

(X) DRAINAGE EASEMENT 1.83 WIDE (J299158)

EX JUNCTION
S.L 67.03
I.L 66.09
LEVELS TBC

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.

LEGEND

P1

SUMP PIT

300x300 FLOOR GULLY

100/150 Ø GARDEN GULLY

DRAINAGE PIPE

AERIAL PIPE

S.L.

SURFACE LEVEL

I.L.

INVERT LEVEL

F.F.L.

FINISHED FLOOR LEVEL

G.F.L.

GARAGE FLOOR LEVEL

• 0.00

EXISTING REDUCED LEVEL

• R.L 157.00

PROPOSED REDUCED LEVEL

DP

DOWNPIPE

SP

SPITTER/SPREADER

CLEANING EYE

+++++

SEDIMENT FENCE

AG LINE

OVERLAND FLOW

DRAINAGE REQUIREMENT TO WC POLICY

SITE AREA

= 786 m2

MINIMUM STORAGE

= 200 m3/ha

MAXIMUM DISCHARGE

= 400 l/s/ha

REQUIRED STORAGE

= 15.7 m3

PERMITTED DISCHARGE

= 31.4 l/s

RAINWATER TANK

= 3.00 m3

ON SITE DETENTION STORAGE

= 12.7 m3

PROVIDED STORAGE

= 15.7 m3

UNCONTROLLED DISCHARGE

= 22.0 l/s

CONTROLLED DISCHARGE

= 9.00 l/s

RAINWATER TANKS
AS SHOWN ON PLAN

PROVIDE 3x5247L RAINWATER TANKS
CONNECTED IN ACCORDANCE
WITH THE BASIX REQUIREMENTS.

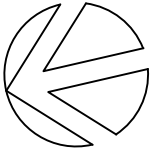
3000L DEDICATED TO BASIX RE-USE;
12,741 DEDICATED TO OSD STORAGE

DETAILS SHOWN ON SW19151 - 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. 170.45
TANK INLET I.L. 169.60
HEAD PRESSURE - 850mm



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

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CIVIL ENGINEERING CONSULTANTS

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69 DELANGE ROAD, PUTNEY NSW 2112

