



SITE STORMWATER MANAGEMENT LAYOUT

SCALE 1:200/A3

STORMWATER LAYOUT NOTES

- 1) PITS DEEPER THAN 600mm TO BE 600 X 900 W, ELSE 375 SQ U.N.O.
- 2) ALL PIPES TO HAVE 1% MIN. GRADE U.N.O.
- 3) ALL DOWNPIPES TO BE 100 X 50 BOX or 90 Ø.
- 4) PIPES TO BE U.P.V.C. OR STORMWATER PIPE TO A.S.1254.
- 5) PITS TO BE STANDARD PRECAST CONCRETE PITS OR BRICK RENDERED WITH CONCRETE HEAVY DUTY GRATES SIZED AS PITS PER PLAN.
- 6) NO SEWER VENTS, GULLY PITS OR SIMILAR TO BE LOCATED BELOW THE MAXIMUM WATER SURFACE LEVEL IN DETENTION BASINS.
- 7) PERSONS UTILISING THIS PLAN FOR ANY PURPOSES SHALL VERIFY THE DATUM & RESPECTIVE LEVELS PRIOR TO

- COMMENCING ANY WORKS & NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- 8) DRIVEWAY LEVELS PROVIDED FOR DRAINAGE DESIGN PURPOSES ONLY. LEVELS MAY BE ADJUSTED TO SUIT FINAL HOUSE CUT/FILL CONDITIONS BUT NEED TO MAINTAIN INTENT OF DRAINAGE SYSTEM. ENGINEER TO BE CONSULTED PRIOR TO CONSTRUCTION TO ENSURE INTENT MAINTAINED.
 - 9) END OF EXISTING DRAINAGE LINE TO BE EXPOSED & LEVELS CONFIRMED BY BUILDER PRIOR TO COMMENCEMENT OF WORKS.
 - 10) BUILDERS TO ENSURE SERVICES CONNECTIONS TO HOUSE DO NOT CONFLICT WITH DRAINAGE DESIGN REQUIREMENTS.
 - 11) ALL WORKS TO BE CONSTRUCTED TO GOOD BUILDING PRACTICE & MATERIALS TO MEET ACCEPTED SPECIFICATIONS.

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

LEGEND

P1	PIT LABEL	G.F.L.	GARAGE FLOOR LEVEL
	SUMP PIT - PIT SIZE REFERS TO GRATE DIMENSIONS	• 0.00	EXISTING REDUCED LEVEL
	300x300 FLOOR GULLY	• R.L. 157.00	PROPOSED REDUCED LEVEL
	100/150 Ø GARDEN GULLY	■ DP	DOWNPIPE
	DRAINAGE PIPE	■ SP	SPITTER/SPREADER
	AERIAL PIPE	⊙	CLEANING EYE
S.L.	SURFACE LEVEL		SEDIMENT FENCE
I.L.	INVERT LEVEL	— ∞ —	AG LINE
F.F.L.	FINISHED FLOOR LEVEL	⇒	OVERLAND FLOW



RAINWATER TANK
AS SHOWN ON PLAN

PROVIDE A 12,822L RAINWATER TANK
CONNECTED IN ACCORDANCE
WITH THE BASIX REQUIREMENTS.

3322L DEDICATED TO BASIX RE-USE;
5000L RAINWATER AS OSD CREDIT;
4500L DEDICATED TO OSD STORAGE

DETAILS SHOWN ON SW22325-S2.
PROVIDE OVERFLOW TO PIT P1.

