

ALTERATIONS & ADDITIONS

at: 15 BALTIC STREET, FAIRLIGHT

for: REDSQUARE PTY LTD

Architect: MONT ARCHITECTS

Prepared By:

NB Consulting Engineers
STRUCTURAL • CIVIL • STORMWATER • REMEDIAL

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DRAWING SCHEDULE:

- D01 A STORMWATER DRAINAGE GENERAL NOTES
- D02 A LEVEL 1 & LEVEL 2 STORMWATER DRAINAGE PLAN
- D03 A LEVEL 3 & ROOF STORMWATER DRAINAGE PLAN
- D10 A STORMWATER DRAINAGE DETAILS SHEET 1
- D11 A STORMWATER DRAINAGE DETAILS SHEET 2
- D20 A ROOF CATCHMENT PLAN

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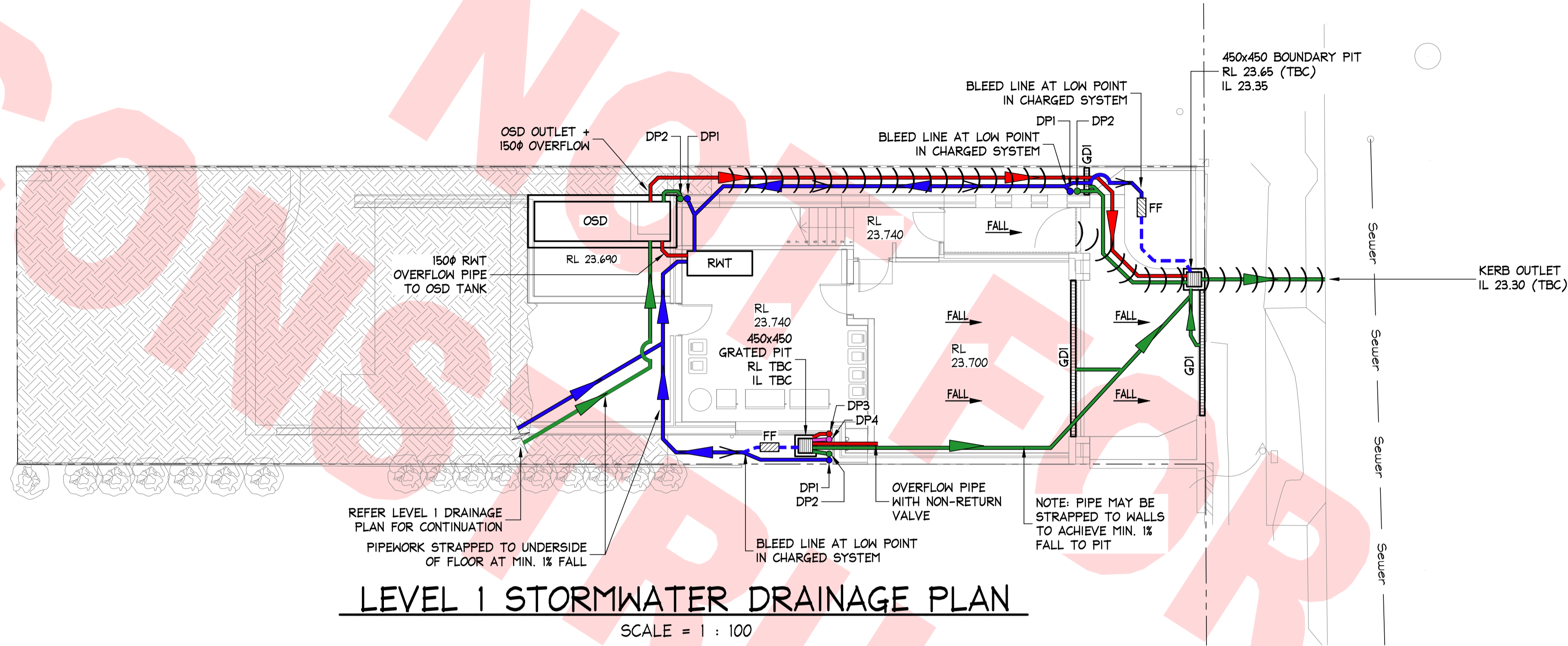
2410101

