New Westminster

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Excavation and Shoring Policy

1. Purpose

In accordance with the Occupational Health and Safety Regulation of WorkSafeBC, excavations must be assessed for the risk of collapse, and where a hazard to workers exists, the excavation must be protected by an appropriate protective system, including sloping, benching, shoring, trench boxes, or other effective means.

This policy establishes requirements for the permitting, installation and removal of the shoring systems within the City of New Westminster. The purpose of this policy is to protect public rights-of-way, municipal infrastructure, and adjacent properties from risks associated with excavation activities.

This policy applies to developers, contractors, and consultants undertaking excavation and shoring activities within the City of New Westminster, particularly where such works impact or encroach upon City property or rights-of-way.

2. Governing Regulations

All works must comply with the following regulations, as amended from time to time:

a) WorkSafeBC Occupational Health & Safety Regulation

b) BC Building Code

c) Engineers and Geoscientists BC professional standards and guidelines

d) Applicable City of New Westminster bylaws and engineering design criteria

3. Permit Application Requirements

No excavation or installation of shoring systems, including anchor rods, shall be undertaken without a valid permit. All works shall be performed in full compliance with the terms and conditions of the issued permit. Applications must include the following documents, at minimum:

a) A shoring design sealed by a professional engineer registered in the province of British Columbia

b) Geotechnical report confirming no anticipated impact from the shoring on neighboring properties (both public and private)

c) Letter of Assurance (Schedules A and B)

d) Erosion and Sediment Control (ESC) plan

e) Hoarding and site safety plan

f) Traffic Management Plan

For more details, refer to the City of New Westminster Website at: https://www.newwestcity.ca/major-projects

4. Fees and Deposits

Prior to permit issuance or renewal, the applicant shall provide:

a) A non-refundable shoring fee as specified in the *Engineering Fees and Rates Bylaw 7553, 2013,*

b) A security deposit (cash or irrevocable letter of credit) in the amount specified in the *Engineering Fees and Rates Bylaw 7553, 2013*

The security deposit is refundable subject to the successful removal of the shoring system as outlined in section 6, the right-of-way restoration as outlined in section 7, and the completion of any required repairs to damaged infrastructure.

5. Pre-Construction Requirements

The following conditions must be met prior to commencing the work:

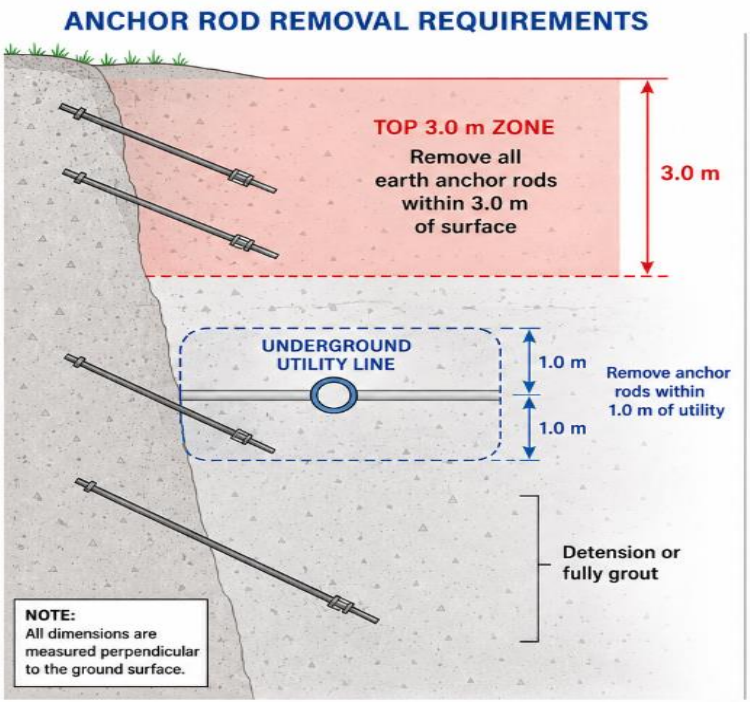
a) A shoring licence agreement must be executed for work in the public right-of-way. For work impacting private property, an agreement with the property owner impacted shall be executed and provided to the City for confirmation.
b) A Street Occupancy Permit is required for any disruption to vehicle, cyclists or pedestrians within the City's road right-of-way. Traffic management plans must be submitted with the application.
c) Construction fencing or hoarding must be installed along the full site perimeter to ensure public safety and site security. The hoarding is to be constructed and maintained in accordance with the current version of the B.C. Building Code.
d) All neighboring buildings and City equipment adjacent to the site, such as light poles, fire hydrants, and signage, must remain accessible and fully functional at all times.

