



Report to: Development Services Committee

Report Date: December 6, 2011

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**SUBJECT:** PRELIMINARY REPORT  
Proposed Zoning By-law Amendment to Prohibit New  
Reverse Slope Driveways in the Town of Markham  
PR-128052

**PREPARED BY:** Tom Villella – Senior Projects Coordinator, ext. 2758  
**REVIEWED BY:** Biju Karumanchery – Senior Development Manager

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**RECOMMENDATION:**

That the report dated December 6, 2011 entitled “PRELIMINARY REPORT – Proposed Zoning By-law Amendment to prohibit new reverse slope driveways in the Town of Markham, PR-128052”, be received;

And that a Public Meeting be held to receive comments from the public, internal and external agencies, and other stakeholders with respect to prohibiting reverse slope driveways in the Town of Markham;

And further that Staff be authorized and directed to do all things necessary to give effect to this resolution.

**PURPOSE:**

The purpose of this report is to provide preliminary information on a proposed Town-initiated zoning by-law amendment that is intended to prohibit reverse slope driveways associated with low-density ground-oriented homes, such as single-detached, semi-detached, and freehold townhome dwellings in the Town of Markham. As well, authorization is being sought to hold a statutory Public Meeting on this matter.

This report contains general information in regards to applicable OP or other policies as well as other issues and the report should not be taken as Staff’s opinion or recommendation on the application.

**BACKGROUND:**

The term “Reverse Slope Driveway” refers to a driveway that leads downward from a public street to a parking area (garage) fully or partially below ground-level, or in the lower level of a building. These driveways are common to many land uses, including residential uses. In fact, they are to be expected in most large commercial and residential buildings such as offices or apartment/condominium buildings.

Concerns have been raised respecting driveways leading downward from the public street into a garage in the lower level of a dwelling. This has been the subject of concern from residents over issues of safety (due to flooding concerns) and aesthetics (related to the associated retaining walls and the view of parked vehicles from the public street). The

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prime focus of attention has been on the high risk of basement flooding posed by this particular design element.

### **Flood Risk Issues**

The Town has received comments from some residents concerning the continued development of reverse slope driveways, particularly in areas where there is a known flood risk. The subject was also highlighted in the December 2009 Report to General Committee “West Thornhill Flood Remediation Class Environmental Assessment” and the more recent Report to General Committee on November 1, 2011 “West Thornhill Stormwater Flood Control Implementation Strategy”. In both documents, reverse slope driveways were listed as a contributing factor to basement flooding during flood events. The storm event of August 2005 was extremely intense and although such a storm will not likely be experienced again for 150 years, several hundred homes in Thornhill experienced some level of flooding during this event. Prohibiting the future development of reverse slope driveways will not affect the current condition. It would however prevent further exacerbation of the problem. It is for this reason that the Town’s Engineering Department is not supportive of continuing to allow reverse slope driveways. Where they are constructed, the Town currently requires all such property owners to enter into an agreement with the Town in order to indemnify the municipality in the event of damage occurring to the property through flooding as a result of the reverse slope driveway.

### **Aesthetic Issues**

The Town’s Urban Design group has expressed some concerns regarding the built form associated with reverse slope driveways and garages in basements. As well, some residents also believe that reverse slope driveways contribute to unacceptable massing and size of infill homes that are being constructed, especially in areas such as Thornhill. It has been argued that allowing a garage to be located in the basement results in an “overbuilding” of the site. The gross floor area of a garage in a basement is not included in the total gross floor area of the dwelling for the purpose of calculating the maximum permitted floor area ratio. In essence, a homeowner could construct additional living area on the first floor where the garage would have been located if it had not been constructed in the basement, resulting in a larger living area that some believe is excessive massing and an overbuilding of the site. A plan view and a photograph depicting a dwelling with a reverse slope driveway and lower-level garage are attached as Figures 1 and 2.

At this time, reverse slope driveways are not prohibited in Thornhill or in any other area of Markham. There are currently no provisions in any of Markham’s Zoning By-laws respecting reverse slope driveways.

### **OPTIONS/ DISCUSSION:**

A review of zoning by-laws of Ontario municipalities is currently being undertaken in order to determine the extent of regulation in place regarding reverse slope driveways. The City of Toronto has recently examined this issue as a result of flooding problems in the North York area. Staff will consult with Toronto staff as research into the matter

continues. As well, Staff will evaluate the various means of restricting reverse slope driveways through zoning, in order to provide a solution that is appropriate to Markham. For instance, it may be appropriate to have restrictions apply only to flood-prone areas, or only to certain types of buildings, or only to certain types of lots.

A Public Meeting is proposed in order to solicit comments from the public respecting the prohibiting of reverse slope driveways throughout Markham. However, as a result of comments received from the public and any other stakeholders, the Development Services Committee may direct Staff to formulate a by-law that introduces alternate restrictions (something other than a complete prohibition).