REV. A - 05.12.2024

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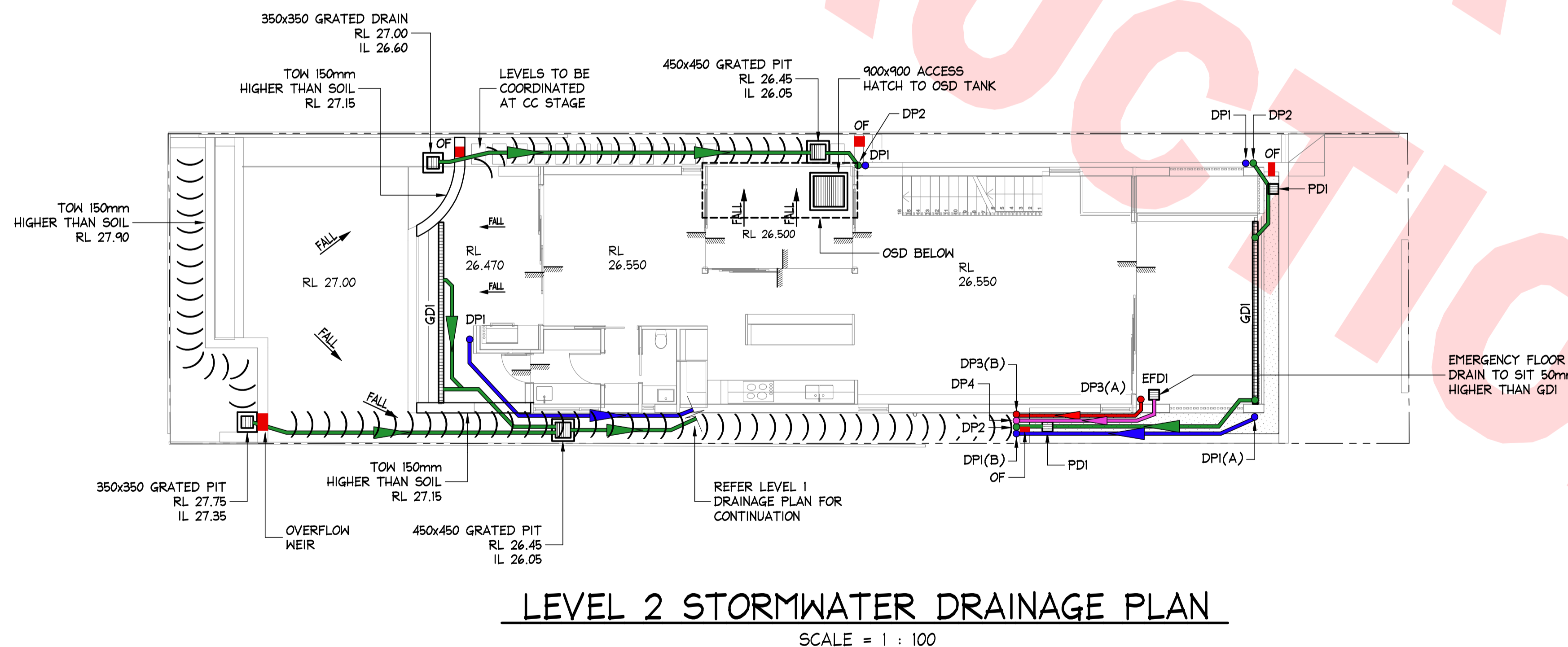
LEVEL 1 STORMWATER DRAINAGE PLAN

SCALE = 1 : 100

LEGEND

- DPI ● 100mm Ø ROOF DRAINAGE DOWNPIPE TO DISCHARGE TO RWT
- DP2 ● 100mm Ø SURFACE DRAINAGE DOWNPIPE
- DP3 ● 100mm Ø EMERGENCY OVERFLOW DOWNPIPE
- DP4 ● 100mm Ø EMERGENCY OVERFLOW DOWNPIPE
- NEW SURFACE DRAINAGE STORMWATER PIPE
- NEW OVERFLOW STORMWATER PIPE
- NEW OVERFLOW STORMWATER PIPE
- NEW ROOF DRAINAGE STORMWATER PIPE
- > STORMWATER PIPE FALL DIRECTION IN CHARGED SYSTEMS
- ▲ STORMWATER PIPE FLOW DIRECTION
- STORMWATER PIT
- EFDI □ EMERGENCY FLOOR DRAIN, REFER TO DETAILS
- PDI □ PLANTER DRAIN, REFER TO DETAILS
- GDI — GDI - 150 MIN DEPTH x 150 WIDE GRATED DRAIN
- RWT RAINWATER TANKS TO COLLECT ALL DPI DOWNPIPES, REFER TO DETAILS
- OSD OSD TANK, REFER TO DETAILS
- ((((OVERLAND FLOW PATH
- OF OVERFLOW, TO BE COORDINATED AT CC STAGE
- RECOMMENDED TO PROVIDE MINIMUM 50mm SET DOWN TO EXTERNAL AREAS, ALTERNATIVELY THRESHOLD DRAINAGE TO BE INCORPORATED INTO SUBSILL
- FF BELOW GROUND FIRST FLUSH, REFER TO DETAILS

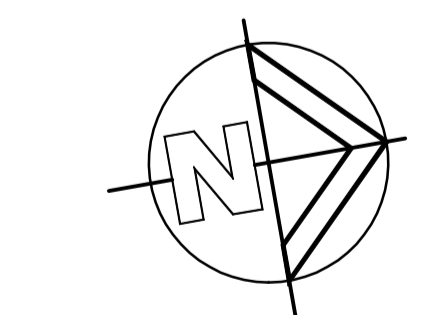
NOTE: ALL DRAINAGE LINE LOCATIONS ARE INDICATIVE ONLY. LOCATION MAY VARY DUE TO CONSTRAINTS.



