

PROPOSED SINGLE RESIDENTIAL DWELLING AT 28 SOUTH STREET, STRATHFIELD NSW

STRATHFIELD COUNCIL
RECEIVED
DA2022.06
DATE 24 January 2022

CSEG REFERENCE # CSW2021.79

DETAILED STORMWATER DESIGN.

REVISION 01

DRAWING # CSW100

TABLE OF SCHEDULES

SHEET #	DRAWING NAME	REV	DATE
100	COVER PAGE	01	15.12.21
101	GENERAL NOTES	01	15.12.21
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300	DETAILED SECTIONS	01	15.12.21
301	DETAILED SECTIONS	01	15.12.21

SPECIFICATIONS

THESE PLANS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL DESIGN
PLANS AND STRUCTURAL DESIGN PLANS

Info CENTRE X

Lot Details
 Total Lot Area (approx): 1240 sqm
 Address: 28 SOUTH STREET STRATHFIELD NSW 2135
 Title: 73/DP8778
 Property ID: 1557572
 Lot Area (approx): 1240 sqm

Applicable Planning Controls
Strathfield LEP 2012 (Map Tile 005)
 Land Zoning: R2 Low Density Residential
 Height of Building: 9.5 m
 Minimum Lot Size: 560 m²
 Acid Sulphate Soils: Class 5

*For further advice on this location, please contact us.
 Phone: 02 8667 8668 / Email: info@mecone.com.au*

LEGEND	
	STORMWATER LINE DISCHARGE
	STORMWATER LINE SURFACE RUNOFF
	STORMWATER LINE ROOF RUNOFF
	STORMWATER RISING MAIN
	GRADED SURFACE INLET PIT
	JUNCTION PIT
	GRADED TRENCH DRAIN
	FIRST FLUSH
	DOWNPIPE
	RAINWATER OUTLET
	CLEAR OUT POINT
	RAINHEAD
	DOWNPIPE DROP
	DOWNPIPE SPREADER
	WARNING LIGHT
	SPOT LEVELS

SITE LOCALITY

ARCHITECT



1300 854 243
 +61 2 9188 8486
 admin@chd.net.au
 chddesign@com.au
 51 princes hwy, SYLVANIA nsw 2224

CLIENT

MR MEZIN MEHEJAR

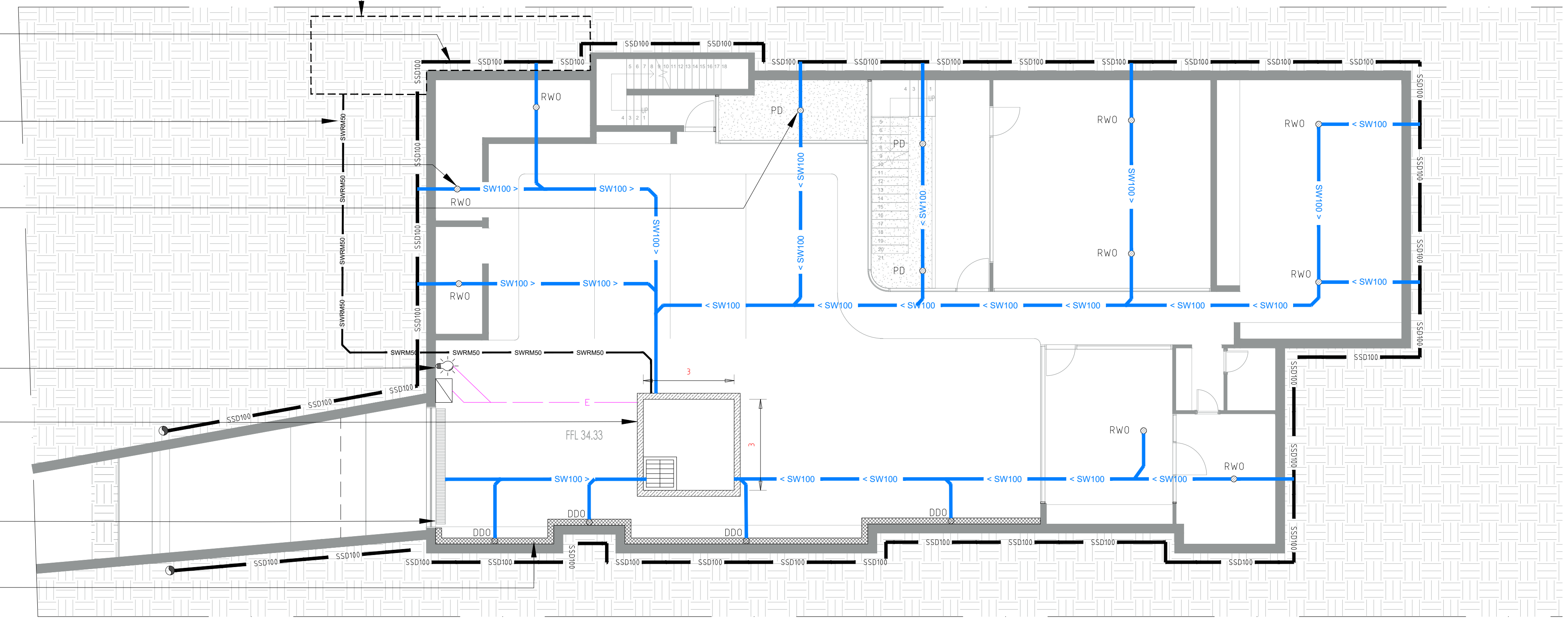
PREPARED BY

CSEG
 CIVIL STORMWATER
 ENGINEERING GROUP
 A - 51 PRINCES HIGHWAY, SYLVANIA, NSW, 2224
 P - (02) 8520 4022
 E - INFO@CSEGGROUP.COM.AU
 W - WWW.CSEGGROUP.COM.AU

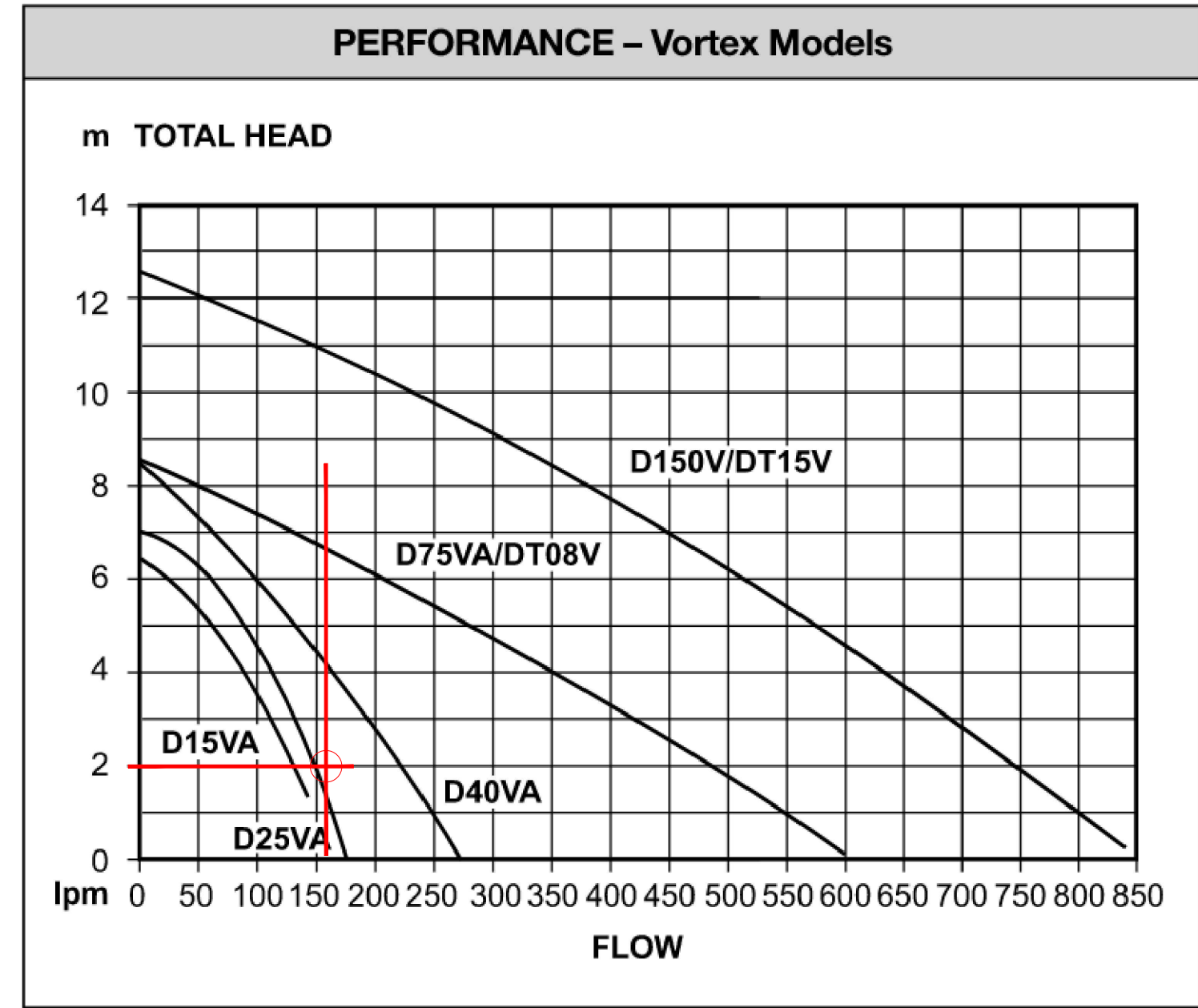
"TOGETHER, WE ARE IMPLEMENTING GOOD IDEAS TO IMPROVE PEOPLE'S LIVES".