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

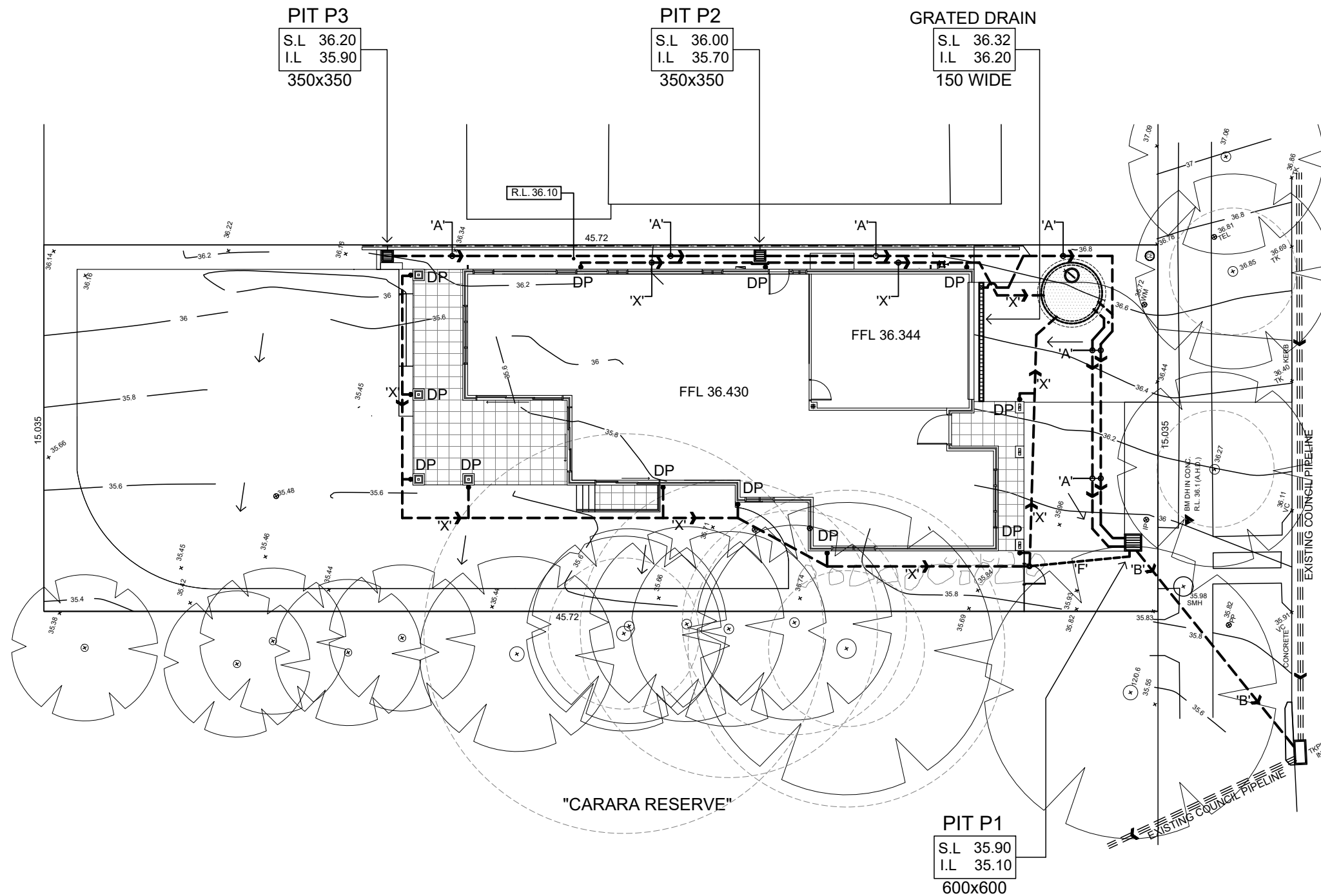
ROOF GUTTERS I.L. 38.93
TOP OF TANK R.L. 36.65
HEAD PRESSURE - 2280mm

alwdesign
CIVIL ENGINEERING CONSULTANTS

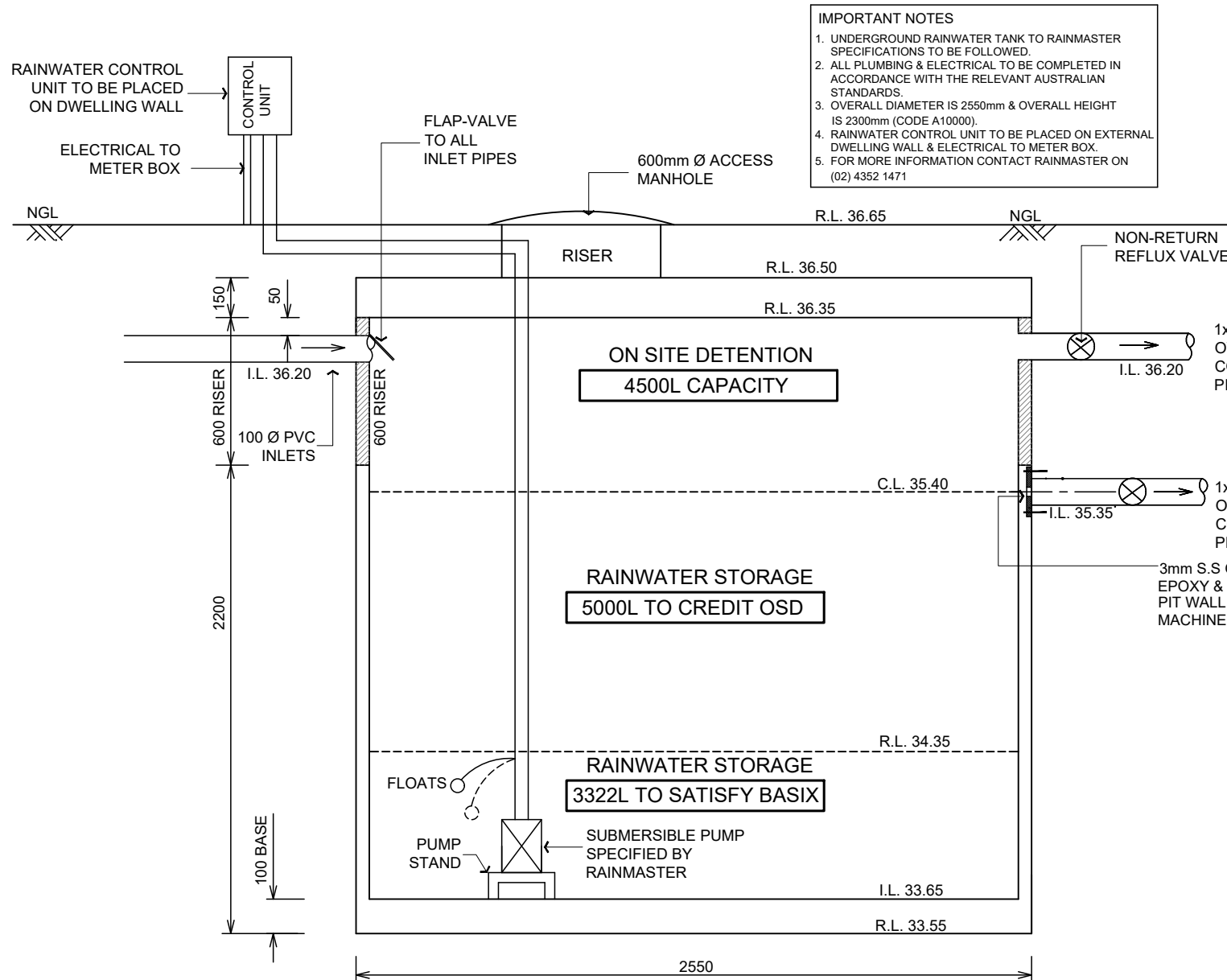
P: 02 9802 5509 E: admin@alwdesign.com.au
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JOB NUMBER:
SW22325
DRAWING NUMBER:
SW22325 - S1

PROJECT:	PROPOSED RESIDENTIAL DWELLING AT LOT 6, # 17 FALCONER STREET, WEST RYDE NSW		
DRAWING:	SITE STORMWATER MANAGEMENT LAYOUT		
DESIGNED	DRAWN	CHECKED:	ANDREW L WAHBE - BE (CIVIL) MIEAUST PENG
A.W	N.W	DRAWINGS NOT TO BE USED FOR CONSTRUCTION UNLESS SIGNED BY DESIGNING ENGINEER	
C	ISSUED FOR DEVELOPMENT APPLICATION		09/11/22
ISSUE	REVISION DESCRIPTION		APPR. DATE