LEVEL 2 STORMWATER DRAINAGE PLAN

SCALE = 1 : 100

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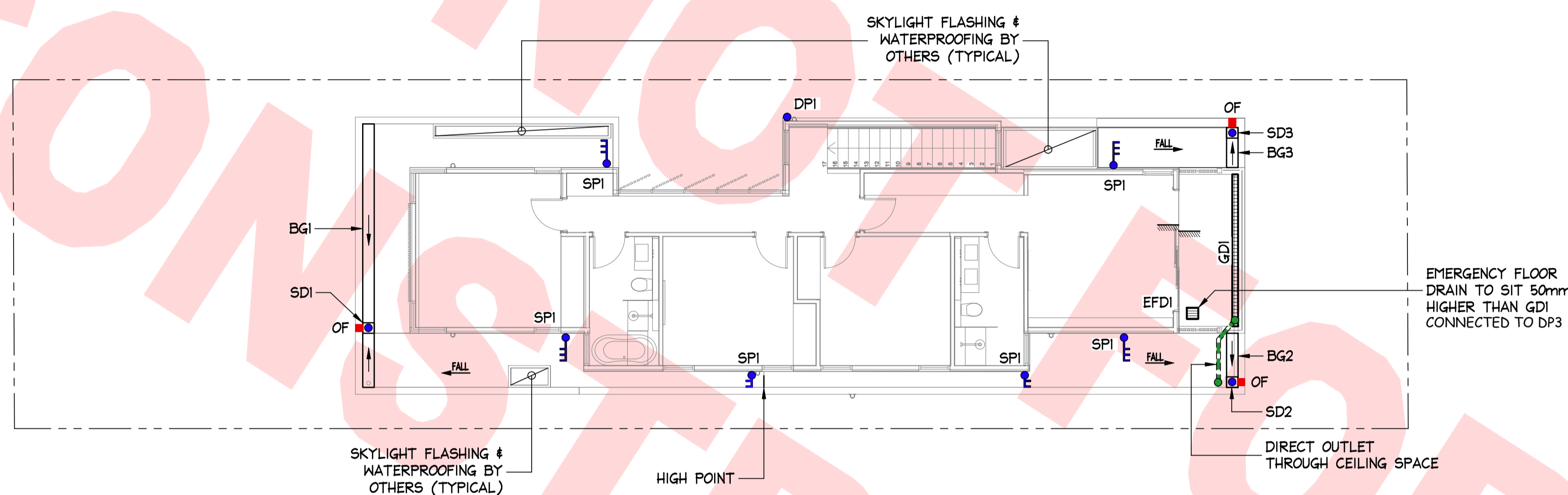
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05.12.2024		A		ISSUED FOR DA SUBMISSION ONLY - NOT FOR CONSTRUCTION		LS HS		Client: RED SQUARE PTY LTD		Drawing Title: LEVEL 1 & LEVEL 2 STORMWATER DRAINAGE PLAN		Job No: 2410101		Drawing No: D02		Issue: A	
Date:	Issue:	Description:				By:	Review:	The copyright of this drawing remains with NB Consulting Engineers				Sydney: Ph: (02) 9984 7000 Unit 11, 1 Vuko Place, Warriewood NSW 2102 Gold Coast: Ph: (07) 5631 4744 Suite 1, 30B Griffith Street, Coolangatta QLD 4225 E : nb@nbconsulting.com.au W : www.nbconsulting.com.au					

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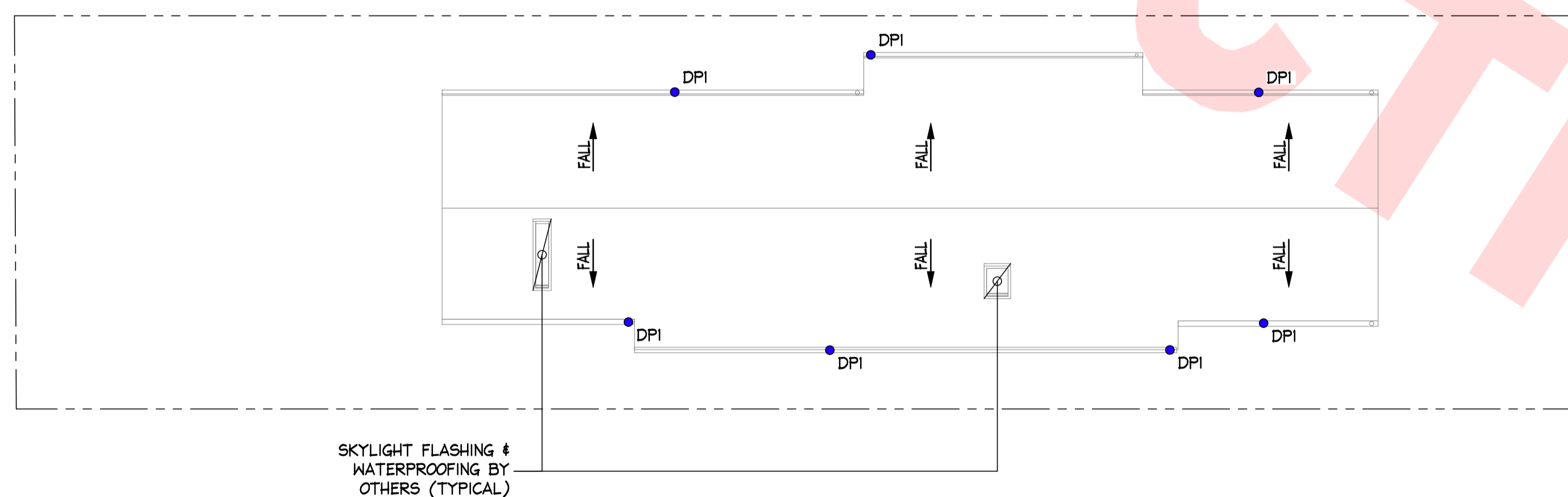
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LEVEL 3 STORMWATER DRAINAGE PLAN

