From: Howley, David (Capita) [mailto:David.Howley@capita.co.uk]
Sent: 26 November 2013 11:37
To: Ellett, Susanna
Cc: Newton, Katie
Subject: RE: Wellesley

## Hi Susanna

I can confirm that the extra volume needed to manage the impact of climate change has been calculated based upon a 2l/s/ha maximum allowable discharge rate. The 14.3m<sup>3</sup>/ha is additional storage required above that indicated in Table 2.S1 - column "Estimated Storage Volume 100+CC @30yr RP Existing Impermeable" in order to lift the 30 yr boundary to the 100 year boundary, (CC=30%). The 14.3m<sup>3</sup>/ha is conservative based on the balance of differences provided in Appendix D of our recent submission and refers to the maximum deficit of **total** rainfall depth which is the 15 minute duration. It can be seen from Appendix D that this deficit continuously decreases as the storm duration increases and that beyond the 525 minute event (8.75 hrs) the storage indicated is surplus. The 14.3m<sup>3</sup>/ha applies to existing/retained impermeable area; new impermeable areas are limited to 2l/s/ha for all durations and frequencies considered. We consider that there is scope to provide this additional 14.3m<sup>3</sup>/ha storage within each and all of the development zones.

I hope this doesn't confuse the issue.

Kind regards

**David Howley** Flooding and Drainage Engineer

Property and Infrastructure Capita, St Davids House, Pascal Close, St Mellons, Cardiff

Tel: 02920 - 803569 Email: <u>David.Howley@capita.co.uk</u> <u>www.capita.co.uk/property</u> <u>www.capita.co.uk/infrastructure</u> (select as appropriate)