

Stellen Consulting Level 1, 27 Belgrave Street Manly NSW 2095 +61 450 460 496 tel ABN 61 149 095 189

PO Box 151 Freshwater NSW 2096

3 February 2020

The Pittwater House Schools c/- Neeson Murcutt Architects Pty Ltd Level 2, 9 Roslyn Street Potts Point NSW 2011

Attention: Kirsty Hetherington < kirsty@neesonmurcutt.com>

The Pittwater house Schools (DA2019/1274) - response to development engineering referral

Dear Kirsty

Stellen Consulting was engaged to assess the proposed development at The Pittwater House Schools, 70 South Creek Road in reference to potential impacts arising from overland flow through the site.

This letter provides formal response to the flood related concerns raised by Northern Beaches Council (Council) within the Development Engineering Referral Response published 22 January 2020 by Jacob Strong and references the updated flood report for the site (P170688-RP-FL-001-1), dated 3 February 2020.

Item 1: Provision of model results clearly indicating differences between depths, velocities and hazards.

Additional maps for pre vs. post development depth and velocity afflux have been prepared for the 1% Annual Exceedance Period (AEP) event and are discussed in section 7.4 of the updated report. The afflux figures for depth and velocity are Figures 32 & 33, respectively (Appendix C).

Hazard maps for the pre and post development during the 1% AEP rainfall events are also found in Appendix C (refer Figures 19 & 27) of the updated report. Differences between the pre and post development hazard classifications are discussed in section 7.5.

Item 2: Provision of hazard map for the PMF event

A hazard map for the Probable Maximum Flood (PMF) event is shown in Figure 31, Appendix C of the updated report.

Item 3: Submission of DRAINS model.

A softcopy of the DRAINS modelling file for the upstream catchment feeding into the existing council stormwater asset below the oval is attached.

Please contact me if you have any questions or would like to discuss the matter further.

Kind regards,

MM

Logan English-Smith Senior Engineer

Stellen Consulting

Level 1, 27 Belgrave Street, Manly, NSW 2095

T. 0430 472 389

E. logan.englishsmith@stellenconsulting.com.au

🗱 Stellen

1 of 1 P170688-LT-FL-002-0