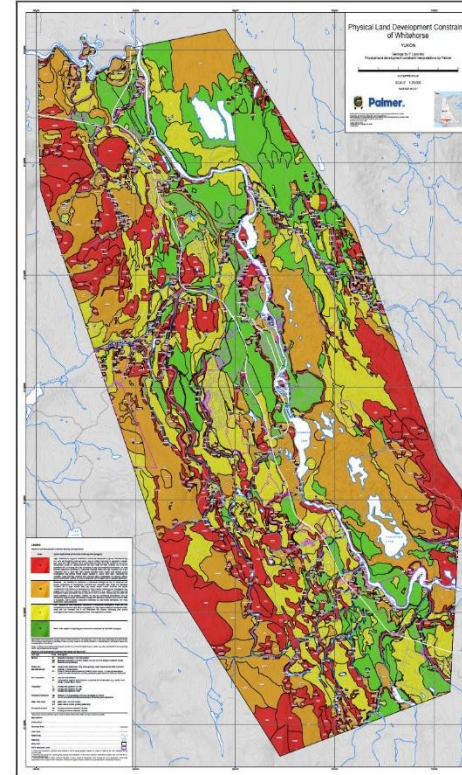
Figure A-4.1.6.16.(4)(b)
Snow loads for a sloped roof with Parallel Flush solar panels where $w_g \geq w_p$

Note – additional precautions for roofs that incorporate snow stops.


Soil Bearing and Footing Design

Whitehorse has a wide variety of soil conditions which impact the soil bearing, backfilling and drainage. It is key to verify the soil conditions for your build project is key to limiting any negative affects to your build.

Newer sub-divisions such as Whistle Bend have soil conditions more prevalent to freezing and poor drainage, which requires involvement of a geotechnical engineer, and may change the typical foundation systems (PWF) that have been traditionally used in other areas of the city.



Note – to be reviewed in more detail in Session 02 – refer to the city’s geotechnical guidelines

 **Whitehorse** City of Whitehorse
2121 - 2nd Avenue, Whitehorse, Yukon Y1A 1C2 Bus: (867) 667-6401 Fax: (867) 668-8398

2024-01-12

GUIDELINE FOR GEOTECHNICAL ENGINEERING FOR EXCAVATIONS

Type – Internal Guideline
Number - GLBI.01(D)
Date Implemented – 2024-01-12
Approved – Supervisor, Building Inspections
Date to be Reviewed - 2025 (TBC – to coincide with new NBC cycles)

Application:

- All excavations over 1.2 m deep

Purpose:

To establish when geotechnical engineering design and oversight is required as part of review and issuance of building and plumbing permits where the proposed works include excavation in order to:

- Ensure compliance with the Yukon Workers' Compensation, NBC, and CoW Building and Plumbing Bylaw as amended from time to time.
- Keep CoW employees safe during the execution of their day to duties related to building construction.
- Limit liability for issuance of building/plumbing permits where excavations may undermine adjacent private or public lands.
- Ensure fair and consistent application of the geotechnical design and oversight requirements.

Definitions and Interpretations:

- 'Geotechnical Engineer' means a Professional Engineer with experience in geotechnical engineering registered in the Yukon Territory.
- 'Requirement for Geotechnical Engineering' means the proposed excavation exceeds the noted parameters for not requiring geotechnical design and oversight.
- 'CoW' means the City of Whitehorse.
- 'NBC' means the National Building Code of Canada as amended from time to time.

UPDATED FEBRUARY 2016

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Soil Bearing and Footing Design

Note – to be reviewed in Session 02.

Section 9.4.4. Foundation Conditions outlines the limitations of Part 9 design and allowable bearing pressures for different soil conditions.

9.4.4. Foundation Conditions


9.4.4.1. Allowable Bearing Pressures

- 1) Footing sizes for *shallow foundations* shall be
 - a) determined in accordance with Section 9.15., or
 - b) designed in accordance with Section 4.2. using
 - i) the maximum allowable bearing pressures in Table 9.4.4.1., or
 - ii) allowable bearing pressures determined from *subsurface investigation*.

Table 9.4.4.1.
Allowable Bearing Pressure for Soil or Rock
 Forming Part of Sentence 9.4.4.1.(1)

Type and Condition of <i>Soil or Rock</i>	Maximum Allowable Bearing Pressure, kPa
Dense or compact sand or gravel ⁽¹⁾	150
Loose sand or gravel ⁽¹⁾	50
Dense or compact silt ⁽¹⁾	100
Stiff clay ⁽¹⁾	150
Firm clay ⁽¹⁾	75
Soft clay ⁽¹⁾	40
Till	200
Clay shale	300
Sound <i>rock</i>	500

Notes to Table 9.4.4.1.:
 (1) See Note A-Table 9.4.4.1.



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2020 NBC – Division C – Administrative Provisions

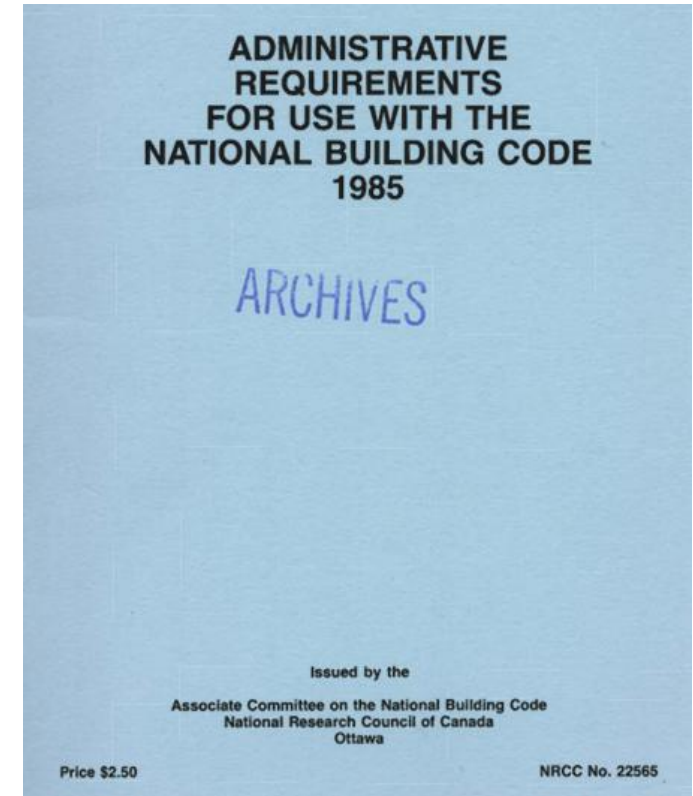
Section 2.2. Administration

2.2.1. Administration

2.2.1.1. Conformance with Administrative Requirements

- 1) This Code shall be administered in conformance with the appropriate provincial or territorial regulations, **municipal bylaws** or, in the absence of such regulations or bylaws, in conformance with the Administrative Requirements for Use with the National Building Code of Canada 1985.

Therefore, use City of Whitehorse Building and Plumbing Bylaw 99-50.



nrc-publications.canada.ca/eng/view/ft/?id=da43508-0b95-471b-aad8-5e2c4c61e939



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BUILDING SOLUTIONS

2020 NBC – Division C – Administrative Provisions

Division C contains administrative provisions relating to the application of the Code.

Many provinces and territories establish their own administrative provisions upon adopting or adapting the NBC; having all the administrative provisions in one Division facilitates their customization to suit jurisdictional needs.

Includes

- 2 Parts
 - 1. General,
 - 2. Administrative
- Provides great information on basic design, drawing and commissioning requirements!

