

# PROPOSED NEW DWELLING AT 8 WENTWORTH STREET, CROYDON PARK NSW 2133

## DRAINAGE NOTES:

ALL PIPES TO BE LAID ON 75mm SAND BED WITH THE BARRELS FULLY SUPPORTED

100mm AND 150mm DIAMETER PIPES TO BE LAID ON MINIMUM 1% GRADE

MINIMUM DEPTH OF COVER FOR PIPES NOT SUBJECT TO VEHICULAR LOADING TO BE 300mm

ALL DRAINAGE PIPES LAID UNDER PAVEMENT SHALL BE REINFORCED CONCRETE WITH RUBBER RING JOINTS

BACKFILL TRENCHES WITH COMPACTED SAND OR APPROVED AGGREGATE MATERIAL

ALL PITS TO HAVE 600x600mm INTERNAL DIMENSIONS (U.N.O.)

SILT ARRESTORS TO HAVE 900x900mm INTERNAL DIMENSIONS

HEAVY DUTY GRATES AND COVERS ARE TO BE PROVIDED IN TRAFFICABLE AREAS

PIT GRATE TO BE TYPE WELDLOK OR APPROVED EQUIVALENT

ALL PITS SHALL BE PROVIDED WITH A LOCKING CLIP

ALL PITS SHALL BE MAINTAINED REGULARLY

TOP OF BENCHING SHALL BE TO THE HALF OF THE OUTLET PIPE DIAMETER

MAXIMUM FRONT ENTRY PIPE:-  
STRAIGHT ENTRY - Ø750  
SKEW ENTRY 45° - Ø525

Ø100 SUBSOIL DRAINAGE PIPE 3000mm LONG WRAPPED IN FABRIC SOCK TO BE PROVIDED ADJACENT TO INLET PIPES

COMPRESSIVE STRENGTH  $f_c$  FOR CAST IN SITU CONCRETE TO BE A MINIMUM OF 20MPa AT 28 DAYS

PROVIDE CLEANING EYES TO ALL DOWNPIPES NOT DIRECTLY CONNECTED TO PITS

ISOLATED JOINTS TO BE PROVIDED TO ISOLATE CONCRETE PAVEMENTS FROM PITS

ALL TRENCH GRATES PROVIDED SHALL HAVE A MINIMUM CLEAR WIDTH OF 200mm

STORMWATER DRAINAGE CONNECTIONS TO THE MAIN SYSTEM SHALL BE TO THE REQUIREMENTS AND THE SATISFACTION OF LOCAL COUNCIL

## STORMWATER PIPE BEDDING/PAVING NOTES:

WHERE TRENCH BASE IS ROCK A MINIMUM OF 75mm BEDDING TO BE PROVIDED UNDER PIPE COLLARS.

STORMWATER PIPE BEDDING DETAIL TO BE IN ACCORDANCE WITH LOCAL COUNCIL REQUIREMENTS. BEDDING DETAILS TO BE CONFIRMED UPON EXCAVATION & PRIOR TO INSTALLATION OF PIPEWORK.

## FOOTPATH REINSTATEMENT NOTES:

REMOVE ALL SAND FILL WITHIN THE FOOTPATH AREA TO THE EXISTING SUBGRADE.

SUPPORT ALL AUTHORITY SERVICES TO STRUCTURAL ENGINEERS DETAILS DURING EXCAVATION.

REINSTATE FOOTPATH SUBGRADE.

THE CONTRACTOR SHALL PROVIDE CERTIFICATION OF COMPACTION FROM A NATA REGISTERED TESTING AUTHORITY. MINIMUM THREE TESTS PER LAYER AS FOLLOWS:  
SELECT FILL 95% MODIFIED  
SELECT FILL (LESS THAN 300mm 98% MODIFIED BELOW BASE COURSE)  
BASE COURSE 100% MODIFIED

## EROSION & SEDIMENT CONTROL NOTES:

CONTRACTOR TO PROVIDE SILT FENCE/HAY BAIL BARRIERS TO THE LOW SIDE OF ALL EXPOSED EARTH EXCAVATIONS (TYP).

ISOLATE EXISTING STORMWATER PITS WITH HAY BALES TO FILTER ALL INCOMING FLOWS.

DO NOT STOCK PILE EXCAVATED MATERIAL ON THE ROAD WAY.

## SURVEY

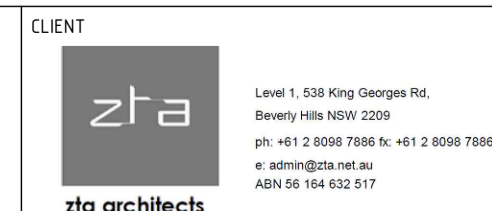
THE EXISTING SITE CONDITIONS SHOWN ON THE FOLLOWING DRAWINGS HAVE BEEN INVESTIGATED BY REGISTERED SURVEYORS. THE INFORMATION IS SHOWN TO PROVIDE A BASIS FOR DESIGN. SYDNEY STRUCTURAL DOES NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE SURVEY BASE OR ITS SUITABILITY AS A BASIS FOR CONSTRUCTION DRAW.

SHOULD DISCREPANCIES BE ENCOUNTERED DURING CONSTRUCTION BETWEEN THE SURVEY DATA AND ACTUAL FIELD DATA, CONTACT SYDNEY STRUCTURAL.

## DRAWING SCHEDULE

DRAWING No.	DRAWING TITLE
D00	COVER SHEET
D01	STORMWATER DRAINAGE PLAN - BASEMENT LEVEL
D02	STORMWATER DRAINAGE PLAN - GROUND LEVEL
D03	STORMWATER DRAINAGE PLAN - FIRST LEVEL
D04	STORMWATER DRAINAGE PLAN - ROOF LEVEL
D05	STORMWATER DRAINAGE DETAILS SHEET 1
D06	STORMWATER DRAINAGE DETAILS SHEET 2

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REV	DATE	DESCRIPTION	RVD
REVISIONS			

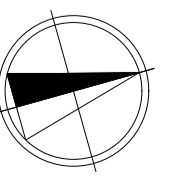


CLIENT	8-10 WENTWORTH STREET, CROYDON PARK NSW 2133
ADDRESS	ISSUED FOR C.D.C.
PROJECT	PROPOSED NEW DWELLING
TITLE	COVER SHEET

STATUS	ISSUED FOR C.D.C.
DRAWN	AM
DESIGNED	JL
CHECKED	AE
APPROVED	AK

DO NOT SCALE DRAWING, USE FIGURED DIMENSIONS ONLY.	SCALE	1:100
PROJECT No.	DRAWING No.	REV.
SSCE220213	D00	A

SCALE	1:100
AT A1 SIZE	





**NOTES**

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- ALL PIPES TO HAVE MIN 200mm COVER IF LOCATED WITHIN PROPERTY.
- ALL PITS IN DRIVEWAYS BE HEAVY DUTY GRATES. DIRECT SURFACE FLOW TO ALL GRATED SURFACE INLET PITS.
- ALL WORK DO BE DONE IN ACCORDANCE WITH AS/NZ 3500.3.2:1998 AND COUNCIL SPECIFICATIONS.
- LOCATION OF DOWNPIPES & FLOOR WASTES ARE INDICATIVE ONLY. DOWNPIPE & FLOOR WASTE SIZE, LOCATION & QUANTITY TO BE DETERMINED BY BUILDER & IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS.
- THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE ARCHITECTURAL, LANDSCAPE AND STRUCTURAL PLANS.
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- ALL GUTTERS WILL BE FITTED WITH LEAF GUARDS AND SHOULD BE INSPECTED AND CLEANED TO ENSURE LEAF LITTER CANNOT ENTER THE DOWNPIPES
- EXISTING STORMWATER DRAINAGE TO BE UTILISED WHERE CONTRACTOR SEE FIT.

