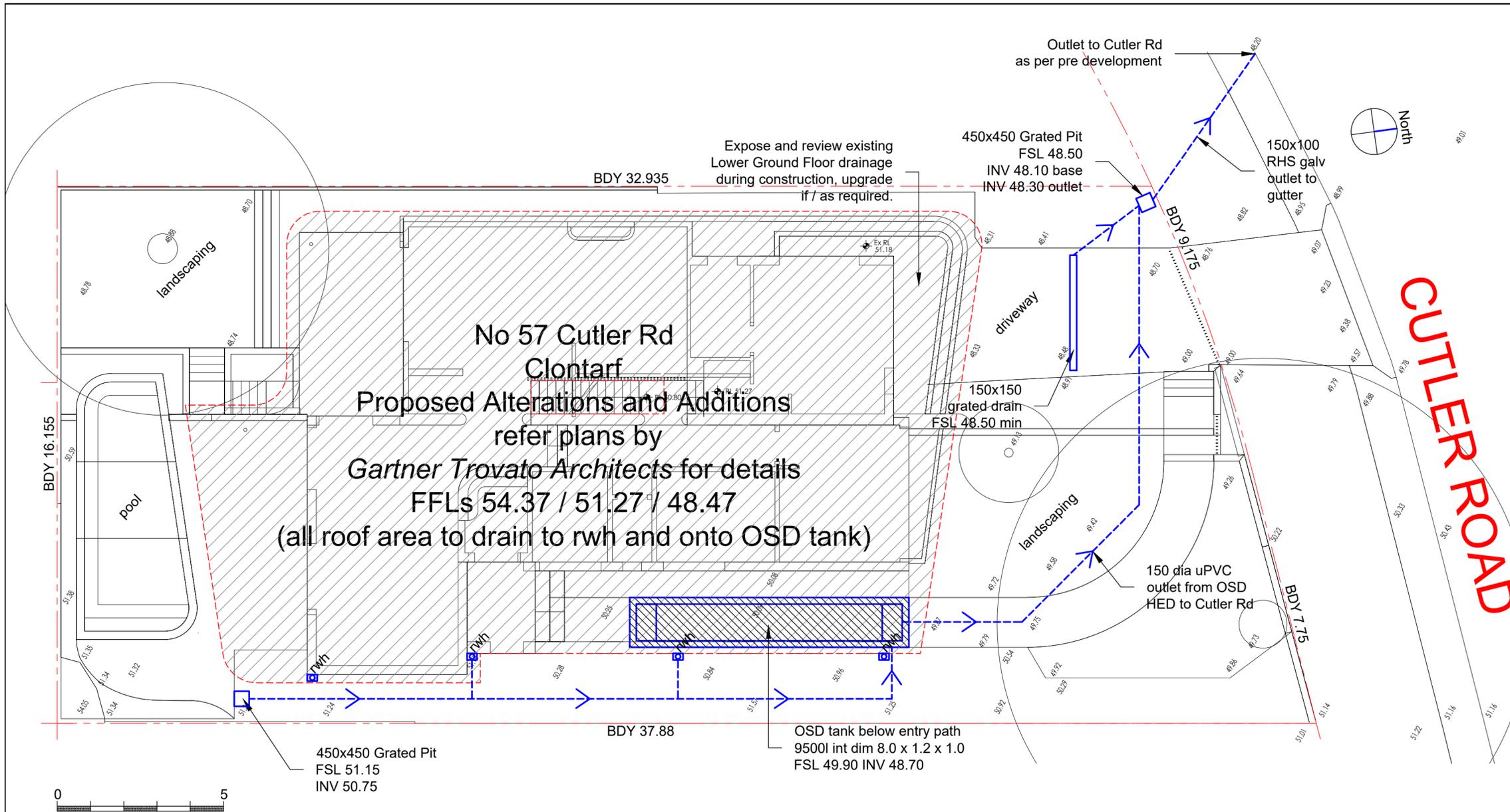


STORMWATER NOTES

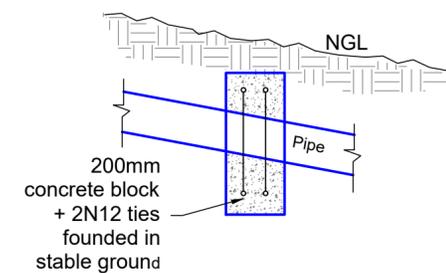
- All roof collection components (ie gutters / DPs etc) are to be located / sized by the Developments contracting Plumber for a **5% AEP** event capacity.
- Trunk lines shown on plan to be 150mm dia uPVC, uno.
- All pipes to be uPVC to AS 1254:2002.
- All pipes to be laid at the grade required to match pit invert levels.
- All pipes to be installed and laid in accordance with AS 3500.3:2003.
- 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 900x900mm 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 to 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 an engineer every 20yrs.
- 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.
- Flows from upstream properties entering the site are to be monitored during construction and diverted about the OSD system / residence etc as required.