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2.1.1.	Application	2-1
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2020 NBC – Division C – Administrative Provisions

Section 2.2. Administration

Structural Design

1) For design carried out in accordance with Part 4 of Division B, the designer shall be a professional engineer or architect skilled in the work concerned. (See Note A-2.2.1.2.(1).)

Information Required for Proposed Work General Information Required

- 1) **Sufficient information shall be provided to show that the proposed work will conform to this Code and whether or not it may affect adjacent property.**
- 2) Plans shall be drawn to scale and shall indicate the nature and extent of the work or proposed occupancy in sufficient detail to establish that, when completed, the work and the proposed occupancy will conform to this Code.
- 3) When proposed work is changed during construction, information on the changes shall comply with the requirements of this Section for proposed work



2020 NBC – Acceptable vs Alternative Solutions

Division C

Provides an outline in providing an alternative solution to any “acceptable solution” with the Code.

(5) The rationale for an alternate proposal is not:

- Because that’s the way we’ve always done it
- It costs too much?
- The owner wants it that way

Therefore, when providing an “alternative”, the proposal should be clear on how the objective and functional statements (Division A) are being met.

Section 2.3. Alternative Solutions

2.3.1. Documentation of Alternative Solutions

(See Note A-2.3.1.)

2.3.1.1. Documentation

1) Documentation conforming to this Subsection shall be provided by the person requesting the use of an alternative solution to demonstrate that the proposed alternative solution complies with this Code.

2) The documentation referred to in Sentence (1) shall include

- a) a Code analysis outlining the analytical methods and rationales used to determine that a proposed alternative solution will achieve at least the level of performance required by Clause 1.2.1.1.(1)(b) of Division A, and
- b) information concerning any special maintenance or operational requirements, including any *building* component commissioning requirements, that are necessary for the alternative solution to achieve compliance with the Code after the *building* is constructed.

3) The Code analysis referred to in Clause (2)(a) shall identify the applicable objectives, functional statements and acceptable solutions, and any assumptions, limiting or restricting factors, testing procedures, engineering studies or *building* performance parameters that will support a Code compliance assessment.

National Building Code of Canada 2020 Volume 1

Division C 2-5

4) The Code analysis referred to in Clause (2)(a) shall include information about the qualifications, experience and background of the person or persons taking responsibility for the design.

5) The information provided under Sentence (3) shall be in sufficient detail to convey the design intent and to support the validity, accuracy, relevance and precision of the Code analysis.

6) Where the design of a *building* includes proposed alternative solutions that involve more than one person taking responsibility for different aspects of the design, the applicant for the permit shall identify a single person to co-ordinate the preparation of the design, Code analysis and documentation referred to in this Subsection.

2020 NBC – Acceptable vs Alternative Solutions

When preparing an Alternative Solution, there is also the NBC 2015 – Intent Statements, which provides an outline of why that particular code item has been developed.

Link - [National Building Code of Canada 2015 – Intent Statements | National Research Council Canada](#)

Please note that the Intent Statement guide has not been updated, and it is important to confirm any updated code references.

An example - 9.14.6.1.(1) Surface drainage

Sentence 9.14.6.1.(1)

1. OH1	2. OS2	3. OP2
Objective	OH1.Indoor.Conditions	
Attribution	[F60-OH1.1,OH1.2,OH1.3]	
Intent		
Intent 1:	To limit the probability of inadequate grading of the building site, which could lead to excessive moisture loading on foundations, which could lead to:	
	<ul style="list-style-type: none">the ingress of moisture from the ground, orcompromised thermal performance of components intended to provide resistance to heat transfer.	
	This is to limit the probability of:	
	<ul style="list-style-type: none">an inadequate control of the temperature of interior spaces, relative humidity, or water ingress and accumulation,the generation of pollutants from biological growth or from materials that become unstable on wetting, ordeterioration, which could lead to compromised integrity of elements protected by the environmental separators.	
	This is to limit the probability of:	
	<ul style="list-style-type: none">negative effects on the air quality of indoor spaces,the inadequate thermal comfort of persons, andcontact with moisture.	
	This is to limit the probability of harm to persons.	
	Top of Page	

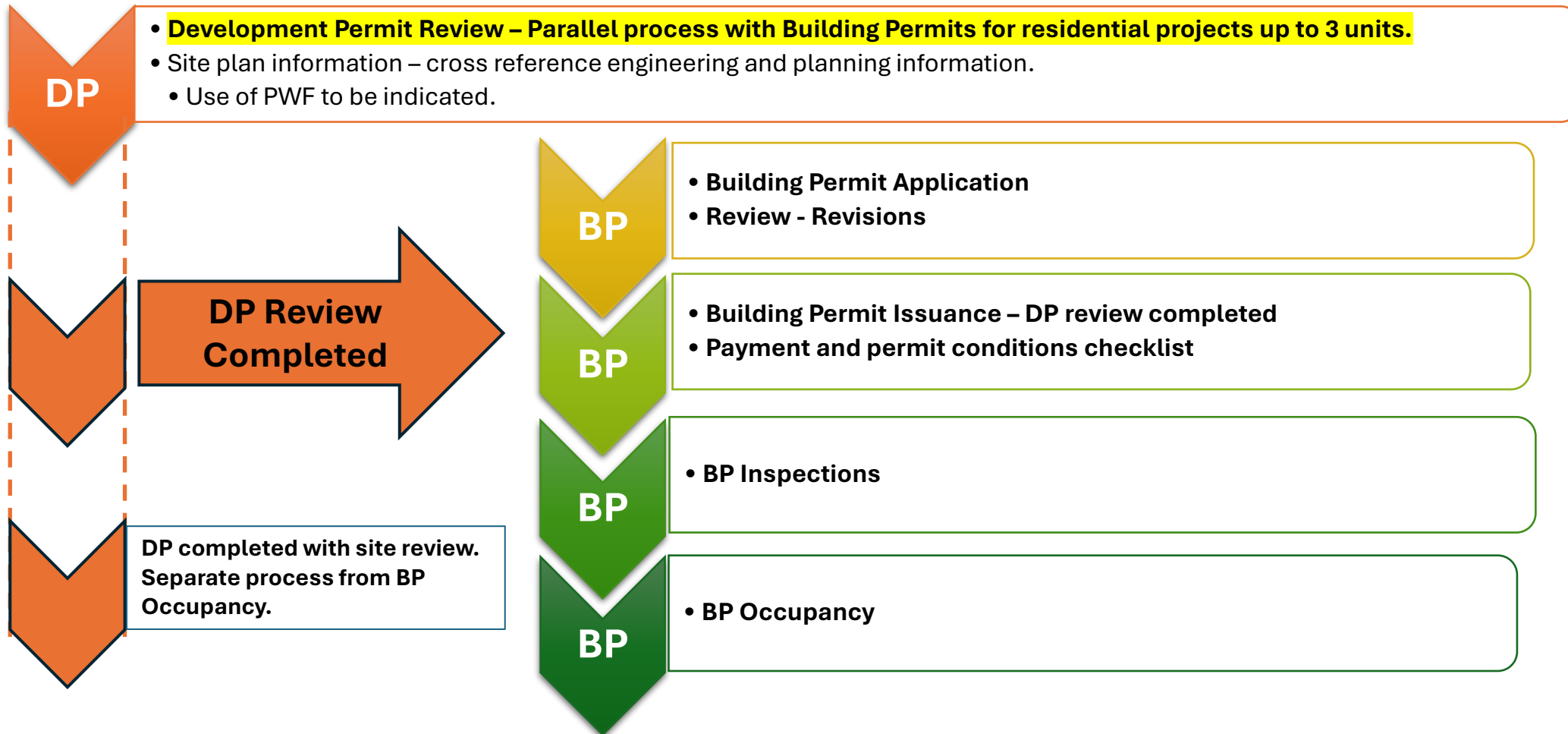
Poll question

- Where are Acceptable Solutions found in the NBC?
 - Div A
 - Div B
 - Div C
- Where are Objective and Functional statements outlined in the NBC?
 - Div A
 - Div B
 - Div C
- Where are Alternative Solutions outlined in the NBC?
 - Div A
 - Div B
 - Div C