JOB NUMBER:
SW19151

DRAWING NUMBER:
SW19151 - S1

PROJECT: PROPOSED RESIDENTIAL DWELLING AT
LOT 10, # 7 WENTWORTH PLACE, BELROSE NSW

DRAWING: SITE STORMWATER MANAGEMENT LAYOUT

DESIGNED: A.W

DRAWN: N.W

CHECKED: ANDREW L WAHBE - BE (CIVIL) MIEAUST PENG

B

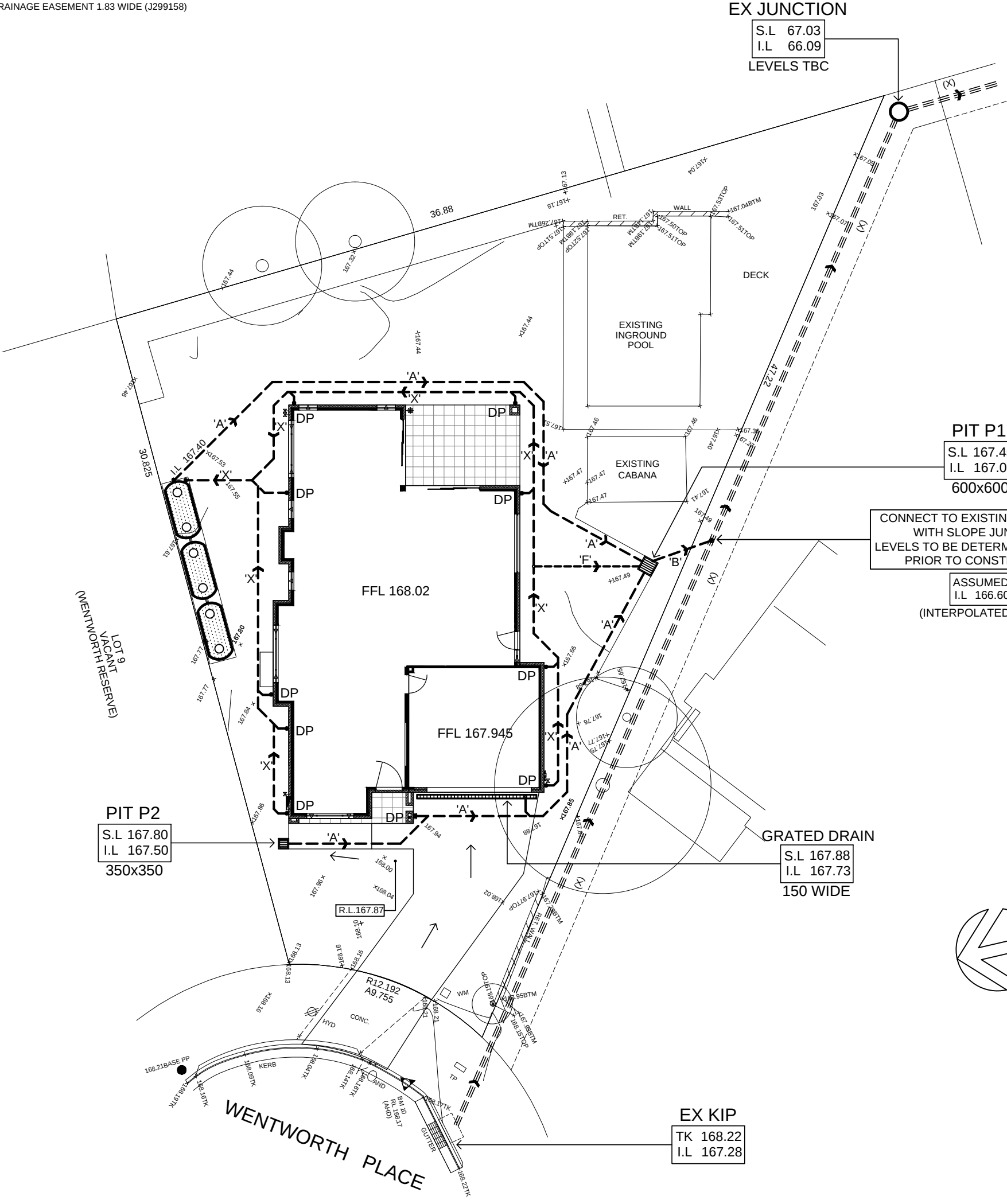
ISSUED FOR DA - LEVELS ADJUSTED

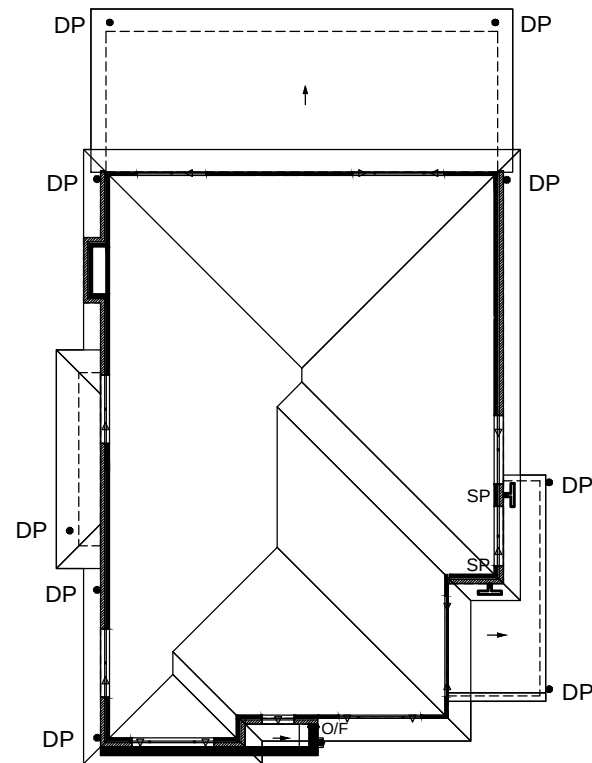
17/12/19

ISSUE

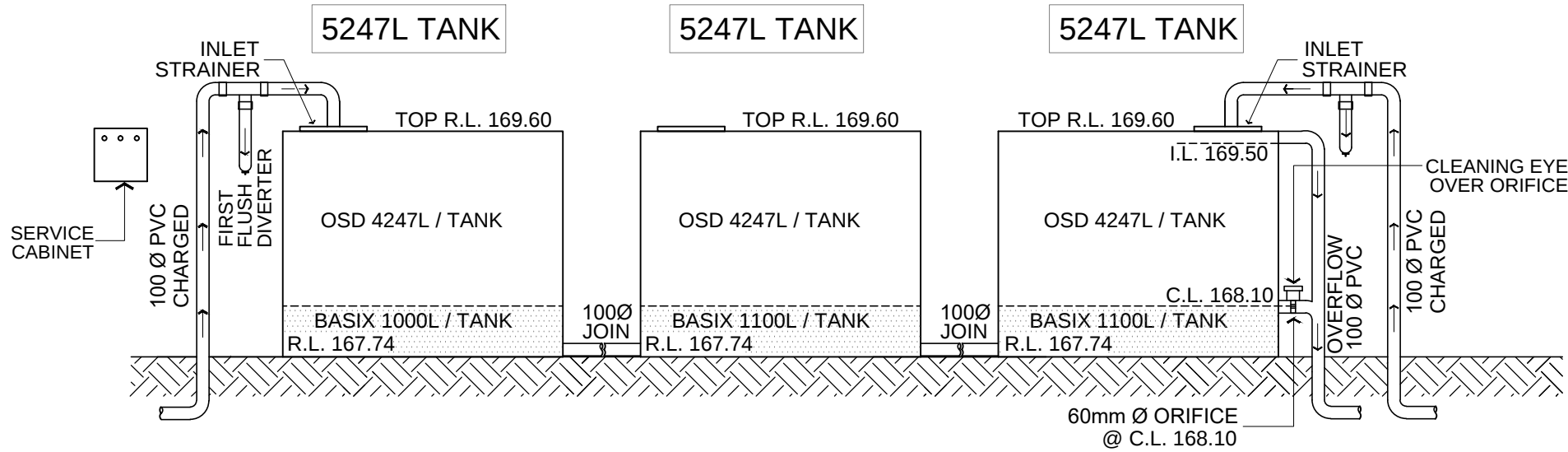
REVISION DESCRIPTION

APPR. DATE





ROOF & FIRST FLOOR LAYOUT
SCALE 1:200/A3

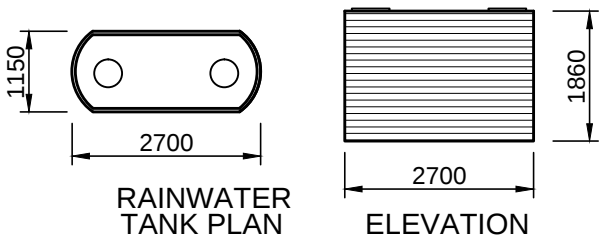


OSD / RAINWATER TANK CONFIGURATION

ENSURE ALL CONNECTIONS WITHIN CHARGED SYSTEM ARE SOLVENT WELDED

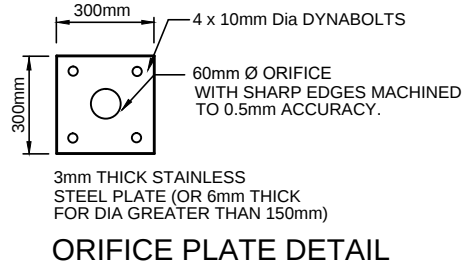