SITE STORMWATER MANAGEMENT PLAN

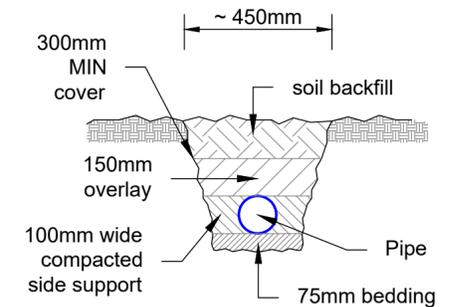
~ 1:200

All works to be of a conventional nature as per NCC / BCA and AS3500.3 requirements. Disposal as per predevelopment to Cutler Road kerb and gutter. Compliance to Northern Beaches Council Water Management for Development Policy Section 9.3.3 On Site Stormwater Disposal Region 3 - Southern Catchments. The 9500l OSD system has been designed to restrict site run off to 20% AEP event predevelopment conditions. All roof areas and total of area of 376m² to be connected to the OSD system. Trunk drainage lines as shown above to be 150 dia uPVC. Pipe and rwh layout indicative tbc with construction documents.



ANCHOR BLOCK DETAIL

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



TYPICAL PIPE & TRENCH DETAIL

~ NTS

ISSUE:	DATE	DESCRIPTION
08. 09. 2022	PreLim	Issued for comment
09. 09. 2022	DA	Issued for DA submission

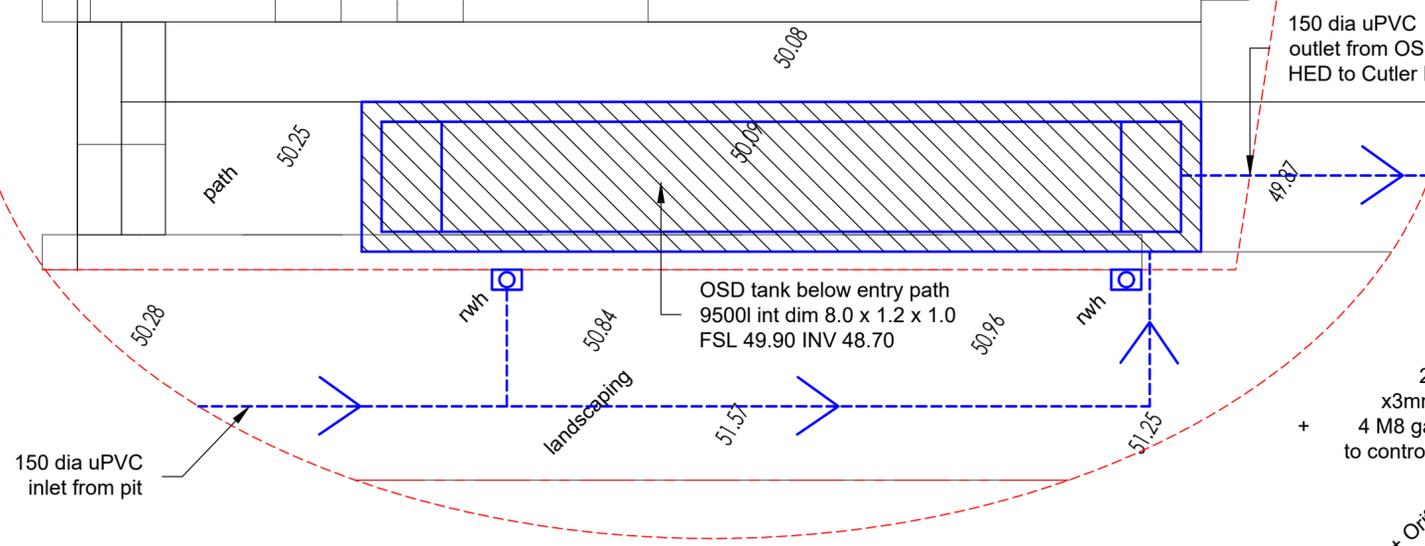
Barrenjoey Consulting Engineers pty ltd
 Stormwater Structural Civil
 PO Box 672
 Avalon NSW 2107
 M: 0418 620 330
 E: lucasbcc@bigpond.com
 ABN: 13124694917
 ACN: 124694917