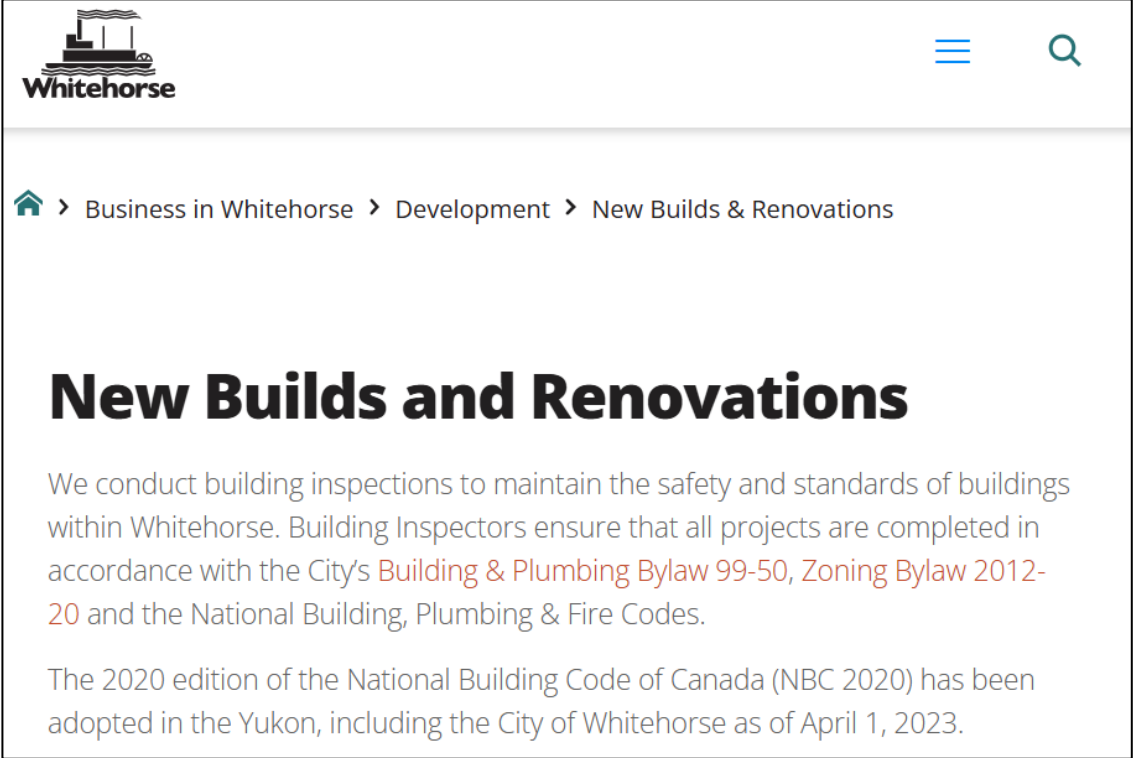
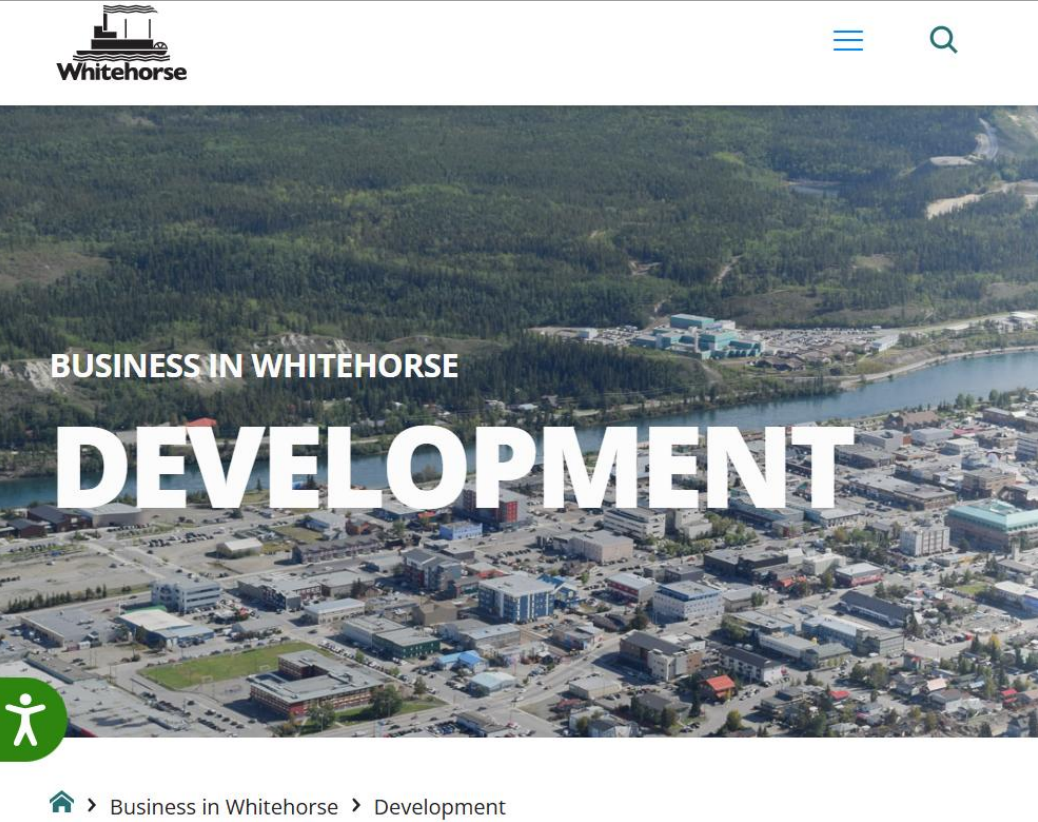
Typical Building Permit Process – Part 9

Overview of typical Building permit flow for a new Residential projects – up to 3 units



When in doubt – reach out

Development - City of Whitehorse



Building Permit Process – New SFH



Application for Development Permit: Form 1A – Contact Information and Owner Authorization		City of Whitehorse Zoning Bylaw 2012-20				
Municipal Address: #:	Street:					
Legal Description:	Lot/Block:	Plan #: Subdivision:				
Property Owner						
Owner Name:						
Contact information:	Phone:	E-mail:				
	Mailing Address:					
Authorised Agent: (If applicable)	If you are an agent acting on behalf of the property owner (such as a property manager or an authorised signatory for a corporation) please provide proof of authorization.	Name: Phone: Email: Mailing Address:				
Applicant (If Different From Owner/Agent)						
Name:						
Contact Information:	Phone:	E-mail:				
	Mailing Address:					
Proposed Development (check all that apply and fill out the corresponding form/s)						
<table border="1"> <tr> <td>New Construction</td> <td>Forms to Attach</td> </tr> <tr> <td><input type="checkbox"/> Residential (excluding RCS, RCS2, RCS3, and RCT zones, and multiple housing)</td> <td>2A and 3B</td> </tr> </table>		New Construction	Forms to Attach	<input type="checkbox"/> Residential (excluding RCS, RCS2, RCS3, and RCT zones, and multiple housing)	2A and 3B	
New Construction	Forms to Attach					
<input type="checkbox"/> Residential (excluding RCS, RCS2, RCS3, and RCT zones, and multiple housing)	2A and 3B					
<input type="checkbox"/> Garden Suite	3H	<small>*additional supplementary form(s) may be required depending on zone/proposed use</small>				
Development Incentive:	Projects that provide living/garden suites, rental or supportive housing, achieve density targets, or are undertaken by a non-profit or non-governmental organization may be eligible for a Development Incentive. Are you applying for a Development Incentive in accordance with the City's Housing Development Incentives Policy? (Council Policy 2020-01)	<input type="checkbox"/> Yes Attach Form 5A				
Authorization of Proposed Development						
I hereby certify that I am the registered owner, or authorised agent of the owner, and hereby make application for a Development permit subject to the provisions of the Whitehorse Zoning Bylaw in accordance with the plans and supporting information submitted herewith and which forms part of this application.						
Signature of Owner/Agent:	Date:					
Signature of Applicant:	Date:					