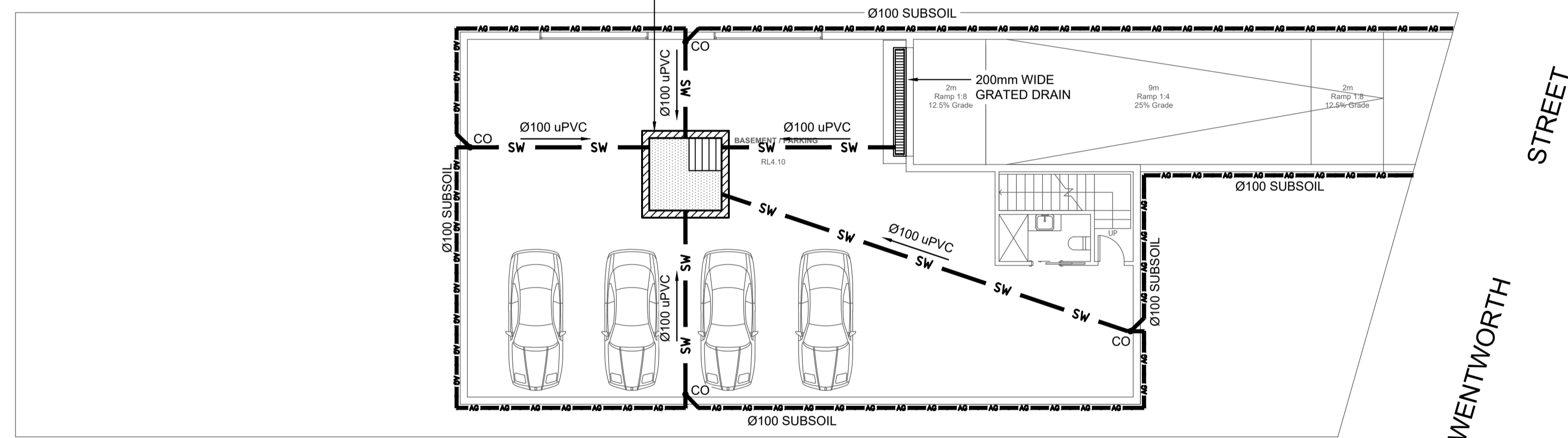
**SYMBOLS**

RL	PIT SURFACE LEVEL
IL	INVERT LEVEL
TK	TOP OF KERB
— SW —	STORMWATER DRAINAGE PIPE
— RWT —	DOWNPIPE TO RAINWATER TANK
— OF —	OVERFLOW PIPE FROM RAINWATER TANK
— AG —	Ø100 SUBSOIL PIPE
— RM —	RISING MAIN
FW	FLOOR WASTE 150X150
FW	FLOOR WASTE 150Ø
RWO	RAINWATER OUTLET 300Ø
• DP	DOWN PIPE
• DPS	DOWN PIPE SPREADER
• CO	CLEAN OUT
• IO	INSPECTION OPENING
• VD	VERTICAL DROP
• VR	VERTICAL RISER
⊠	CONCRETE COVER JUNCTION PIT
▣	GRATED INLET PIT
▨	WIDE GRATED DRAIN

**DESIGN NOTES**

- LGA = CANTERBURY-BANKSTOWN COUNCIL
- SCOPE OF WORKS TO INCLUDE DEMOLITION OF EXISTING DWELLING AND CONSTRUCTION OF RESIDENTIAL DEVELOPMENT.
- IN ACCORDANCE WITH COUNCIL GUIDELINES, OSD IS NOT REQUIRED FOR THE PROPOSED AREA AS IMPERVIOUS AREA IS LESS THAN 70%.
- RAINWATER TANK AS PER BASIX SPECIFICATIONS.

**PUMP WELL DETAILS**  
 AREA = 2.0x2.0 = 4.0m<sup>2</sup>  
 DEPTH OF WATER: AVG 0.75m  
 VOLUME = 3.0m<sup>3</sup>  
 (MINIMUM FLOW RATE OF PUMP:  
 5.0 l/sec@ 4.0m HEAD) (SUBMERSIBLE  
 AUTOMATIC PUMPS WORKING AT  
 ALTERNATIVE LEVELS WITH ALARM).



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REV	DATE	DESCRIPTION	RVD
A	07/03/2022	ISSUED FOR C.D.C.	AK

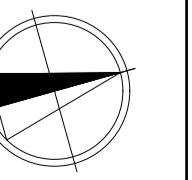


CLIENT	ADDRESS	STATUS
zta architects	8-10 WENTWORTH STREET, CROYDON PARK NSW 2135	ISSUED FOR C.D.C.
PROJECT	TITLE	
PROPOSED NEW DWELLING	STORMWATER DRAINAGE PLAN BASEMENT LEVEL	