SCALE = 1 : 100



ROOF STORMWATER DRAINAGE PLAN

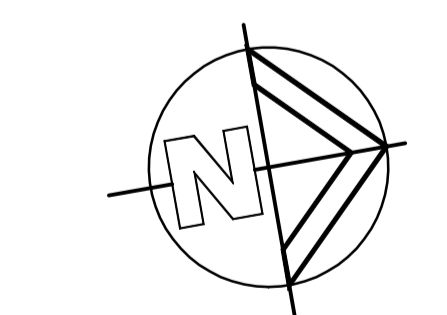
SCALE = 1 : 100

LEGEND

- DPI ● 100mm ϕ ROOF DRAINAGE DOWNPIPE TO DISCHARGE TO RWI
- DP2 ● 100mm ϕ SURFACE DRAINAGE DOWNPIPE
- DP3 ● 100mm ϕ EMERGENCY OVERFLOW DOWNPIPE
- DP(A) DOWNPIPE ABOVE ONLY
- DP(B) DOWNPIPE BELOW ONLY
- SDI-3 SUMP, REFER TO DETAILS
- BGI-3 BOX GUTTER, REFER TO DETAILS
- SPI SPREADER PIPE, REFER TO DETAILS
- 50mm ϕ uPVC STORMWATER PIPE CAST INTO SLAB
- NEW SURFACE DRAINAGE STORMWATER PIPE
- NEW OVERFLOW STORMWATER PIPE
- NEW ROOF DRAINAGE STORMWATER PIPE
- STORMWATER PIPE FLOW DIRECTION
- STORMWATER PIT
- EFDI EMERGENCY FLOOR DRAIN, REFER TO DETAILS
- GDI GDI - 150 MIN DEPTH x 150 WIDE GRATED DRAIN
- RECOMMENDED TO PROVIDE MINIMUM 50mm SET DOWN TO EXTERNAL AREAS, ALTERNATIVELY THRESHOLD DRAINAGE TO BE INCORPORATED INTO SUBSILL

NOTE: ALL DRAINAGE LINE LOCATIONS ARE INDICATIVE ONLY. LOCATION MAY VARY DUE TO CONSTRAINTS.

