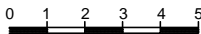


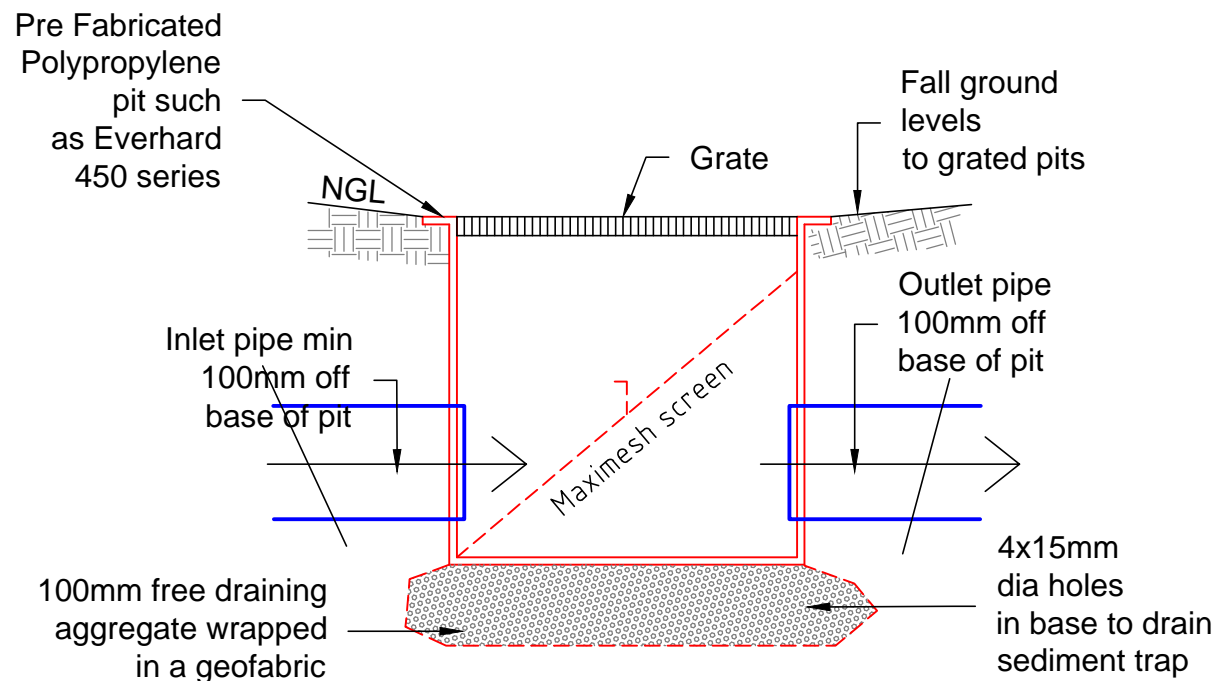
STORMWATER MANAGEMENT PLAN

~ 1:200

Proposed alterations and additions shown hatched, refer to plans by *rama architects* for details. Noting all works within the existing building footprint with the existing roof extents to remain. Any existing system is to be identified and assessed / certified as operating satisfactorily by a licensed plumber during construction with all leaking/damaged etc components being repaired/replaced, including replacing any clay pipes with uPVC. All new / altered works are to be sized and installed by a licensed plumber in accordance with BCA requirements and AS3500.3 specifications, noting design spec to be for a 5% AEP event capacity (30m2 roof area per 90mm dp via Quad low front gutter).