DRAWN	DESIGNED	CHECKED	APPROVED
AM	JL	AE	AK

DO NOT SCALE DRAWING, USE FIGURED DIMENSIONS ONLY.	SCALE
	1:100
PROJECT No.	DRAWING No.
SSCE220213	D01

REV.	AT A1 SIZE
A	





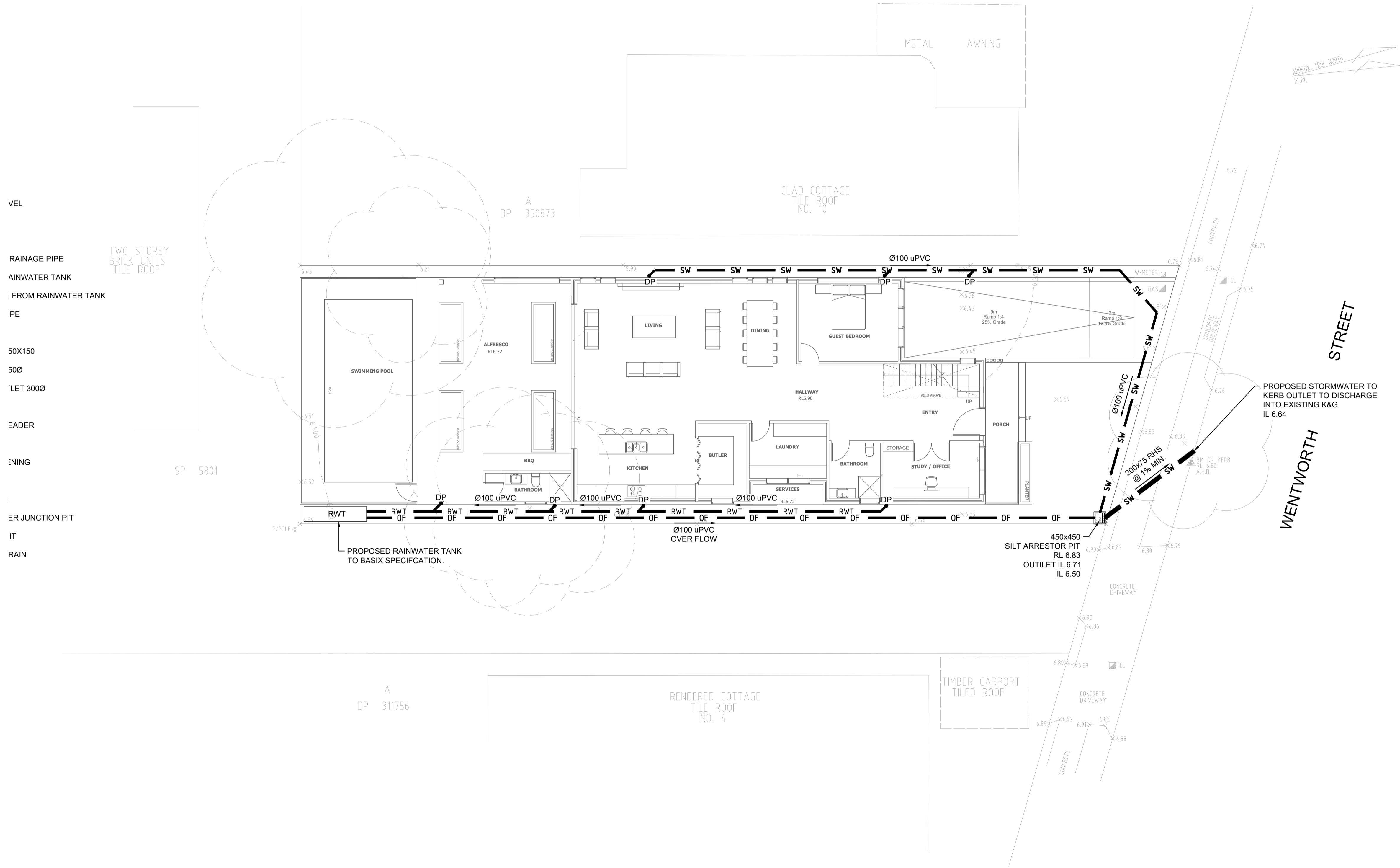
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**SYMBOLS**

- RL PIT SURFACE LEVEL
- IL INVERT LEVEL
- TK TOP OF KERB
- SW STORMWATER DRAINAGE PIPE
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- OF OVERFLOW PIPE FROM RAINWATER TANK
- Ø100 SUBSOIL PIPE
- RM RISING MAIN
- FW FLOOR WASTE 150X150
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- RWO RAINWATER OUTLET 300Ø
- DP DOWN PIPE
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- CO CLEAN OUT
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- VD VERTICAL DROP
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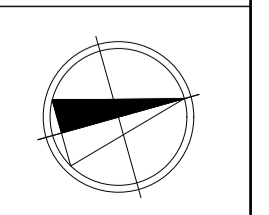


CLIENT: zfa architects  
 ADDRESS: 8-10 WENTWORTH STREET, CROYDON PARK NSW 2135  
 PROJECT: PROPOSED NEW DWELLING

STATUS: ISSUED FOR C.D.C.  
 TITLE: STORMWATER DRAINAGE PLAN GROUND LEVEL

DRAWN: AM  
 DESIGNED: JL  
 CHECKED: AE  
 APPROVED: AK

DO NOT SCALE DRAWING, USE FIGURED DIMENSIONS ONLY.  
 PROJECT No: SSCE220213  
 SCALE: 1:100  
 DRAWING No: D02  
 REV: A





**NOTES**

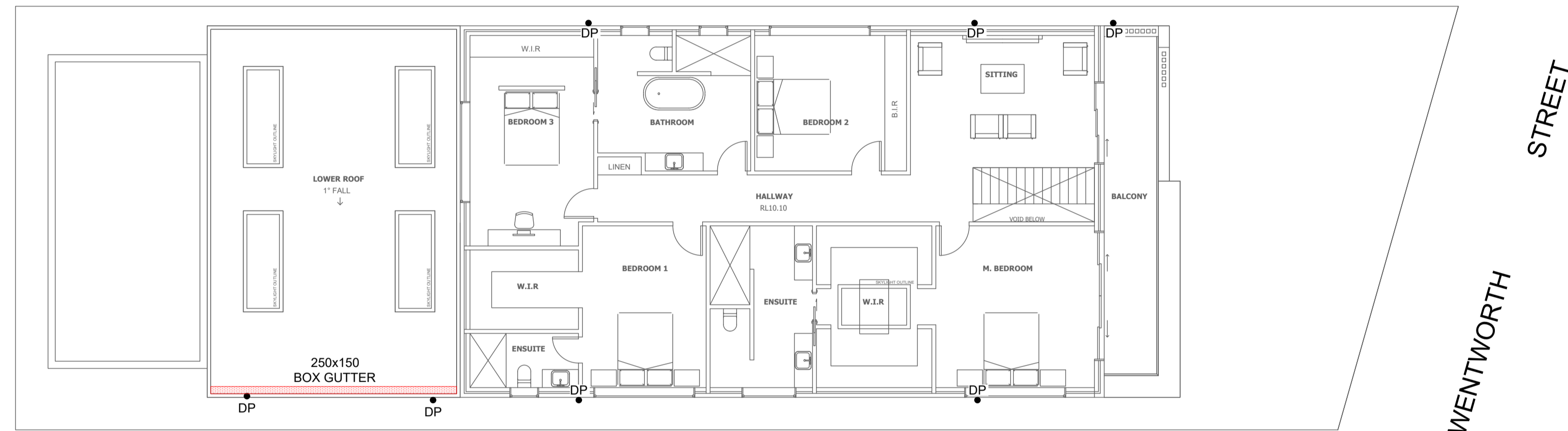
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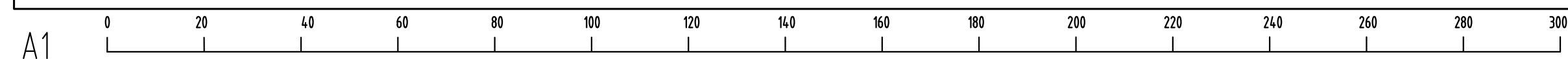
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**NOTES**