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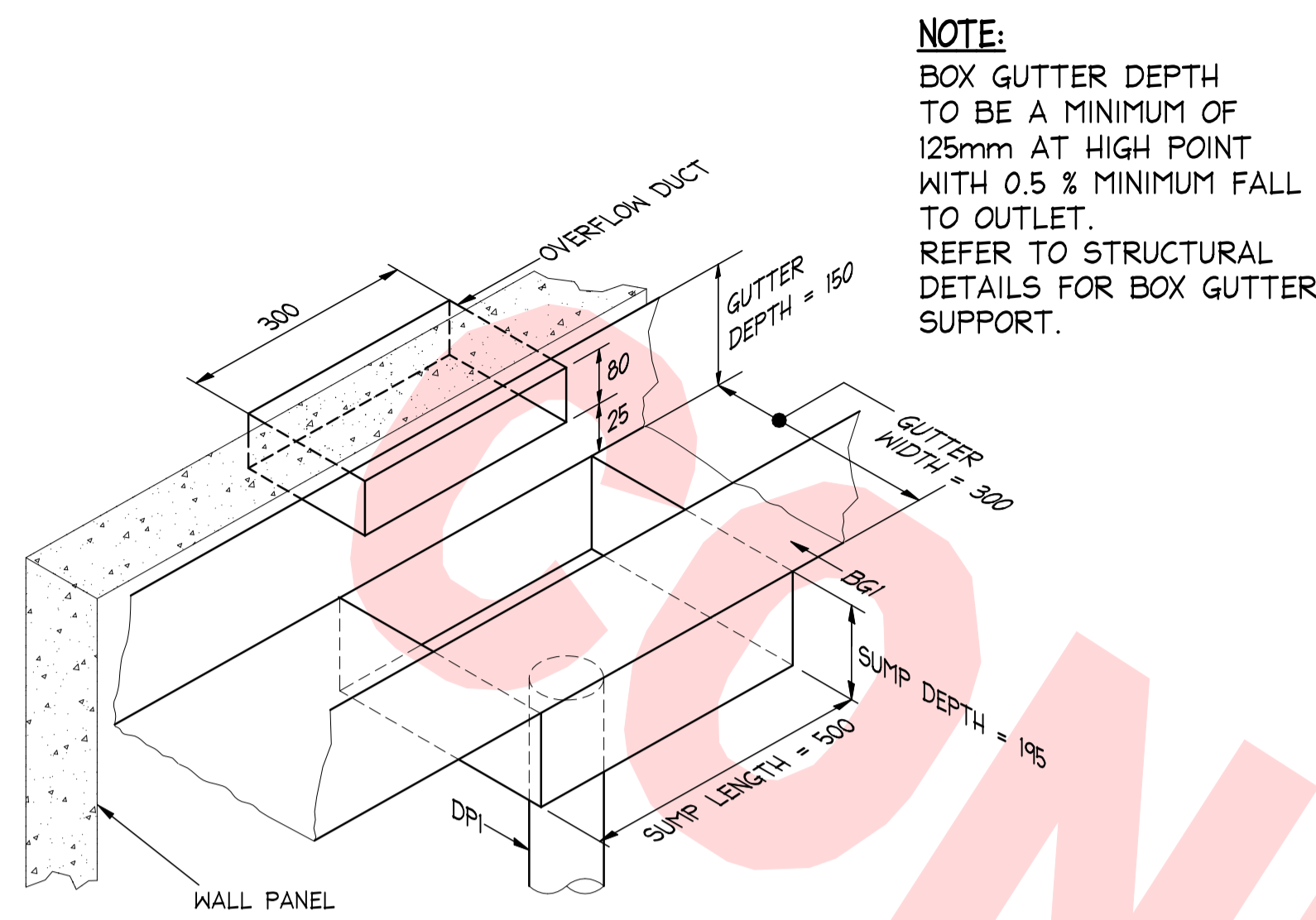
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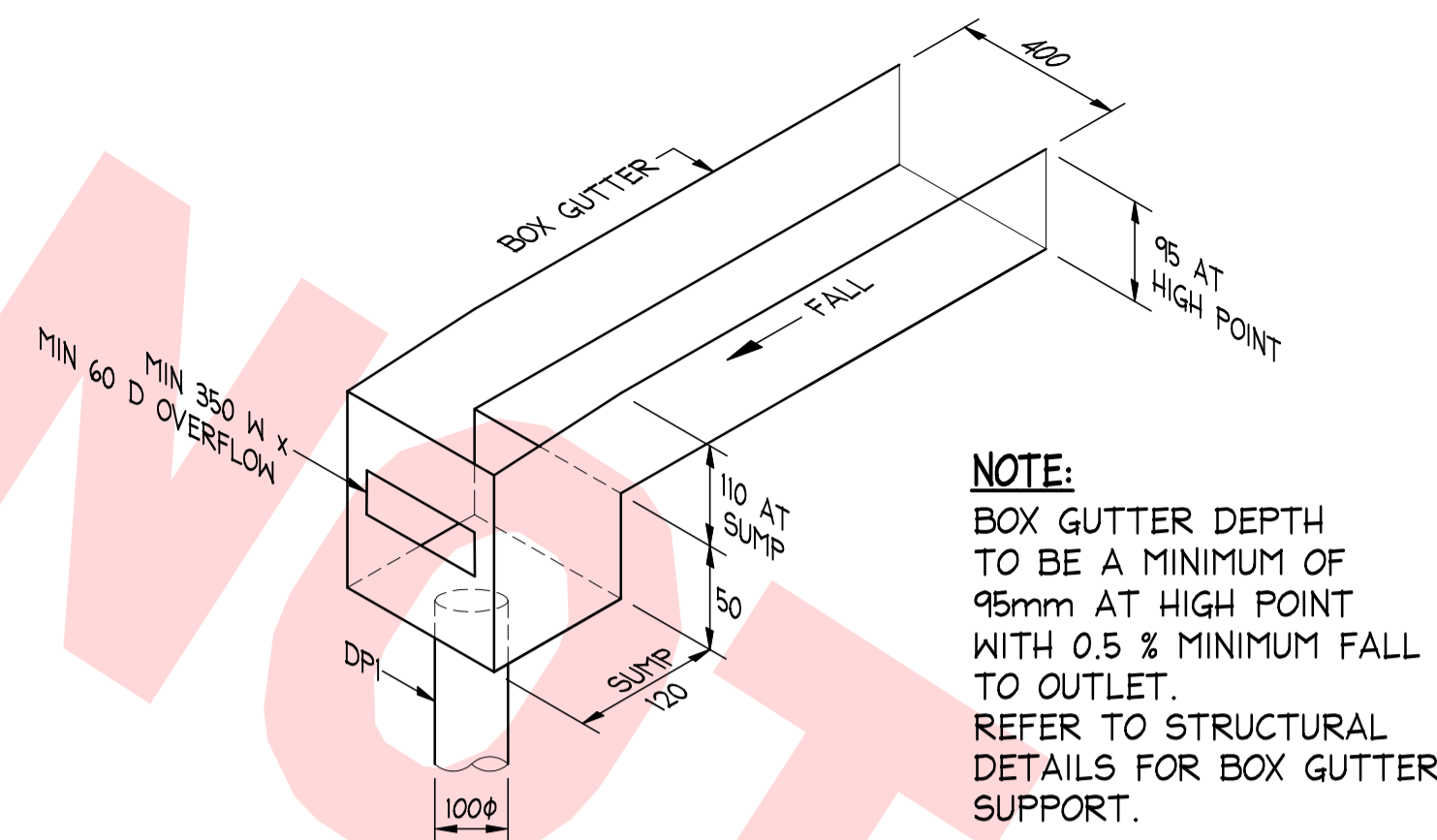
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		Date: 13.12.2024 Michael Wachjo B.E.(Civil), MIEAust., PRE, DEP. (Director NB Consulting Engineers)		Sydney: Ph: (02) 9984 7000 Unit 11, 1 Vuoko Place, Warriewood NSW 2102 Gold Coast: Ph: (07) 5631 4744 Suite 1, 30B Griffith Street, Coolangatta QLD 4225 E: nb@nbconsulting.com.au W: www.nbconsulting.com.au		Client: REDSQUARE PTY LTD		Drawing Title: LEVEL 3 & ROOF STORMWATER DRAINAGE PLAN		Job No: 2410101	Drawing No: D03	Issue: A
Date:	Issue:	Description: ISSUED FOR DA SUBMISSION ONLY - NOT FOR CONSTRUCTION										