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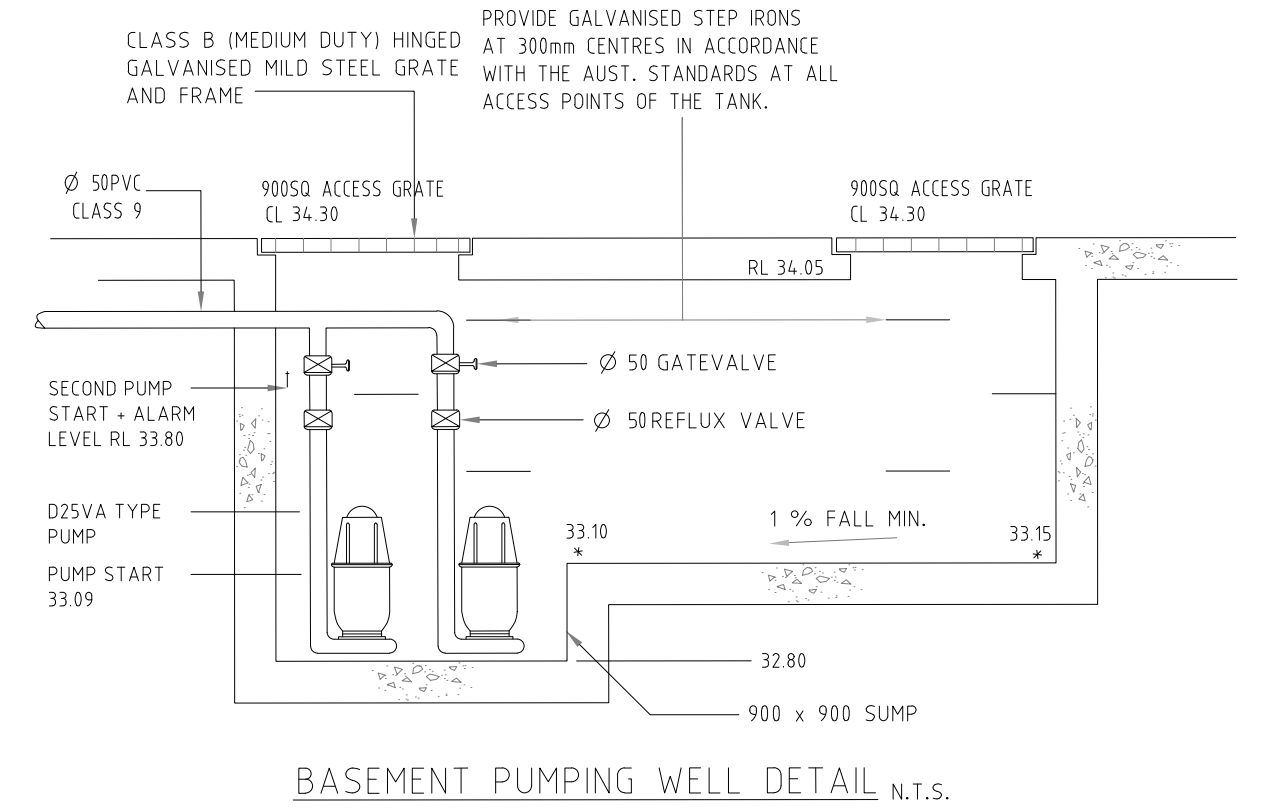
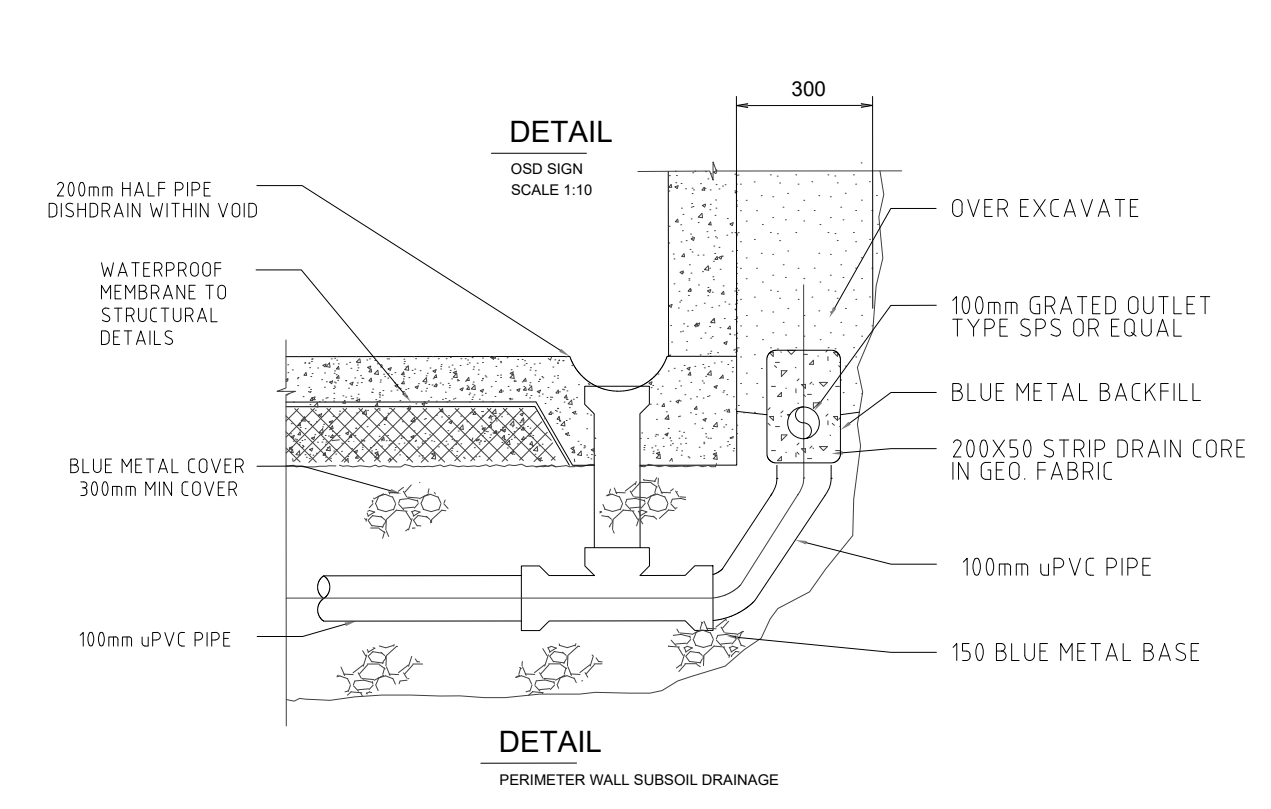
- DASHED LINE DENOTES LOCATION OF BELOW GROUND OSD TANK
- 100mm SUB-SOIL DRAINAGE TO BE INSTALLED AROUND ENTIRE BASEMENT PERIMETER TO COLLECT SEEPAGE ONLY SUB-SOIL TO DISCHARGE INTO PROPOSED PUMP OUT PIT
- DUAL 50mm STORMWATER RAISING MAINS TO BE CONNECTED TO PROPOSED BELOW GROUND OSD TANK
- RAINWATER OUTLETS TO BE INSTALLED IN ALL ENCLOSED ROOMS. CONNECT RWO TO PUMP OUT PIT
- PLANTER DRAINS TO BE INSTALLED IN ALL PLANTER BOXES (TYP)
- PUMP OUT PIT TO BE EQUIPPED WITH PUMP FAILURE WARNING LIGHT. SYSTEM TO BE INSTALLED BY QUALIFIED ELECTRICIAN
- 8.1m³ PUMP OUT PIT TO BE INSTALLED TO COLLECT WATER SEEPAGE. PIT TO DISCHARGE INTO OSD TANK. PUMP TO BE EQUIPPED WITH DUAL PUMPS D25VA TYPE PUMPS OR EQUIVALENT
 LENGTH = 3.0m
 WIDTH = 3.0m
 DEPTH = 0.9m
- 200x100 COMMERCIAL GRADE GRATED TRENCH DRAIN TO COLLECT DRIVEWAY WATER RUNOFF ONLY. CONNECT GTD TO PUMP OUT PIT
- 100mm WIDE DISH DRAIN TO BE FORMED ON CONCRETE SLAB AS PER PLANS



STORMWATER DESIGN - BASEMENT PLAN
 SCALE 1:100



PUMP CHART



PROVIDE AT ACCESS CONFINED SPACE WARNING SIGN AS PER COUNCIL REQUIREMENT. PROVIDE CHLD PROOF LOCKS ON ALL TANK LIDS. INSTALL TANK TO STRUCTURAL ENGINEERING DETAILS.

PUMP BLACKOUT VOLUME

Q = C/A/3600
 C = 1.0
 I = 39.1MM/HR (1%ARI 2HR)
 A = 42m²

Q = (1.0x0.0391x42)/3600
 = 0.45 l/s
 = 27.37 l/min

VOLUME ACCUMULATED

V = CxQxD
 C = 1.0
 Q = 0.45 L/S
 D = 5HOUR

V = (1.0x0.45x5x3600)/1000
 = 8.10m³

PUMP DISCHARGE

Q = C/A/3600
 C = 1.0
 I = 233MM/HR (1%ARI 5MIN)
 A = 42m²

Q = (1.0x0.233x42)/3600
 = 2.71 l/s
 = 163.1 l/min

CONTROL VOLUME TO PREVENT PUMP FROM STARTING TOO OFTEN (<10/HR)

CV = 900xQ p/n
 CV = (900x2.71)/(163.1)
 = 0.24m³

WARNING:
 EXISTING SERVICES HAVE BEEN PLOTTED FROM RECORDS SUPPLIED BY THE PUBLIC UTILITY AUTHORITIES. LOCATIONS HAVE BEEN INTERPRETED FROM THESE RECORDS AND ARE APPROXIMATE ONLY. EXTREME CAUTION SHOULD BE TAKEN WHEN EXCAVATING

www.dialbeforeyoudig.com.au

REV	DATE	DRN	DETAILS	APR'D
01	15.12.21	TJD	FOR APPROVAL	SCH

CURRENT REVISION CONTRACTOR:

DESIGNED: SAMIR C HAKIM
 B.E., M.E. (civil/construction), ADV. DIPLOMA (civil design), M.I.E. Aust., Peng MIE Aust # 3491570

DRAWN: TJD

REVIEWED: SAMIR C HAKIM
 SIGNATURE: *SAMIR C HAKIM*

CONTRACTOR:

