

Development Assessment and Approvals
Planning & Infrastructure
GPO Box 39 | Sydney NSW 2001

Attention: Necola Chisholm
Email: necola.chisholm@planning.nsw.gov.au

Dear Necola,

Ref: MP07_0106 MOD 5:

Re: Flooding Issues: Lot 31, 60 Charlotte Street, Campsie

Craig and Rhodes have been engaged by SHDA Pty Ltd to undertake engineering investigations with respect to flooding within Lot 31 on DP1170404.

The initial approved flood study was carried out by Hyder Consulting.

Craig & Rhodes have taken the information from the approved report to carry out subsequent analysis required to support the development of Lot 31. Our analysis has been undertaken to ensure that the intent of the Hyder Consulting recommendations are provided. In order to do this Craig & Rhodes have created a new model to prove the post development scenario does not negatively impact the existing pre development flood regime.

The new model created by Craig & Rhodes matches, within acceptable levels of certainty, the Hyder Consulting model.

On this basis we are able to provide the result of our modelling within our Flood Management Report.

The Flood Management Report prepared by Alasdair Cameron of Craig and Rhodes previously submitted indicates the impact of the proposed development of Lot 31 on the local flood regime.

The figures within the aforementioned flood management report have been updated and are annexed to this document. The drawings have been revised to indicate 100 year ARI flood levels and flows in both the pre and post-development scenarios. The figures illustrate no increase in flood levels as a result of the proposed seniors living development. Although there is a slight increase in velocity the velocity/depth ratio is reduced significantly due to the depth of flooding reducing within the site adjacent to the new building.

As Lot 31 is flood affected, no on-site detention will be provided to attenuate post-development site discharge. These additional flows however, have been considered in the overall Clemton Park Village stormwater management strategy. The flood mitigation measures constructed upstream of Lot 31, within the Sunbeam and Mackinder Street road reserves, limit all discharge from the fully developed Clemton Park Village development to

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flow rates less than those leaving the site in the pre-development scenario. As a result, flows within and downstream of the main trunk drainage system (Cup and Saucer Creek) are lessened as a result. Hydraulic modelling has been undertaken on the conservative assumption that post-development flows are equivalent to those of the pre-development scenario.

Flood evacuation strategies have been provided by others and adequately illustrate how safe access would be offered to the facility during a flood event.

Yours faithfully,
CRAIG & RHODES PTY LTD



Alasdair Cameron
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