e) The prime contractor's liability insurance must be submitted, indemnifying and holding harmless the City of New Westminster from all claims arising from the permitted work.
f) The applicant must notify all impacted property owners and utility providers, including Fortis BC, Telus, Shaw, City of New Westminster Energy and Climate Action and Engineering and Public Works Departments, a minimum of forty-eight (48) hours before the installation of the earth anchors, to confirm utility location.
g) The engineer-of-record shall submit pre-construction CCTV inspections of all underground utilities adjacent to the site that may be impacted by the installation of anchor rods. A certified pipe inspection company must carry out all CCTV inspections.

6. Shoring Removal Requirements

6.1 Shoring removal and decommissioning must be completed as follows: (refer to the diagram below for illustration)

a) Earth anchor rods within 3.0m of the surface must be removed
b) Earth anchor rods located within 1.0m of any underground utility below 3.0m from the surface, must also be removed
c) Earth anchor rods not being removed, must be de-tensioned or fully grouted
d) Shotcrete placed within City road rights-of-way must be removed to a minimum depth of 1.5 m, or to at least 1.0 m below any utilities, whichever is greater.



6.2 Within 30 days of completion of shoring works and prior to any off-site works commencing, the developer's professional engineer shall provide a sealed certification letter confirming:

a) All works conducted in strict accordance with the approved shoring plans,

b) Removal and de-tensioning of each earth anchor rods are in accordance with section 6.1

6.3 Within 30 days of completion of the shoring works, the developer's civil engineer-of-record shall certify, based on CCTV inspection, whether or not the installation of anchor rods have caused any damage or adverse effects to the adjacent underground utilities.

7. Restoration Standards

The developer shall restore any portion of the City rights-of-way disturbed as a result of the shoring system installation, to meet the City standards as follows:

a) backfill material placed within the City's road right-of-way must consist of well-graded pit run gravel in accordance with section 02226 of the Master Municipal Specifications and the City of New Westminster Supplementary Specifications

b) Compaction of the backfill material should meet the Modified Proctor Densities per ASTM D1557:

- Boulevards: minimum 90%
- Roads, driveways, shoulders and sidewalks: minimum 95%

Should construction disturb or damage any private property adjacent to the site, the developer shall restore the affected property to a condition satisfactory to the affected property owner, in accordance with the mutually agreed requirements and construction industry best practices.

8. Encroachment into City Property or Neighboring Private Property

If the anchor rods and associated appurtenances are located within City rights-of-way or onto adjacent private property, the developer's professional engineer shall provide written justification explaining why their removal is not feasible. The City will review this request and, if approved, the developer must:

a) For encroachment into City Property

- Make payment of the anchor retention fee as specified in the *Engineering Fees and Rates Bylaw 7553, 2013*, to cover the future removal cost by the City
- Submit a plan showing the exact location of remaining anchors

b) For permanent encroachment into Private Property

- Confirm mutually agreed requirements have been met

9. Enforcement

Failure to comply with the provisions of this policy or the terms and conditions of the permit may result in:

a) Stop work orders
b) Permit suspension
c) Additional fees or penalties
d) Legal Action