Application for Development Permit: Form 2A – New Residential Construction Checklist (excluding Multiple Housing)		City of Whitehorse Zoning Bylaw 2012-20
Checklist for a Complete Application: Please confirm your application is complete by filling in the check boxes in the list below and signing the declaration. <u>Incomplete applications will not be accepted.</u> Please check each box to confirm your application contains the required information		
a) Project Information: Every application for a development permit shall contain complete information in accordance with Section 4.4 and 4.5 of the Zoning Bylaw, including but not limited to: <ul style="list-style-type: none"> <input type="checkbox"/> A letter explaining the details of the proposed development; <input type="checkbox"/> Form 3B, or 3C (for developments in a comprehensive zone), summarizing compliance with the Zoning Bylaw; <input type="checkbox"/> Floor plans and elevation drawings of all proposed buildings and structures including any additions or renovations; 		
b) Site Plan: Every application for a development permit shall contain a site plan at an appropriate metric scale containing: <ul style="list-style-type: none"> <input type="checkbox"/> A north arrow; the drawing scale, legal description and municipal address; <input type="checkbox"/> Lot dimensions; <input type="checkbox"/> All principal and accessory building footprints; <input type="checkbox"/> Setback distances for all principal and accessory buildings relative to property lines; <input type="checkbox"/> Parking area and driveway dimensions including surface treatment (e.g. asphalt, concrete, gravel); <input type="checkbox"/> Location and description of existing and proposed landscaping ground cover, trees, shrubs, or other landscape features; <input type="checkbox"/> Location of any other relevant site improvements such as steps, decks, fences, fuel tanks, waste containers, or exterior storage areas; <input type="checkbox"/> Location of easements, power poles/lines, fire hydrants, street lights, other infrastructure on or near the property; and <input type="checkbox"/> Location of laydown area for project, if applicable. 		
c) Lot Grading and Servicing Plan: To be shown on site plan or a separate lot grading/servicing plan. Lot grading plans must correspond with design elevations identified in an engineered subdivision drainage plan, where applicable. The following is a list of key information required on your lot grading/servicing plan. For a complete description of lot grading requirements, please review the <i>City of Whitehorse Development Guidelines – Lot Grading Guidelines for Simple Developments</i> , available from www.whitehorse.ca/developmentforms . <ul style="list-style-type: none"> <input type="checkbox"/> Proposed main floor elevation(s) <input type="checkbox"/> Proposed spot elevations at lot corners, building perimeter and corners, of buildings, edge of surface treatments, grade breaks and along property lines and drainage features; <input type="checkbox"/> Direction of drainage and grade percentage; <input type="checkbox"/> Any drainage features such as swales, ditches, and retaining walls; <input type="checkbox"/> Location, size, and material of proposed underground service connections (if applicable); and <input type="checkbox"/> Grade of sanitary service (if applicable). In urban areas, where an engineered subdivision drainage plan is not available, provide the following additional information: <ul style="list-style-type: none"> <input type="checkbox"/> Topographic survey of existing site conditions with spot elevations at corners of lot, grade breaks and at existing building corners (if any), road, curb, sidewalk, lanes and on adjacent properties; <input type="checkbox"/> Location and elevations of neighbouring buildings; and <input type="checkbox"/> Design to be sealed by a Professional Engineer licensed to practice in the Yukon. For lots larger than 0.5 ha in country residential areas, the above items are not normally required, but the general drainage pattern and location of well and septic field must be indicated on site plan. The Development Officer may request additional details if required.		

d) Fees, Charges, and Guaranteed Security Information: Every application shall be accompanied by the fee required by the Fees and Charges Bylaw.

- Development Permit application fee of \$175.
- In comprehensive zones, a guaranteed hard-surfacing security of \$1,000 is required to ensure the hard-surfacing is installed. A guaranteed landscape security of \$1,000 is required to ensure the landscaping is installed. A security may be collected for development in other zones, where hard-surfacing and/or landscaping improvements are required.

e) Declaration:

Please check each box to confirm you understand and agree to the following statements:

- I hereby declare that all the information provided in this application for development and contained in the supporting documents are to the best of my belief true and correct in all respects.
- I hereby acknowledge that all the information provided is considered public information and available for public viewing and distribution.
- I hereby acknowledge that any variation from the description, specifications, and plans that form the basis of approval of a development permit, building permit or business license must be authorized in writing by the Development Officer, or where applicable, the Building Inspector. Failure to obtain authorization may result in the development permit, building permit, or business license to be null and void.
- I hereby confirm that the proposed development, as outlined in the application for Development Permit, complies with any easements, caveats, or contracts which affect development of the site.

Signature of Applicant: _____ Print Name: _____ Date: _____

It is critical to ensure all the information is provided at time of DP application!

- a) Project information**
- b) Site plan**
- c) Lot grading plan**
- d) Fees**
- e) Declaration**



Building Permit Process – New SFH



Application for Development Permit: **Form 3B – Project Information Table for Residential Development** (excluding comprehensive zones and multiple housing) City of Whitehorse Zoning Bylaw 2012-20

Municipal Address of Proposed Development:	
Zone:	
Type of Housing:	<input type="checkbox"/> Single Detached <input type="checkbox"/> Duplex <input type="checkbox"/> Mobile Home* <small>*Permitted as principal use in RC1/RC2 zone only; permitted as conditional use in RS/RS2 zone (subject to Council process).</small>
Lot Area (m²):	
Gross Floor Area (m²):	

Sum of the horizontal areas of each storey, measured from the exterior faces of the exterior walls. Excludes garages, attics, balconies, breezeways, carports, porches, and terraces.

