

## Grading and Drainage Clearance Certificate Detailed Plan Requirements

1. The Grading and Drainage Plan (the "Plan") shall be stamped and certified by an Ontario Land Surveyor or a Professional Engineer, pursuant to Section 5.03 of By-law 52-2018.
2. Submit three (3) copies of a Grading and Drainage Plan, for approval, pursuant to Section 6 of By-law 52-2018 and in accordance with the following requirements:
  - a) Only a Plan drawn to a metric scale of 1:100, 1:200, 1:250 or 1:300 will be accepted.
  - b) All property lines shall be shown on the Plan.
  - c) If the City's right-of-way is not at its deemed width, an Ontario Land Surveyor will need to determine the required right-of-way widening (measured from the original centreline of the City's right-of-way and to 3 decimal places) and the deemed right-of-way shall be shown on the Plan.
  - d) All site engineering, as defined in Section 1 of By-law 52-2018, shall be shown on the Plan and shall not encroach onto the City's deemed right-of-way or adjacent lands.
  - e) All site engineering shall be in accordance with City of Burlington Lot Grading Standard Drawings S-118 and S-119.
  - f) All restoration of the City's right-of-way shall be shown on the Plan and shall be in accordance with City of Burlington Reinstatement Standard Drawings S-114, S114-A and S-114-B, as required.
  - g) All existing and proposed elevations shall be derived from a City of Burlington control monument and reference to the monument shall be provided on the Plan. For a complete list of control monuments, visit the City's Navigate Burlington webpage:  
<https://navburl-burlington.opendata.arcgis.com/pages/apps>.
  - h) The location, dimensions and elevations of the existing grade, including swales, ditches and any drainage system appurtenances, on the site and 5 metres beyond the property line for the adjacent lands and the location, dimensions, elevations and grade of any proposed site engineering, including swales, ditches and any drainage system appurtenances, to address site runoff shall be shown on the Plan. The proposed site engineering shall be in accordance with the following:
    - i) Drainage system appurtenances shall be designed to accommodate the stormwater runoff of a 5-year storm event and the design shall be certified by a Professional Engineer;
    - ii) Minimum slope for side and rear yard swales shall be 2% or shall require subdrain;
    - iii) Minimum slope for finished ground (except impervious surfaces) shall be 1%;
    - iv) Maximum slope for finished ground (except impervious surfaces) shall be:
      - 2:1 for slopes less than 0.6 metres in height;
      - 3:1 for slopes from 0.6 metres to 1.25 metres in height;
      - 4:1 for slopes greater than 1.25 metres in height; and
    - v) Minimum slope for impervious surfaces (except driveways) shall be 0.5%.
  - i) The location, dimensions, elevations and use of any buildings and other structures, including fencing, to be protected or demolished or proposed to be erected on the site and adjacent lands shall be shown on the Plan. The provided elevations of any buildings and other structures on the site shall include and be in accordance with the following (where applicable):

- i) Top of Foundation Wall (TFW) – shall be a minimum of 0.15 metres above surrounding finished ground elevations;
  - ii) Finished Floor Elevation (FFE) – shall be a minimum of 0.30 metres above TFW;
  - iii) Basement Slab Elevation (BSE);
  - iv) Underside of Footing Elevation (USF); and
  - v) Garage Floor Elevation (GFE).
- j) The location, dimensions and elevations of any retaining walls to be protected or demolished or proposed to be erected on the site shall be shown on the Plan. Any proposed retaining walls shall be located a minimum of 0.3 metres from the property line. Any proposed retaining walls greater than 1 metre in height shall be designed by a Professional Engineer. Any proposed retaining walls greater than 0.6 metres in height may require a barrier.
- k) The location, dimensions, elevations and grade of existing or proposed driveways, including the locations of existing and proposed driveway curb cuts shall be shown on the Plan. Proposed driveways shall be in accordance with the following:
- i) Normal Driveway – shall be between 2% (minimum) and 8% (maximum); and
  - ii) Reverse Driveway – shall be between 2% (minimum) and 5% (maximum) and shall only be permitted when it is proven by a Professional Engineer that the driveway will not flood during a 100-year storm event.
- l) The location and discharge direction of all existing and proposed sump pumps and downspouts shall be shown on the Plan. Sump pumps shall not discharge to a side yard and both sump pumps and downspouts shall discharge to a permeable surface via concrete splash pads or outlet extensions.
- m) The location of any existing and proposed underground services (water, sanitary, storm, gas and hydro) and appurtenances and any aboveground utilities (overhead lines, poles, boxes, etc.) and any connections to services or utilities on the City's right-of-way shall be shown on the Plan.
- n) The location, dimensions and instrument number of any existing or proposed easements shall be shown on the Plan.
- o) The location and details of all site control measures shall be shown on the Plan.
- p) The location of Environmentally Sensitive Areas, as identified in the Halton Region Environmentally Sensitive Areas Consolidation Report dated April 2005, as amended, lakes, streams, channels, ditches, swales, water courses and other bodies of water on the site and 15 m beyond the property lines for sites less than 0.2 ha, and 30 m beyond the property lines for site greater than 0.2 ha shall be shown on the Plan.
- q) The location and dimensions of Conservation Halton's regulated area shall be shown on the Plan (where applicable).
- r) The location and diameter at breast height (DBH) for any City owned trees shall be shown on the Plan. All City owned trees require tree protection, in accordance with City of Burlington Tree Protection and Preservation Specification SS12A, the location and details of which shall be shown on the Plan. Please Note: The proposed removal of any City owned trees may require Council approval.
- s) The location and diameter at breast height (DBH) for any privately-owned trees on the site and within 3 metres of the property line on adjacent lands and with a DBH of 0.1 metres or shall be shown on the Plan. All other vegetation shall be shown as massed outlines.