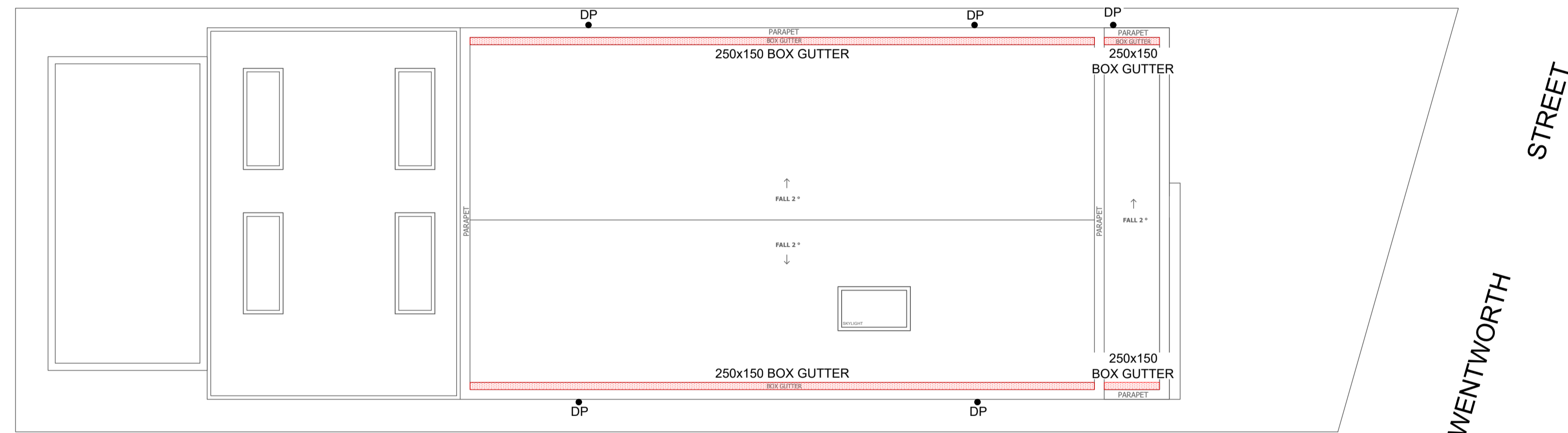
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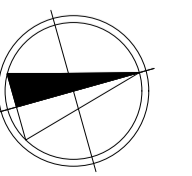
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ADDRESS	8-10 WENTWORTH STREET, CROYDON PARK NSW 2135
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STATUS	ISSUED FOR C.D.C.
TITLE	STORMWATER DRAINAGE PLAN ROOF LEVEL

DRAWN	DESIGNED	DO NOT SCALE DRAWING, USE FIGURED DIMENSIONS ONLY.	SCALE	AT A1 SIZE
AM	JL		1:100	
CHECKED	APPROVED	PROJECT No.	DRAWING No.	REV.
AE	AK	SSCE220213	D04	A



**WARNING**  
 PUMP OUT SYSTEM  
 FAILURE IN BASEMENT  
 WHEN LIGHT IS FLASHING  
 AND SIREN SOUNDING

COLOURS :  
 WARNING - RED  
 BORDER AND OTHER - BLACK

**NOTES:**

SIGN SHALL BE PLACED IN A CLEAR AND VISIBLE LOCATION WHERE VEHICLES ENTER THE BASEMENT.

A SUITABLE ALARM SYSTEM POSITIONED AT ENTRANCE OF BASEMENT CARPARK TO PROVIDE A FLOOD WARNING IN CASE OF PUMP FAILURE (TO COUNCILS SPEC).

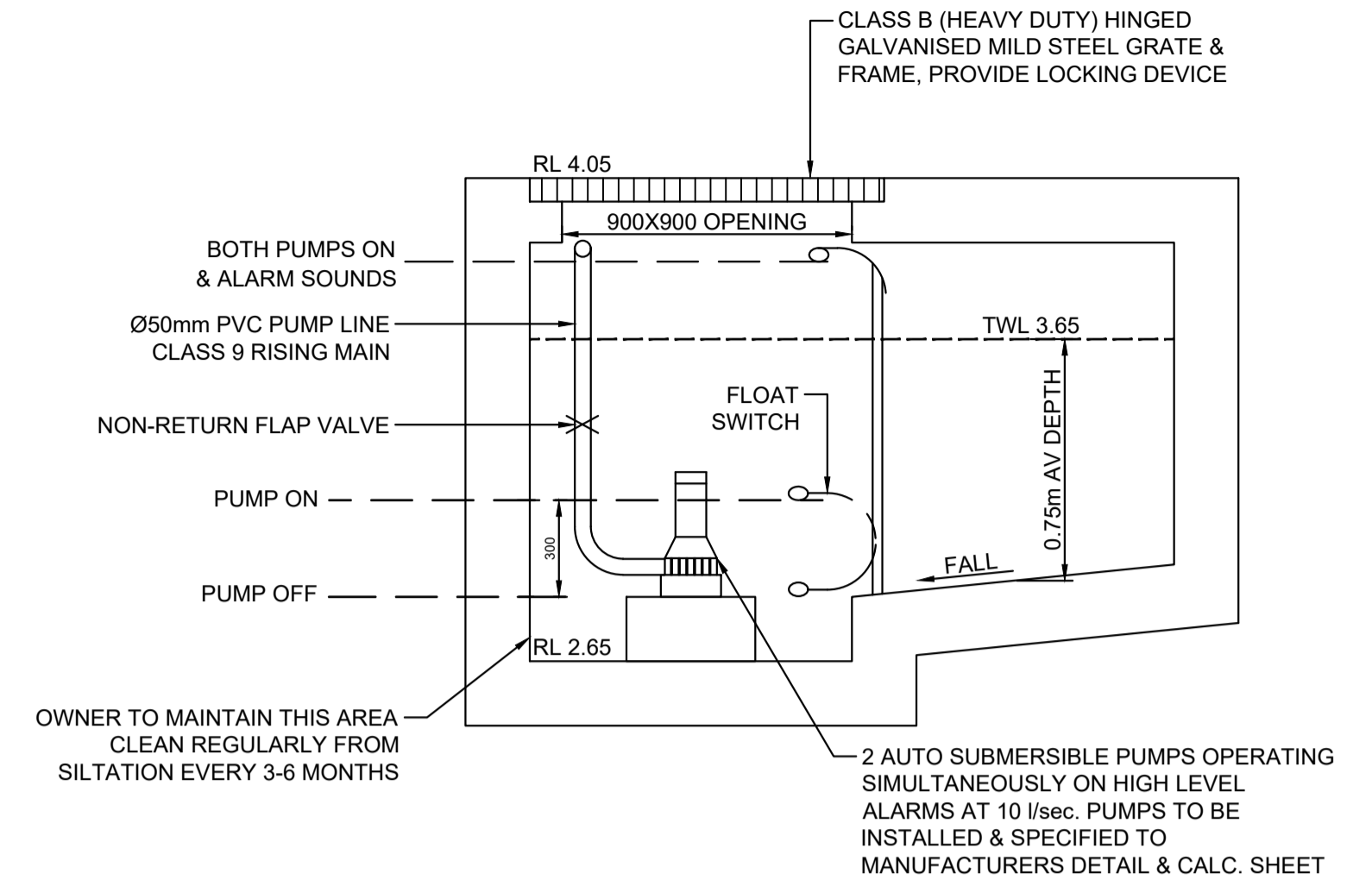
**DANGER**  
 CONFINED SPACE  
 NO ENTRY WITHOUT  
 CONFINED SPACE  
 TRAINING

WIDTH 200MM

HEIGHT 150MM

COLOURS:  
 "DANGER" AND BACKGROUND WHITE  
 ELLIPTICAL AREA RED  
 RECTANGLE CONTAINING ELLIPSE BLACK  
 OTHER LETTERING AND BORDER BLACK