Development Description	Required Zone Standard	Proposed										
Site Coverage: The percentage of the lot area that may be built upon, including accessory buildings/structures and decks; excluding steps, eaves, cornices, and similar projections, courtyards, terraces or patios, driveways, aisles, and parking stalls.	<table border="1"> <tr><td>RC1/RC2</td><td>20%</td></tr> <tr><td>RD</td><td>50%</td></tr> <tr><td>RR</td><td>35%</td></tr> <tr><td>RS/RS2</td><td>40%</td></tr> </table>	RC1/RC2	20%	RD	50%	RR	35%	RS/RS2	40%	Area of site coverage = _____ m ² Lot area = _____ m ² Area of site coverage ÷ Lot area = _____ %		
RC1/RC2	20%											
RD	50%											
RR	35%											
RS/RS2	40%											
Building Height: The vertical distance measured from the average elevation of the finished grade along the front of the building to the highest point of the roof.	<table border="1"> <tr><td></td><td>Maximum</td></tr> <tr><td>RC1</td><td>12 m</td></tr> <tr><td>RC2/RR/RS</td><td>10 m</td></tr> <tr><td>RD</td><td>8 m*</td></tr> <tr><td>RS2</td><td>9 m</td></tr> </table> <small>*Buildings in RD zone with gable, gambrel, or hip roof may project an additional 2.0 m.</small>		Maximum	RC1	12 m	RC2/RR/RS	10 m	RD	8 m*	RS2	9 m	Height = _____ m
	Maximum											
RC1	12 m											
RC2/RR/RS	10 m											
RD	8 m*											
RS2	9 m											
Front Yard Setback: The distance from the front property line to the nearest permitted building or structure. Corner Lots have different setback regulations. Ask a Development Officer or consult the Zoning Bylaw for corner lot regulations.	<table border="1"> <tr><td></td><td>Minimum</td></tr> <tr><td>RC1/RC2</td><td>6 m</td></tr> <tr><td>RD</td><td>2 m</td></tr> <tr><td>RR</td><td>6 m</td></tr> <tr><td>RS/RS2</td><td>6 m</td></tr> </table>		Minimum	RC1/RC2	6 m	RD	2 m	RR	6 m	RS/RS2	6 m	Front yard = _____ m
	Minimum											
RC1/RC2	6 m											
RD	2 m											
RR	6 m											
RS/RS2	6 m											
Side Yard Setback: The distance from each side lot line and the nearest permitted principal building or structure.	<table border="1"> <tr><td></td><td>Minimum</td></tr> <tr><td>RC1/RC2</td><td>6 m</td></tr> <tr><td>RD</td><td>1.5 m</td></tr> <tr><td>RR</td><td>3 m one side 1.5 m other side</td></tr> <tr><td>RS/RS2</td><td>3 m one side 1.5 m other side*</td></tr> </table> <small>*See exceptions in zone-specific regulations.</small>		Minimum	RC1/RC2	6 m	RD	1.5 m	RR	3 m one side 1.5 m other side	RS/RS2	3 m one side 1.5 m other side*	Side yard = _____ m Side yard = _____ m
	Minimum											
RC1/RC2	6 m											
RD	1.5 m											
RR	3 m one side 1.5 m other side											
RS/RS2	3 m one side 1.5 m other side*											
Rear Yard Setback: The distance between the rear property line and the nearest permitted principal building or structure.	<table border="1"> <tr><td></td><td>Minimum</td></tr> <tr><td>RC1/RC2</td><td>6 m</td></tr> <tr><td>RD</td><td>3 m</td></tr> <tr><td>RR</td><td>6 m</td></tr> <tr><td>RS/RS2</td><td>3 m</td></tr> </table>		Minimum	RC1/RC2	6 m	RD	3 m	RR	6 m	RS/RS2	3 m	Rear yard = _____ m
	Minimum											
RC1/RC2	6 m											
RD	3 m											
RR	6 m											
RS/RS2	3 m											

Form 3B – Project Information Table

It is critical to complete this form for review by a Development Officer.

A separate form will be required for different project types such as:

- Living and Garden Suites



Building Permit Process – New SFH

CITY OF WHITEHORSE DEVELOPMENT GUIDELINES
LOT GRADING GUIDELINES FOR SIMPLE DEVELOPMENTS



Ensure you review the lot grading requirements outlined in the city’s lot grading guide.

Please pay particular attention to “infill lot” requirements even in newer subdivisions with established lot grading plans.



Building Permit Process – New SFH

DP

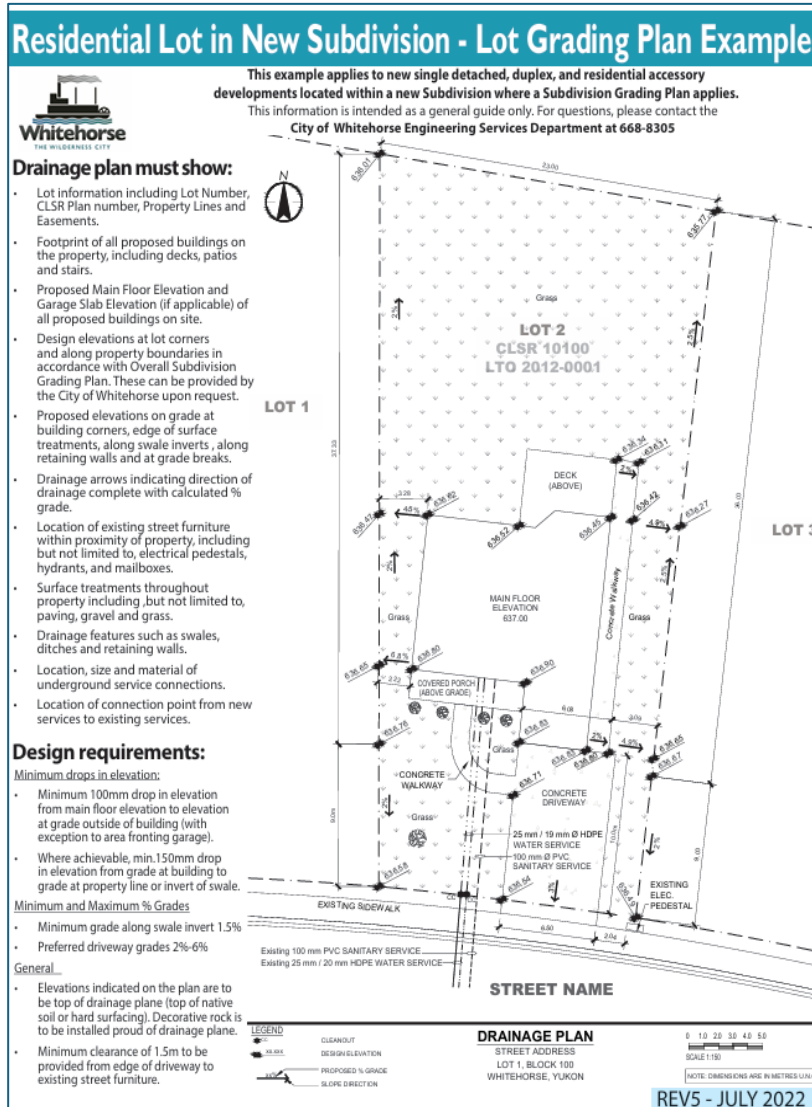
• DP
Review

Site and Lot Grading plans

Ensure all required information is provided to allow for a complete and timely review.

Not that infill lots require additional information in relation to neighbouring properties.

At time of final project closure a separate survey maybe be required.



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BUILDING SOLUTIONS

Building Permit Application




A Building Permit application can be made at the same time as the DP Review process.

It is critical to ensure that the application is filled out and all required information has been provided. Please read the application package in full to ensure all the required information is provided.

In 2025, to improve the efficiency of the plan review process, incomplete building permit applications will not be accepted.

Please note that the DP site plan and lot grading information matches the BP drawings.

Separate projects such as a Garden Suites will require a separate BP application.