CONNECT TO BACK OF EXISTING
KERB INLET PIT AT I.L. 34.90.
WORKS TO BE IN ACCORDANCE
WITH COUNCILS SPECIFICATIONS



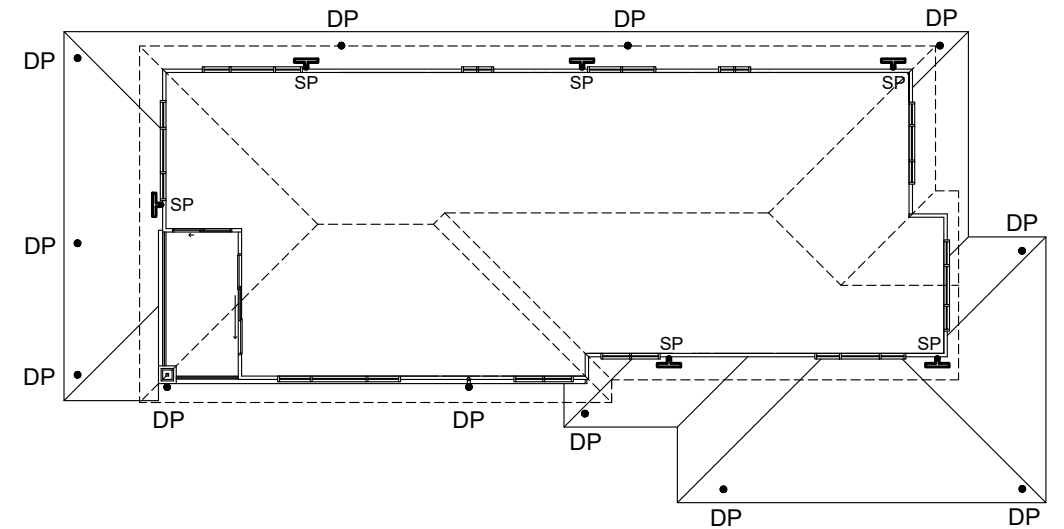
RAINMASTER 12,822 LITRE WATER RECYCLING SYSTEM
(REINFORCED CONCRETE)

- IMPORTANT NOTES**
1. UNDERGROUND RAINWATER TANK TO RAINMASTER SPECIFICATIONS TO BE FOLLOWED.
 2. ALL PLUMBING & ELECTRICAL TO BE COMPLETED IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS.
 3. OVERALL DIAMETER IS 2550mm & OVERALL HEIGHT IS 2300mm (CODE A10000).
 4. RAINWATER CONTROL UNIT TO BE PLACED ON EXTERNAL DWELLING WALL & ELECTRICAL TO METER BOX.
 5. FOR MORE INFORMATION CONTACT RAINMASTER ON (02) 4352 1471

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ROOF GUTTERS I.L. 38.93
TOP OF TANK R.L. 36.65
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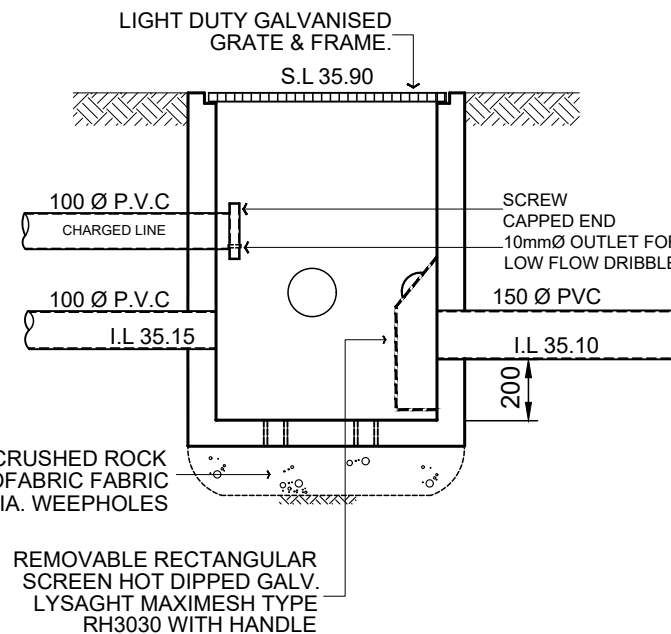
GUTTER SELECTED: LYSAGHT QUAD 115 LO FRONT NSW UNSLOTTED;
AREA = 6165 SQ.MM: LYSAGHT SHEERLINE

