



EXECUTIVE SUMMARY

AGM has been retained by Southside Construction Management Limited to establish the conceptual stormwater management/drainage strategy to support the draft plan of subdivision for the property located at 6309 Pack Road in London. The 31.52 hectare property (designated for development) will create single family residential lots, street townhome blocks, high density residential blocks, a medium density residential block, a road widening block, a parkland block and a stormwater management block.

The purpose of this report is to present the conceptual stormwater management and drainage strategy serving the draft plan of subdivision. This report provides a review of available background materials including the *Dingman Creek Subwatershed: Stormwater Servicing Strategy – Master Plan and Schedule B Municipal Class Environmental Assessment* prepared by Aquafor Beech Limited. The Environmental Assessment document details the regional stormwater management strategy including the implementation of two regional stormwater management ponds downstream (to the west) of the subject property and the implementation of a complete corridor for the conveyance of stormwater, people and wildlife.

The following bullet points summarize the analysis of existing conditions as well as the stormwater management/drainage strategy for the property:

- For the majority of the property, the existing ground elevations fall in the southwesterly direction. Stormwater is currently conveyed by a series of troughs on the surface toward a better-defined headwater feature located on the neighbouring lands to the west.
- A small portion of the property conveys stormwater overland in the southeasterly direction to a natural feature located within the neighbouring lands to the east.
- A local stormwater pond is proposed at the west limit of the property. 8.44 hectares of the subdivision lands will be tributary to the on-site dry pond. Stormwater will be conveyed to the pond by way of a storm sewer and an overland flow route. The pond will outlet to the top end of the future channelized portion of the complete corridor. Stormwater will be restricted to discharge rates that are less than or equal to the existing peak flows experienced at the same outlet location.
- A 20.70 hectare portion of the subdivision will be tributary to the downstream regional stormwater pond. Stormwater will be conveyed to the southwest limit (road connection of Street 'D') by way of a storm sewer and overland flow route. It is expected that the downstream regional pond will also outlet to the complete corridor.
- A second storm pipe is proposed along the south most right-of-way (Street 'B'). The second storm pipe, known in the industry as a "third pipe", will convey 'clean' runoff generated by a 1.06 hectare area to the woodland located on the neighbouring lands at the southwest limit of the property.



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- A small, 0.35 hectare portion of the property is planned to convey stormwater overland to the southeast corner of the property. The area will consist of developed areas, with 'clean' runoff in an effort to feed the natural feature on the neighbouring lands.
 - Stormwater conveyed to existing outlets (via the on-site pond, third pipe and overland to the southeast corner) will be released at less than or equal to the existing peak flow conditions. Stormwater conveyed to the downstream regional stormwater facility will be subject to attenuation and restriction downstream which will be designed by others.
 - Consideration has been given to the implementation of low impact development techniques. With the soil and groundwater conditions present, it is expected that best management practices (such as thickened topsoil depth and roof water discharge to pervious areas) are better suited for this property along with traditional quality control implementations such as oil grit separators providing treatment upstream of the end-of-pipe facilities.