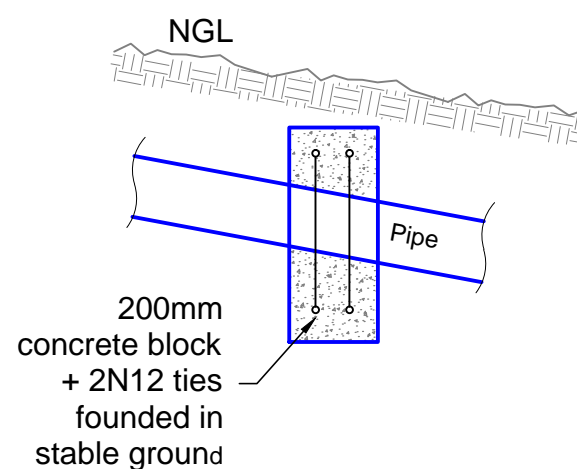


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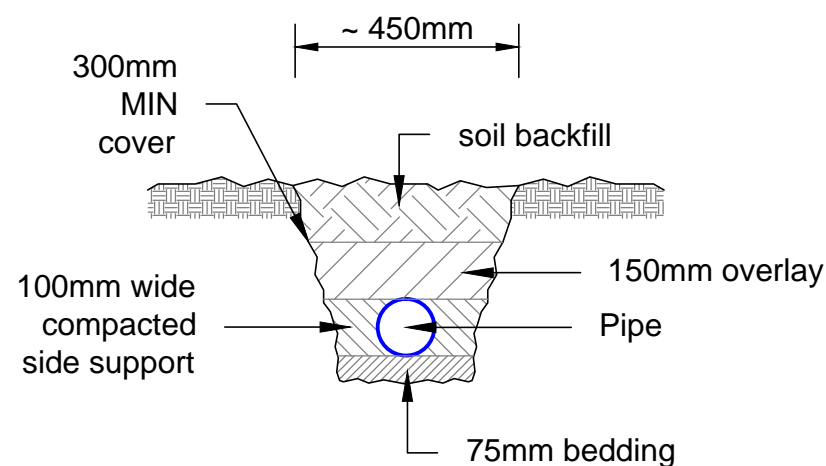
TYPICAL PIT DETAIL

NTS



ANCHOR BLOCK DETAIL

TO BE INSTALLED AT 6m CTS
IF PIPE SLOPE > 1V TO 5H



TYPICAL PIPE & TRENCH DETAIL

~ 1 : 20

Note -
Bedding / overlay to be -
a) sand, free from rock, hard or sharp objects
b) max 14mm crushed rock or gravel
c) the excavated material free of rock, hard or sharp objects and broken up with no soil lumps > 75mm dia

STORMWATER NOTES

1. All roof collection components (ie gutters / DPs etc) are to be located / sized by the Developments contracting Plumber for a **5% AEP** event capacity. (30m² roof area per 90mm dp via Quad low front gutter).
2. Trunk lines shown on plan to be 150mm dia uPVC.
3. All pipes to be uPVC to AS 1254:2002.
4. All pipes to be laid at the grade required to match pit invert levels.
5. All pipes to be installed and laid in accordance with AS 3500.3:2003.
6. All roof guttering / down pipes / valley gutters / box gutters etc are to be sized and installed in accordance with AS 3500.3:2003.
7. All pits are to be proprietary uv resistant polypropylene or similar unless noted (approved by the Engineer) and are to include a min 50mm sediment trap in the base and a maximesh screen laid at 45° across the pit to protect the outlet pipe.
8. All pits greater than 600mm in depth are to be proprietary precast concrete (approved by the Engineer).
9. All pits greater than 1000mm in depth are to have adequate access requirements in accordance with OH&S/Workcover requirements (ie; minimum dimensions 900x900mm with step irons).
10. All works are to be inspected and certified by the Principle Certifying Authority prior to backfilling.
11. All works requiring certification by the Engineer will require a works as executed survey prepared by a registered Surveyor detailing all levels etc as on the Engineering plans.
12. The system is to be flushed and cleaned of all sediment and debris annually.
13. The system will require regular cleaning and maintenance to ensure its ability to function is maintained.
14. To ensure the system's ability to function is maintained it is to be inspected and certified as operating effectively by a licensed plumber every 5 years, and a engineer every 20yrs.
15. All existing predevelopment catchment area run-off conditions exiting the site are to be maintained with no run-off flows being diverted from the predevelopment condition.
16. Flows from upstream properties entering the site are to be monitored during construction and diverted about the OSD system / residence etc as required.

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PROJECT:
**PROPOSED
ALTERATIONS & ADDITIONS
25 THE OUTLOOK
BILGOLA PLATEAU
for ~ L. ROZENBROOK**

DRAWING :
**CONCEPTUAL
STORMWATER
MANAGEMENT DETAILING**

Job No :
200606

Drawing No :
SW2

Document Certification
Barrenjoey Consulting Engineers Pty Ltd
per
Lucas Molloy MIEA CPEng NER Director