MATERIALS:  
 POLYPROPYLENE



**TYPICAL SECTION THROUGH PUMP PIT**  
 SCALE 1:20  
 PUMP WELL VOLUME 3.0m<sup>3</sup>

**PUMP SPECIFICATIONS: STANDARD PUMP-OUT NOTES**

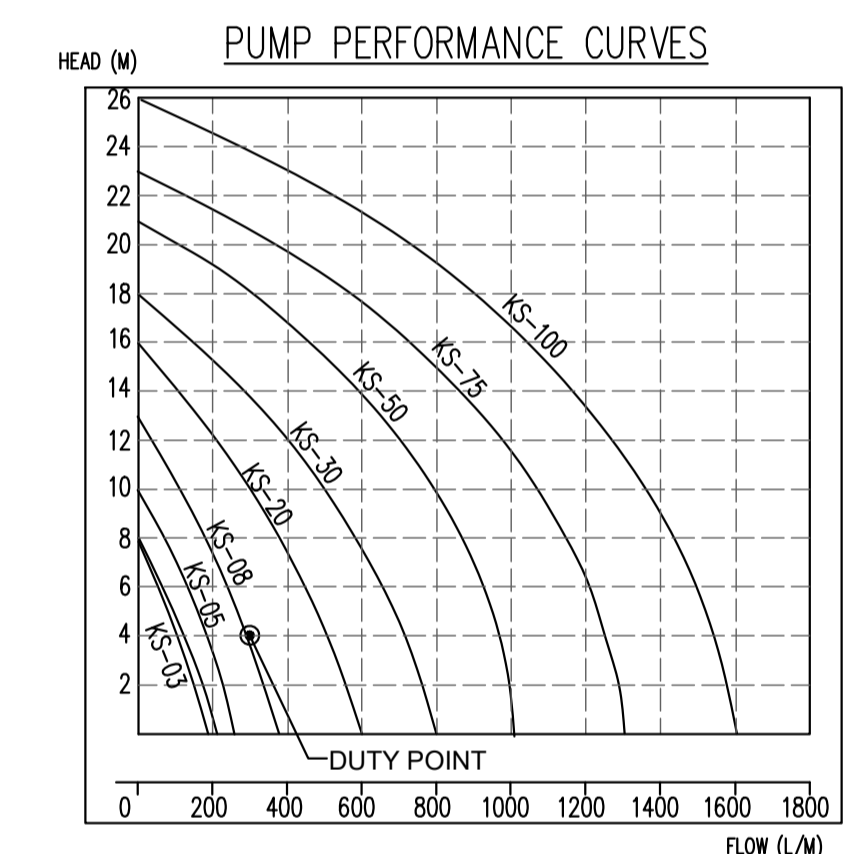
- THE PUMP-OUT SYSTEM IS DESIGNED TO WORK IN THE FOLLOWING MANNER -
- THE PUMPS SHALL BE PROGRAMMED TO WORK ALTERNATELY SO AS TO ALLOW BOTH PUMPS TO HAVE EQUAL OPERATION LOAD & PUMP LIFE.
  - A LOW LEVEL FLOAT SHALL BE PROVIDED TO ENSURE THAT THE MINIMUM REQUIRED WATER LEVEL IS MAINTAINED WITHIN THE SUMP AREA OF THE BELOW GROUND TANK. IN THIS REGARD THIS FLOAT WILL FUNCTION AS AN OFF SWITCH FOR THE PUMPS.
  - A SECOND FLOAT SHALL BE PROVIDED AT A HIGHER LEVEL, APPROXIMATELY 300mm ABOVE THE MINIMUM WATER LEVEL, WHEREBY ONE OF THE PUMPS WILL OPERATE & DRAIN THE TANK TO THE LEVEL OF THE LOW LEVEL FLOAT.
  - A THIRD FLOAT SHALL BE PROVIDED AT A HIGH LEVEL, WHICH IS APPROXIMATELY THE ROOF LEVEL OF THE BELOW GROUND TANK. THIS FLOAT SHOULD START THE OTHER PUMP THAT IS NOT OPERATING & ACTIVATE THE ALARM.
  - AN ALARM SYSTEM SHALL BE PROVIDED WITH A FLASHING STROBE LIGHT & A PUMP FAILURE WARNING SIGN WHICH ARE TO BE LOCATED AT THE DRIVEWAY ENTRANCE TO THE BASEMENT LEVEL. THE ALARM SYSTEM SHALL BE PROVIDED WITH A BATTERY BACK-UP IN CASE OF POWER FAILURE.

**PUMP WELL DETAILS**  
 AREA DRAINING TO SUMP= 26.0m<sup>2</sup>

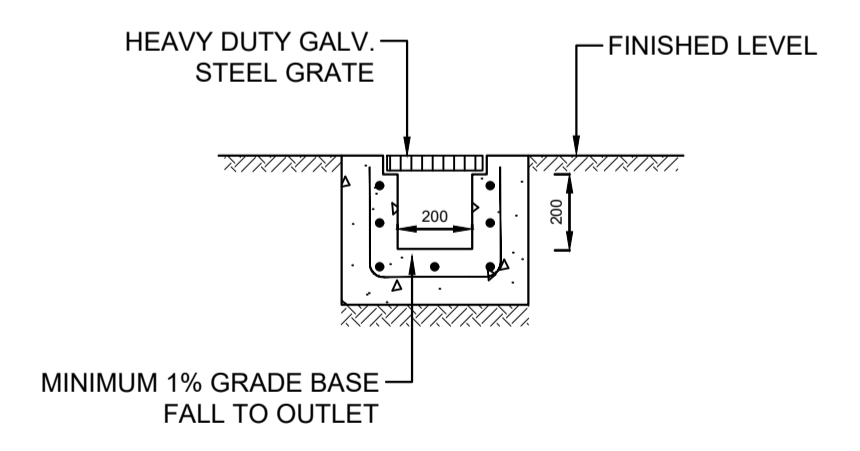
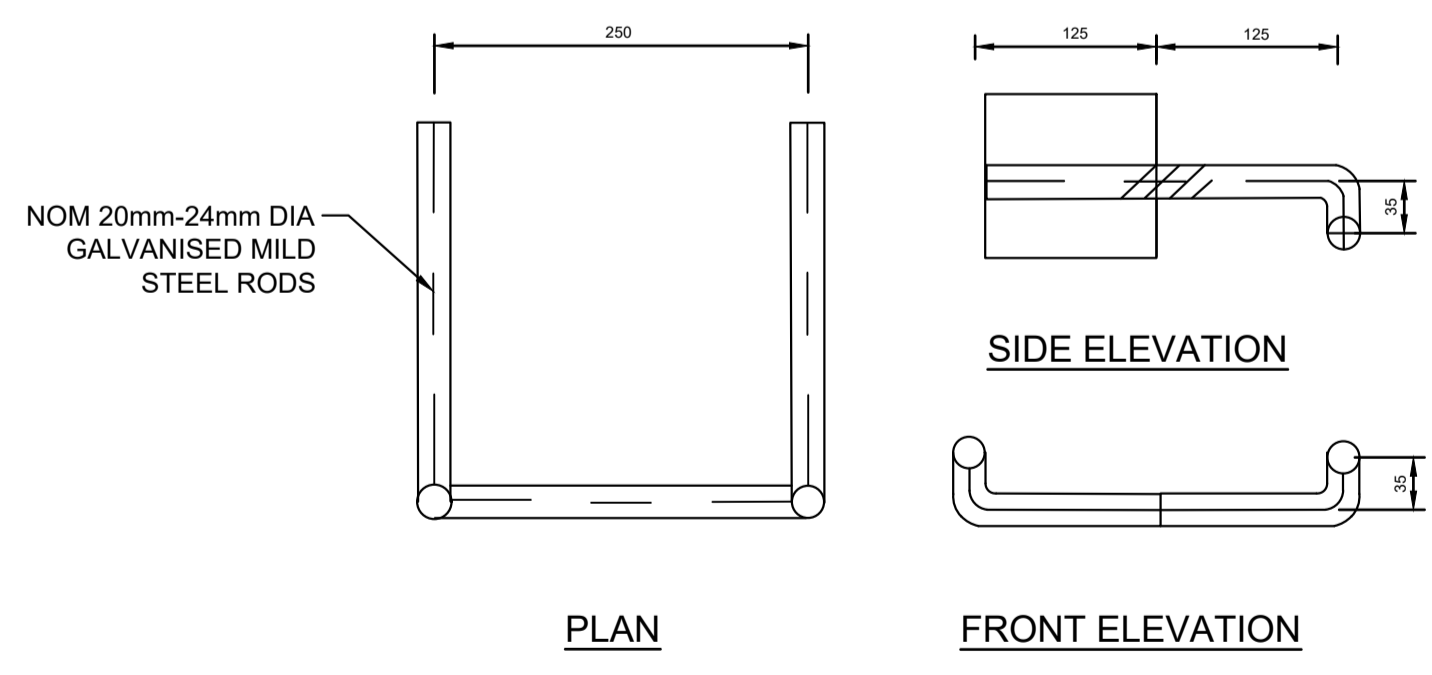
SUMP SIZE BASED ON 100 YEAR 2 HR STORM, I= 35.60 mm/hr,  
 Q=CIA/3600= 1X 35.60 X 26.0/3600 = 0.39 l/sec  
 VOLUME REQUIRED = 0.26 X(2x60x60)=1872 L = 1.872m<sup>3</sup>  
 STORAGE PROVIDED 2.0X2.0X0.75= 3.0m<sup>3</sup> (AS 3500 MIN.)