CLIENT: MR MEZIN MEHEJAR

CLIENT: MR MEZIN MEHEJAR

SCALE: 1:100 (A3 1:200)

PROJECT No: CSW202179

APPLICATION: DEVELOPMENT APPLICATION (DA)

SUPERSEDES:

DRAWING NUMBER: 200

03 SHEET



BELOW GROUND RAINWATER TANK AS PER BASIX
 RWT TO BE EQUIPPED WITH FIRST FLUSH SYSTEM AND
 SUBMERSIBLE PUMP FOR IRRIGATION PURPOSES

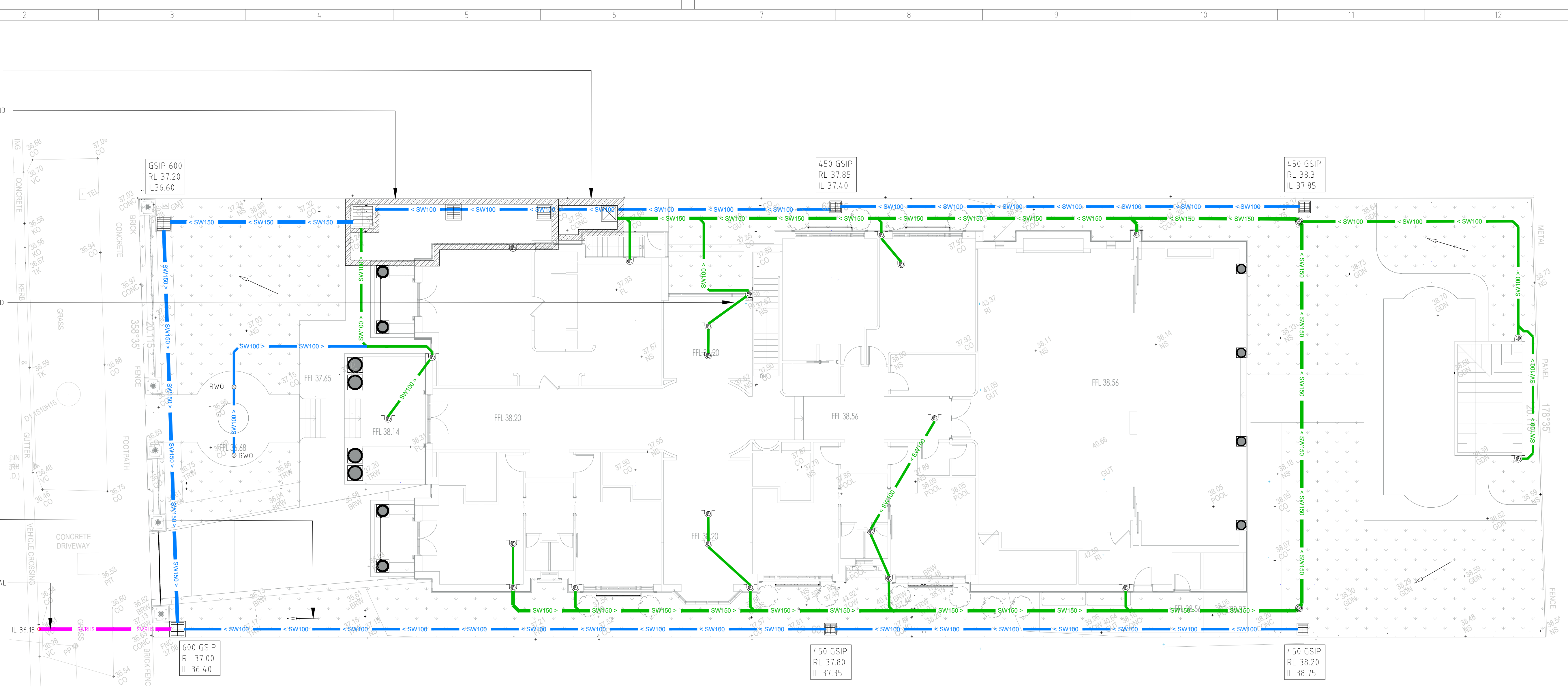
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REQUIRED OSD VOLUME = 14.37m³
 PROVIDED OSD VOLUME = 15.0m³
 RAINWATER STORAGE = AS PER BASIX
 PROVIDED AREA = 19.4m²
 MAX HEIGHT = 770mm
 TOP WATER LINE = 800mm
 ORIFICE CENTERLINE = 36.65m
 ORIFICE SIZE = 107mm

SHOWN DOWNPIPES TO BE CONCEALED WITHIN CEILING AND
 WALL CAVITY
 DOWNPIPE SIZES CAN BE ALTERED TO SUIT CAVITY AS
 LONG AS CAPACITY OF DP IS MAINTAINED

ARROW DENOTES SLOPE DIRECTION (TYP)

150x100 RHS TO BE INSTALLED BELOW FOOTPATH AS FINAL
 POINT OF DISCHARGE. CLEAN CONNECTION TO BE MADE BY
 PLUMBER TO GUTTER INVERT AT IL 36.15



STORMWATER DESIGN - SITE PLAN
 SCALE 1:100

TYPE	GROUP	STORAGE	PERMITTED DISCHARGE (L/S)	ARI	TDS	SITE AREA SQM2	SSR	PSD
Residential (except single dwellings) based on 70% Impervious	1	6	13	2 YR	1000	958	5.748	12.45
		9	17	10YR	1000	958	8.622	16.29
		15	23	100YR	1000	958	14.37	22.03

ORIFICE CALCULATION:

FORMULA: $d = [0.464 \times Q / (h^{0.5})]^{0.5}$ WITH;
 $Q = PSD = 22.03 \text{ L/s}$
 $h = 0.8 \text{ m}$
 $d = 107 \text{ mm}$

!ATTENTION!
 FOR DETAILED SECTIONS
 REFER TO PG 300

!ATTENTION!
 IT'S THE BUILDERS
 RESPONSIBILITY TO LOCATE
 ALL SERVICES BEFORE
 EXCAVATION

!ATTENTION!
 REFER TO PG 202 FOR ROOF
 PLAN DETAILS

!ATTENTION!
 PLANS TO BE READ ON
 CONJUNCTION WITH
 ARCHITECTURAL PLANS

!ATTENTION!
 PLANS ARE COLOR CODED.
 PRINT IN COLOR

DESIGN NOTES:

THE SITE IS GOVERNED BY STRATHFIELD COUNCIL DEVELOPMENT CONTROL PLAN

SITE AREA PER LOT = 1284.3m² BY CALCULATION

TYPE OF DEVELOPMENT = SINGLE RESIDENTIAL DEVELOPMENT

IN ACCORDANCE WITH COUNCIL STORMWATER MANAGEMENT CODE, OSD IS REQUIRED FOR SINGLE RESIDENTIAL HOUSES WITH IMPERVIOUS AREA EXCEEDING 65% OF TOTAL SITE AREA

TOTAL SITE IMPERVIOUS AREA = 958.10m² (74.6%)

Δ OSD REQUIRED Δ

ALL DOWNPIPES AND GUTTERING HAVE BEEN DESIGNED TO ACCOMMODATE FOR THE 1 IN 100 YEAR EVENT

LOCATION OF ALL STORMWATER PIPES, PITS & TRENCHES TO BE CO-ORDINATED WITH EXISTING TREES TO BE RETAINED (TYP).

DOWNPIPE LOCATIONS ARE INDICATIVE AND TO BE CONFIRMED DURING CONSTRUCTION

ALL NEW STORMWATER PIPES TO HAVE A MINIMUM OF 300mm TOPSOIL COVER OR 100mm CONCRETE COVER U.N.O.

WARNING:
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 SUPPLIED BY THE PUBLIC UTILITY AUTHORITIES. LOCATIONS HAVE
 BEEN INTERPRETED FROM THESE RECORDS AND ARE
 APPROXIMATE ONLY. EXTREME CAUTION SHOULD BE TAKEN WHEN
 EXCAVATING



REVISION PANEL DETAILS REV DATE DRN 01 15.12.21 TJD FOR APPROVAL		APR'D SAMIR C HAKIM B.E., M.E. (civil/construction), ADV. DIPLOMA (civil design), M.I.E. Aust., Peng MIE Aust # 3491570 This drawing is the property of the CSEG PTY LTD and shall not be copied or modified in part or in whole without authorization.		DESIGN PANEL DESIGNED SCH DRAWN TJD REVIEWED SIGNATURE SAMIR C HAKIM CONTRACTOR:		CLIENT MR MEZIN MEHEJAR 		A1 SCALE: 1:100 (A3 1:200) PROJECT No: CSW202179 SHEET SIZE: DEVELOPMENT APPLICATION (DA) SUPERSEDES: DRAWING NUMBER: 201		01 REVISION 04 SHEET	
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!ATTENTION!

PLANS TO BE READ ON STRATHFIELD COUNCIL RECEIVED IN CONJUNCTION WITH ARCHITECTURAL PLANS DA2022.06

DATE 24 January 2022

PLANS ARE COLOR CODED. PRINT IN COLOR

!ATTENTION!

REFER TO PG 201 FOR DOWNPIPE LOCATION

!ATTENTION!

