Alleviating Sewer Infrastructure Issues Through On-Site Rainwater Management

City of Vancouver

CP Seminar | October 29, 2025

Photo courtesy of Destination Vancouver

Rainwater Management Update - Upcoming Changes

VBBL Engineered Pathway

RWM Bulletin
(2018 - 2023)

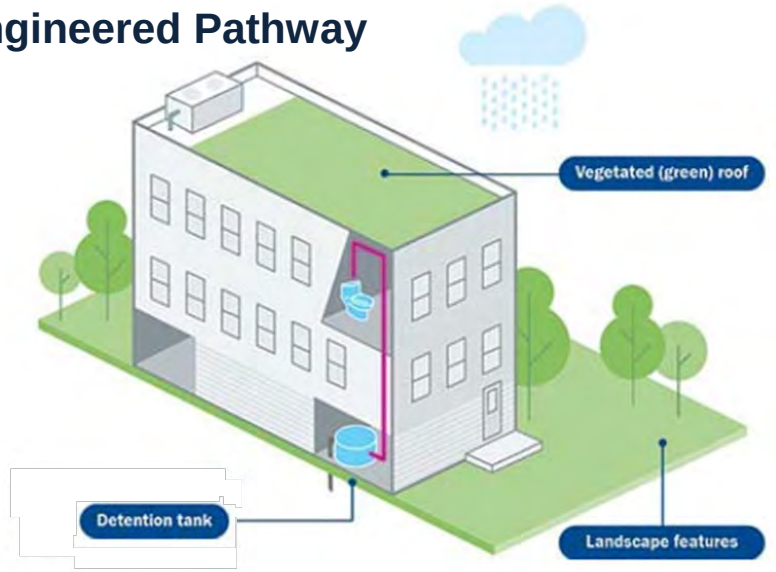
VBBL RWM
(Complex Buildings)
JAN 2024

Updated VBBL RWM
(>1000m2 and/or
>1.0 FSR)
JAN 2026

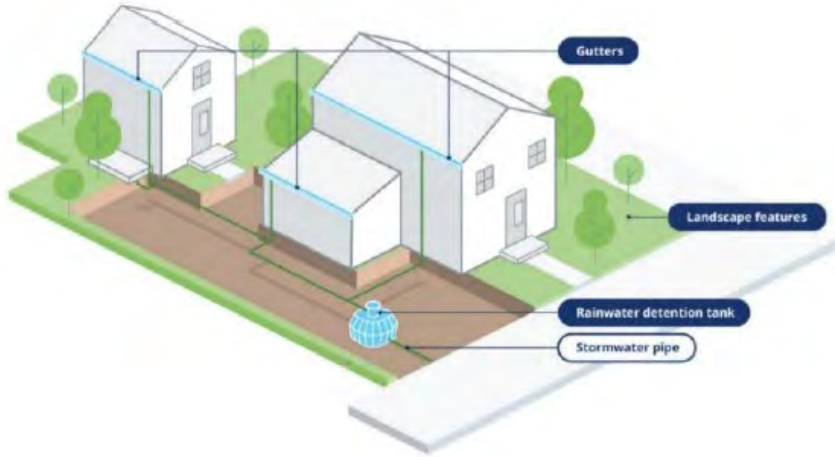
VBBL Small Site Pathway (Unchanged)

VBBL RWM (Small Site Pathway)
JUL 2025

Engineered Pathway



Small Site Pathway



Rainwater Management Update – Upcoming Changes

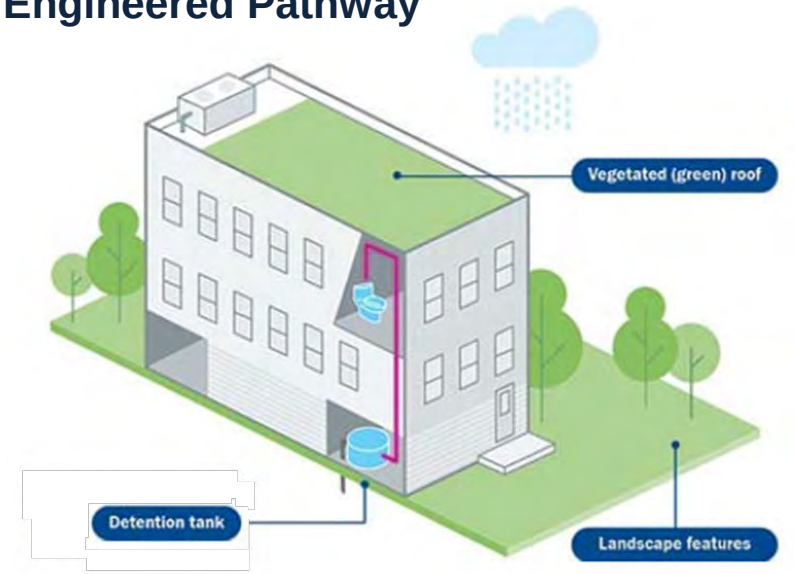
Objectives

- Better adapt drainage system to growth
  - Reduce sewer upgrade conditions
- Improve predictability to industry
- Simplify regulations