PUMP OUT RATE BASED ON 100YR 5MIN STORM, I=197 mm/hr  
 Q=CIA/3600= 1X 197.0 X 26.0/3600 = 1.43 l/sec  
 Q= 5.0 l/sec (AS 3500 MIN.)

DUAL KS-08 PUMP OR EQUIVALENT TO BE INSTALLED IN SUMP AND CONNECTED TO CONTROL PANEL WHICH WILL ALLOW FOR THE PUMPS TO OPERATE SIMULTANEOUSLY ON HIGH LEVEL ALARMS AT 5.0 l/sec (PER PUMP) AT 4.0m HEAD



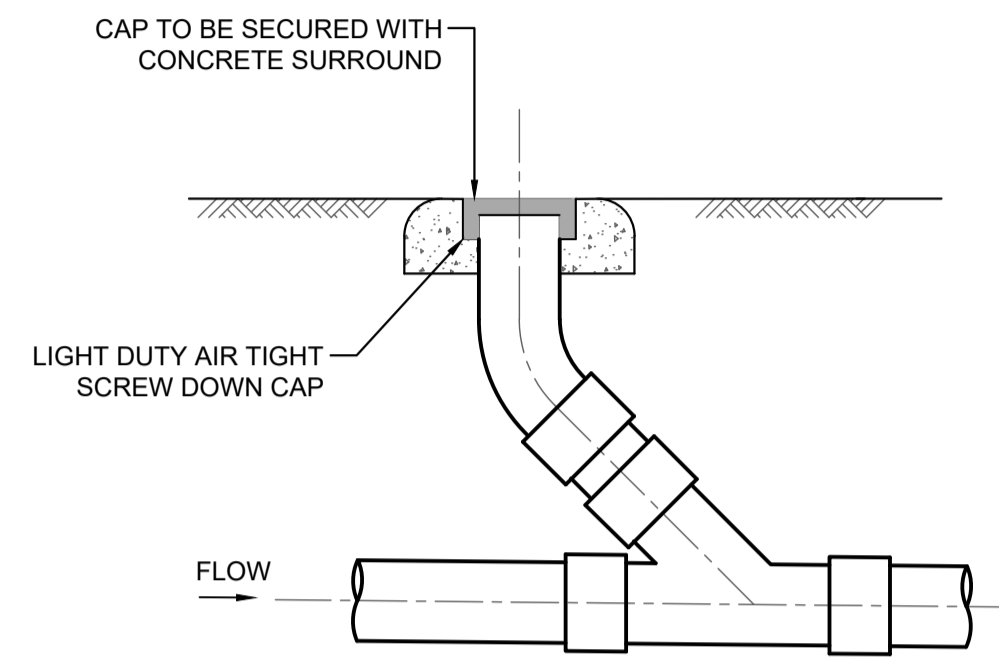
Type	Output		Outlet		Rated Head Capacity		Maximum Capacity		Weigh Kg	Dimension		
	HP	kW	mm	Inch	M	LPM	M	LPM		L(mm)	W(mm)	H(mm)
KS-03	1/3	0.25	40	1 1/2"	3	130	8	180	9	188	141	305
KS-04	1/2	0.4	50	2"	5	150	8	220	11	208	140	359
KS-05	1/2	0.4	50	2"	5	160	10	260	14	230	156	375
KS-08	1	0.75	50	2"	6	240	13	380	21	290	180	425
KS-20	2	1.5	80	3"	10	300	16	600	31	278	182	475
KS-30	3	2.2	80	3"	10	500	18	800	42	390	250	450
KS-50	5	3.7	100	4"	10	800	21	1100	48	450	240	530
KS-75	7 1/2	5.6	100	4"	15	800	23	1300	60	550	310	590
KS-100	10	7.5	150	6"	18	900	25	1600	70	550	310	610



