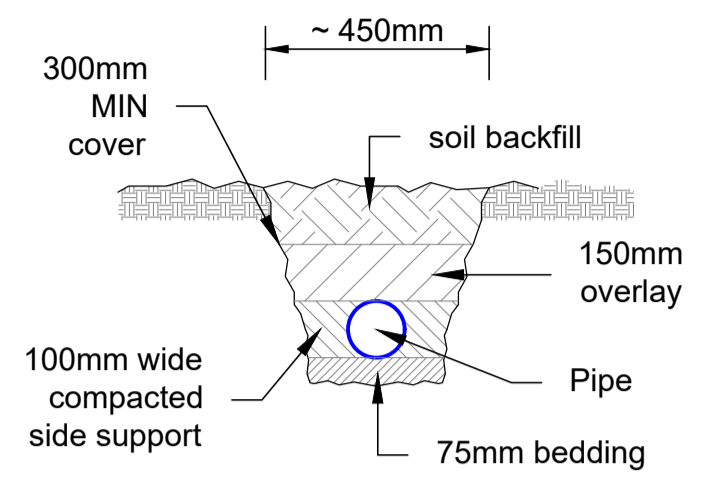
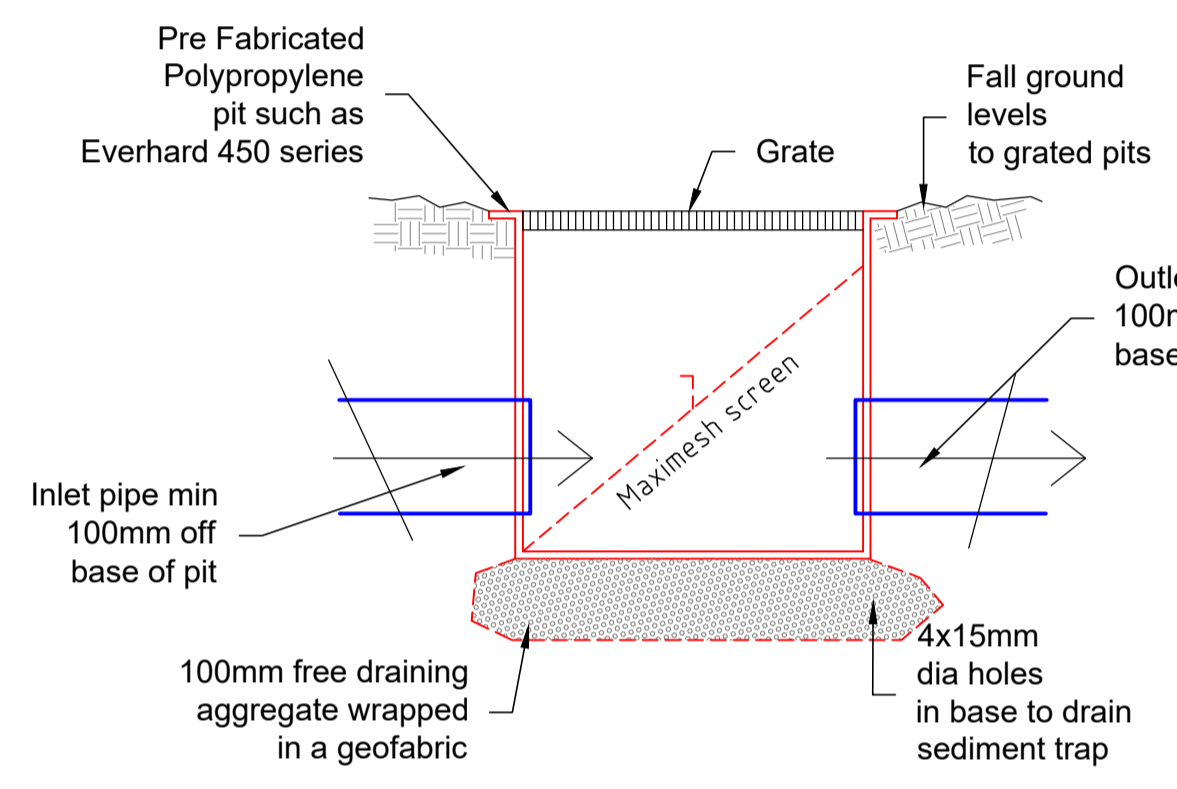


