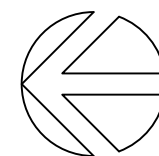


ENSURE ALL CONNECTIONS
WITHIN CHARGED SYSTEM
ARE SOLVENT WELDED

ALL DOWNPIPES ARE TO BE ENTIRELY PVC. PIPES ARE TO BE SEALED UPTO U/S OF ROOF GUTTERS

ROOF GUTTERS I.L. 149.79
TANK INLET I.L. 148.71
HEAD PRESSURE - 1080mm



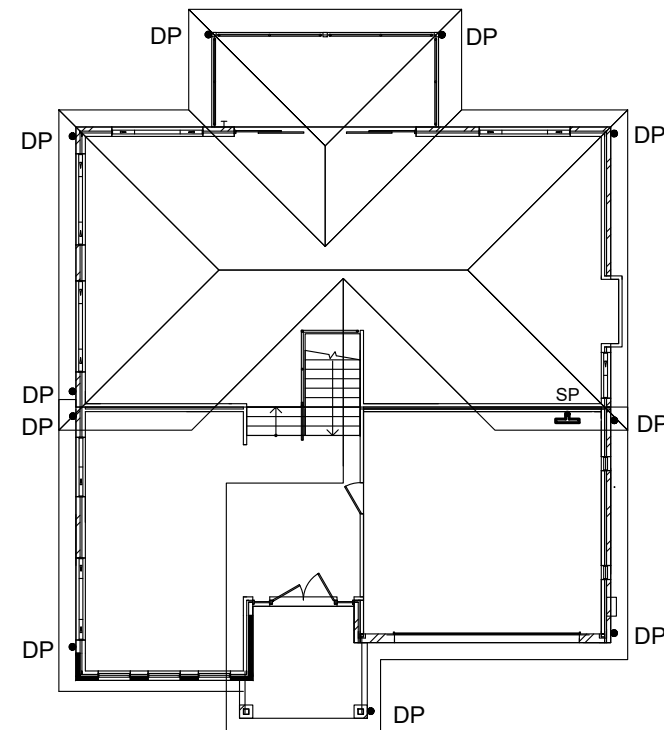
SITE STORMWATER MANAGEMENT LAYOUT

SCALE 1:200/A3

PIPE SCHEDULE

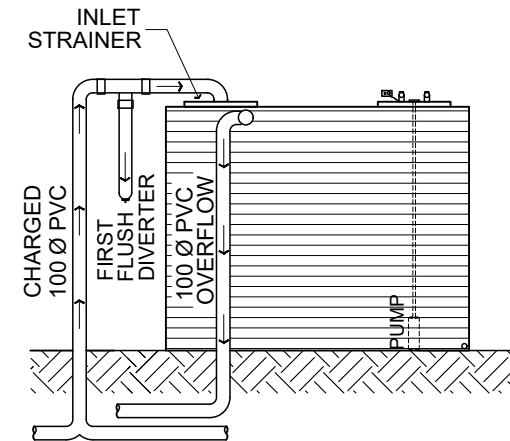
TAG	SIZE	MATERIAL	GRADE	DESCRIPTION
'A'	100 Ø	P.V.C	1% MIN	REGULAR GRAVITY PIPE
'B'	150 Ø	P.V.C	1% MIN	REGULAR GRAVITY PIPE
'X'	100 Ø	P.V.C	CHARGED	TO FEED RAINWATER TANK
'F'	100 Ø	P.V.C	1% MIN	FLUSHING LINE - CAPPED END
'R'	150x100	GALV RHS	1% MIN	DISCHARGE PIPE TO KERB

