



# Fernbrook Homes

**Client:** Mooregate Estates Inc.

**Location:** Bayfield Street and Hanmer Street, Barrie

**Services:** Draft Plan Design, Surveying, Earth Preparation and Grading, Final Road & Servicing Design, Co-ordination of Utilities, Contract Administration and Site Inspection

The Jones Consulting Group Ltd. was retained by Mooregate Estates Inc. to provide planning, surveying and engineering services related to the design of a residential subdivision in the north end of Barrie, Ontario.

The 19.31 hectares of land to be developed are located on the west side of Bayfield Street at the northerly limit of the City of Barrie's urban boundary. The proposed development comprises 328 residential units made up of 55 single units, 36 semi-detached units, 147 street townhomes, 90 high density units, and 2.46 hectares of land for commercial purposes. This subdivision will encourage a mixed-use, pedestrian-friendly, urban environment for future residents.

The property generally slopes in a westerly direction and the north part of the site is affected by an easement for the TransCanada pipeline, presenting storm drainage challenges. The constraint of "no outlet" necessitated that The Jones Consulting Group look at the potential for on-site retention and infiltration to address the "no outlet" scenario. A traditional wet stormwater management pond to provide quality and quantity control, as well as storage up to the regional flood event was proposed. This facility will meet the Ministry of the Environment, Nottawasaga Valley Conservation Authority and City of Barrie criteria and standards. The SWM pond is proposed to discharge to a subsurface infiltration pipe gallery to release the post development runoff. This innovative scheme makes use of the ideal infiltration capabilities of the soil conditions found across the site. The principles of the stormwater management have allowed the proposed subdivision to advance to final approval.

The surrounding topography also makes it necessary to construct a sewage pump station within the development area to lift and convey sewage flows to the existing trunk sewer on Hanmer Street. This design work along with the Hanmer Street collector road design is currently underway. The design is expected to be completed in Spring 2009, with construction expected to begin in Fall 2009.