 Whitehorse 2121 - 2 nd Ave. Whitehorse, YT Y1A 1C2 Land & Building Services Ph: 668-8340 Fax: 668-8395 adminbuilding@whitehorse.ca		APPLICATION FOR RESIDENTIAL BUILDING PERMIT BUILD, ALTER, REPAIR, OR MOVE A RESIDENTIAL STRUCTURE	
			<input type="checkbox"/> FOUNDATION ONLY PERMIT REQUESTED
ADDRESS OF PROPOSED WORK		Street Occupancy Permit #	
OWNER		MAILING ADDRESS	
EMAIL		BUSINESS LICENCE # (if applicable)	
		PHONE	
CONTRACTOR		MAILING ADDRESS	
EMAIL		BUSINESS LICENCE #	
		PHONE	
BUILDING TYPE		REQUIRED SUPPORTING DOCUMENTS	
<input type="checkbox"/> SINGLE DETACHED HOUSE (SDH) <input type="checkbox"/> SINGLE DETACHED HOUSE W/ LIVING SUITE (Separate permit will be issued for each) <input type="checkbox"/> ROW HOUSING (One Dwelling Unit Per Lot)		<input type="checkbox"/> LIVING SUITE <input type="checkbox"/> MULTI-RESIDENTIAL <input type="checkbox"/> GARDEN SUITE	
<input type="checkbox"/> DUPLEX HOUSING <input type="checkbox"/> ACCESSORY BUILDING/STRUCTURE		<input type="checkbox"/> CONSTRUCTION Drawings, two sets (one paper, one PDF preferred) <input type="checkbox"/> Acknowledgment of Owner's Obligations form <input type="checkbox"/> Engineered Drawings and Letter of Professional Assurance (if applicable)	
CLASS OF WORK			
<input type="checkbox"/> NEW <input type="checkbox"/> RENOVATION / ALTERATION <input type="checkbox"/> ADDITION		<input type="checkbox"/> CONVERSION OF SDH TO SDH W/ LIVING SUITE <input type="checkbox"/> CONVERSION OF ACCESSORY BUILDING TO GARDEN SUITE <input type="checkbox"/> OTHER	
BUILDING INFORMATION			
HEATING TYPE(S) <input type="checkbox"/> WOOD/PELLET <input type="checkbox"/> OIL <input type="checkbox"/> GAS (LPG) <input type="checkbox"/> ELECTRIC <input type="checkbox"/> OTHER			
USE(S) OF BUILDING		NO. STORIES _____	
		● CRAWLSPACE _____ ft ²	
		● PATIO _____ ft ²	
		● BASEMENT _____ ft ²	
		● DECK _____ ft ²	
		● FIRST _____ ft ²	
DWELLING UNITS		● GARAGE/SHED _____ ft ²	
CONSTRUCTION COST		● SECOND _____ ft ²	
		● PORCH _____ ft ²	
		● THIRD _____ ft ²	
DESCRIPTION OF WORK			
IMPORTANT NOTICE			
In consideration of the granting of the permission applied for, I hereby agree to indemnify and keep harmless the City of Whitehorse and its employees or agents against all claims, liabilities, judgements, costs and expenses of whatsoever kind that may occur in consequence of and incidental to the granting of this permit if issued and the work carried out under the permit if issued and I further agree to conform to all requirements of the City of Whitehorse Building and Plumbing Bylaw and all other Bylaws and Acts relating to this permit.			
OWNER / AUTHORIZED AGENT			
NAME (PRINT)		SIGNATURE	DATE
CONTRACTOR			
NAME (PRINT)		SIGNATURE	DATE
INTERNAL USE ONLY			
DATE RECEIVED	REVIEWER'S SIGNATURE		DATE ACCEPTED

Building Permit Application – New SFH

BP

• BP Application



Living in Whitehorse

Our Government

Business in Whitehorse

Visiting Whitehorse



– How To Apply For A Building Permit

Complete applications can be submitted by email, mail or in person. Once the application has been reviewed and is ready for approval, LBS staff will contact you to make arrangements for payment of the application fees and signing the permit(s).

How to submit by email:

- Send complete application by email to adminbuilding@whitehorse.ca.
- Completed application forms may be scanned and attached to the email.
- Supporting documents (plans, etc.) may be attached in PDF format. If too large to attach to an email, a link may be provided to download the documents from a cloud service. Photographs of plans are not accepted.
- Visit our [Application Forms](#) page for all application forms, including checklists for a complete application, and example plans.

How to submit by mail or in person:

- Application forms and plans may be submitted in person to our office at 6-151 Industrial Road, or by mail to City of Whitehorse, Land & Building Services, 2121 2nd Avenue, Whitehorse YT Y1A 1C2.
- One printed set of supporting documents must be included. The Building Inspector may require that a digital set of plans in PDF format also be provided.

Note – apply early for your BP to leave time for any required revisions. Typically, early spring and late fall see increased permit volumes, which extends wait times.



FLYWHEEL
BUILDING SOLUTIONS

BP Application – Truss and Floor Systems

BP

• BP
Application

New for 2025 - Building Permit Applications will now require the following:

- 1) Roof and floor trusses (parallel chord trusses) plans and plans for using I-Joists (like TJI's) or other engineered framing systems are required to be submitted in support of any permit application (ie. application requirement)

Although it may seem as a 'new' requirement, our research has confirmed this has been present in many previous NBC code cycles and is currently applied as a standard across Canada. While the city understands that this is a modification to past and present practice in Whitehorse, this will serve to ensure compliance with relevant requirements of the NBC in future.



FLYWHEEL
BUILDING SOLUTIONS

BP Application - Professional Involvement

BP

• Application

As outlined in Building Bylaw 99-50 and 9.4 of the Code, there will be more SFH projects requiring the involvement of an Engineer (geotechnical and or structural), which will require submission of sealed drawings and Letters of Design confirmation time of BP application.

Factors for the city requiring increased involvement of engineers are:

- New house designs are longer open plan layouts with larger point loads outside the scope of Part 9,
- Increase in engineered building components and propriety products
- Soil conditions that can create concerns related to bearing capacity, drainage and backfill.

Note – to be reviewed in more detail in Session 02 and 03 webinars.



FLYWHEEL
BUILDING SOLUTIONS

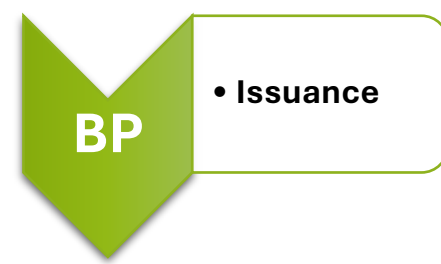
Building Permit Issuance

A building permit will be issued when all required revisions or confirmations and payment have been provided.

The city provides an outline of the conditions of permit within the Permit Condition checklist, and it is critical that the permit holder reviews these conditions carefully to avoid any confusion when construction commences.

If clarification is required, please contact the issuing Building Official for a meeting or on-site consultation.

Please also ensure that the issued permit package is kept on site at all times to ensure all parties involved in the project are working off the permit issued drawings and for the building official during site inspections.

A sample form titled 'PLUMBING PERMIT CONDITION LIST' from Whitehorse. The form includes contact information for Whitehorse (2121 - 2nd Ave., Whitehorse, YT Y1A 1C2, Land & Building Services, Ph: 668-8340, adminbuilding@whitehorse.ca) and a table for 'CONDITIONS'. The conditions list five items: 1. Construction shall conform to the City of Whitehorse Building and Plumbing Bylaw, Zoning Bylaw and NBCC and NPCC current editions. 2. Plumbing requires inspection prior to being covered. 3. Every washroom connected to municipal services shall have high efficiency toilets (dual flush toilets with a maximum flush of 6L per flush or single flush with a maximum of 4.8L per flush) installed. 4. When a PRV, backflow preventer or any other check valve assembly is installed on a domestic water supply system, adequate means to accommodate thermal expansion must also be installed. (Cushion tank) 5. Fast closing valves (solenoid valved on clothes washers, dishwashers, ice makers, etc) require water hammer arrestors. The form also has sections for 'IMPORTANT NOTICE', 'OWNER / AUTHORIZED AGENT' (with fields for NAME (PRINT), SIGNATURE, and DATE), and 'INTERNAL USE ONLY' (with fields for REVIEWER and DATE).

Example of a plumbing permit condition list



Building Permit Inspections – New SFH



Whitehorse
THE WILDERNESS CITY
6 - 151 Industrial Road
Whitehorse, Yukon Y1A 2V3
BLDG. INSP. 668-8340
FAX 668-8395

INSPECTION REPORT

(Type) _____
 Building Address _____
 Lot _____ Block _____
 Owner _____

BUILDING PERMIT PLUMBING PERMIT

ITEM NO.	BUILDING INSPECTION	ACCEPTED		ITEM NO.	PLUMBING INSPECTION	ACCEPTED	
		YES	NO			YES	NO
1.				1.			
2.				2.			
3.				3.			
4.				4.			
5.				5.			

