

Our Ref 600283-L002

Contact Garry Neville

13 December 2011

The Manager
Robertson Marks Architects
11 -17 Buckingham Street
Surrey Hills NSW 2010

Attn: Ian Farrelly

Dear Ian,

RE: MEADOWBANK PRECINCT MASTER PLAN, SHEPHERDS BAY

Please find attached updated stormwater drainage concept drawings as requested.

We confirm that the latest architectural layout changes have minimal impact on the overall site stormwater strategy. We note that the location of the rainwater tank shown under the upper basement vehicle ramp has been relocated to suit the amended location of the ramp.

We acknowledge Ryde City Council's comments with respect to stormwater drainage and flooding and respond as follows;

Capacity of receiving stormwater system: Runoff from the site is proposed to be drained via a new pit and pipe system connecting the site directly to the sea wall. The new pit and pipe system has been sized to convey flows in accordance with Part 8.2 of Council's Development Control Plan 2010. As such, the impact of the development on Council's existing stormwater network will not be minor/negligible. Information relating the stormwater analysis and modelling carried out for the proposed development is contained in Cardno's *Integrated Stormwater Management Report*. We would be please to provide electronic copies of the DRAINS and MUSIC model files created for the stormwater analysis on request.

Impacts of overland flow: Flood modelling has been carried out for the subject Site as detailed in Cardno's *Flooding Assessment Report* dated 12 December 2011. Belmore Street at the eastern frontage of the site conveys flood flows from the upstream catchment to the harbour. Figure 1 as attached shows 100 yr ARI flood contours adjacent to the proposed development. Based on these contours, vehicular and pedestrian entries to the site will be set to a level equal to the 100 year ARI flood level plus 300mm.

Please contact the undersigned should have any queries in relation to this advice.

Yours faithfully



Garry Neville
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for **Cardno**



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FIGURE I - 100 YR ARI FLOOD CONTOURS.

13/12/11