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ROOF GUTTERS I.L. 170.45
TANK INLET I.L. 169.60
HEAD PRESSURE - 850mm

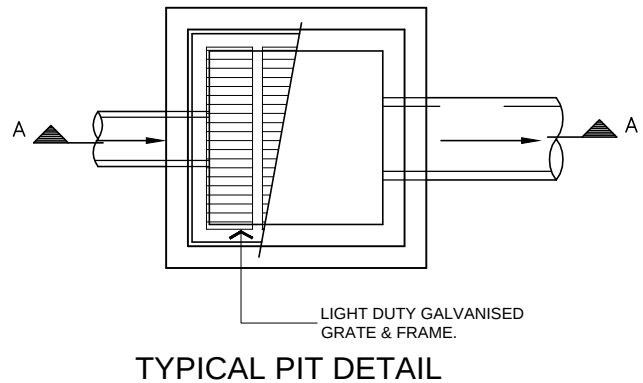


5247L SLIMLINE TANK BY TANKWORKS

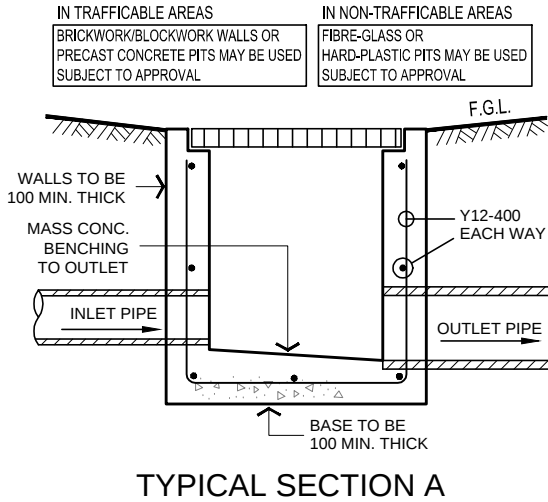
ORIFICE CALCULATION			
Calculate orifice diameter in 100 year event			
Diameter, $d = (0.48 \times Q / h)^{0.5}$	$Q =$ P.S.D. (m3/sec)	$Q =$ 0.009 m3/sec	
$d = 0.0604$ m	$h =$ Maximum height above orifice (m) (not HED)	$h = 1.4$ m	
60 mm			
Using orifice equation to check the pipe outflow:			
$Q = CA(2gh)^{0.5}$	$A =$ Area of orifice (mm2)	$A = 0.0029$ mm2	
$Q = 0.009$ m3/sec	$h =$ Maximum height above orifice (m) (not HED)	$h = 1.4$ m	
9.02 L/sec			



