

**1. Request for Additional Information**

HW Request	Applicant Response	HW Response
<p>1)</p> <p>a) Please review the post-development channel calculations; in particular, Cross-Section CC has a Manning roughness corresponding to a grassed surface where the plans indicate parking spaces and the proposed COAL.</p> <p>b) Please provide a E36.9 flood risk hazard assessment with specific comments regarding safe egress for pedestrians or vehicles from the COAL (or alternate route) for infrequent rainfall events.</p> <p>c) Please update the proposal such that runoff from all impervious surfaces (including roofing) is captured by a GD01 treatment device in accordance with Large Brownfield Requirements.</p> <p>d) The proposed detention volume for attenuation of the proposed peak 10% AEP attenuation may appear to be incorrect. Please provide the electronic HEC model file in order to generate the proposed volume for review.</p> <p>e) It appears that runoff from the COAL, Block C &amp; D bypasses the proposed SW treatment device. Please amend the proposal such that all runoff from paved surfaces is captured by a GD01 SW treatment device.</p>	<p>Based on an updated co-efficient from 0.03 to 0.013, the flood depth has now been reduced from 150mm to 100mm. Please find revised report and calculations enclose with Infrastructure Report</p> <p>With reference to the Stormwater Code of Practice, the maximum depth of allowable flow traversing pedestrian or vehicular accessways is 200mm. The calculated depth of flow at Section C-C is a 100mm and is therefore in compliance with the allowable flood depth of 200mm.</p> <p>Although there is an increase to the velocity at this section of the COAL, this flow is impeded by the proposed swale and scruffy dome located to the west of Blocks B and C. A Stormwater catchpit has also been proposed within the COAL in proximity to the flowpath. This would cater for a percentage of the flowpath.</p> <p>Based on the levels of the carpark and common accessway, we envisage no ponding of floodwater within the vehicular access.</p> <p>The future development has been designed based on the use of inert cladding, roofing and sprouting building materials that do not have surfaces made from contaminants of concern to water quality (i.e., zinc, copper, lead). Based on the above mentioned, treatment of roof runoff is not required. This was already accepted during zone change assessment and preapplication submission.</p> <p>Please find HEC Model attached.</p> <p>Additional Treatment Device now added to COAL entering from Cresta Avenue. Please note Block C and D paved areas discharge into the catchpit located outside Block C and is thereafter being treated by the Hynds Upflo system located outside Block B.</p> <p>Response to Item C above applies to the treatment of roof Runoff from Blocks C and D also.</p>	