An inspector called to inspect work done on these premises but could not gain access. Please phone and arrange for an inspection. Work Progressing No Progress

NOTE: AN INSPECTION MUST BE CALLED FOR TO VERIFY AN ACTIVITY WITHIN 6 MONTHS OF THIS DATE OR THIS PERMIT MAY BE CANCELLED.

INSPECTOR _____ DATE _____ YEAR MONTH DAY TIME _____ HOUR MINUTE A.M. P.M.

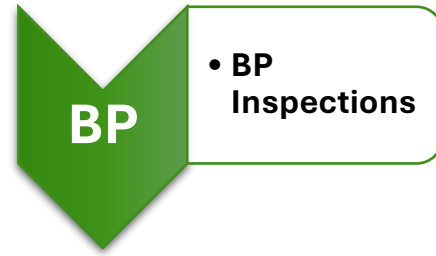
The building permit condition checklist will outline the mandatory document requirements as well as the required inspections.

For a **new Part 9 residential project**, it will include:

- 1) Siting and Foundation/Water and Sewer Service
- 2) Foundation and Damp-proofing/Plumbing Rough-in Under Slab
- 3) Framing,
- 4) Insulation and Vapour Barrier/Rough-in with Test On Chimney,
- 5) Heating and Mechanical Systems/Water Turn On and Frost Protection
- 6) Occupancy and/or Final/Final Plumbing



Building Permit Inspections – New SFH



1) Siting and Foundation/Water and Sewer Service

This is a critical inspection to ensure all parties are aware of the permit conditions. It is important to update the Building Official of any proposed changes or questions related to the issued permit package.

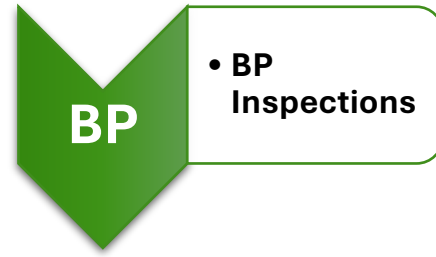
Minimum on-site conditions and documents reviewed:

- **Permit card posted**
- **Issued permit package to be on site,**
- **Site safety (Part 8 BCBC) – no negative impact to neighbouring properties/city,**
- **Working in a protected area – water course/steep slope, etc.**
- Exposed Soils condition – may require Geotechnical review if not already involved,
- Geotechnical and/or structural engineer (if applicable) to provide applicable field review and testing reports before inspection,
- Cold weather provisions (when applicable),

Standard documents required:

- location certificate and main floor elevation
- field reviews for foundation and frost protection if engineered
- for sewer/water trench the declaration and geo confirmation for compaction is required
- for all rough in plumbing a test must be on when inspected per the bylaw and the NPC

Building Permit Inspections – New SFH



1) Siting and Foundation/Water and Sewer Service (cont'd)

- Stepped footings (lack of footing bearing support)
- Pad footing sizes
- Minimum frost protection or finished grade clearances (drop footings at below grade entrance)
- Visual Siting - Zoning setbacks
- Frost protection at the exterior door at the bottom of the stair well.
- Footing thickness shall not be less than the greater of 100mm or the width of the projections of the footing beyond the supported element.

Plumbing -

Standard documents required:

- location certificate and main floor elevation
- field reviews for foundation and frost protection if engineered
- for sewer/water trench the declaration and geo confirmation for compaction is required
- for all rough in plumbing a test must be on when inspected per the bylaw and the NPC



Building Permit Inspections – New SFH

04

• BP
Inspections

2) Foundation and Damp-proofing/Plumbing Rough-in Under Slab

Minimum on-site conditions and documents reviewed:

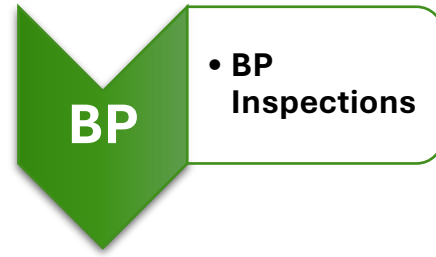
- Previous deficiencies to be corrected
- Permit package on site
- Wood foundation (if applicable) shall comply with CSA-S406 "Specification of permanent wood foundations for housing and small buildings" or Part 4 (Engineering) including but not limited to lateral restraint requirements in compliance with S406-16 clause 4.5.2 and inside corner reinforcement in compliance with S406-16 clause 4.5.6
- Dampproofing appropriate for use (PWF, ICF, etc)
- Confirmation of back-fill material to be used.

Typical deficiencies to avoid:

- plumbing tests to be in place to be verified by Building Official
- galvanized fasteners for PWF and treat all cut/drilled areas
- no notching or drilling of pwf
- underslab insul and poly in the right order (poly in top)

NOTE – this is a benchmark inspection – all previous deficiencies, required documents and updated drawings (when applicable) are required prior to continuing (backfilling). Failure to ensure all outstanding items are provided may result in a Stop Work posting.

Building Permit Inspections – New SFH



3) Framing,

Minimum on-site conditions and documents reviewed:

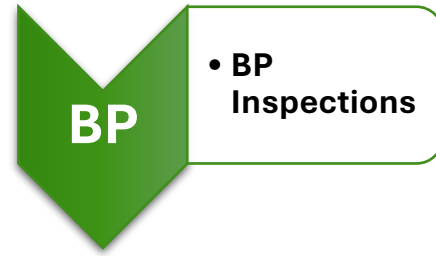
- Previous - inspection deficiencies completed,
- Substantial completion of framing - **All framing to be visible**
 - **Note – insulation including spray foam not to be applied.**
- Rough-in's (plumbing, Elec, Gas) should be completed
- Completion of roof truss/floor system bracing as per design
- Verification of spatial calculation – no changes to window sizes
- Insulated Concrete Forms (ICF) installation (if applicable for above ground use)
- Back-framing and fire blocking to be substantial completed.

Standard documents required.

- Heat loss calcs and TECA/HRAI ventilation checklist to be provided prior to booking
- Engineers field review if applicable
- **Sealed engineered truss specs – note also beams if applicable**
- Permit package including permit drawings and roof/floor layouts

Note – The NBC sets maximum moisture content for wood products at 19%. Precautions should be taken to ensure weather conditions or moisture laden air from heating equipment does not create higher moisture levels.

Building Permit Inspections – New SFH

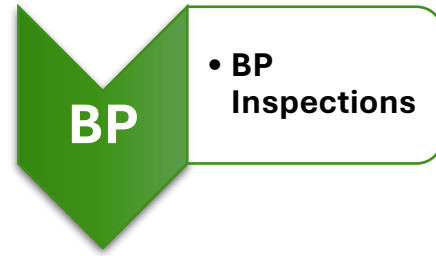


3) Framing, NOTE

- 1) Roof and parallel chord truss individual designs sealed by a Yukon Engineer are required to be submitted prior to booking a framing inspection.
- 2) For I-joist and other engineered framing systems, the requirements for seals will depend on the complexity and whether there are point loads. **As such, requirements for seals will be determined and communicated as a condition of the issuance of a building permit (ie determined during the plan review process).**

Although it may seem as a 'new' requirement, our research has confirmed this has been present in many previous NBC code cycles and is currently applied as a standard across Canada. While the city understands that this is a modification to past and present practice in Whitehorse, this will serve to ensure compliance with relevant requirements of the NBC in future.

