



Appendix B

REQUIREMENTS FOR UTILITY INSTALLATIONS
WITHIN THE CITY RIGHT-OF-WAY

City of Burlington
Engineering Services | Right of Way Management
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1.0 General

The guidelines outlined in this document, in conjunction with the Municipal Consent Permit Manual (MCPM), and the City of Burlington Municipal Consent By-Law, establish the general requirements for utility installations within the City of Burlington Right-of-Way.

1.1 Ontario Provincial Standards

All work shall be carried out in accordance with the Ontario Provincial Standards (OPS).

The City of Burlington Construction Specifications are supplemental to the Ontario Provincial Standards and thus take precedence over the Ontario Provincial Standard Specifications (OPSS) or Ontario Provincial Standard Drawings (OPSD) if specified.

1.2 Tree Protection

Installation of services within the Minimum Tree Protection Zone (MTPZ) of public, or privately-owned trees, shall be completed using hand tools, dry vac or low pressure hydrovac in accordance with the City's specification for tree preservation, SS-12A.

No equipment shall be installed within the MTPZ of a tree without prior approval from City staff.

Installation within the MTPZ of public, or privately-owned tree, shall follow the methodologies for sensitive excavation and associated root pruning located within the SS-12A specification.

All work shall comply with the City of Burlington's Public and Private Tree By-laws and applicable guidelines, including Forest Protection and Tree Permit requirements outlined in the MCPM.

2.0 Mainline Depth of Cover

The depth of cover for all mainline utility installations shall meet the depths indicated below. Where there is a conflict at the proposed depth of cover, the Applicant shall plan to go deeper to accommodate the existing plant and meet all other required clearances. Where deemed necessary, additional depth may be required at the discretion of City staff.

Where an Applicant demonstrates that the depth requirements cannot be met, exceptions may be granted on a case-by-case basis.

Under no circumstances shall plant be installed shallower than the minimum depths indicated without specific written consent from City staff.

The depths listed below are minimums.

2.1 Curbed Roads and Boulevards

For the entire Right-of-Way, from street-line to street-line, on curbed roads, the minimum depth of cover shall be 1.0 m.

2.2 Uncurbed Roads

For the entire Right-of-Way, from street-line to street-line, on uncurbed roads, the minimum depth of cover shall be 1.2 m below the road, or below the lowest point of the adjacent ditch, whichever is deeper.

3.0 Residential Services

This section outlines the general standards for the installation of telecommunications services to residential properties, including both traditional conduit-based installations and direct buried service wire installations.

Services shall be designed and constructed in a straight line perpendicular to the road. If an application shows a service that is not in a straight line perpendicular to the road, the Applicant will be required to explaining why this could not be achieved.

Where services cross beneath sidewalks, they shall be tunneled beneath the sidewalk, or the full sidewalk bay(s) shall be removed and reinstated at the Applicant's expense.

No services shall be installed within the joint between sidewalk bays.

3.1 Traditional Service Installations

Services installed within soft surface areas and parallel to a sidewalk, curb, or driveway shall be offset a minimum of 500mm from the nearest hard surface edge.

Services shall maintain a minimum 300mm depth of cover.

3.2 Direct Buried Installations

This section sets out requirements specific to direct buried service wire installations and shall be read in conjunction with Section 3.0

For direct buried installations, the location in which services shall be installed is demonstrated below, in order of preference. If the first location is not feasible, proceed to the second option.

	Preferred Placement	Required Offset	Min Depth of Cover	MTPZ Required Depth
1	Top Side of Sidewalk (Field Side)	300mm from top edge of sidewalk	150mm	100mm
2	Bottom Side Sidewalk (Road Side)	300mm from bottom edge of sidewalk	150mm	100mm

Where neither of the above installation options can be achieved, the Applicant shall consult with City staff prior to installation. A site visit will be coordinated to review the constraints and determine acceptable alternatives.

Direct buried service wires installed within the driveway and sidewalk joint shall maintain a minimum depth of 150mm and shall be backfilled with polymeric sand.

If the direct buried service crosses within the MTPZ of a public or private tree, direct buried services shall be installed at a depth of 100mm within the MTPZ.

Direct buried installation is not permitted in areas with uncurbed roads without prior approval from City Staff.

3.3 Temporary Services

Temporary services shall be permitted as a temporary means to supply servicing to residents with the permanent service being installed at a future date. Temporary service wires shall be subject to the following requirements:

- Installation of cables shall be performed in a manner that ensures the safety of residents, pedestrians, and vehicles and placed with due regard for aesthetics.
- When within the boulevard, a cable shall be buried such that it does not constitute a tripping hazard.
- Cables shall not lie unprotected on the ground at any location.
- When crossing a road, sidewalk, driveway or walking path, the height of the cable shall be no less than 4.5 metres.
- Cables shall enter and leave a utility pedestal at a 90-degree angle.
- A cable shall not cross over a property that is not being serviced by said cable without consent of the affected property owner.
- Notification must be given to all residents of all properties affected by the temporary service connection including an estimated date of permanent service installation and removal of the temporary cable.
- All infrastructure including, but not limited to, utility pedestals, cables, supports and access points shall remain in a closed and safe condition at all times.

