Maidstone Borough Council
Maidstone Planning Department
King Street
Maidstone
Kent
ME15 6JQ

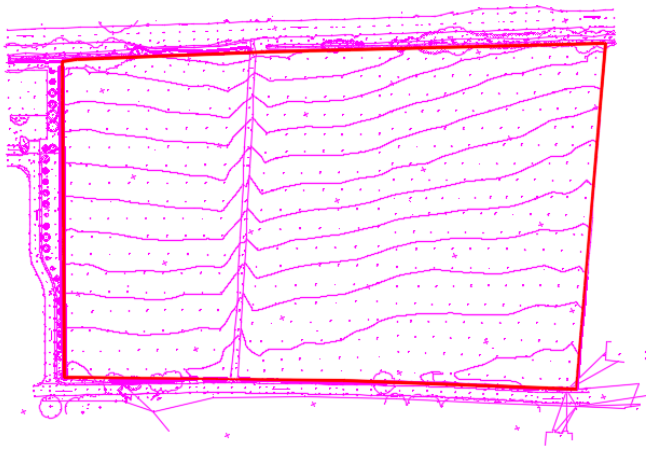
Date: 11th September 2018
Our Ref: EMC-2018-035

Dear Sirs

Land north of Old Ashford Road, Lenham
Planning Application Ref: 17/500357/HYBRID
Drainage Briefing Note

We have been requested by the Applicant to prepare a drainage briefing note in response to concerns raised at the Planning Committee meeting regarding an increased risk of flooding to neighbouring properties should the above application be consented.

The site is currently undeveloped and slopes gently from north to south (115mAOD to 107.50mAOD) with the northeast corner of the site being the lowest point as shown on the existing topographical survey as frame 1 below.



Frame 1 ~ Site Survey Extract

The site area is 5.2ha and by using the Institute of Hydrology Report 124 – Flood Estimation of Small Catchments (ICP SUDS) method, the mean annual flood flow (Q_{bar}) for small catchments is calculated as 22.8l/s; The existing Greenfield run-off rate for the site is therefore calculated as **4.4 l/s/ha**. (22.8/s / 5.2 ha).

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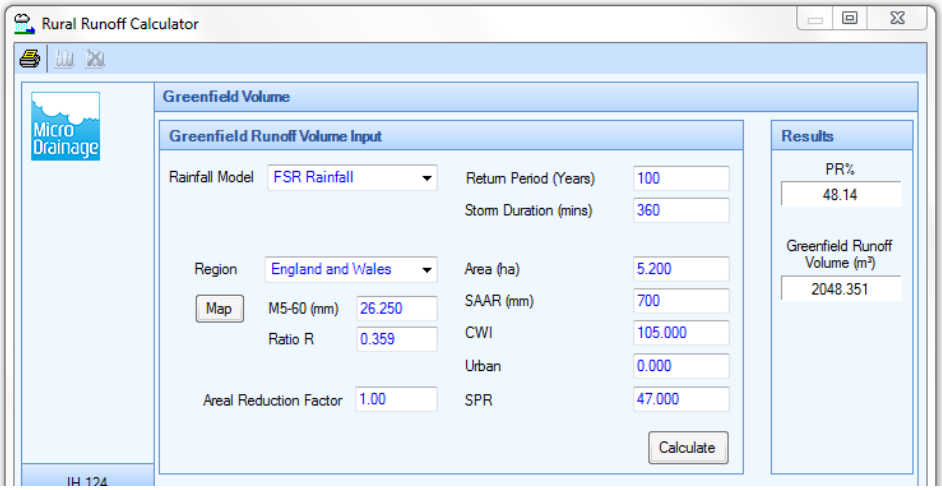
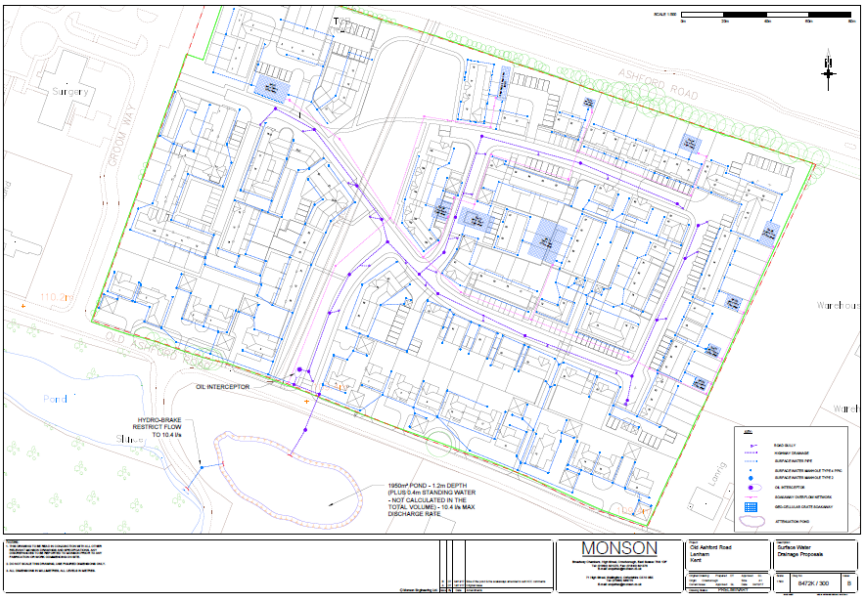
The pre-development run-off volume from a 1in100 year return period storm of 6hr duration is calculated as 2,048m³ as per the run-off calculator results as frame 2 below.