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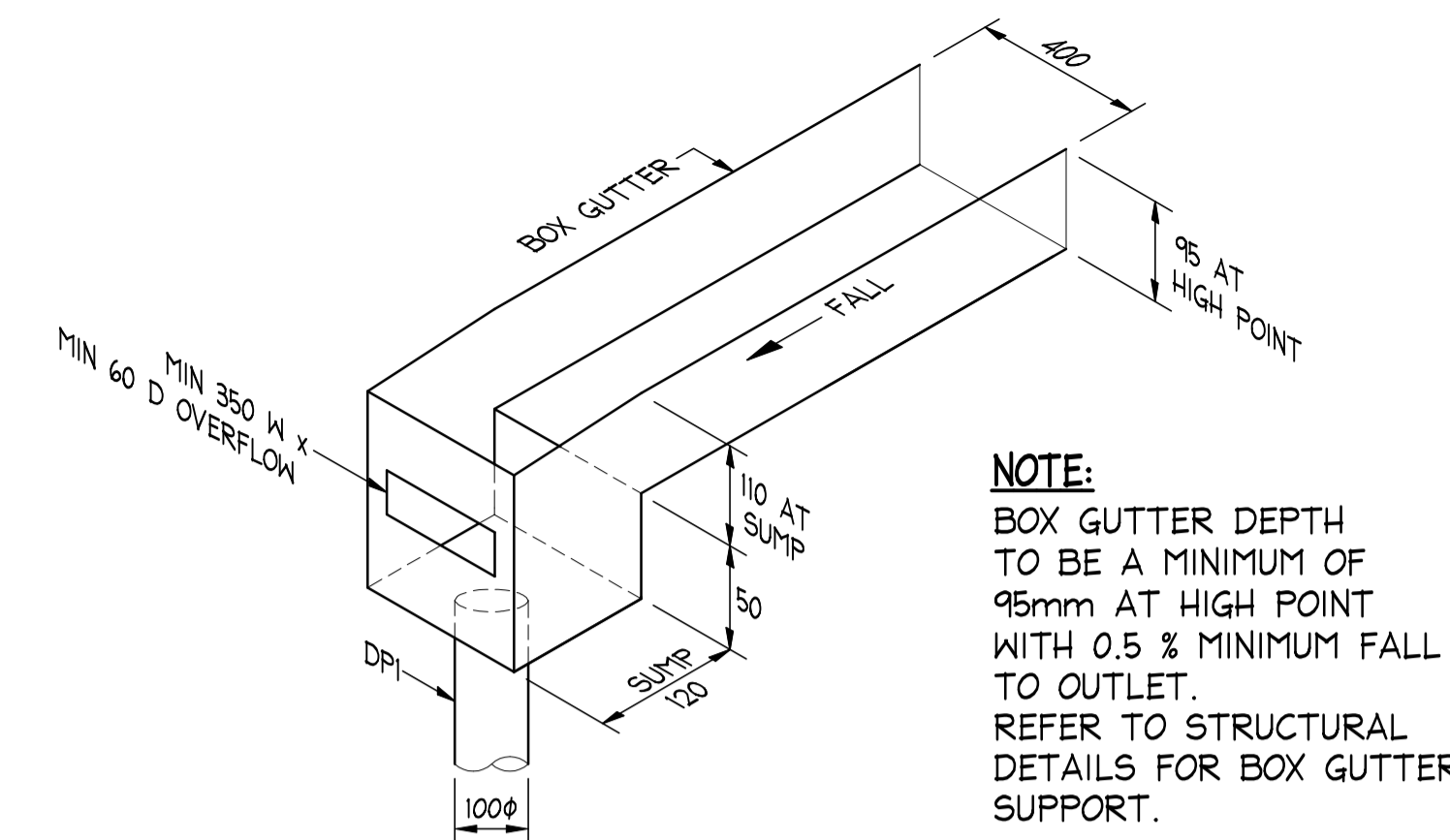
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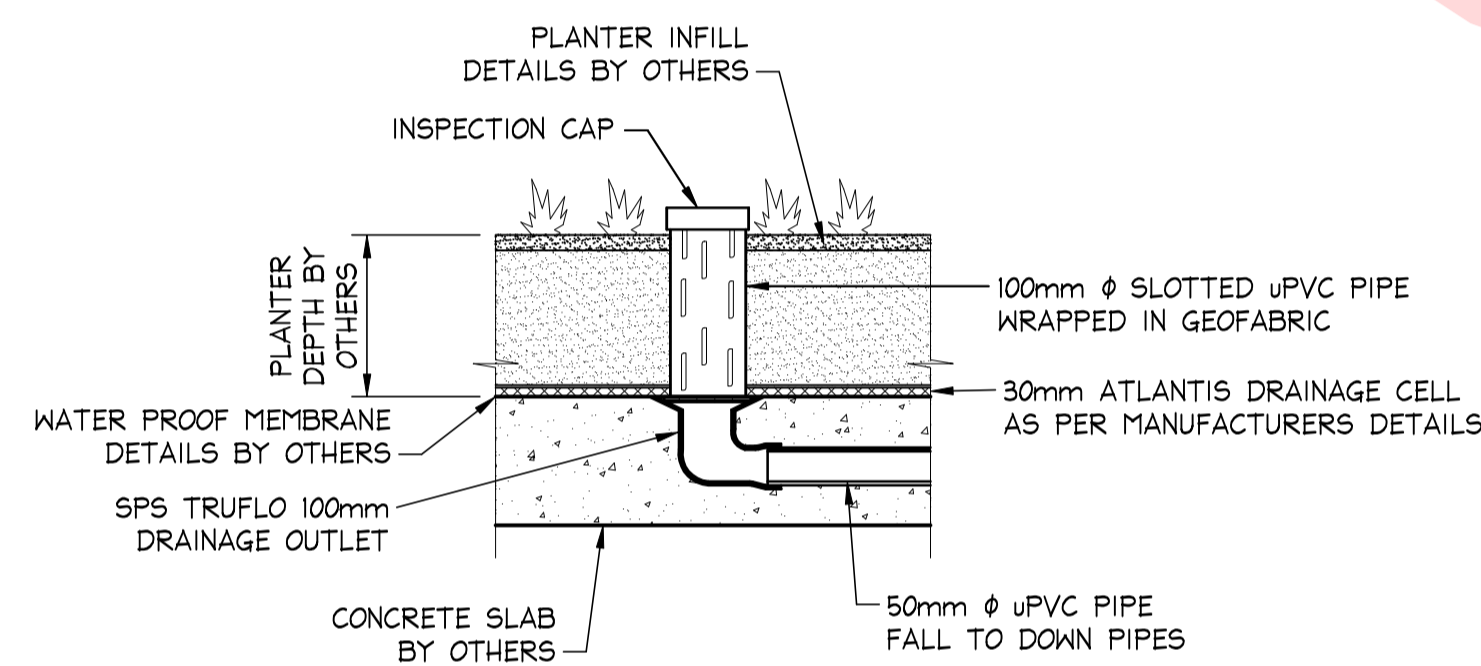
BOX GUTTER IS DESIGNED IN ACCORDANCE WITH AS 3500.3
BOX GUTTER 'BG1' AND SUMP 'SD1' DETAIL
 SCALE = NTS