ON SITE DETENTION IS NOT
REQUIRED AS THE SITE COVERAGE
AREA IS LESS THAN 40%

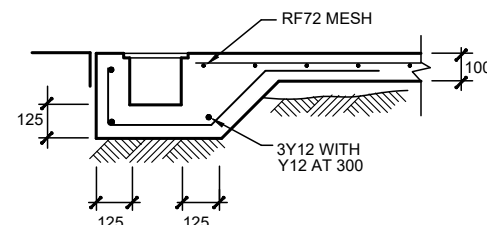


ROOF & FIRST FLOOR LAYOUT
SCALE 1:200/A3

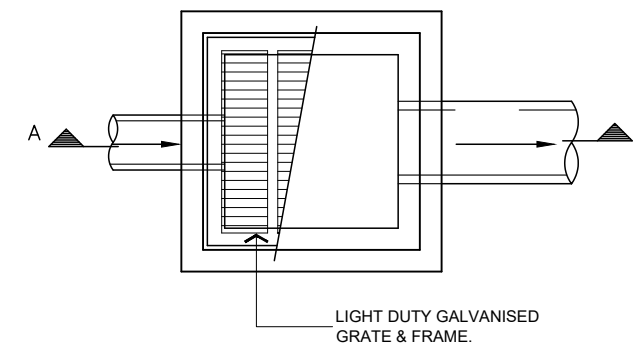
- ENSURE ALL CONNECTIONS WITHIN CHARGED SYSTEM ARE SOLVENT WELDED
- ALL DOWNPIPES ARE TO BE ENTIRELY PVC. PIPES ARE TO BE SEALED UPTO U/S OF ROOF GUTTERS
- ROOF GUTTERS I.L. 149.79
TANK INLET I.L. 148.71
HEAD PRESSURE - 1080mm