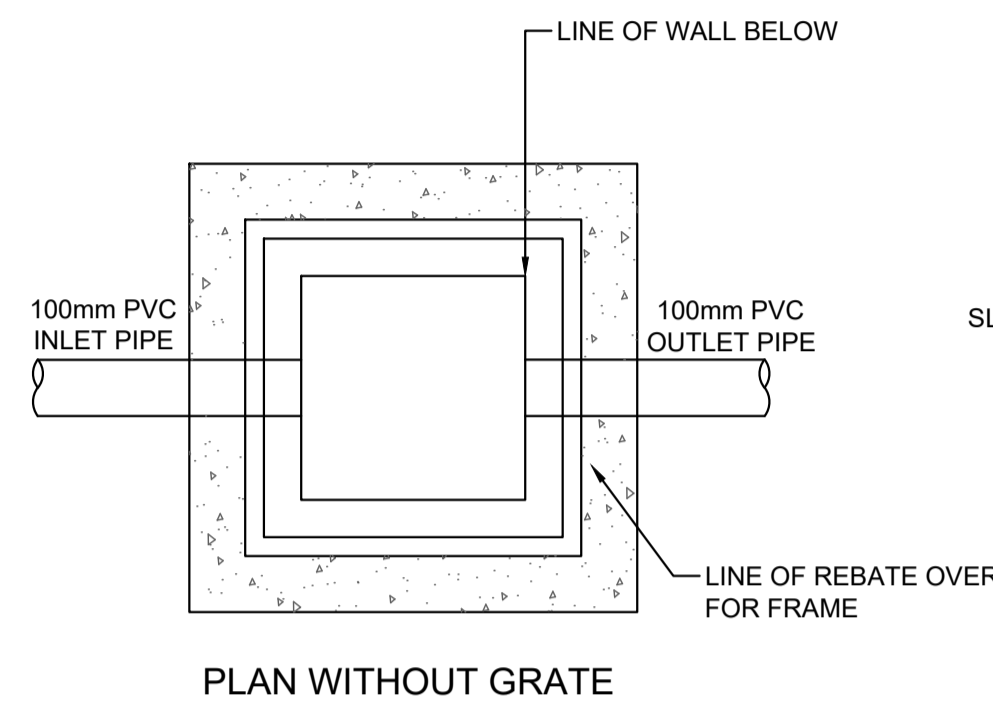
**DETAIL**  
 STEP IRONS 1:5  
 NOTE: INSTALL WHERE PITS ARE DEEPER THAN 1000

**DETAIL**  
 GRATED TRENCH DRAIN SCALE 1:20

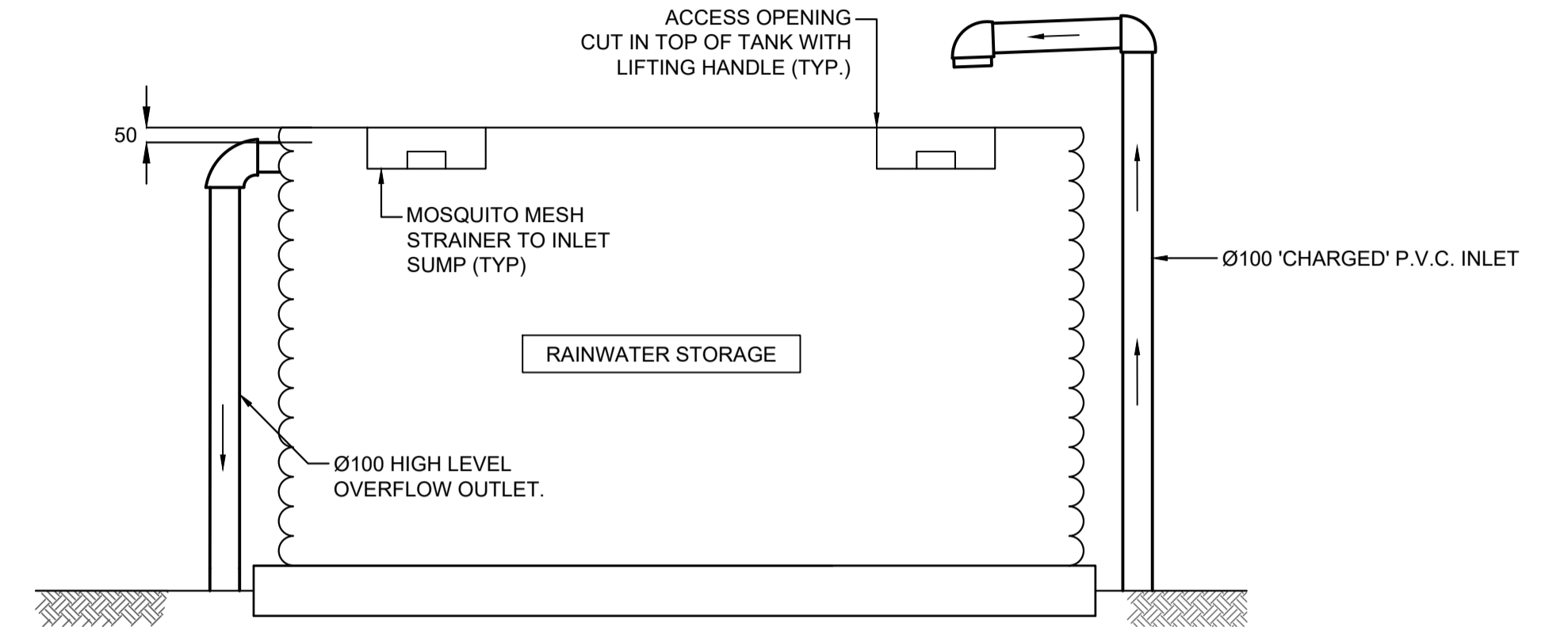
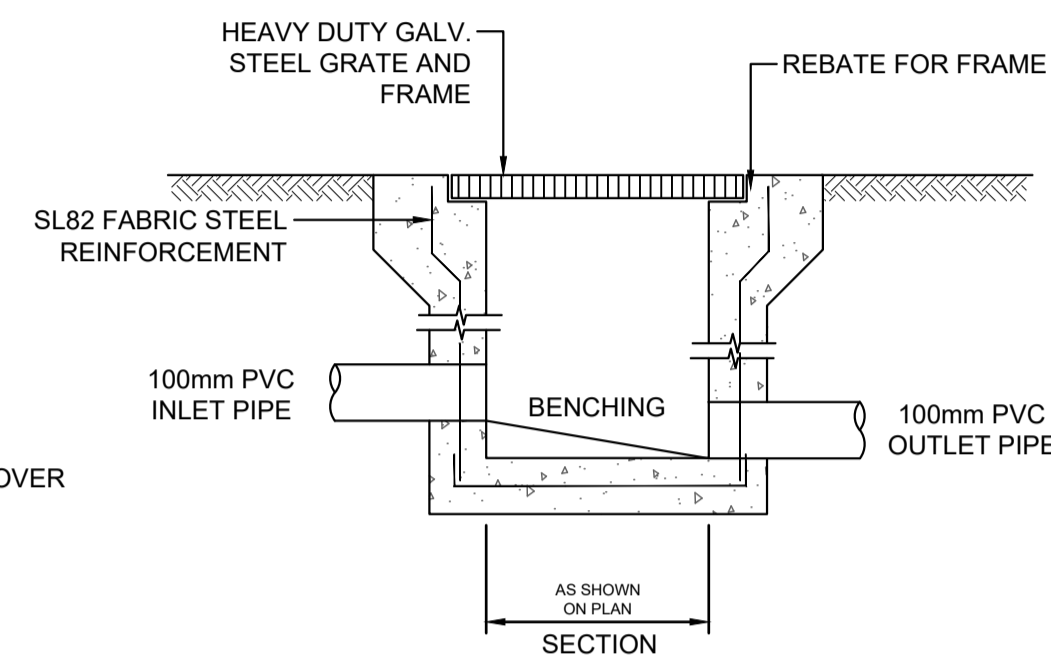
<b>Sydney Office</b> — A / 64/23 Macmahon Street, Hurstville, NSW P / +61 401 200 104 E / info@sydneystructural.com.au W / www.sydneystructural.com.au						CLIENT zta architects	ADDRESS 8-10 WENTWORTH STREET, CROYDON PARK NSW 2135	STATUS ISSUED FOR C.D.C.	DRAWN AM	DESIGNED JL	DO NOT SCALE DRAWING, USE FIGURED DIMENSIONS ONLY.	SCALE 1:100	
REVISIONS REV DATE DESCRIPTION RVD	A 07/03/2022 ISSUED FOR C.D.C. AK	W/ www.sydneystructural.com.au				PROJECT PROPOSED NEW DWELLING	TITLE STORMWATER DETAILS SHEET 1	CHECKED AE	APPROVED AK	PROJECT No. SSCE220213	DRAWING No. D05	REV. A	AT A1 SIZE