**FINANCIAL CONSIDERATIONS AND TEMPLATE:**

There are no financial matters to be considered in this report.

**HUMAN RESOURCES CONSIDERATIONS**

There are no Human resources matters to be considered in this report.

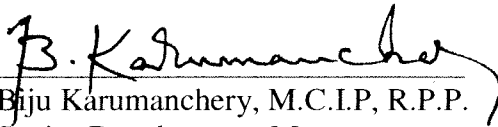
**ALIGNMENT WITH STRATEGIC PRIORITIES:**

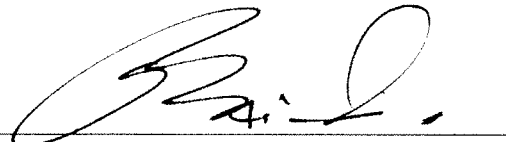
The zoning by-law refinements suggested for review will align with Council's Growth Management and Environmental strategic focus areas.

**BUSINESS UNITS CONSULTED AND AFFECTED:**

The proposal will be circulated to various Town departments and external agencies for review and comment. Final comments from Markham's Engineering Department and Urban Design Group will be especially helpful in determining the effect that a zoning amendment to address this matter would have on flooding issues and on neighbourhood aesthetics.

**RECOMMENDED BY:**

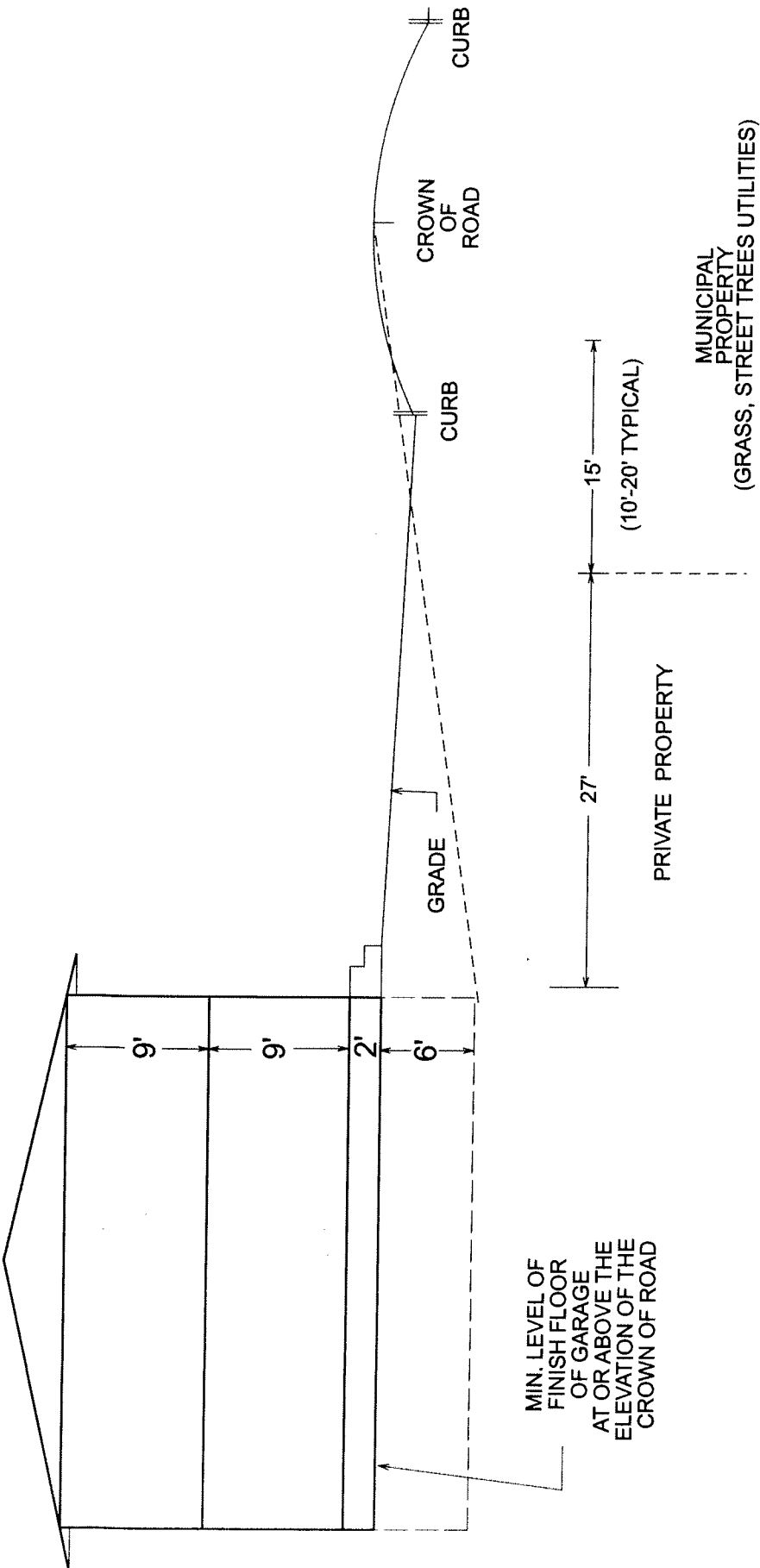
  
Biju Karumanchery, M.C.I.P., R.P.P.  
Senior Development Manager

  
Jim Baird, M.C.I.P., R.P.P.  
Commissioner, Development Services

**ATTACHMENTS:**

Figure 1 – Plan View of a Dwelling with a Reverse Slope Driveway/ Basement Garage