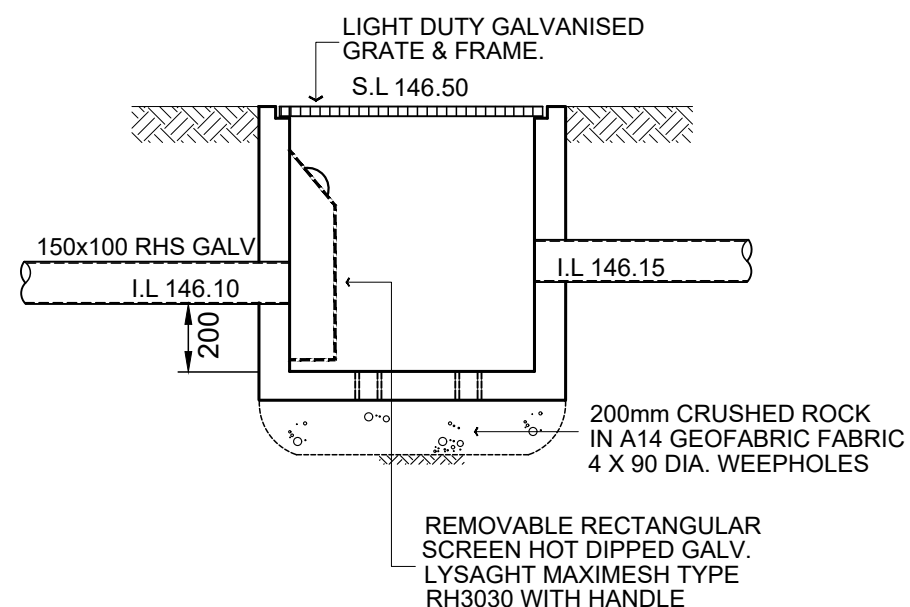
EVOLUTION MkIII RAINWATER TANK
CONFIGURATION BY KINGSPAN



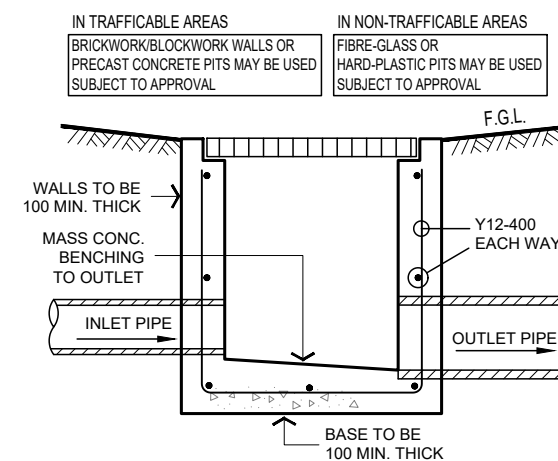
GRATED DRAIN



TYPICAL PIT DETAIL



PIT P1 - 450x450



TYPICAL SECTION A

alwdesign CIVIL ENGINEERING CONSULTANTS			PROJECT: PROPOSED RESIDENTIAL DWELLING AT LOT 8, # 45 THE ESPLANADE, FRENCHS FOREST NSW DRAWING: ROOF LAYOUT & GENERAL DETAILS		
P: 02 9802 5509 M: 0413 763 432 E: admin@alwdesign.com.au 69 DELANGE ROAD, PUTNEY NSW 2112			DESIGNED: A.W. DRAWN: N.W. CHECKED: ANDREW L WAHBE - BE (CIVIL) MIEAUST PENG DRAWINGS NOT TO BE USED FOR CONSTRUCTION UNLESS SIGNED BY DESIGNING ENGINEER		
JOB NUMBER: SW21367 DRAWING NUMBER: SW21367 - S2			A ISSUED FOR DEVELOPMENT APPLICATION 08/12/21		
ISSUE REVISION DESCRIPTION			APPR. DATE		



Warringah Council

On-site Stormwater Detention (OSD) Checklist

For Single Dwelling Residential Developments

This form is to be used to determine if OSD will be required for demolition and reconstruction, or construction of new single dwelling residential developments and must be completed and included with the submission of any development application for these works. Please read both sides of this form carefully for its applications, guidelines and definitions.

For assistance and support, please contact Council's Customer Service Centre on (02) 9942 2111.

Address of Proposed Development

Address of proposed development	Lot	<input type="text" value="8"/>	DP (if applicable)	<input type="text"/>
	No.	<input type="text" value="45"/>	Street	<input type="text" value="THE ESPLANADE"/>
	Suburb	<input type="text" value="FRENCHS FOREST"/>		

PART 1 Exemption for properties that drain naturally away from the street

Tick one only	Does the site fall naturally away from the street?
	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	If yes, stormwater drainage must be in accordance with Council's Policy No. PDS-POL 136 'Stormwater Drainage from Low Level Properties'.
	If no, proceed to the next part.

PART 2 Is the site area less than 450m²

Tick one only	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	If yes, OSD is not required.
	If no, proceed to next part.

PART 3 Exemption for Direct Discharge to Ocean

Tick one only	Does the site of the development drain directly to the ocean without the need to pass through a drainage control structure such as a pipe, bridge, culvert, kerb and gutter or natural drainage system?
	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	If yes, OSD is not required.
	If no, proceed to the next part.

PART 4 Exemption for Flood Affected Areas

Tick one only	Is the site of the development located within an established Flood Prone Land as referred to in the Warringah Local Environmental Plan? Refer to section 2.6 of Council's OSD Technical Specification.
	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	If yes, OSD is not required.
	If no, proceed to the next part.

PART 5 Determination of OSD Requirements

3.1 Calculations	(a) Site area <u>699</u> m ² x 0.40 = <u>280</u> m ²
	(b) Proposed and remaining impervious area <u>280</u> m ²
Please view below examples	OSD will not be required when (a) is greater than (b)
	Is OSD required for this development (tick one only) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	If yes, then a design in accordance with the Streamlined Method in Council's OSD Technical Specification is to be provided with the Development Application (refer to Clause 3.1.1)
	If no, OSD is not required.
3.2 Example	If the proposed combined impervious area is greater than 40% of the site area, then OSD is required.
	Example 1: Site Area = 600m ² Total proposed & remaining impervious area = 290m ² 600 x 0.4 = 240m ² (290 > 240) OSD required
	Example 2: Site Area = 800m ² Total proposed & remaining impervious area = 290m ² 800 x 0.4 = 320m ² (290 < 320) OSD is not required

DEFINITIONS

Designed to help you fill out this application	Site area: This refers to the area of the land bounded by its existing or proposed boundaries.
	Impervious areas: This refers to driveways, pathways, paved areas, hardstand areas, roofed areas, garages and outbuildings that are proposed and to be retained.
	Where an existing structure is to be demolished to make way for a new dwelling, only the proposed impervious areas and remaining impervious areas are to be used in the calculations. No credit is given for existing impervious areas that are not retained.

NOTES

Please read before filling out this form	1. Other works, ancillary buildings, commercial, industrial, subdivisions and multiple occupancy developments are to comply with Council's OSD Technical Specification.
	2. A reduction in the OSD volume required may be permitted. Refer to Council's "OSD Rainwater Re-use Policy for Single Residential Dwellings". If OSD is required, then a design for OSD in accordance with Council's "OSD Technical Specifications" is to be provided with the development application.