ALL CONCEALED BOX GUTTERS REQUIRE SUMPS. MULTIPLE SUMPS PER ROOF APPLY

NO.28 LOT 73
DP 8778
1283.6 m² (BY TITLE)
1284.3 m² (BY CALC)

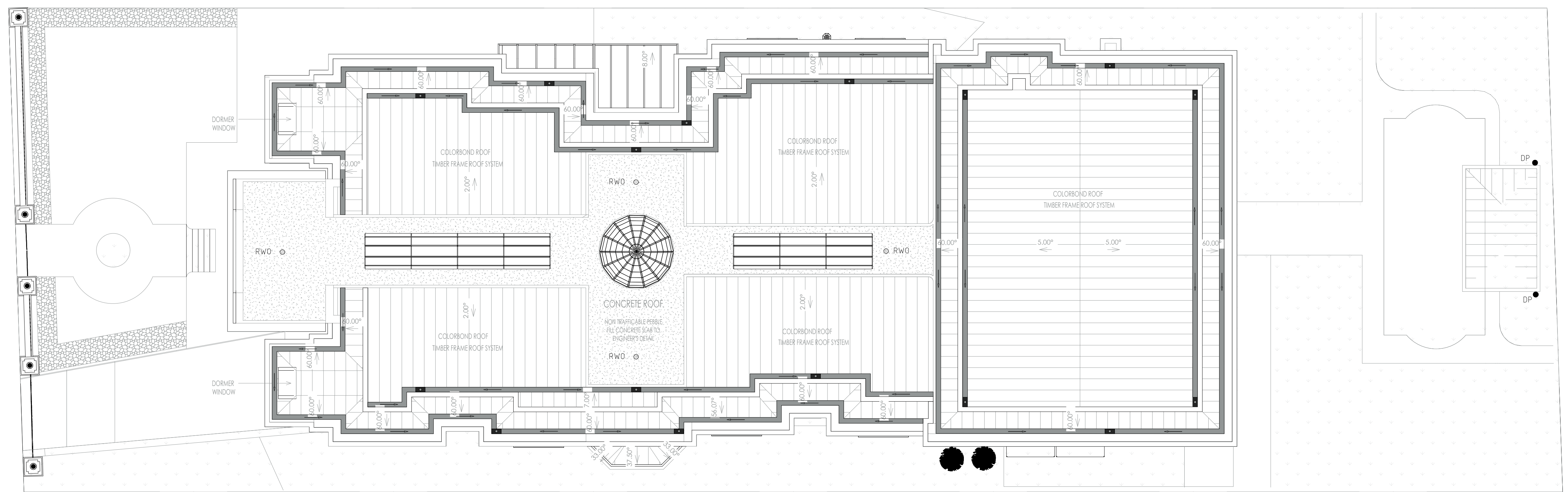
AREA 3	= 120m ²
AREA PER RWO	= 30m ²
PONDING DEPTH	= 30mm
BLOCKAGE FACTOR	= 50%
CIRCULAR RWO	= 195φmm
SQUARE RWO	= 170x170mm
DOWNPIPE	= 70mm

AREA 1 & 6	= 60m ²
BG WIDTH	= 200mm
BG DEPTH	= 170mm
SPITTER (WIDTH)	= 150mm
SPITTER (DEPTH)	= 110mm
SUMP DEPTH	= 175mm
SUMP WIDTH	= 200mm
SUMP LENGTH	= 400mm
CLEARANCE I	= 30mm
CLEARANCE B	= 21mm
DIMENSION C	= 39mm
DOWNPIPE	= 100mm

AREA 2 & 5	= 100m ²
BG WIDTH	= 200mm
BG DEPTH	= 190mm
SPITTER (WIDTH)	= 150mm
SPITTER (DEPTH)	= 115mm
SUMP DEPTH	= 205mm
SUMP WIDTH	= 200mm
SUMP LENGTH	= 400mm
CLEARANCE I	= 40mm
CLEARANCE B	= 30mm
DIMENSION C	= 45mm
DOWNPIPE	= 100mm

AREA 4	= 140m ²
BG WIDTH	= 200mm
BG DEPTH	= 185mm
SPITTER (WIDTH)	= 150mm
SPITTER (DEPTH)	= 120mm
SUMP DEPTH	= 230mm
SUMP WIDTH	= 200mm
SUMP LENGTH	= 400mm
CLEARANCE I	= 35mm
CLEARANCE B	= 20mm
DIMENSION C	= 40mm
DOWNPIPE	= 100mm

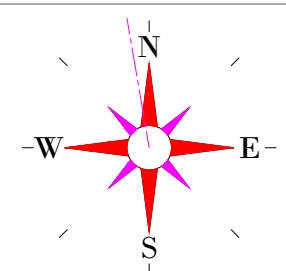
AREA 7	= 60m ²
BG WIDTH	= 200mm
BG DEPTH	= 170mm
SPITTER (WIDTH)	= 150mm
SPITTER (DEPTH)	= 110mm
SUMP DEPTH	= 176mm
SUMP WIDTH	= 200mm
SUMP LENGTH	= 400mm
CLEARANCE I	= 30mm
CLEARANCE B	= 20mm
DIMENSION C	= 40mm
DOWNPIPE	= 100mm



REV	DATE	DRN	DETAILS	APR'D
01	15.12.21	TJD	FOR APPROVAL	SCH

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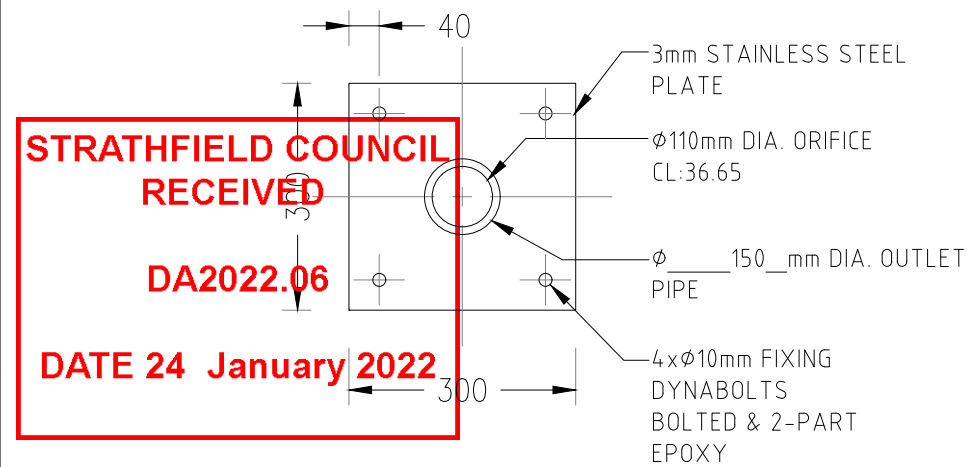
DESIGNED	DESIGN PANEL	CLIENT
SCH		MR MEZIN MEHE JAR
DRAWN		
TJD		
REVIEWED	SIGNATURE	
SAMIR C HAKIM	<i>SAMIR C HAKIM</i>	
CONTRACTOR:		



ROOF PLAN

A1	SCALE: 1:100 (A3 1:200)	01
SHT SIZE	PROJECT No: CSW202179	REVISION
APPLICATION	DEVELOPMENT APPLICATION (DA)	
SUPERSEDES:		
DRAWING NUMBER	202	05
		SHEET