VBBL Update (Jan. 1, 2026 effective date)

- Responds to system challenges and industry feedback
  - Reduced release rate target & increased detention size
  - Standardized calculation method
  - Elimination of stormwater requirements in other by-laws

Engineered Pathway



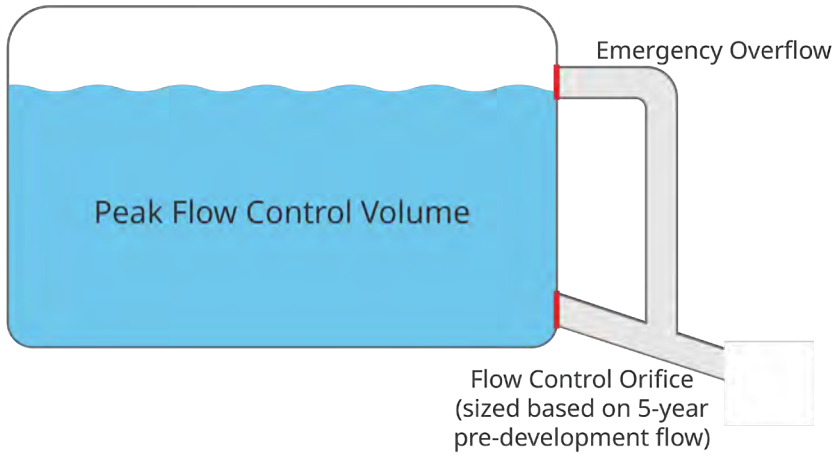
Rainwater Management Update – Upcoming Changes

Applicable to Sites >1000m^2 and/or >1.0 Floor Space Ratio (FSR):

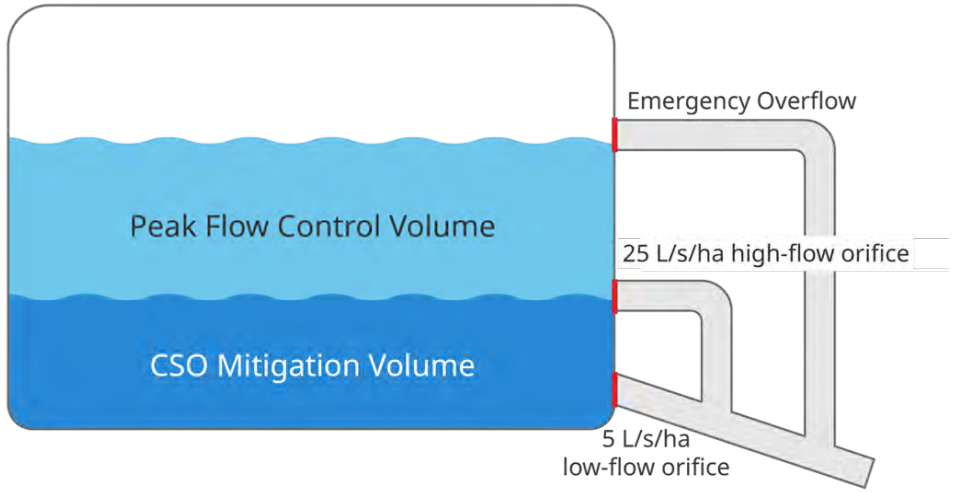
1. **Peak Flow Control**
   - Reduces flows to sewer system:
     - **10-year** 2100 release rate <=**25 L/s/hectare**

2. **CSO Mitigation**
   - Less sewage released into water bodies:
     - The first **15mm** of rainfall to land on a site on non-landscaped areas released at **5 L/s/hectare** of site area