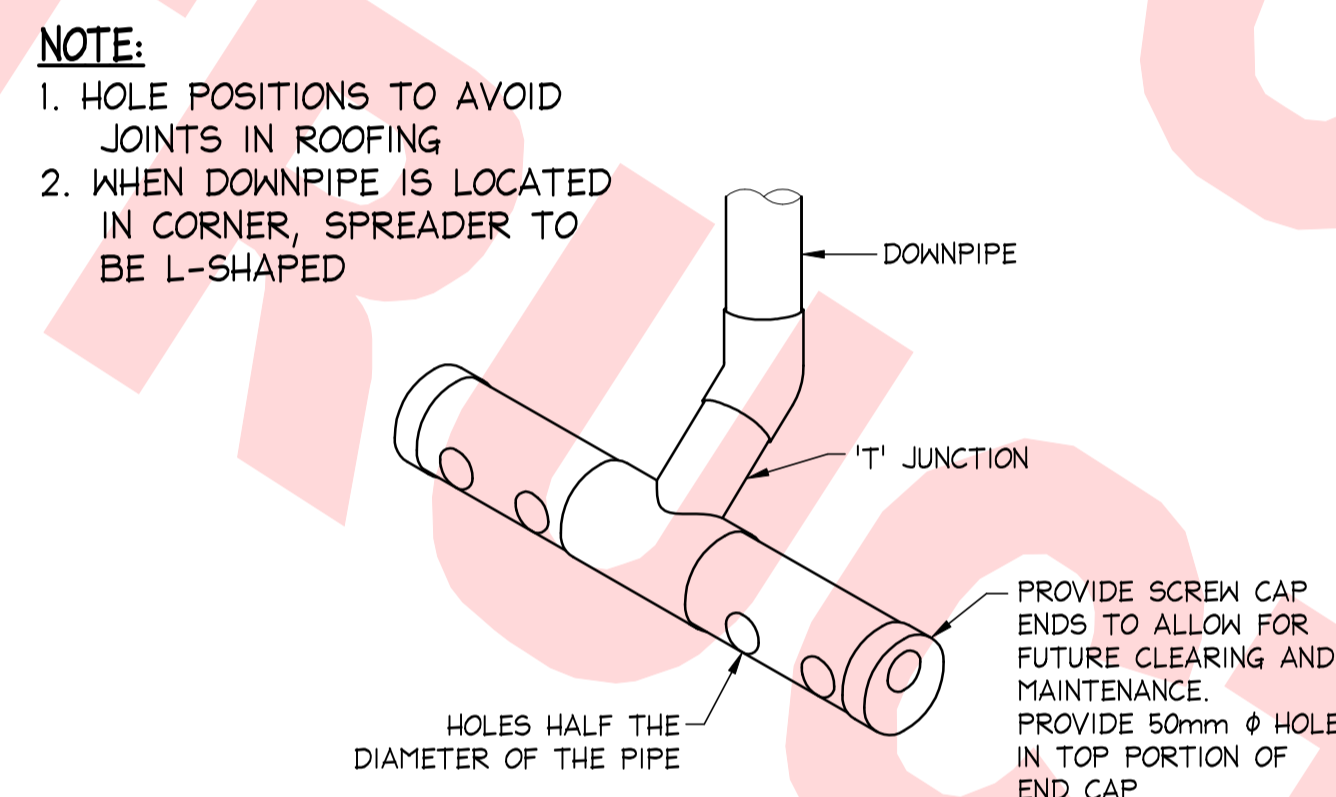
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BOX GUTTER BG2 AND SUMP SD2 DETAIL
 SCALE = NTS