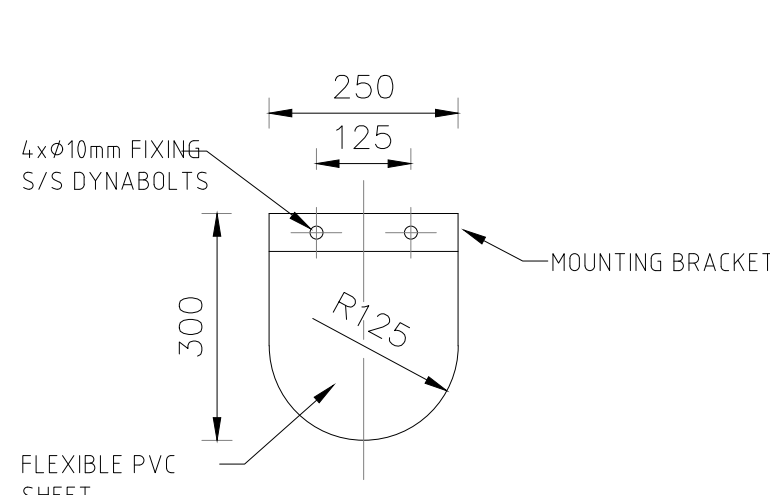


DETAIL 1
ORIFICE PLATE
SCALE 1:20

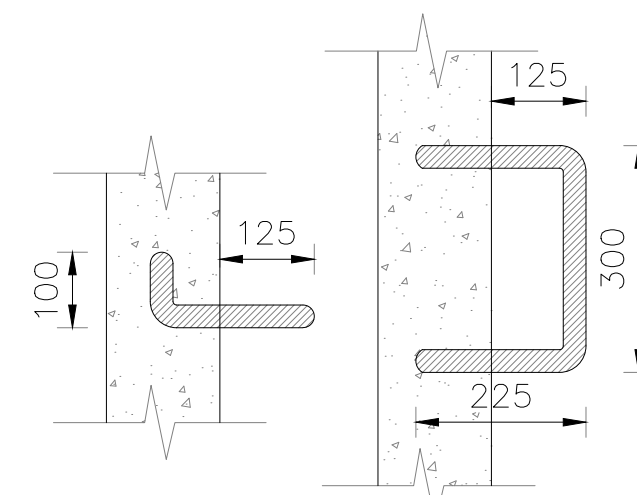


DETAIL 1
RAINWATER SIGN
SCALE 1:10

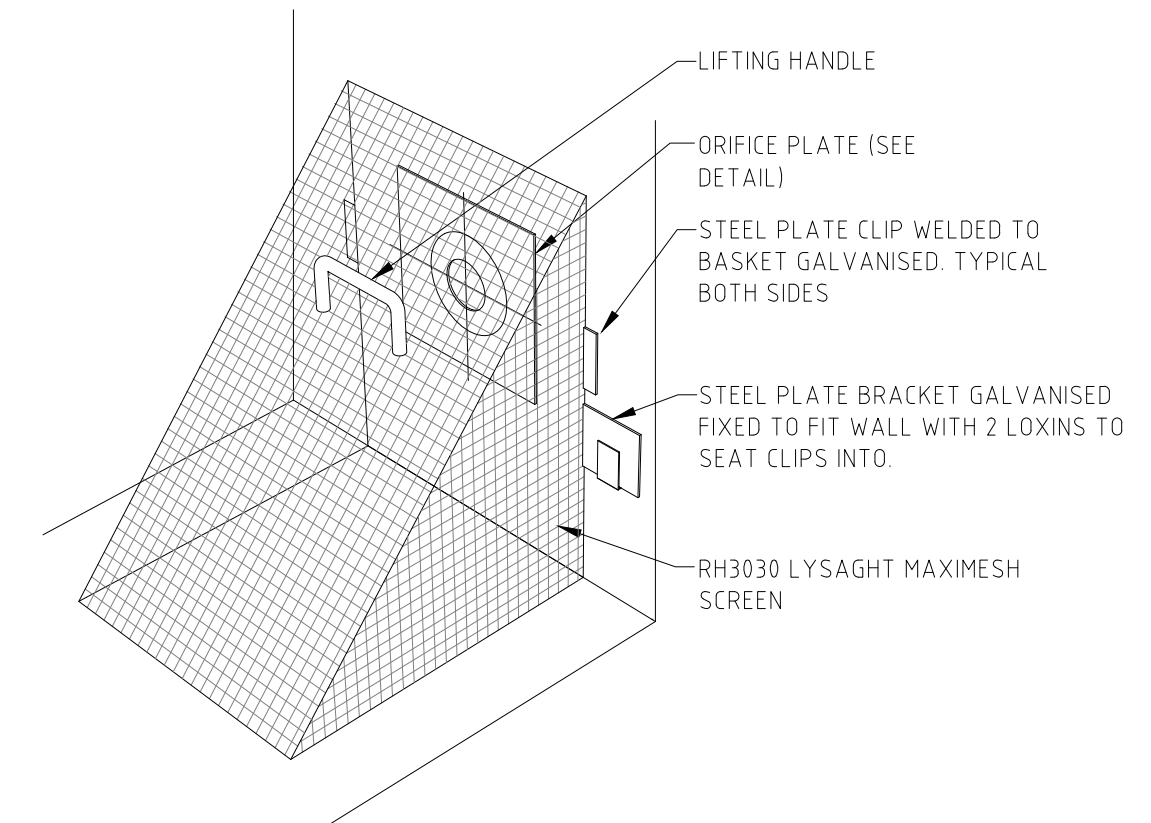
LEGEND:
BACKGROUND IS YELLOW
TEXT IS WHITE ON BLACK
BACKGROUND



DETAIL 1
FLAP VALVE
SCALE 1:10



DETAIL 1
STEP IRON
SCALE 1:10



DETAIL 1
DEBRIS SCREEN
NOT TO SCALE

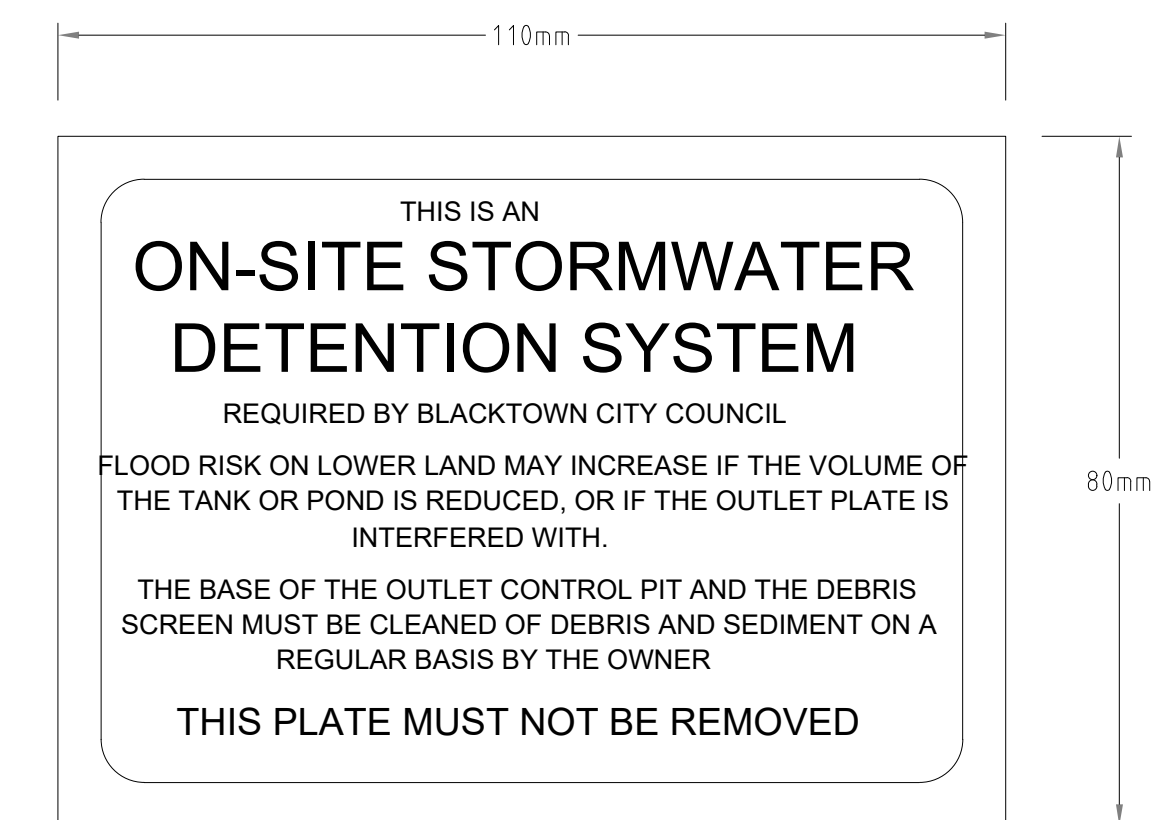
TYPE	GROUP	STORAGE	PERMITTED DISCHARGE (L/S)	ARI	TDS	SITE AREA SQM2	SSR	PSD
Residential (except single dwellings) based on 70% Impervious	1	6	13	2 YR	1000	958	5.748	12.45
		9	17	10YR	1000	958	8.622	16.29
		15	23	100YR	1000	958	14.37	22.03



CONFINED SPACE DANGER SIGN

NOTES:

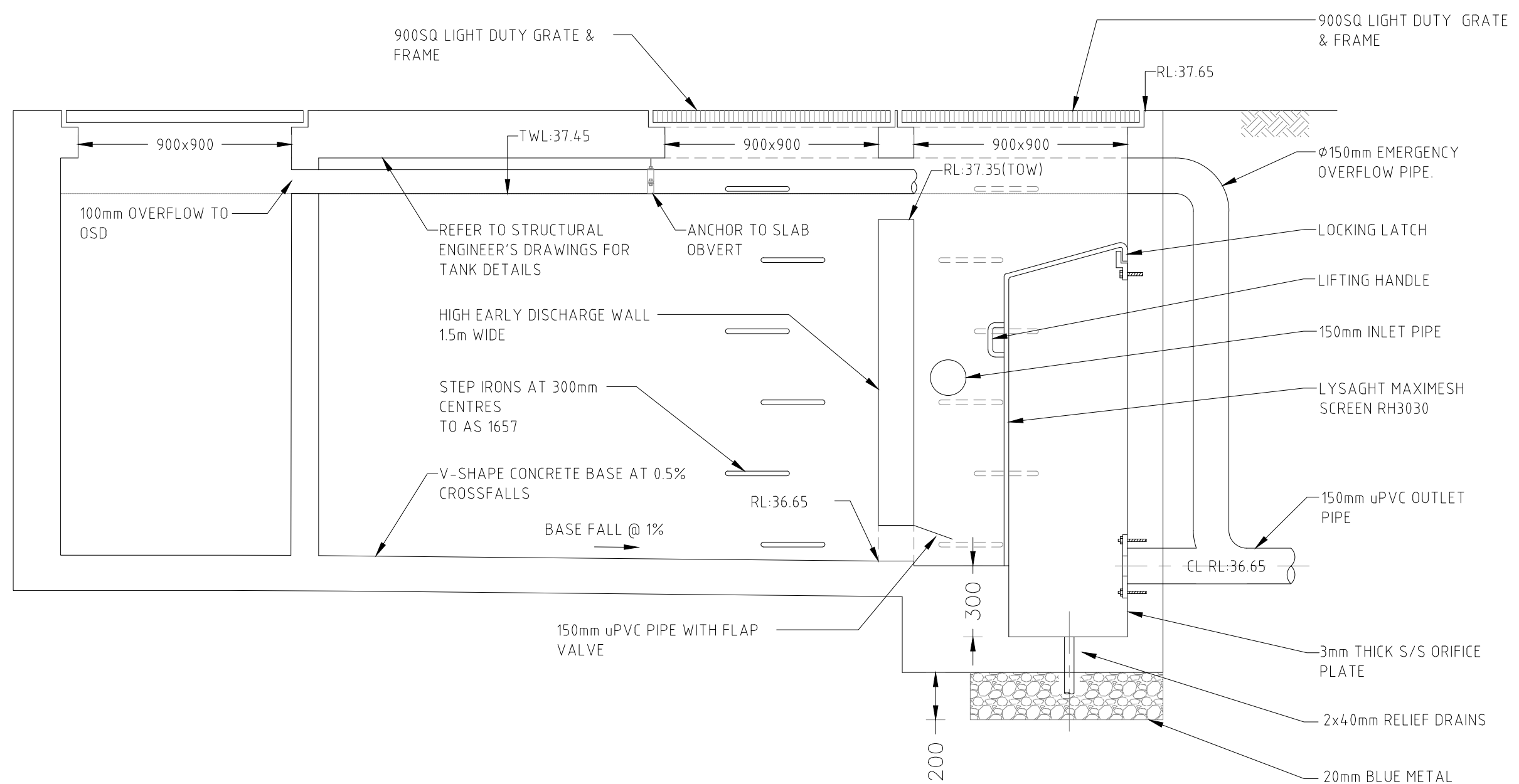
- A CONFINED SPACE DANGER SIGN SHALL BE PLACED NEXT TO EACH AND EVERY ACCESS POINT SO THAT THEY ARE VISIBLE TO PERSONS ENTERING ANY BELOW GROUND TANK OR PIT.
- COLOURS:
"DANGER" AND BACKGROUND - WHITE
ELLIPTICAL AREA - RED
RECTANGLE CONTAINING ELLIPSE - BLACK
LETTERING AND BORDER - BLACK
- MINIMUM DIMENSIONS OF THE SIGN:
LARGE ENTRIES: - 300mm x 450mm
SMALL ENTRIES: - 250mm x 180mm
- SIGN TO BE MADE FROM COLOUR BONDED ALUMINIUM OR POLYPROPYLENE.
- SIGN FIXED USING HILTI CHEMSETS OR EXPOXY



