

<u>Drainage Notes.</u>

- 1. All work to be carried out in accordance with Northern Beaches Council's standard specifications and to the satisfaction of Council's Engineer.
- 2. All pipes to be UPVC (sewer grade) unless noted otherwise.
- 3. Pipes not noted to be dimensioned \$\phi100mm @ 1.0% min. grade.

 4. All downpipes to be \$\phi100mm or equivalent U.N.O. Gutters to be a minimum of 125mm x 75mm eaves gutters. All gutters to have a minimum fall of 1 in 200. All installation of gutters and downpipes to be in accordance with AS/NZS2179.1-2014

 Specifications for rainwater goods, accessories and fasteners
- Metal shape or sheet rainwater goods, and metal accessories and fasteners and AS2180-1986 Metal Rainwater Goods...
- 5. All pits in driveway areas to have heavy duty galvanized steel grates. All pits in landscaped areas to have light duty galvanized steel grates.
- 6. All pipes to be laid to the fall indicated in sand or gravel bedding.
- 7. Pipes to have a 1% minimum grade UNO by the pit inverts. Pipes to be VC class 'X' or UPVC class stormwater pipe to AS1254, AS1260, AS1273, AS1477, AS2179.2 and where exposed to direct sunlight to have adequate protection to UV radiation (ie painted) in accordance with AS2032. Sewer grade/galvanised pipes to be used where Council's policy or consent requires such.
- 8. The contractor is to verify the location and relocate as necessary all services on site especially across the footpath (eg Water, Gas, Electricity, Telecom and Sewer) should any services conflict with the stormwater system, contact the engineer immediately.
- 9. Grates to be removable type.
- 10. Where pit depth exceeds 1.2m, provide \$\phi 20mm\$ galvanized steel step irons at 300mm cts. from top to bottom of the pit.

 11. NOTE. The Hydraulic Engineer or Council Engineer is to contacted to undertake an inspection of the internal drainage lines prior to back filling and at completion of the works in order to provide certification.

NOTE:

The existing stormwater drainage lines are to be inspected and if the condition is satisfactory, they may be re-used for the new development where appropriate and practical.

