

# RESPONSE TO BCD

REF: DA23/3021

182-186 GERTRUDE ST NORTH GOSFORD

ISSUE DATE: 24/11/2023

FLOODING AND FLOOD RISK	RESPONSE
<p><b>1. The provided overland flood study does not reflect observed low points at the site</b></p> <p>The provided overland flood study has been prepared from a combination of LiDAR and site survey pre and post development. Inspection on site revealed that the roadway in this location is a split-level road with significantly different flow paths at each level. This is not consistent with the flow paths predicted by the overland flow study. The site is located near the top of a catchment and Council's flood information certificate indicates the site is impacted by overland flow but not encoded as a flood control lot. It is unlikely that the development will result in risk to life however design will need to ensure that overland flows are routed around the building and do not cause added nuisance to downstream properties or risk to property at the development site. The proposed development and access ramp significantly alters the existing low point in the service road which would currently be the main flow path.</p> <p><b>Recommendation 1</b></p> <p>Detailed analysis of true flow paths will be required to ensure that the subject development can be protected from overland flow entering the basement and habitable spaces. Overland flow paths will need to be incorporated in the development to ensure they do not contribute to additional nuisance flows offsite.</p>	<p>Flood study has been updated. Detail refers to the updated flooding study.</p>
<p><b>2. The existing stormwater easement pipework is unlikely to be adequate to serve the development</b></p>	<p>The stormwater design has been updated. Detail refers to Stormwater Concept Design.</p>

<p>The stormwater design indicates that low points adjacent to the access ramp will be drained by a 375mm pipe. The development stormwater plan also shows 300 mm pipes, the 375mm pipe and a 150mm pipe all connecting to the council easement pipework. The council easement pipework is a 375mm pipe. The inflow pipework size appears to exceed the capacity of the connection point and may lead to additional surcharge of council pipework and additional overland flows to downstream properties. An onsite detention system has been proposed to limit flows from the development however the water cycle management plan has not correctly assessed credit for the rainwater reuse. This may result in the system not achieving the designed decrease in flows.</p> <p><b>Recommendation 2</b></p> <p>The “drains” model needs to be updated to correctly represent the onsite detention and calculation provided to ensure that upgrade of the stormwater easement infrastructure is not required.</p>	
<p><b>3. The development has not addressed important matters raised in Councils pre DA assessment</b></p> <p>Documents provided to BCD do not indicate that the proponent has adequately addressed Councils concerns in matters raised in the pre-development assessment including sewer relocation, waste management, overland flow management and building height envelopes. These significantly impact the viability of the architectural and stormwater plans provided.</p> <p><b>Recommendation 3</b></p> <p>Matters raised by Central Coast Council in the pre DA assessment will need to be assessed by Central Coast Council to ensure that the development is consistent with Council’s requirements in this area.</p>	<p>The mentioned issues have been addressed as described below:</p> <p><b>Sewer relocation:</b></p> <p>The proposed sewer work has been detailed on the proposed sewer plan with an advice letter prepared by sewer expert for clarification purposes. Detail refers to the proposed sewer plan and Advice letter of sewer issues.</p> <p><b>Waste management:</b></p> <p>Upon contacting the Section manager Darren North from Central Coast Council’s waste services department regarding these issues, it is allowed to propose kerbside waste collection twice a week without having the HRV entering the site or making any turn within the site if we can meet his requirements.</p> <p>Key points of his expectation include:</p>

- Locating individual bins on each floor to enable convenient waste management.
- Design of waste room for min.10sqm bulky waste and bins required by council.
- Consideration of mechanical devices to empty bins into bulk waste bins and provide storage area for those devices.
- Providing space for 7 bulk waste bins in the waste room. 5 of them will be emptied twice a week via kerbside waste collection and 2 of them are left as contingency, resulting in a maximum of 3 bins (the same number as collecting bins from the existing 3 dwelling houses) for each collection.
- Minimize the visual impact of the waste room to the street scape.
- Update Waste Management Plan accordingly.

In this case, the layout and the waste management plan has been updated as per his feedback above and obtained Email confirmation of Waste management.

Detail refers to Updated architectural plans, Email confirmation of Waste management and Waste Management Plan.

**Overland flow management:**

Flood study has been updated.

Detail refers to the updated flooding study.

**Building height envelopes:**

Unit 702 on level 7 has been removed, and the general building height has been lowered to ensure the adjoining property to the south can maintain adequate solar access amenity.