ON SITE STORMWATER DETENTION SYSTEM SIGN

NOTES:

- CORNERS SQUARE
- COLOURS:
ETCHED AND FILLED BLACK LEDGEND ON A NATURAL SILVER BACKGROUND.
- CONSTRUCTED FROM ALUMINIUM 0.9mm MILL.
- THIS SIGN SHALL BE PLACED IN A VISIBLE LOCATION NEAR A DISCHARGE CONTROL PIT OR AT THE ACCESS TO ONE.
- SIGN FIXED USING HILTI CHEMSETS OR EXPOXY



SECTION A
DCP-OSD
NOT TO SCALE

REV	DATE	DRN	DETAILS	APR'D
01	15.12.21	TJD	FOR APPROVAL	SCH

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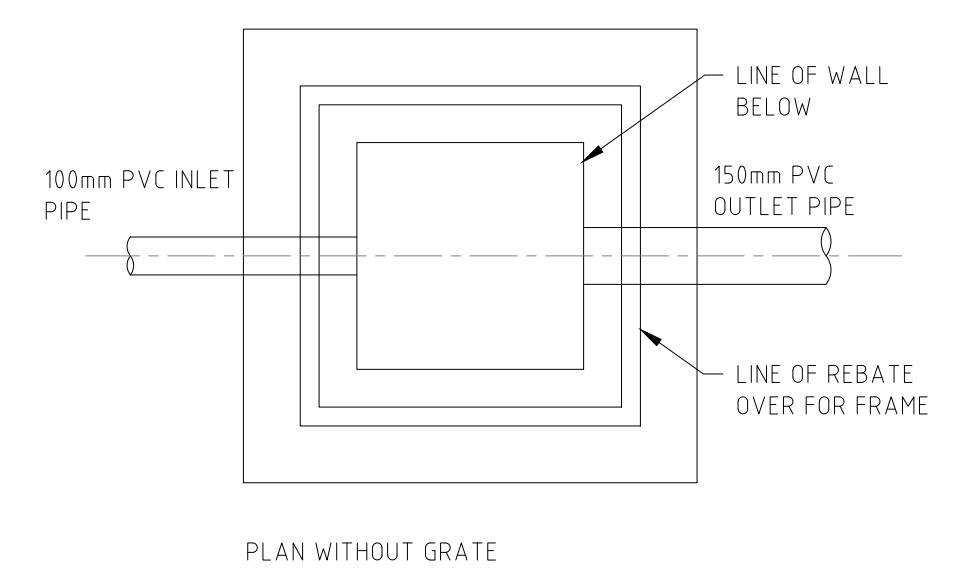
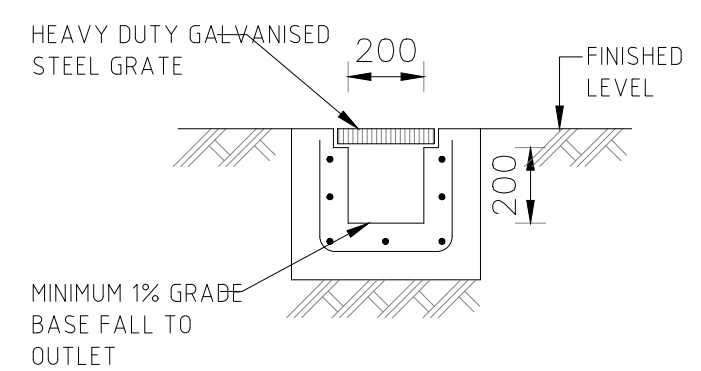
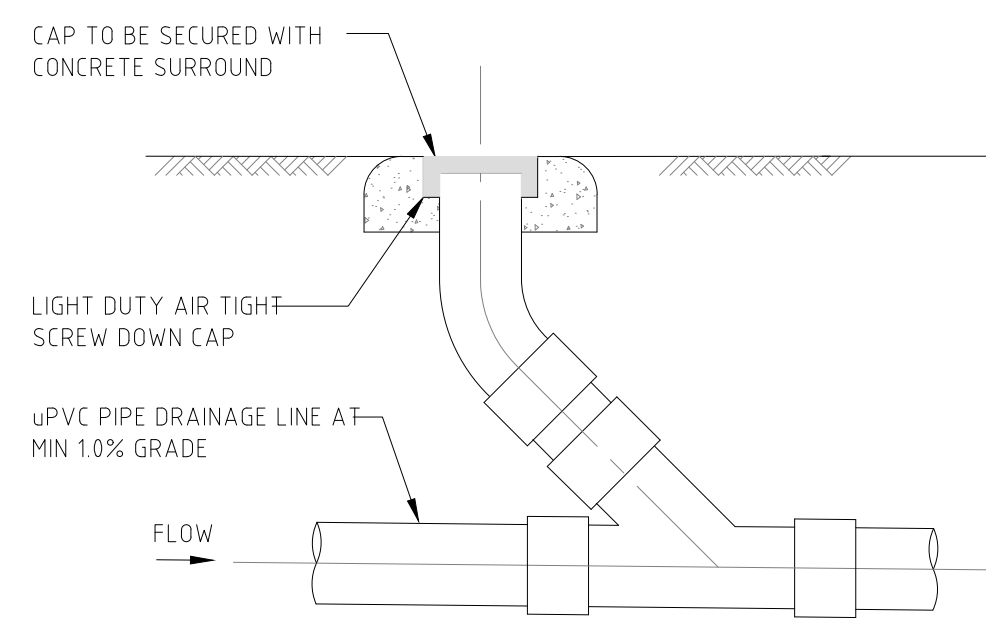
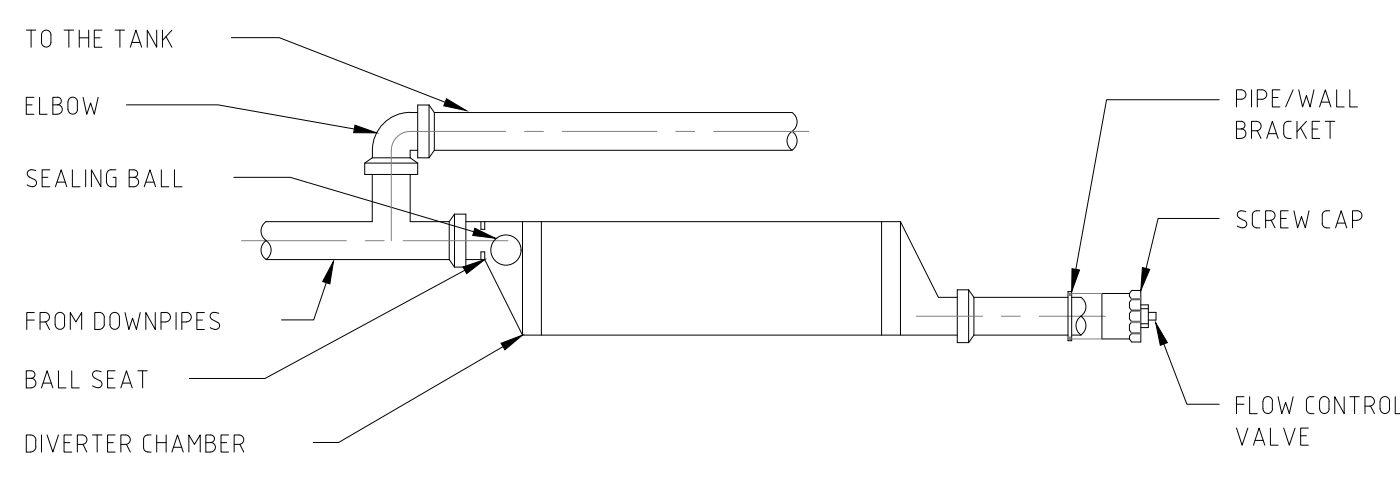
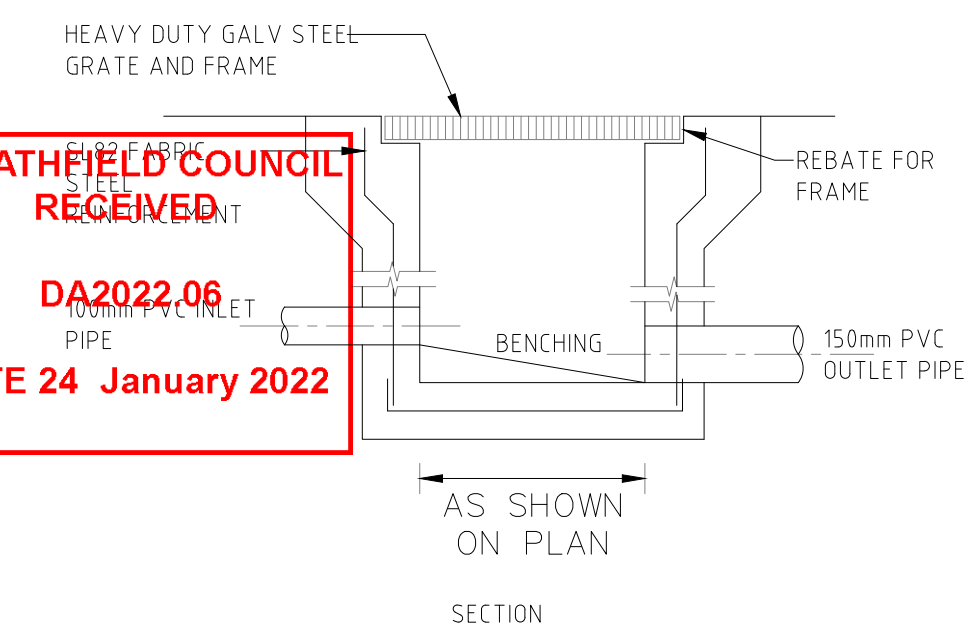
DESIGNED	CLIENT
SCH	MR MEZIN MEHEJAR
DRAWN	
TJD	
REVIEWED	
SAMIR C HAKIM	
CONTRACTOR:	