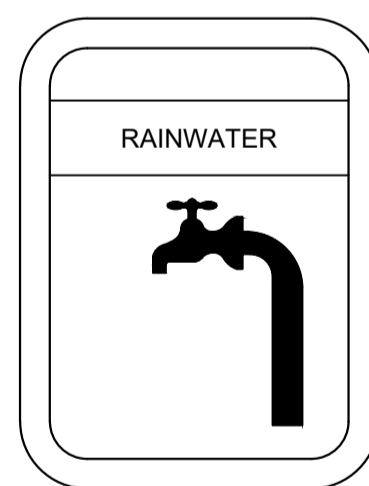
TYPICAL CLEANING EYE DETAIL  
SCALE NTS



DETAIL  
STORMWATER PIT  
SCALE NTS

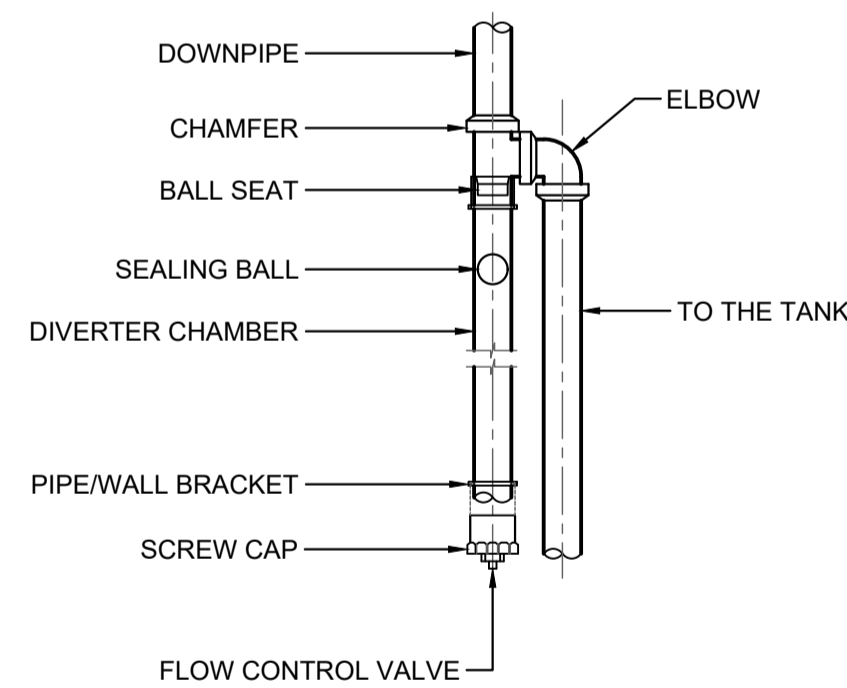


TYPICAL RAINWATER TANK DETAIL  
NOT TO SCALE

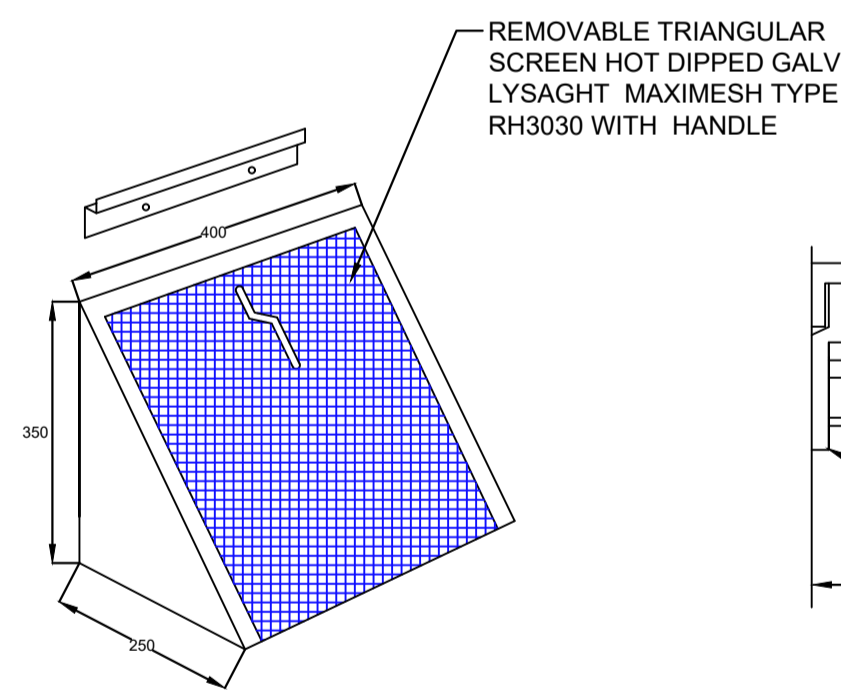


LEGEND:  
BACKGROUND IS YELLOW  
TEXT IS WHITE ON BLACK  
BACKGROUND

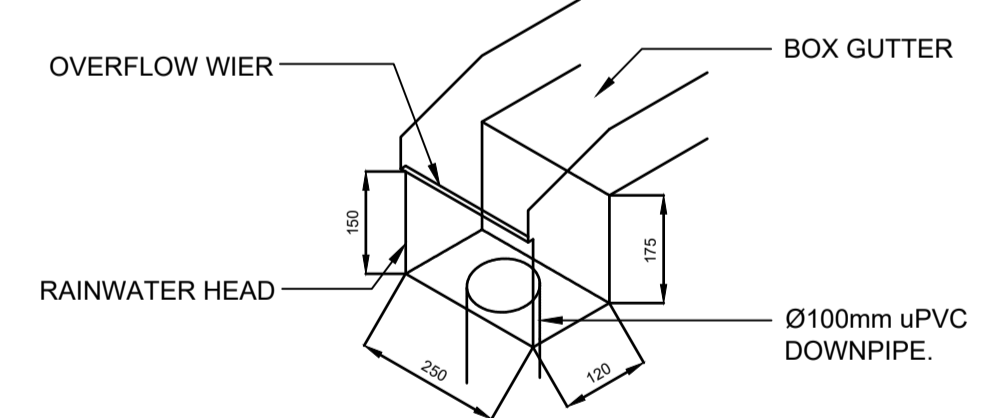
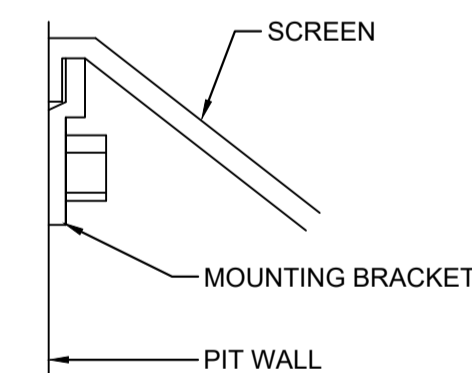
DETAIL  
RAINWATER SIGN  
SCALE 1:20



FIRST FLUSH DETAIL  
SCALE 1:10



MULTI PURPOSE FILTER SCREEN  
SCALE 1:10



STANDARD RAINWATER HEAD SECTION  
NOT TO SCALE

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PROJECT  
PROPOSED NEW DWELLING

STATUS  
ISSUED FOR C.D.C.  
TITLE  
STORMWATER DETAILS SHEET 2

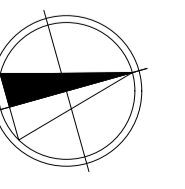
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AM  
CHECKED  
AE

DESIGNED  
JL  
APPROVED  
AK

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PROJECT No.  
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SCALE  
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DRAWING No.  
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AT A1 SIZE  
REV.  
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