Installation of the permanent service shall be performed as soon as possible. In general, temporary service drops shall be removed within 45 days.

Immediately upon installation of the permanent service, regardless of whether or not restoration has been completed, all materials and equipment associated with the temporary service drop shall be removed from the site.

4.0 Equipment Placement Guidelines

All above-ground utility equipment, including but not limited to grade-level boxes (GLBs), pedestals, cabinets, and similar appurtenances, shall be located to minimize impacts to the public Right-of-Way, existing infrastructure, and adjacent properties.

Equipment shall not be placed within hard surface areas such as sidewalks, multi-use paths, driveways, nor within drainage features including ditches, swales, or overland flow routes. Placement shall maintain clear pedestrian and vehicular sightlines, preserve accessibility, City infrastructure, and landscaping.

Final equipment locations are subject to review and approval, and City staff may require relocation or adjustment of proposed equipment locations to address safety, operational, maintenance, or future infrastructure considerations.

4.1 Notification

Engaging and consulting with the public allows for a more informed public and furthermore leads to a smooth construction process. Notification to the adjacent property owner(s) is recommended for any above ground plant when fronting a property. Notification letters should include the type, size and location of the plant.

4.2 Above Ground Equipment

Equipment that is placed within the Right-of-Way and stands above the grade surface.

- Curb appeal is very important to many residents within the community; you must consider a smaller or flush to grade option whenever possible.
- Equipment shall be placed on the projected property lines. (shared between two properties).
- Equipment shall be placed on the side of a property (flankage) where it does not face the front of a house whenever possible.
- Equipment shall be placed behind fences and hedges to conceal it from windows.
- Effort shall be made to retain plantable space for existing and future trees.

No above ground equipment shall be placed:

- In a location that obstructs the sight lines of vehicular or pedestrian traffic.
- Less than 0.5m from a curb, driveway or sidewalk

4.2.1 Large Scale Above Ground Structures

Large scale above ground structures such as Tap Boxes, Transformers, and Central Splitting Points shall:

- Be placed on arterial streets whenever possible.
- Maintain safe sight lines and setbacks from the road.
- Include aesthetic treatments when possible.
- Not be placed in plain sight of a window, window display, or door, unless approved by City staff.

4.3 Flush to Grade Equipment

Equipment that is placed in the Right-of-Way and sits flush to the grade surface.

- Equipment shall be placed on the projected property lines. (shared between two properties).
- Equipment shall be placed on the side of a property (flankage) where it does not face the front of a house whenever possible.
- Equipment shall be placed behind fences and hedges to conceal it from windows.
- Equipment must not be placed on concrete/hard/brick interlocked surfaces that are part of a pedestrian walkway
- Preference is that equipment is placed within the boulevard (between the sidewalk and curb) area.

No flush to grade plant shall be placed:

- Less than 0.5m from a curb, driveway or sidewalk.
- Less than 0.5m from the property line of a residential property.

4.4 Non-Residential Installations

General considerations for all equipment in non-residential areas:

- Equipment shall not be placed less than 0.5m from a curb, driveway or sidewalk.
- Equipment shall be clustered with same/other utilities where possible.

4.4.1 Above Ground structures

- Shall maintain adequate sight lines for vehicular and pedestrian traffic.
- Shall not be higher than 1.2m.
- Shall not block a commercial store front window or sign.

4.4.2 Large Scale Above Ground structures

- Shall maintain adequate sight lines for vehicular and pedestrian traffic.
- Shall not be higher than 1.2m.
- Shall be placed in a boulevard with a minimum width of 2m.
- Shall not block a commercial store front window or sign.
- Shall include aesthetic treatments when possible.

4.5 Public Spaces – Parks, Community & Open Spaces

General considerations for all above ground equipment in community spaces:

- Place equipment in a location furthest away from park entrances/walking paths.
- Place equipment away from park signs.
- Place equipment away from park elements (gardens, playgrounds etc.)
- Consider aesthetic treatments to blend equipment into the streetscape (shrubs etc.) when possible.

Reference Documents and Links

The following documents are referenced within this document. Links are provided for convenience only. In the event of any discrepancy, the official version of the document, as amended, shall prevail.

Document / By-Law	Issuing Authority
<u>Municipal Consent By-Law</u>	City of Burlington
<u>Municipal Consent Permit Manual</u>	City of Burlington
<u>Standard Specifications for Roads, Sewers, and Watermains</u>	City of Burlington
<u>Engineering Standard Drawings</u>	City of Burlington
<u>Ontario Underground Infrastructure Notification System Act, 2012 (S.O. 2012, c. 12)</u>	Government of Ontario
<u>Ontario Provincial Standards for Roads and Public Works (OPS)</u>	Government of Ontario
<u>On-Site and Excess Soil Management (O. Reg. 406/19)</u>	Government of Ontario