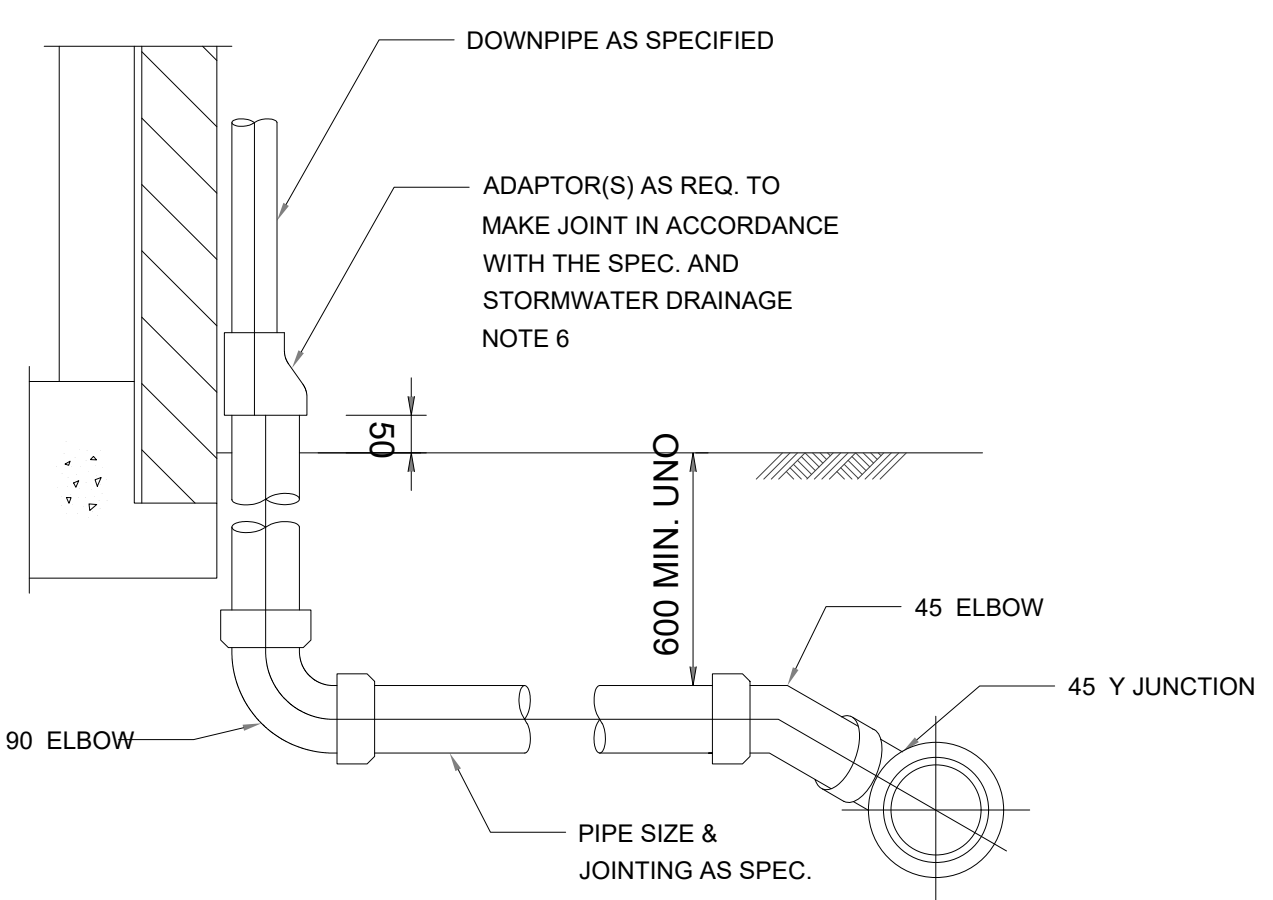
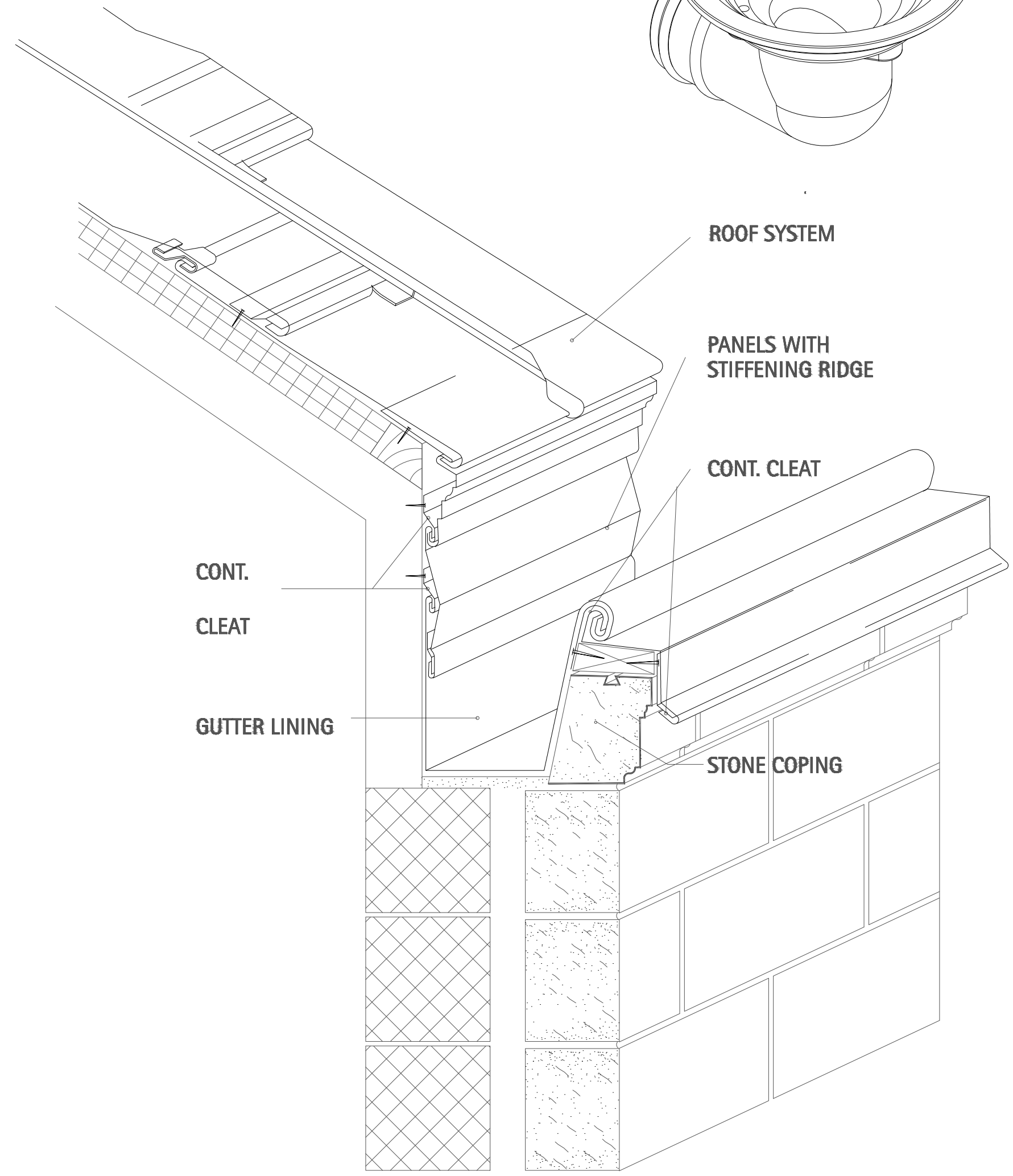
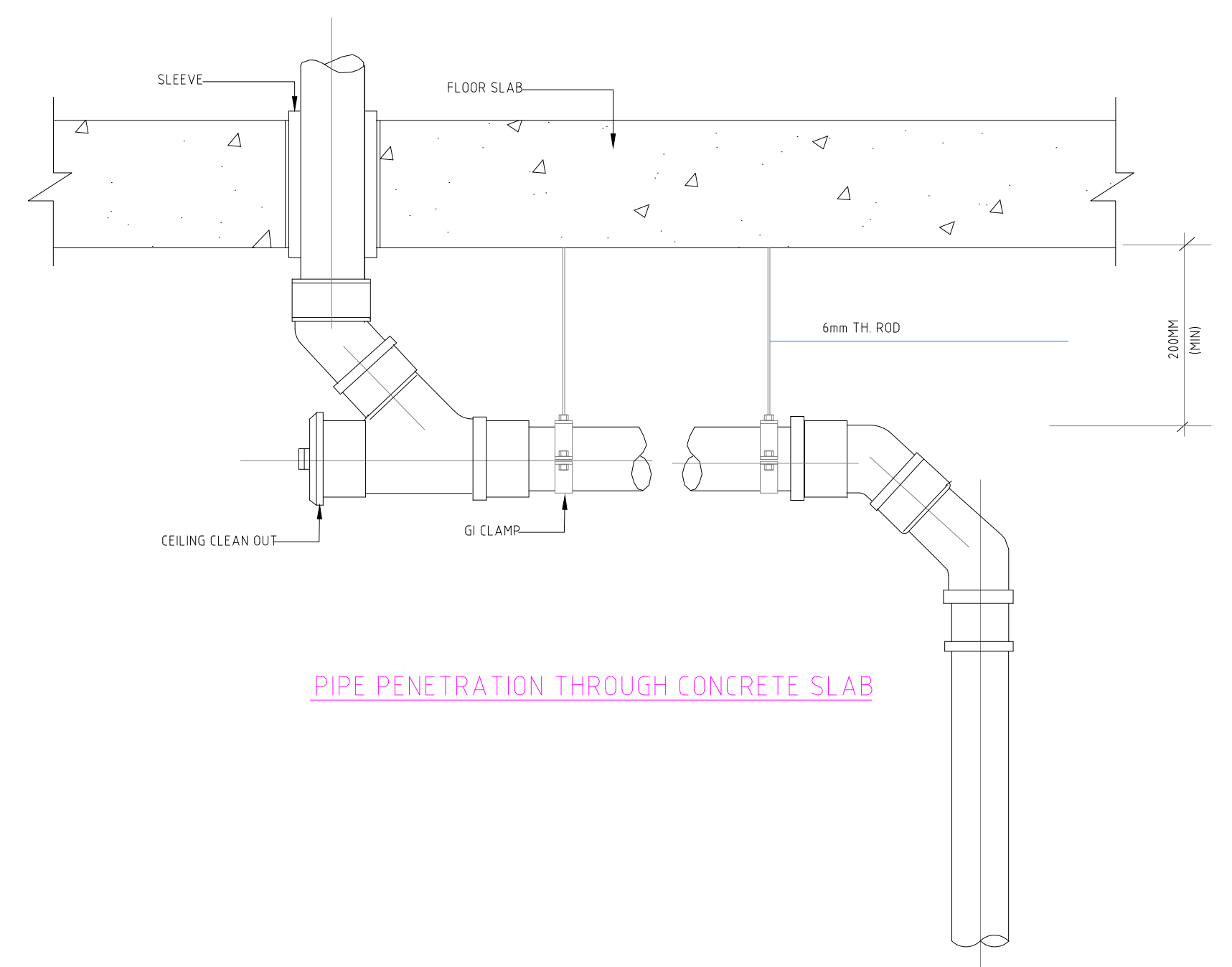
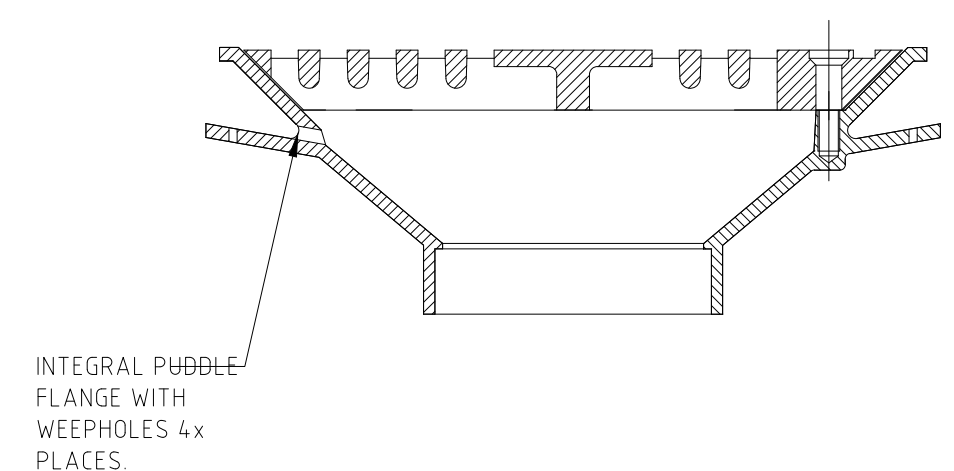
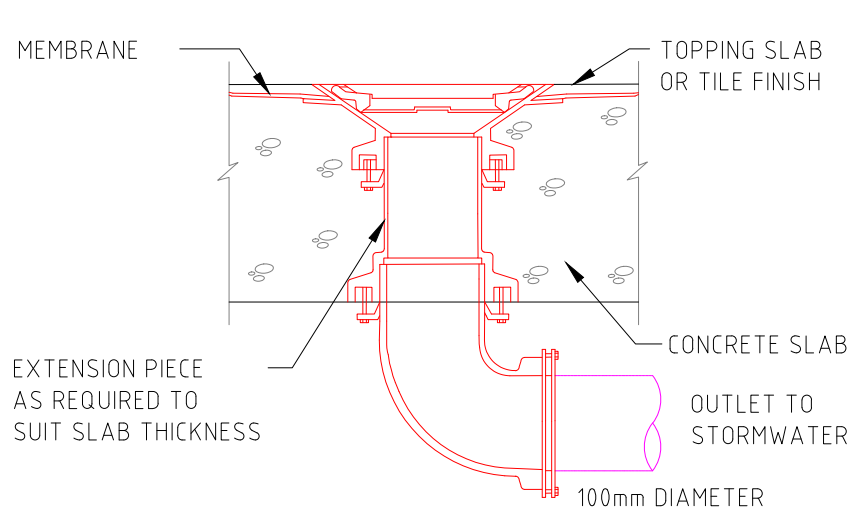
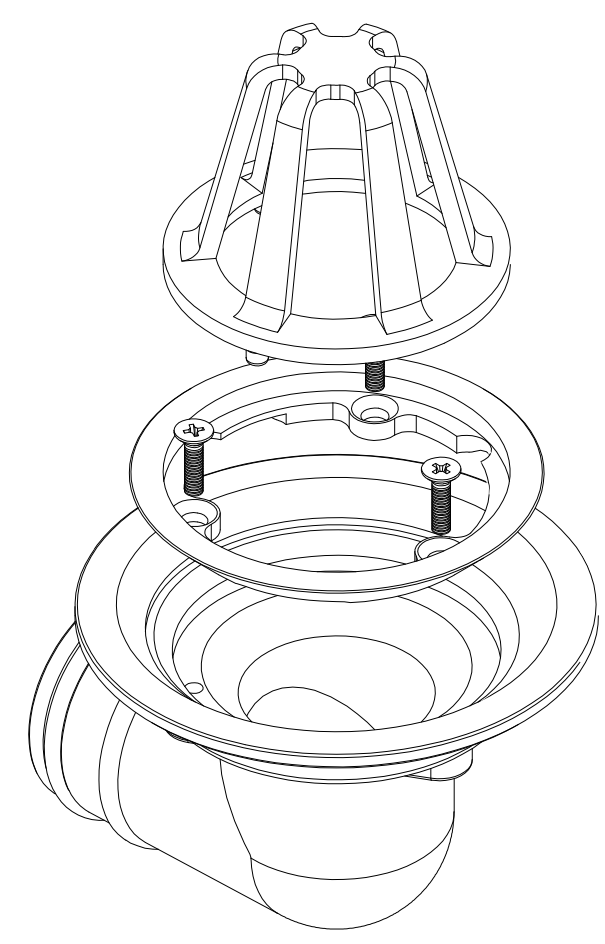
SCALE: 1:100 (A3 1:200)
PROJECT No: CSW202179
APPLICATION DEVELOPMENT APPLICATION (DA)
SUPERSEDES:
DRAWING NUMBER: 300

