Council's Feedbacks:

- 1. The report has shown on Figure 13 Comparison of Flood Extent in Pre and Post Development Condition that the Post-Development is larger than the Pre-Development flood extent, although, the statement in the report provided under the paragraph 5.5 contradict this by saying that Figure 13 shows a slight reduction in the flood extent in the Post-Development scenario.
- 2. In Figure 16 Flood Extent map for Existing Condition in 1% AEP Storm with Retaining Wall Extension is shown that the development property is not going to be affected with overland flood. However, the result of that wall extension shows that there is about a 60 mm increase in the flood level at the neighbouring property. This increase in flood level at the adjacent property is not acceptable as Council has advised the Applicant and the appointed consultant, at the last meeting, that no adverse impact on the neighbouring property is acceptable.
- 3. Also, it is important to indicate that based on Warringah Local Environmental Plan 2011 Part 6-Clause 6.3 Flooding planning: Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that the development incorporates appropriate measures to manage risk to life from flood, and not adversely affect flood behavior resulting in increases in the potential flood affectation of other development or properties.
- 4. The carport area below the habitable building, is still within the flow path and it is not acceptable, as per Northern Beaches Council Warringah DCP Part E The Natural Environment/ E11 Flood Prone Land and 1.2 Perspective Controls: G1 Open car park areas and carports shall not be located within the flood-way.

Our Response:

In this edition, the model has been thoroughly revised. The terrain within the site and the neighbouring property has been updated using survey plans. Half of the capacity of the existing pipe has also been considered in the model. Model result has shown that the depth of the 1% AEP flood water within the proposed carport is mostly below 0.1 m. If the existing retaining wall is extended, the maximum increase in the flood water in the neighbouring property is 0.02 m. The clarifications on the comments on the previous report along with the revised model results are as follows.

- 1. We thoroughly reviewed the report. It was found that the part of the report within that section went on unedited from the previous edition. Apologies for typo error.
- 2. The purpose of that section was just to observe the impact on the neighbouring property. This time, half of the capacity of the existing pipe has also been taken into account. The front part of the new retaining wall has been limited up to the front edge of the proposed secondary dwelling at western lot. In such a case, the rise in the flood level in the neighbouring property has been reduced to 0.02m.
- 3. Acknowledged.
- 4. Even without extending the existing retaining wall, the 1% flood depth within the proposed carport (with half of the capacity of the existing stormwater pipe considered) is mostly below 0.1 m and the maximum velocity depth product is also well below 0.1 m²/s. Based on these values, it is considered that this part is not the floodway. There is no risk of floating/sweeping away the car from the carport in 1% AEP flooding event.