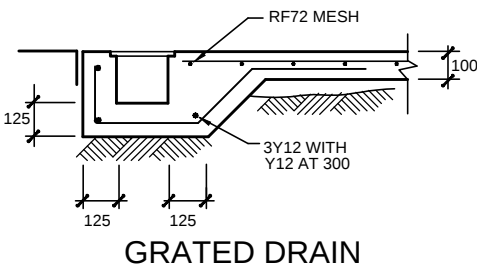
ORIFICE PLATE DETAIL



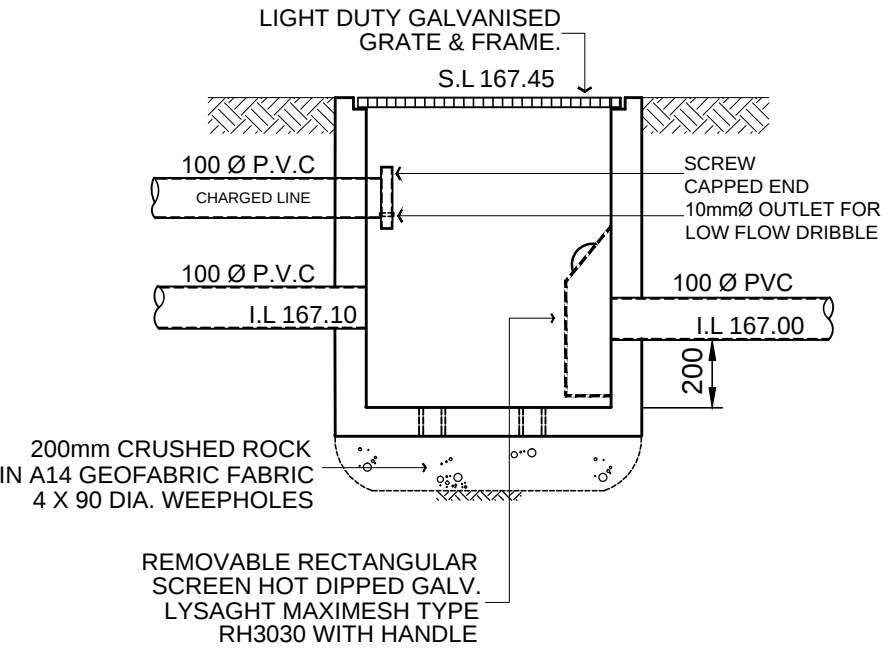
TYPICAL PIT DETAIL



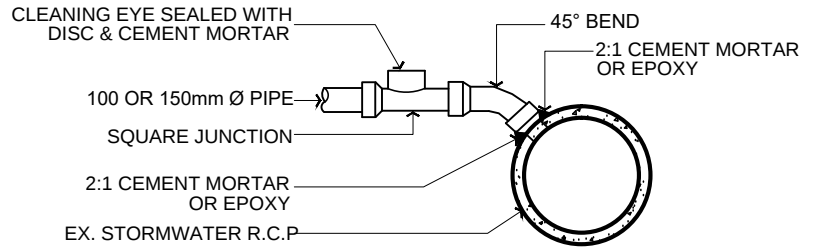
TYPICAL SECTION A



GRATED DRAIN



PIT P1 - 600x600



CONNECTION TO COUNCIL PIPE

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DRAWING NUMBER: SW19151 - S2	DRAWING: ROOF LAYOUT & GENERAL DETAILS
DESIGNED: A.W.	DRAWN: N.W.
CHECKED: A.W.	APPROVED: ANDREW L WAHBE - BE (CIVIL) MIEAUST PENG
ISSUE: B	REVISION DESCRIPTION: ISSUED FOR DA - LEVELS ADJUSTED
	APPR. DATE: 17/12/19