01	REVISION
06	SHEET

STRATHFIELD COUNCIL
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DA2022.06
DATE 24 January 2022



DETAIL
STORMWATER PIT
SCALE 1:20



CONNECTION TO KERB

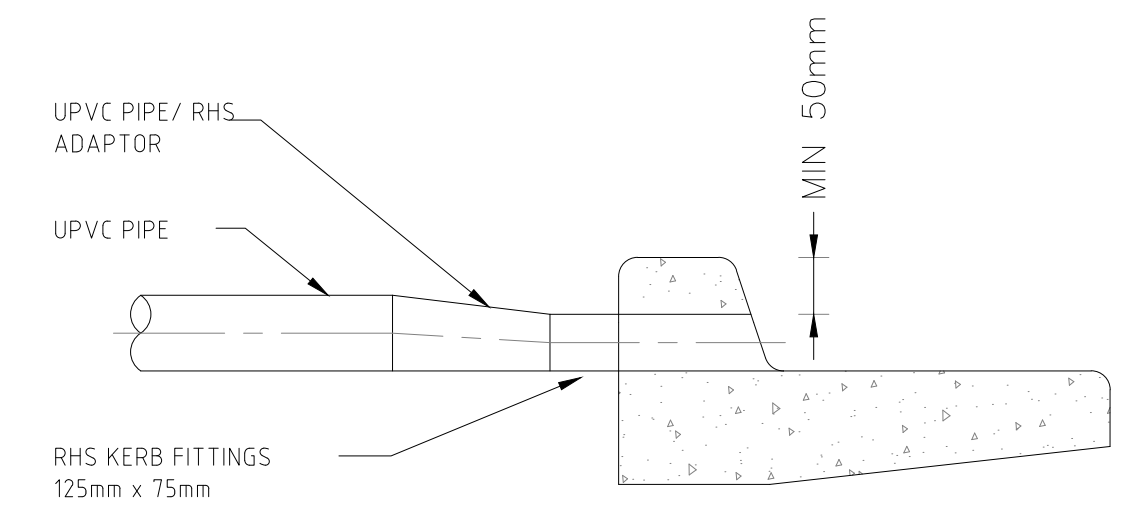
INTERNAL DIAMETER OF PIPES OR INTERNAL HEIGHT OF RECTANGULAR SECTION ACROSS FOOTPATH SHALL BE 100mm MAXIMUM, 90mm MINIMUM

PIPES ACROSS FOOTPATH SHALL BE SEWER GRADE UPVC

RECTANGULAR HOLLOW SECTIONS ACROSS FOOTPATH SHALL BE HOT DIP GALVANISED RHS

CONVERT 150mm DIAMETER PIPES WITHIN THE PROPERTY TO A 200x100x6mm GALVANISED RHS ACROSS THE FOOTPATH USING A 300x300mm PIT WITH REMOVABLE LID

CONNECTIONS TO KERB ACROSS TO THE FOOTPATH TO BE AT A MAXIMUM OF 60 DEGREES TO THE KERB LINE



REVISION PANEL				DESIGN PANEL				CLIENT				SCALE: 1:100 (A3 1:200)			
REV	DATE	DRN	APR'D	SAMIR C HAKIM B.E., M.E. (civil/construction), ADV. DIPLOMA (civil design), M.I.E. Aust., Peng MIE Aust # 3491570	DESIGNED SCH			MR MEZIN MEHEJAR				A1		01	
FOR APPROVAL				This drawing is the property of the CSEG PTY LTD and shall not be copied or modified in part or in whole without authorization.				DRAWN TJD		PROJECT No: CSW202179				REVISION	
CURRENT REVISION CONTRACTOR:				ALL RIGHTS RESERVED				REVIEWED SIGNATURE SAMIR C HAKIM		APPLICATION DEVELOPMENT APPLICATION (DA)					
				CONTRACTOR:						SUPERSEDES:					
										DRAWING NUMBER				07	
										301				SHEET	