ALL DOWNPIPES TO BE 90 Ø MIN

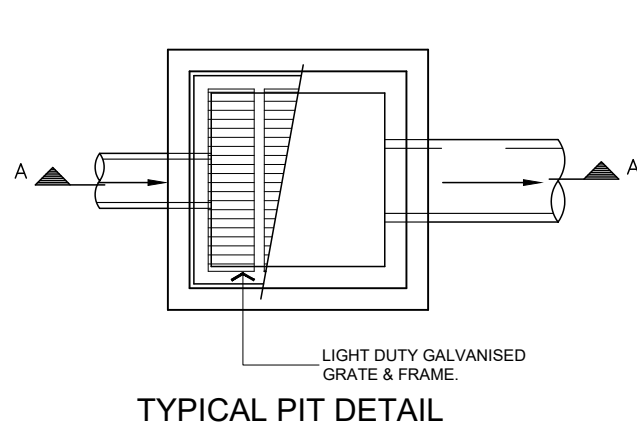
ROOF & FIRST FLOOR LAYOUT

SCALE 1:200/A3

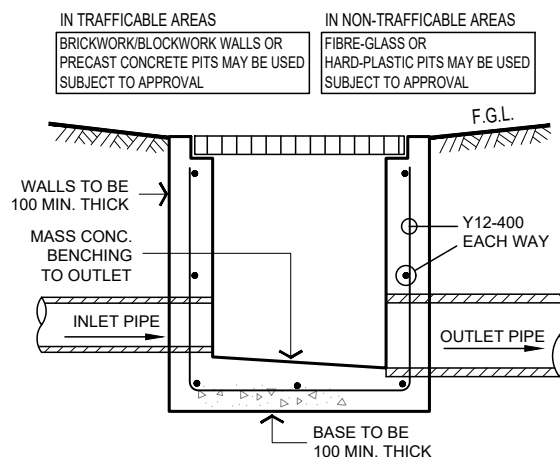
ON-SITE DETENTION CALCULATION SHEET					
DEVELOPMENT TYPE:	DWELLING				
ADDRESS:	17 FALCONER	Zone 2			
Catchment Zone		(Zone1)	(Zone 2)	(Eastwood)	
Site Area				687	m ² (A)
65% Site Area				446.55	m ²
Total Proposed Impervious Area (roofs, driveways, hardstand etc)				313	m ² (B)
% of site impervious				46%	
Impervious area draining to the Storage Facility				271	m ² (C)
Pervious area draining to the Storage Facility				0	m ² (D)
Total Area draining to the Storage Facility (impervious and pervious)				271	m ² (E)
Pervious area bypassing the Storage Facility				374	m ² (F)
Impervious area bypassing to the Storage Facility				42	m ² (G)
				Total Area	687 Check
				(C) + (G)	313
				(C)	271
					1.15 (L)
Permitted Site Discharge (PSD) rate per m ²					
Catchment in Zones 1 & 2					
If (G)=0 then PSD =0.0265l/sec/m ²					
If (G)≠0 then PSD =0.0265x (L) ^{-1.37} l/sec/m ²					
Eastwood Catchment					
If (G)=0 then PSD =0.0210l/sec/m ²					
If (G)≠0 then PSD =0.0210x (L) ^{-1.37} l/sec/m ²					
				0.022	0.0218 (J)
PERMITTED SITE DISCHARGE				(E) x (J)	5.9505
					5.90 l/s
Storage Volume per m ²					
(K) = 0.0275m ³ /m ² for zone 1 or					
(K) = 0.0255m ³ /m ² for zone 2 or					
(K) = 0.0300 m ³ /m ² for Eastwood Catchment					
					0.0275 (K)
SITE STORAGE REQUIREMENT				((E) + (G)) x (K) x (1.2) ^{1/3}	10.33 m ³
				OSD BASIN	8.61 m ³
NOTE ¹ If OSD is provided in a lands caped surface basin the volume must be increased by 20%					
OUTLET CONTROL- using a Sharp Edged Orifice Plate					
Height Difference between top water level and Centre of Orifice (m)					0.80 (H)
ORIFICE DIAMETER (mm)					56 mm



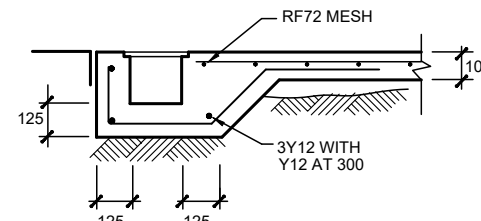
PIT P1 - 600x600



TYPICAL PIT DETAIL



TYPICAL SECTION A



GRADED DRAIN