

File 111179

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Brian Worsley, MSc, P.Eng., PMP, MICE
Manager Development Engineering
Town of The Blue Mountains
32 Mill Street, P.O. Box 310
Thornbury, Ontario N0H 2P0
bworsley@thebluemountains.ca

Re: Windfall Development, Town of The Blue Mountains
Master Stormwater Management Report - Revision No. 4

Dear Brian:

Further to recent draft plan changes, we have revised our Master Stormwater Management (SWM) Report and associated drawings to reflect the proposed draft plan changes in Phases 5 and 6 of the Windfall development. Master Stormwater Management Report – Revision No. 3 (September 2018) was previously prepared to address draft plan changes that increased the number of semi-detached units; reducing the number of single detached units. The proposed changes under Revision No. 3 increased the total number of units from 609 to 681 (72 units) by increasing the unit density in Phases 4, 5 and 6. Revision No. 4 proposes a lower density than Revision No. 3. The proposed Draft Plan changes under Revision No. 4 increase the total number of units from 609 to 659 (50 units) by increasing the unit density in Phases 5 and 6. The conservative modelling assumptions incorporated into the SWM report under Revision No. 3 still apply for Revision No. 4 and are summarized as follows:

1. A detailed analysis of the as-built density in Phases 1 and 2 was completed to determine the average imperviousness of the as-built lots versus the original assumptions in the hydrologic model. Catchment 201 comprises the as-built Phases 1 and 2 and was originally modelled as 50% impervious and 25% directly connected. Based on the analysis of the as-built lots, the as constructed values are 45% impervious and 25% directly connected. The hydrologic model for Phases 1 and 2 (specifically, Catchment 201) has been updated to reflect these values.
2. The percent impervious values for Catchment 200 in the hydrologic model were also reviewed. Catchment 200 includes Phases 3 and 4 and the unbuilt portions of the development (Phases 4, 5 and 6). Catchment 200 contains the proposed additional units which are being added by increasing the number of semi-detached dwelling types and reducing the number of single detached dwelling types. Based on the analysis of the imperviousness of semi-detached lots in Phases 1 and 2, the

imperviousness of Catchment 200 has been increased from 50% to 60% and the percent directly connected imperviousness from 25% to 30% to reflect the proposed Draft Plan changes.

Based on the above changes to the hydrologic model, it was determined that the pond will still satisfy the original criteria of the SWM report and provide post to pre-development peak flow attenuation if the overflow weir is adjusted from an elevation of 213.95 m to 214.00 m. This change must be implemented to ensure the 100-year storm is contained below the overflow weir while maintaining sufficient freeboard for the Regional storm event. Detailed calculations in support of the hydrologic model and SWMF design changes were prepared for the updated Master Stormwater Management Report – Revision No. 3 and are included with Revision No. 4. The updated report confirms that the stormwater management plan continues to achieve the required criteria originally established for the site.

Yours truly,

Tatham Engineering Limited



David Marshall, B.A.Sc., P.Eng.
Intermediate Engineer

DAM:rlh

Encl.



Daniel Twigger, B.Sc.Eng., P.Eng.
Senior Engineer, Group Leader