PROJECT:
PROPOSED ALTERATIONS & ADDITIONS
57 CUTLER RD CLONTARF
 for ~ POPOVAC FAMILY

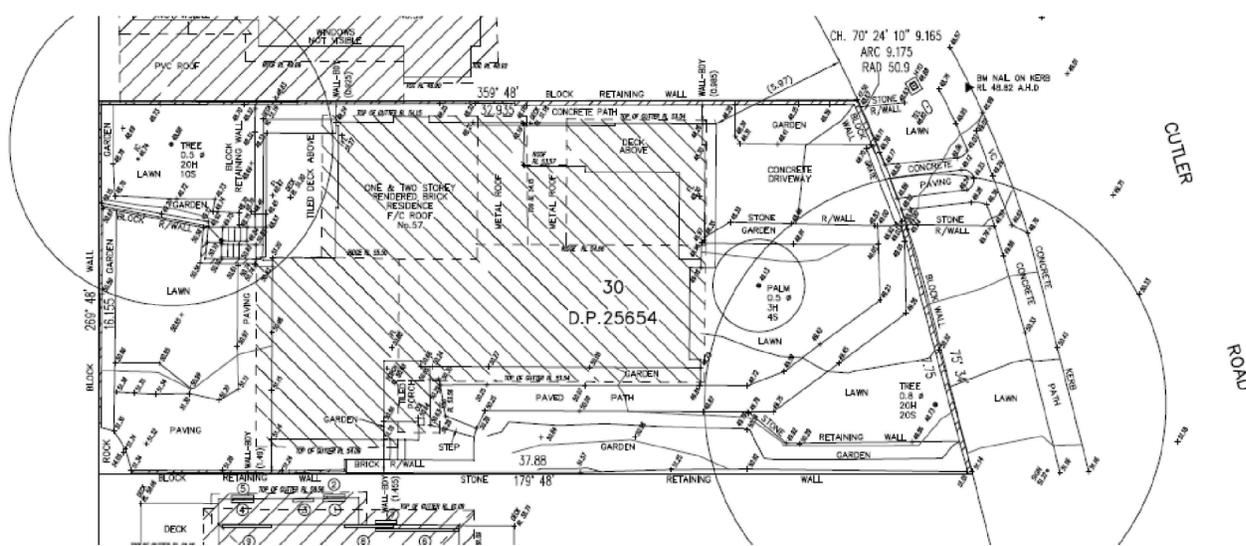
DRAWING :
SITE STORMWATER MANAGEMENT PLAN

Job No : **220802**
 Drawing No : **SW1_{DA}**
 Document Certification
 Barrenjoey Consulting Engineers pty ltd
 per Lucas Molloy
 MIEA CPEng NER Director
 sept' 2022

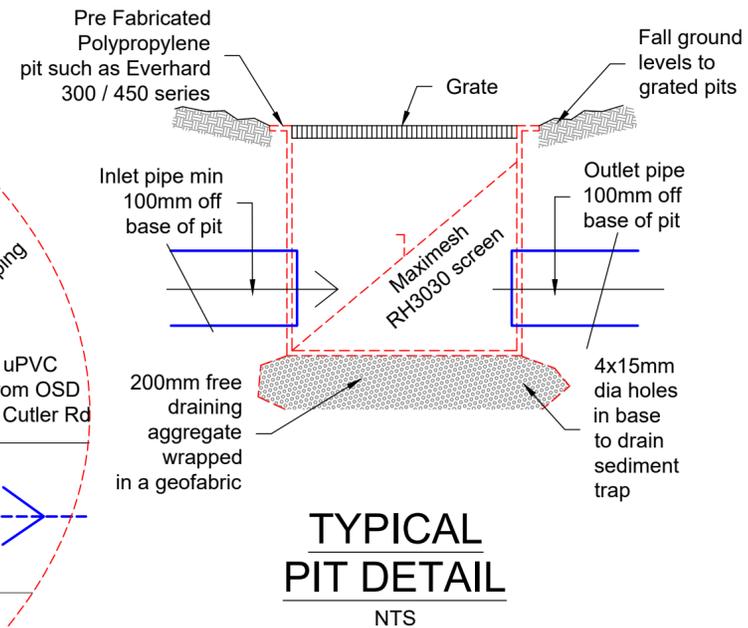
No 57 Cutler Rd
Clontarf
Proposed Alterations and Additions
refer plans by
Gartner Trovato Architects for details
FFLs 54.37 / 51.27 / 48.47
(all roof area to drain to rwh and onto OSD tank)