**SITE STORMWATER MANAGEMENT PLAN**  
~1:200

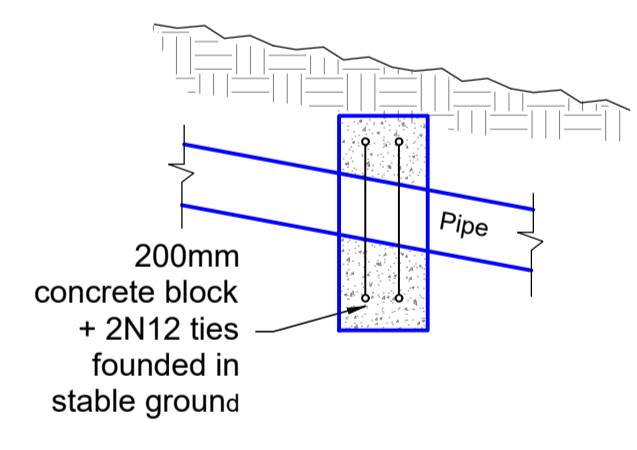
Proposed Studio / Car Platform refer to plans by Gartner Trovato Architects for details. Site Area - 1977m<sup>2</sup>  
 On Site Stormwater Detention as per Northern Beaches Councils - *Water Management For Development Policy*  
 9.3.1 Onsite Stormwater Disposal Requirements Region 2 – Northern Catchments  
 new impervious area less than 50m<sup>2</sup> therefore no onsite stormwater detention required.  
 All works (ie gutters/dps etc) are to be sized (for a 5% AEP event) and installed by a licensed plumber in accordance with NCC requirements and AS3500.3 specifications. All Trunk Drainage pipes, as shown on this plan are to be minimum of 90mm dia uno.  
 Variations to layout to be reviewed and approved by Barrenjoey Consulting Engineers before construction.



**TYPICAL PIPE & TRENCH DETAIL**  
~ 1 : 20



**SEDIMENT / GROSS POLLUTANT CONTROL PIT DETAIL**  
NTS



**ANCHOR BLOCK DETAIL**  
 TO BE INSTALLED AT 6m CTS  
 IF PIPE SLOPE > 1V TO 5H  
 AND AT CHANGE IN GRADE OF PIPE  
 ALT SOUNDLY FIX PIPE  
 TO ROCK / CONCRETE STRUCTURE

**STORMWATER NOTES**

- All roof collection components (ie gutters / DPs etc) are to be located / sized by the Developments Hydraulic Consultant for a 5% AEP event capacity.
- All Trunk Drainage pipes, as shown on this plan are to be minimum of 90mm dia uno.
- All pipes to be uPVC to AS 1254:2002.
- All pipes to be laid at the grade required to match pit invert levels.
- All pipes to be installed and laid in accordance with AS 3500.3:2003.
- Thrust blocks to be installed to the trunk drainage pipes in accordance with AS 3500.3:2003.
- All roof guttering/ down pipes / valley gutters / box gutters etc are to be sized and installed in accordance with AS 3500.3:2003.
- 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.
- All pits greater than 600mm in depth are to be proprietary precast concrete (approved by the Engineer).
- All pits greater than 1000mm in depth are to have adequate access requirements in accordance with OH&S/Workcover requirements (ie; minimum dimensions 900x600mm with step irons).
- All works are to be inspected and certified by the Principle Certifying Authority prior to backfilling.
- 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.
- The system is too be flushed and cleaned of all sediment and debris annually.
- The system will require regular cleaning and maintenance to ensure its ability to function is maintained.
- 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.

ISSUE:	DATE	DESCRIPTION
Prelim	23. 02. 2023	Issued for comment
DA	24. 02. 2023	Issued for DA submission
S4.55	21. 02. 2024	Issued for S4.55 submission

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PROJECT: PROPOSED ALTERATIONS & ADDITIONS 20 THE SERPENTINE BILGOLA BEACH ~for MILLER FAMILY

DRAWING : SITE STORMWATER MANAGEMENT PLAN

Job No : 230104  
 Drawing No SW1 S4.55  
 Document Certification  
 Barrenjoey Consulting Engineers Pty Ltd  
 per Lucas Molloy MEA OPEng NER Director