

## **RETAINING WALLS**

# PROCESS AND INFORMATION GUIDE

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### **Purpose**

The intent of this Standard Practice is to clarify circumstances where a retaining wall is deemed to be a designated structure and which are regulated under the Ontario Building Code.

#### **Definitions**

#### **Ontario Building Code**

## **Designated Structures:**

- 1.3.1.1.(1), Div. A:
  - (1) The following structures are designated for the purposes of clause (d) of the definition of building in subsection 1 (1) of the Act:
    - (a) a retaining wall exceeding 1 000 mm in exposed height adjacent to,
      - (i) public property,
      - (ii) access to a building, or
      - (iii) private property to which the public is admitted

#### **Guard Requirements:**

- 4.4.3.1., Div. B Guards over Retaining Walls
- (1) Every retaining wall that is designated in Sentence 1.3.1.1.(1) of Division A shall be protected by *guards* on all open sides where the public has access to open space at the top of the retaining wall.

Guards may be required in other circumstances, for instance:

- 9.8.8.1., Div. B Required Guards (See Appendix A.)
- (1) Except as provided in Sentences (2) and (3), every surface to which access is provided for other than maintenance purposes, including but not limited to flights of steps and ramps, exterior landings, porches, balconies, mezzanines, galleries and raised walkways, shall be protected by a guard on each side that is not protected by a wall for the length, where,
  - (a) there is a difference in elevation of more than 600 mm between the walking surface and the adjacent surface, or

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(b) the adjacent surface within 1.2 m from the walking surface has a slope of more than 1 in 2.

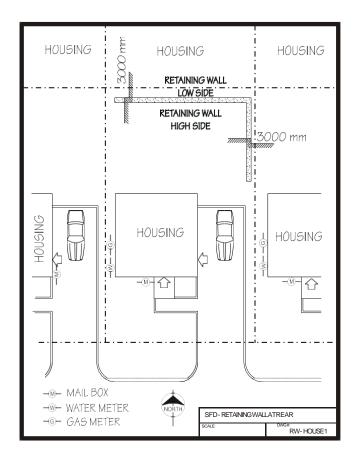
#### **Standard Practice**

The Ontario Building Code does not define "adjacent to" or the types of property in the definition of a retaining wall deemed to be a designated structure. The objective is to protect public safety by reviewing permit applications for retaining wall requirements.

To clarify when a retaining wall is deemed to be a designated structure and/or when guards may be required, the following examples are provided:

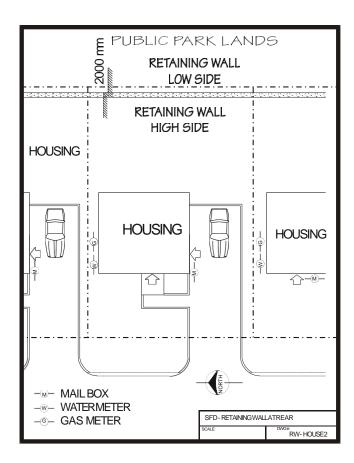
## **Example 1: Residential Property Adjacent to Other Residential Property**

- Retaining wall, varying in height from 3m to 1m along its length
- Its length faces only other residential property
  - ➤ This scenario would NOT be a designated structure since public does not have access to the wall
  - No guards required by the OBC but Building Services would recommend their use.



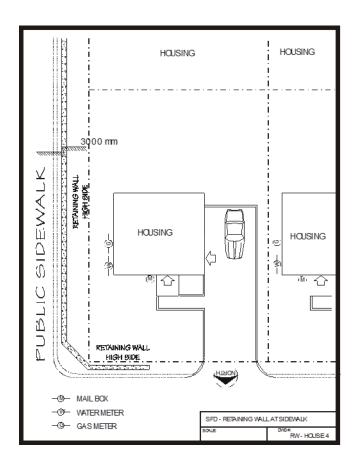
# **Example 2: Residential Property Backing onto a Public Park**

- Wall is 2m in height, extends across rear of property
- Property backs onto public park
  - ➤ The retaining wall in this scenario IS deemed to be a designated structure since it is adjacent to public property, even if wall itself is on private property, given that in the event the wall collapses, it could pose danger to public
  - Guards are NOT required, as no public access provided
  - Exception may be given If the retaining wall is set back further from the public property than its height.
  - A building permit along with drawings prepared by a competent design professional is required.