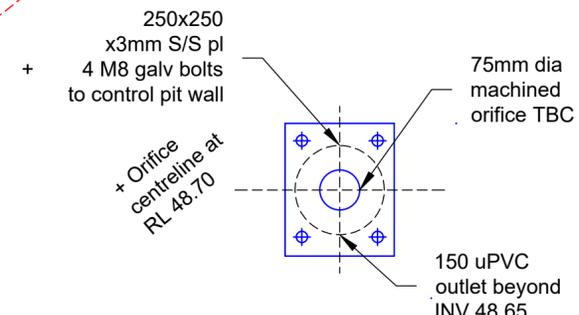
OSD TANK / GROUND FLOOR PLAN
~1 : 50



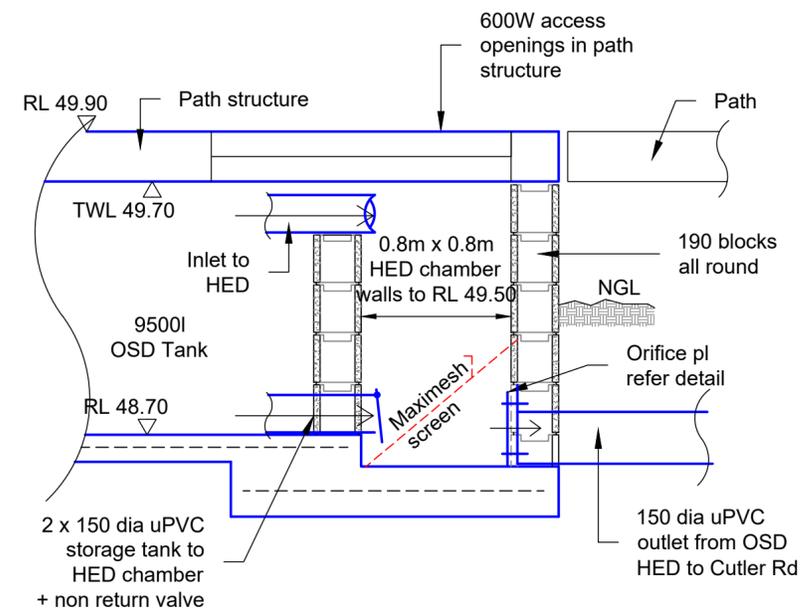
EXISTING SITE SURVEY
~NTS



TYPICAL PIT DETAIL
NTS



ORFICE PL DETAIL
~ 1:20



OSD CONTROL DETAIL
~ 1:20

ONSITE DETENTION REPORT (DRAINS ANALYSIS)

Site area	- 576 m2
Existing impervious area	- 200 m2
Proposed impervious area	- 456m2
Area modeled to OSD	- 376 m2
Detention Volume modeled	- 9500l
Existing Site Discharge	
5yr ARI Storm	- 26l/s
100yr ARI Storm	- 41l/s
Post Development Site Discharge	
5yr ARI Storm	- 20l/s TOTAL (11 l/s via OSD, 9 /s uncontrolled)
100yr ARI Storm	- 26l/s TOTAL (12 /s via OSD, 14l/s uncontrolled)

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PROJECT:
PROPOSED ALTERATIONS & ADDITIONS
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CLONTARF
for ~ POPOVAC FAMILY

DRAWING :
SITE STORMWATER MANAGEMENT DETAILING

Job No :
220802
Drawing No :
SW2_{DA}
Document Certification
Barrenjoey Consulting Engineers pty ltd
per Lucas Molloy
MIEA CPEng NER Director
SEPT'2022