Current



Proposed



Rainwater Management Update – Upcoming Changes

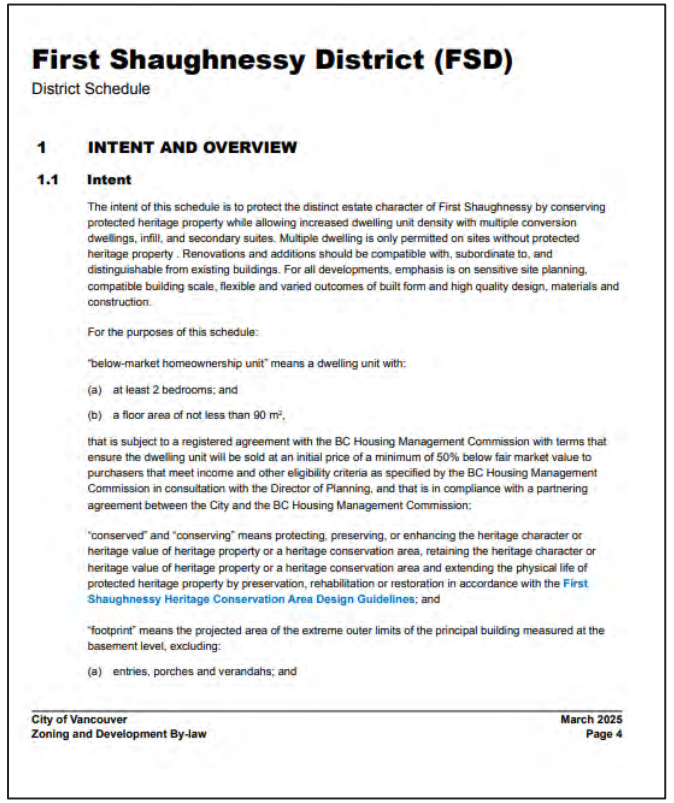
Applicable to Sites >1000m^2 and/or >1.0 Floor Space Ratio (FSR):

3. Standardized Calculation Method

- Improves consistency

4. Elimination of Stormwater Req's from Other By-laws

- Simplifies regulations:
  - First Shaughnessy District
  - Joyce-Collingwood CD-1's



First Shaughnessy District (FSD)

District Schedule

1 INTENT AND OVERVIEW

1.1 Intent

The intent of this schedule is to protect the distinct estate character of First Shaughnessy by conserving protected heritage property while allowing increased dwelling unit density with multiple conversion dwellings, infill, and secondary suites. Multiple dwelling is only permitted on sites without protected heritage property . Renovations and additions should be compatible with, subordinate to, and distinguishable from existing buildings. For all developments, emphasis is on sensitive site planning, compatible building scale, flexible and varied outcomes of built form and high quality design, materials and construction.

For the purposes of this schedule:

"below-market homeownership unit" means a dwelling unit with:

(a) at least 2 bedrooms; and

(b) a floor area of not less than 90 m^2,

that is subject to a registered agreement with the BC Housing Management Commission with terms that ensure the dwelling unit will be sold at an initial price of a minimum of 50% below fair market value to purchasers that meet income and other eligibility criteria as specified by the BC Housing Management Commission in consultation with the Director of Planning, and that is in compliance with a partnering agreement between the City and the BC Housing Management Commission;

"conserved" and "conserving" means protecting, preserving, or enhancing the heritage character or heritage value of heritage property or a heritage conservation area, retaining the heritage character or heritage value of heritage property or a heritage conservation area and extending the physical life of protected heritage property by preservation, rehabilitation or restoration in accordance with the First Shaughnessy Heritage Conservation Area Design Guidelines; and

"footprint" means the projected area of the extreme outer limits of the principal building measured at the basement level, excluding:

(a) entries, porches and verandahs; and

City of Vancouver
Zoning and Development By-law

March 2025
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Rainwater Management Update – Cost Impacts

Cost Implications

- Increased on-site storage minimizes sewer upgrades
  - ~**$20K to $50K** typical increase in storage tank capital cost, with space impact increasing from ~1 to ~2 parking stalls
  - Sewer upgrade conditions average **~350K** per development (range: **$0 to ~$5.8M**, excluding major projects)
    - Greater cost consideration for most developments

Sewer Capacity Review Process Changes

Enables Updated Sewer Capacity Review Policy

- Proposed for Council adoption on October 29
- Eliminates sewer upgrades for eligible new and in-stream files <=7.0 FSR (~26 storeys), and may reduce upgrades for larger sites
  - Industrial, institutional, major sites will still undergo sewer capacity review regardless of FSR
- Updated policy is already being applied to eligible sites:
  - ***29 applications exempted from sewer capacity review***
  - ***27 applications with sewer upgrade conditions removed***
  - ***23 applications being reviewed for potential sewer upgrade elimination***

Discussion & Questions