

JUNE 2022

20220101

ADVISORY EXCAVATION AND SHORING – PART 9

BUILDING CODE SERVICES



EXCAVATION AND SHORING

This advisory applies to excavation and/or shoring design requirements for the construction or demolition of buildings within the scope of Part 9.

PURPOSE OF ADVISORY

The Ontario Building Code notes that excavations shall be undertaken in a manner to prevent damage to adjacent property, existing structures, utilities, roads, and sidewalks.

A professional engineer's (P.Eng) excavation and/or shoring design will outline excavation and soil retention details, weather management strategies for rain/snowfall and a site-specific material storage plan, in an effort to reduce adverse impacts on adjacent property.

LIMITATIONS AND CONDITIONS

This advisory does not apply to the following:

- Isolated piers (no trenching)
- Augered/helical piles
- Slab on grade foundations
- Other foundation systems that require less than 1.2 m of excavation depth
- Active subdivisions (infill scenarios to be evaluated on case-by-case basis), and
- Demolition permits issued in conjunction with building permits

DETERMINATION

Where a foundation wall is located less than 3 m to a property line, P.Eng involvement for the excavation and/or shoring design is required.

Note that shoring systems are always required to be engineered, regardless of location.

BUILDING PERMIT APPLIATION REQUIREMENTS

Where it has been determined that P.Eng involvement is required, the following must be addressed at time of building permit application:

- Confirmation of which system is proposed: sloped excavation or shoring
- Where proposing a sloped excavation, plan of excavation including gradient
- Where proposing a shoring system, shoring construction details and installation procedures
- Outline of precipitation management for rainfall and snowfall events
- Where applicable, detail for cold weather protection

- Confirmation that excavation or shoring methods will be undertaken in a manner to prevent damage to adjacent property
- Where encroachment onto private property is proposed, an informed consent agreement between private property owners is required
- Unless an informed consent agreement is in place, confirmation that adjacent private property including landscaping, vegetation and fencing will be reinstated if damaged, to the satisfaction of the city
- Soil and equipment storage plan in relation to edge of excavation and adjacent structures
- Acknowledgement that impacts on infrastructure, utilities and public and private right of ways have been addressed
- Comment on adjacent angle of repose and slope stability, where adjacent structure is near the property line

POST PERMIT INSPECTION

During construction, the P.Eng is required to provide the following:

- Monitoring site reports where the excavation is exposed for an extended length of time
- Confirmation that required precipitation management measures are in place, as per approved plans
- Where applicable, confirmation that cold weather protection measures are in place, as per approved plans
- Letter of general review upon completion of shoring installation
- Where proposing a sloped excavation, letter of general review may be required

ENCROACHMENTS

Where elements of the excavation and/or shoring system are proposed to extend beyond the property line (e.g., tiebacks), these works must be agreed upon by the adjacent property owner(s) by way of an informed consent agreement. A municipal consent agreement must be obtained for works on City of Ottawa property from Right of Way (ROW) ROW_Permit_Office@ottawa.ca

INFORMED CONSENT AGREEMENT

An informed consent agreement is an agreement between private property owners where encroachment onto adjacent private property is proposed, resulting from construction governed by the Ontario Building Code. A standard informed consent agreement form is available for use between private property owners.

The written consent shall contain the following:

- Confirmation of the subject property owner and adjacent property owner
- Outline of proposed temporary construction works on the adjacent property
- Outline of proposed site access on the adjacent property
- Stipulated limitations and conditions (e.g., timeline, working hours, etc.)
- Agreement confirmation from both parties complete with printed names, date, and signature

The adjacent property owner is not obligated to sign the informed consent agreement. If the adjacent property owner does not enter into an agreement with the subject property owner, the subject property owner shall ensure that all construction works and access are contained within the subject property.

The informed consent agreement does not convey any responsibility by the municipality to enforce or arbitrate remedy or restitution of damages resulting from construction activity encroachment.