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Northern Beaches Council c/-Gartner Trovato Architects Via Email: sean@g-t.com.au

## RE: ENGINEERING REFERRAL RESPONSE & WATER MANAGEMENT REFERRAL RESPONSE AT 45 LANTANA AVENUE, WHEELER HEIGHTS PROJECT NUMBER: 201110

Istruct Consulting Engineers are the Stormwater Consultants on the above project.

The stormwater design for the proposed SEPP HSPD, as shown on the drawings by Istruct Consulting Engineers drawing numbers D01-D04, revision B, dated 25.06.21 and D05, revision A, dated 25.06.21 has been amended as per council's engineering referral response, dated 30.03.21 and water management referral response, dated 18.02.21 as listed below.

- 1. The rainwater tank has been separated from the on-site stormwater detention (OSD) tank with the overflow connected to the OSD tank
- 2. Only roof water is to be connected to the rainwater tank
- 3. Rainwater is to be reused for toilets, laundries, and garden irrigation
- 4. DRAINS and MUSIC models have been re-provided
- 5. Long section for the piped connection to the council drainage pipe in Lantana Avenue with all existing services shown has been provided
- 6. Sediment and erosion control plan has been provided



It is understood that bio-retention system is preferred by the council. However it is deemed unsuitable for the above site as it is unable to achieve minimum allowable fall for discharge if a bio-retention system is to be incorporated. As an alternative, stormwater filter cartridges incorporating a 25kL rainwater tank with reuse of rainwater for toilets, laundries, and garden irrigation as part of a water sensitive urban design approach as requested in the water management referral response has been provided.

We trust that the above meets with your requirements. Please do not hesitate to contact the undersigned should you have any questions in relation to the above.

Yours Faithfully ISTRUCT CONSULTING ENGINEERS

Damian Ienco B.E. (Hons) MIEAust CPEng NER APEC IntPE(Aus)