Frame 3 – Pre-Development Run-off Calculator Results

The proposed development will create approximately 2.145ha (41% of the site) of impermeable area that, from reference to the Drainage Strategy Report (Issue C dated 4th December 2017) prepared by Monson to support application, will have a SUDS system installed designed to cater for a 1in100 year return period with a 40% allowance for future climate change as summarised in frame 4 below. The discharge will be restricted to 10.4l/s (2.0l/s/ha development area) which is less than the equivalent 'Greenfield' rate.

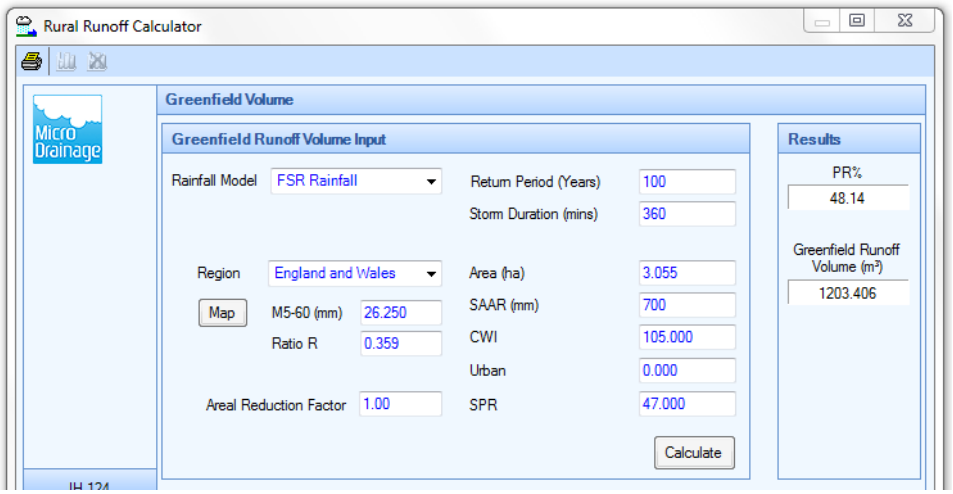


Frame 4 – SUDS Solution Summary

A large attenuation pond (1,950m³ capacity above the permanent wet level) is proposed on land south of Old Ashford Road and has been designed to accommodate all of the impermeable area

from the site in the eventually that the soakaways become ineffective and a soakaway overflow network connecting to the pond is indicated on the above strategy plan. MicroDrainage design calculations are included within Appendix G of the Monson Report and demonstrates that the pond is adequatelt sized to cater for a 1in100 year return period with a 40% allowance for future climate change. The outfall from the proposed new attenuation pond to the River Stour is controlled by 145mm Ø 'Optimum' Hydrobrake vortex flow control device.

With the introduction of a suitably designed SUDS solution to cater for the impermeable areas, the post-development run-off volume from a 1in100 year return period storm of 6hr duration is reduced to 1,203m³ from the remaining permeable area of the site as per the run-off calculator as frame 5 below, a reduction of 845m³ from the pre-development run-off volume.



Frame 5 – Post-Development Run-off Calculator Results

Please note that the proposed development and installation of the SUDS solution will in fact reduce the post development run-off from the site and provide an improvement to the neighbouring properties. We further note that KCC SUDS have removed their previous objection and accepted the proposed surface water disposal strategy.

We understand that the Members were also concerned with regard to risk of flooding from rising groundwater influenced by comments issued by Lenham Parish Council stating that this issue was not included within the Monson Drainage Strategy. We would point out that these comments were made prior to the updated Report and the meeting with KCC SUDS when this issue was discussed has been considered in the updated Strategy Report and will be covered within the detailed design stage.

We are informed that the owner of the application site, with his family, have farmed the field for over 50 years and confirms that it has not suffered from flooding during his period of ownership

and there is evidence of past ponds, ditches, or depressions that were suggested at the Committee Meeting.

Once further monitoring of the groundwater levels have been assessed, there are a number of engineering solutions available with possible high level perimeter cut-off drains connecting downstream of the attenuation pond to the River Stour. The detailed design will need to be agreed with KCC SUDS in order to discharge the recommended planning condition included within KCC SUDS Planning Consultation response.

We trust that the above briefing note adequately addresses the concerns raised at the committee.

Yours Sincerely

Paul Lavender
for Tridax Ltd