

2 LOT GRADING

2.1 Subdivision Grading Control Plans

2.1.1 Drawing Requirements

The following information shall be shown on the grading plan:

- 2.1.1.1 (a) Existing contours at maximum 0.5m intervals within the subdivision and 30 metres beyond the development limits.
- 2.1.1.1 (b) All existing features including buildings, driveways, wells, significant individual trees and their base elevations, bush areas, etc.
- 2.1.1.1 (c) All proposed above ground features including maintenance holes, catchbasins, hydrants, light poles, above ground utility hardware, street and traffic signs, etc.
- 2.1.1.1 (d) Location of lot service connections.
- 2.1.1.1 (e) Proposed elevations at all lot corners and at all changes in grade.
- 2.1.1.1 (f) Direction of storm water flow in swales shall be indicated with an arrow.
- 2.1.1.1 (g) The degree and limits of slopes over 3 horizontal to 1 vertical.
- 2.1.1.1 (h) Any restrictions on building types.
- 2.1.1.1 (i) Engineered fill envelopes.

2.1.2 Design

- 2.1.2.1 (a) Lot grading shall conform to the requirements of the major and minor drainage system and shall ensure that use of the property is maximized while still providing good and positive drainage.
- 2.1.2.1 (b) All lots or blocks that are left vacant six (6) months following completion of overall grading shall have a minimum topsoil depth of 100 mm, seeded, maintained with signage to prohibit dumping and trespassing, to the satisfaction of the City. Such lots or blocks shall be graded to provide positive drainage towards the road or other suitable outlet approved by the City.

2.1.2.2 Residential Subdivisions

- 2.1.2.2 (a) All lot surfaces including rear yard swales shall be designed with a minimum grade of 2% and a maximum of 5%.
- 2.1.2.2 (b) Rear to front draining lots (except for front walkout dwellings) shall have overall grades of:
 - 2.1.2.2 (b) (i) 2.0% minimum to 3.5% maximum for lot with sideyard set back greater than 0.9m.
 - 2.1.2.2 (b) (ii) 2.5% minimum to 3.5% maximum for lot with sideyard set back less than 0.9m.
- 2.1.2.2 (c) The maximum flow allowable to any side yard or rear yard swale shall be that flow from 4 rear yards or 750 m², whichever is less.
- 2.1.2.2 (d) The maximum depth of rear yard swales shall be 150mm minimum and 300mm maximum.
- 2.1.2.2 (e) Swales shall not drain from one lot to another where the property lines are offset by more than 1.0 metre or drainage swale alignment deviates by more than 45 degrees. In these cases catchbasins are required.

- 2.1.2.2 (f) Rear yard catchbasins shall be sumpless and, together with their outlet pipes, shall be located entirely on one lot.
- 2.1.2.2 (g) Rear yard catchbasin and outlet pipes shall be located on the downstream side of the lot and entirely on one lot. The catchbasin structure shall be located 1 metre clear of property lines.
- 2.1.2.2 (h) 3:1 slopes shall only be permitted in side yard areas with a maximum height differential of 2.5 metres to accommodate walk-out dwellings.
- 2.1.2.2 (i) For grading configurations a split lot on the high side and a back-to-front drainage lot on the low side, the rear yard of the lot on the high side shall drain to the rear yard swale. The rear yard swale directs drainage to a side yard swale instead of directly discharging runoff overland to the rear yard on the low side.

2.1.2.3 Parkland

- 2.1.2.3 (a) Park blocks shall be graded to conform to the overall grading plan with clean engineered fill material compacted to 95% Standard Proctor Maximum Dry Density (SPMDD). No fill shall be placed overtop topsoil, existing or otherwise.
- 2.1.2.3 (b) Park blocks must be graded to provide positive drainage. The park block shall generally be graded to allow for a minimum 2% and no greater than 5% gradient over 75% of the total block area. Drainage shall be directed away from adjacent properties. All swales are to be graded to a minimum of 2% and shall be sodded.
- 2.1.2.3 (c) 300 mm of topsoil shall be spread and fine graded over the entire park block. Topsoil for fine grading shall be fertile and friable, natural loam soil with two percent (2%) minimum organic matter for sandy loams and four percent (4%) minimum organic matter for clay loams. Acidity of topsoil shall range from 6.0pH to 7.5 pH (levels of NPK and Mg are to be noted) and shall be capable of sustaining vigorous plant growth. A chemical analysis and topsoil fertility tests by a qualified testing laboratory and results of testing provided to the City prior to placing topsoil. Topsoil shall be free of any mixture of subsoil, clay lumps, stones, and roots over 50mm in diameter and any toxic materials or foreign objects and shall be reasonably free of weed and weed seeds. Add all amendments as required to amend the topsoil to meet the recommendations of the fertility testing and demonstrate that these standards have been met.
- 2.1.2.3 (d) Park block to be seeded and/or sodded to stabilize topsoil with stabilizing mix to the satisfaction of the City.
- 2.1.2.3 (e) Park block to be fenced off and signage to prohibit dumping and trespassing to be installed, to the satisfaction of the City.
- 2.1.2.3 (f) Storm drainage inlets (e.g., catchbasins, interim ditch inlets, etc.) shall be located a minimum of 5 metres away from all property lines.
- 2.1.2.3 (g) Park block shall not be encumbered by any services or easements including but not limited to utility services, transformer boxes, Canada Post mail boxes and/or access easements.
- 2.1.2.3 (h) All temporary sediment control management measures within parks and open space blocks are to be removed prior to rough grading of the associated block.

2.1.2.4 Industrial Subdivisions

- 2.1.2.4 (a) All lot surfaces to be rough graded, generally flat.
- 2.1.2.4 (b) Provide positive drainage and stormwater management requirements to approved outlets and in accordance with the current revision of the City's Site Development guidelines (Section 3 – Site Development).

2.1.2.5 Fencing

Fencing shall be provided completely on private property, clear of the 0.3 metre reserve, where the private lot line abuts a walkway, stormwater management facility, open spaces, woodlot, park, railway, steep slopes or as requested by the City or other authorities. Mandatory fencing along the side of a residential dwelling shall include a gate and a fence return to tie it in to the foundation. The type and design of fencing will be subject to City approval.

Fencing shall be installed directly on the centre of the property line when a residential property abuts another residential property.

Fencing shall be installed on school property when the school abuts a private land use.

Fencing shall be installed on public property only when public property abuts public property.

Residential lots abutting a walkway shall receive privacy fencing, or better, along the side and rear lot lines.

A certificate from a professional Ontario Land Surveyor certifying that all fencing, including concrete footings, are located completely on the private lands and totally clear of any 0.3 m reserves.

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