Building Permit Inspections – New SFH



4) Insulation and Vapour Barrier/Rough-in with Test On Chimney,

Minimum on-site conditions and documents reviewed:

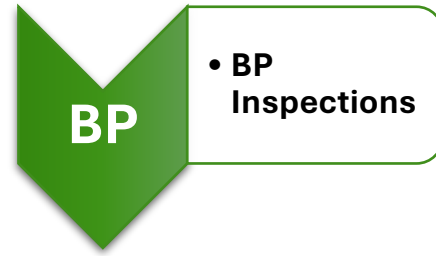
- Previous Inspection deficiencies to be completed
- Moisture content of wood elements to be within Code limits (less than 19%) – (additional drying may be required)
- Exterior to be protected – sheathing membrane minimum
- Clearances to combustibles – flues and chimneys
- All poly and insulation to be checked against approved plans and must be dry and serviceable with all voids filled
- Continuity of insulation - only permitted interruption is at the foundation wall to slab
- Structural backing for vapour/air barrier
- **Check valve, expansion tank and anti-hammer devices for plumbing system**

Standard documents required:

- Permit package on site
- manufacturers csa/ulcc docs to be on site for prefab chimney

NOTE – this is a benchmark inspection – all previous deficiencies, required documents and updated drawings (when applicable) are required prior to continuing (covering). Failure to ensure all outstanding items are provided may result in a Stop Work posting.

Building Permit Inspections – New SFH



5) Heating and Mechanical Systems/Water Turn On and Frost Protection

Minimum on-site conditions and documents reviewed:

- Water and duct insulation verified
- Mechanical systems installed as per design and layouts
- Clearances to combustibles

Standard documents required:

- Heating layouts and ventilation checklists

Building Permit Final Inspections



6) Occupancy and/or Final/Final Plumbing

To ensure a smooth Final & Occupancy process the following should be confirmed and provided to the Building Official prior to arranging a final inspection:

- **No outstanding deficiencies from previous inspections,**
- **Provide all required documentation – Please refer to your permit condition checklist,**
- Updated drawings if there have been changes from the original permit set (Bldg Official to confirm),
- Rough grading to ensure positive slope away from the building and minimum grade clearances provided.
 - Note final lot grading requirements will be verified separately under the DP – Hard Surfacing and Landscaping – refer to slide 64.

Standard forms required for Occupancy:

- PA Field Review & Compliance from all RPs,
- Letter of Assurance No.2
- Electrical Final from Y/G
- Final mechanical ventilation checklist,
- Final heating system layout,
- Post Construction Step Code report (if performance modelled,



Building Permit Final Inspection

Final Inspection with authorization to use the building will be issued when all NBC life safety items are in place and approved.

Common items verified during a Final Occupancy review:

- Previous deficiencies corrected
- No significant layout changes to permit issued drawings,
- Interconnected Smoke Alarms and Carbon Monoxide detectors
- Stairs, Guards and handrails,
- Attic and crawl space access
- general compliance of visible envelope - clearance to grade, flashing with end dams in place, flashing a material changes, terminations and intersections
- decks, porches etc. sloped away from building sufficient to remain after any shrinkage of framing

Mechanical and Plumbing systems

- Anti-hammer devices
- test all traps and sinks
- balance report and final ventilation checklist
- verify heating system(s) per submitted heat loss

BP

• Occupancy

The **Occupancy Approval Certificate** will be issued when there is a clean Final Inspection, a site grading certificate or compliance letter and a confirmation that the dev permit has been complied with and confirmed.

Note that items for which there is a deposit (landscaping) are not included in Occupancy Approval and its incumbent on the owner to apply for the refund of the deposit when the work is complete.

Online permits- DP inspections

To date there is only one online inspection request service available.



Online Services - City of Whitehorse



REQUEST FOR INSPECTION >

For as-built securities, please submit your as-built or record drawings, stamped by the engineer of record.

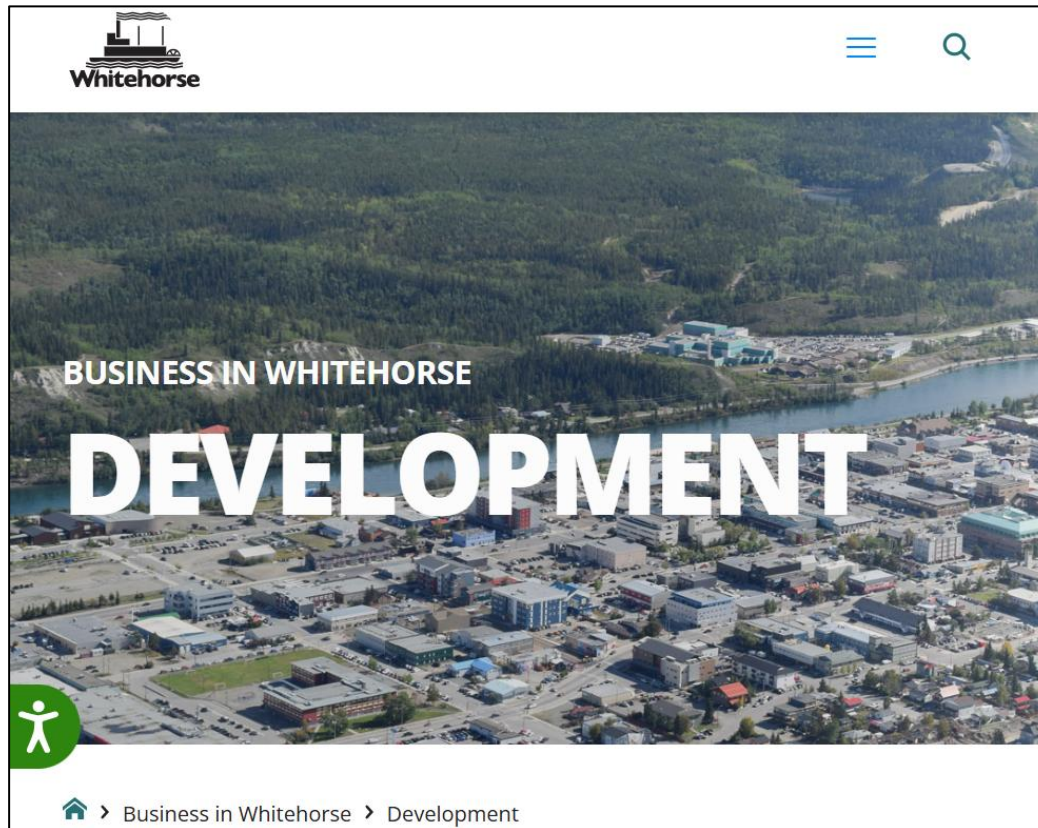
A screenshot of the City of Whitehorse website page for "Hard-Surfacing and Landscaping". The breadcrumb trail at the top reads: Home > Business in Whitehorse > Development > Development Permits > Hard-Surfacing and Landscaping. On the left is a dark sidebar menu with links: Living in Whitehorse, Visiting Whitehorse, Permits & Information, Green Standards, Living and Garden Suites, and Joint Use Agreement. The main content area has the title "HARD-SURFACING AND LANDSCAPING" in large, bold, orange letters. Below the title is a paragraph: "The City of Whitehorse requires that most new developments provide hard-surfaced parking and landscaping as a condition of Development Permit approval. Complete regulations for hard-surfacing and landscaping requirements can be found in the Zoning Bylaw. Specific requirements for each development are described in the approved Development Permit." Below this is another paragraph: "Below are highlights of key requirements and minimum standards for hard-surfacing and landscaping." At the bottom of the main content area is a link: "Completed the hard-surfacing or landscaping and want to get your security back? Submit an inspection request online."

Occupancy inspections will not delay the Occupancy process.



Remember - When in doubt – reach out

Development - City of Whitehorse



Question or Comments