Figure 2 – Photograph of a dwelling with a Reverse Slope Driveway



# REVERSE SLOPE DRIVEWAY

FILE No: 11-128052

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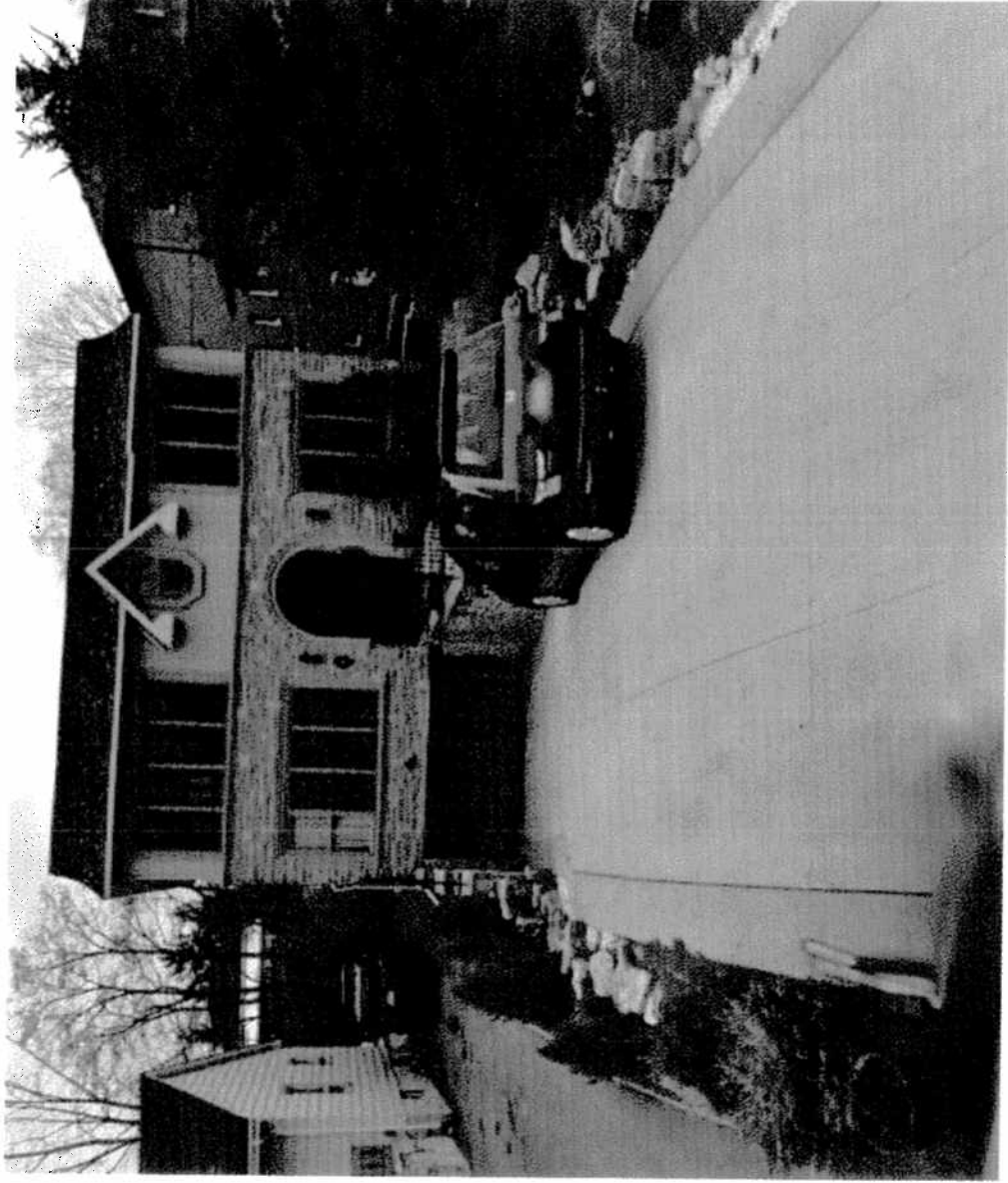


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DATE: 12/09/10

FIGURE No.1



# PHOTOGRAPH OF DWELLING WITH A REVERSE SLOPE DRIVEWAY



FILE No: 11-128052

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FIGURE No.2