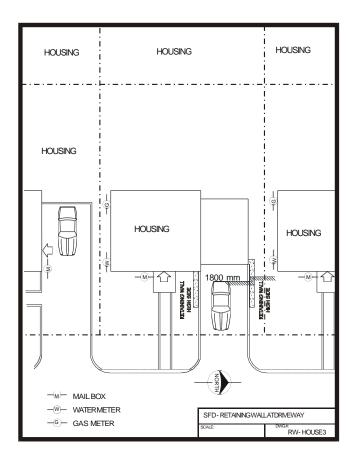
# **Example 3: Residential Property Adjacent to Public Sidewalk(s)**

- Wall is 3m in height on 2 sides of residential property
- Property adjacent to public sidewalks.
  - ➤ The retaining wall in this scenario IS deemed to be a designated structure since it is adjacent to public property, even if wall itself is on private property, given that in the event the wall collapses, it could pose danger to public.
  - Guards are NOT required, as no public access provided provide the retaining wall is on private property.
  - > Guards MAY be required if the retaining wall is on public property.
  - Exception may be given if the retaining wall is set back further from the public property than its height.
  - A building permit along with drawings prepared by a competent design professional is required.



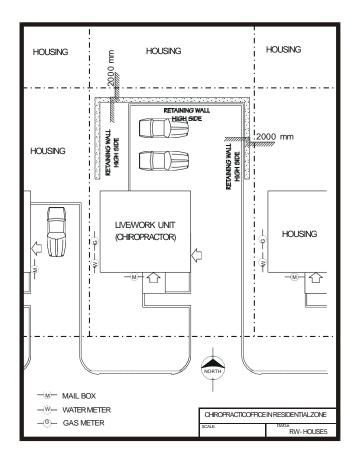
# **Example 4: Residential Property Adjacent to a Residential Driveway**

- The retaining wall is 1.8m in height on either side of a residential driveway between residential properties
- Property adjacent to residential property.
  - ➤ The retaining wall in this scenario IS deemed to be a designated structure since it is adjacent to a stricture (driveway), even if wall itself is on private property, given that in the event the wall collapses, it could pose danger to public.
  - Guards ARE required for the retaining wall adjacent to the side property line as the driveway is considered access to the dwelling.
  - ➤ A building permit along with drawings prepared by a competent design professional is required.



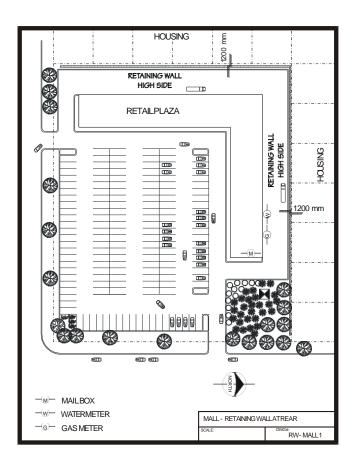
# **Example 5: Commercial Property**

- The retaining wall is 2.0m in height and located entirely on private property of a commercial enterprise to which the public has access to (via a parking lot).
- Property adjacent to residential property.
  - > The retaining wall in this scenario IS deemed to be a designated structure
  - > Guards ARE required for the retaining wall given that the public has access to the area served by the retaining wall.
  - A building permit along with drawings prepared by a competent design professional is required.



# **Example 6: Commercial Property**

- The retaining wall is 1.2m in height and located entirely on private property adjacent to a service route of a commercial enterprise to which the public has access (delivery drivers, etc.)
- Property adjacent to residential property.
  - The retaining wall in this scenario IS deemed to be a designated structure
  - Guards ARE required for the retaining wall given that the public has access to the area served by the retaining wall.
  - A building permit along with drawings prepared by a competent design professional is required.



#### **References and Related Policies**

The Ontario Building Code (O. Reg. 332/12)

## **Review Cycle**

This policy will be reviewed annually by the Chief Building Official.