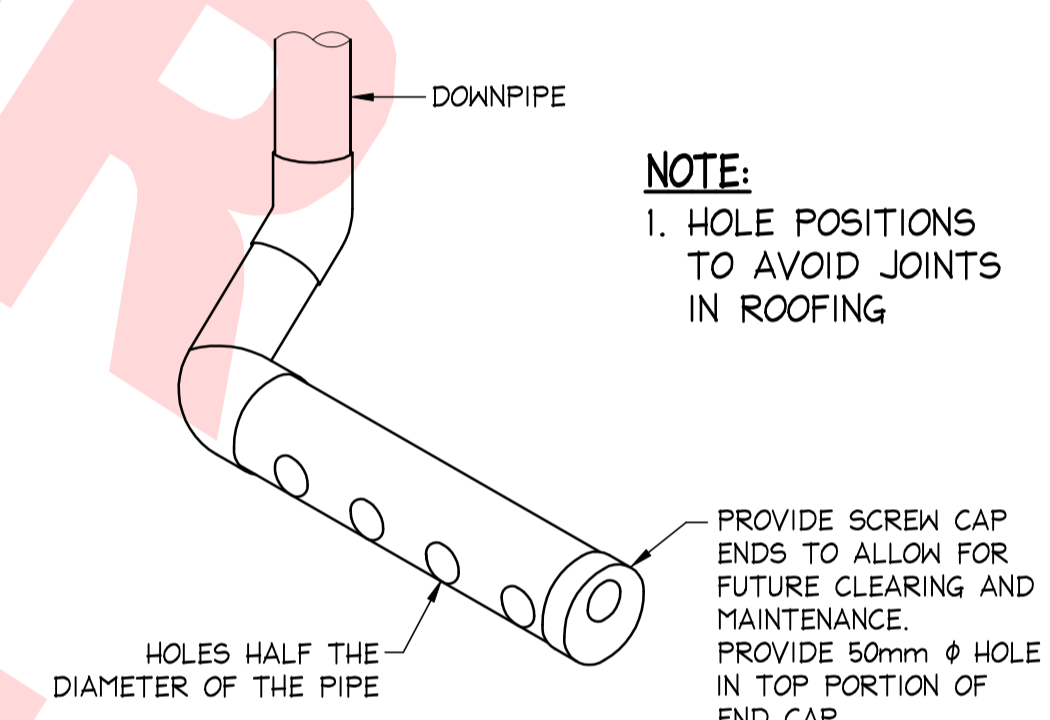
BOX GUTTER IS DESIGNED IN ACCORDANCE WITH AS 3500.3
BOX GUTTER BG3 AND SUMP SD3 DETAIL
 SCALE = NTS



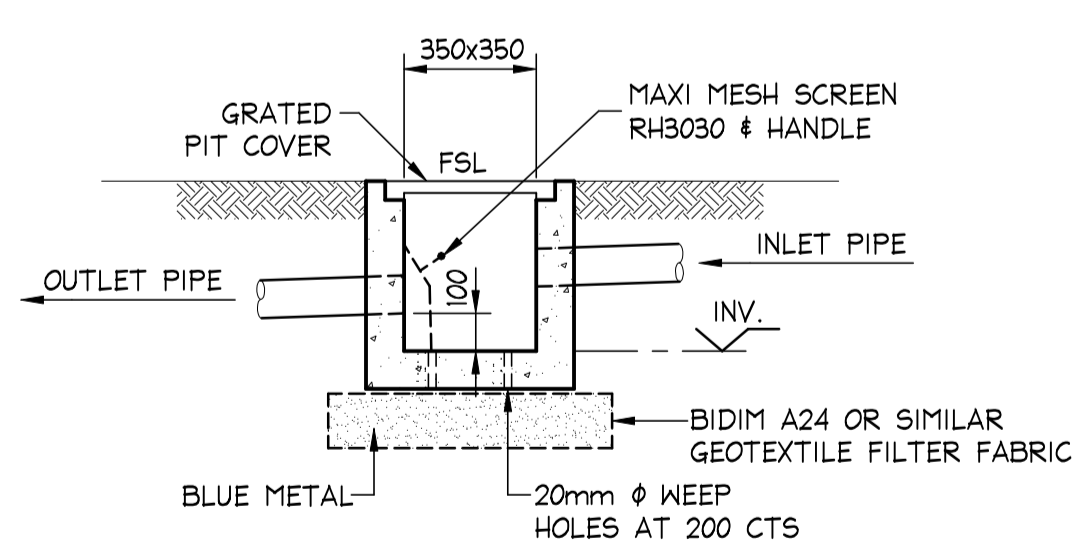
REFER TO MANUFACTURERS SPECIFICATION FOR SPS DRAINAGE OUTLETS
STANDARD PLANTER DRAIN - 'PDI'
 SCALE = 1 : 10



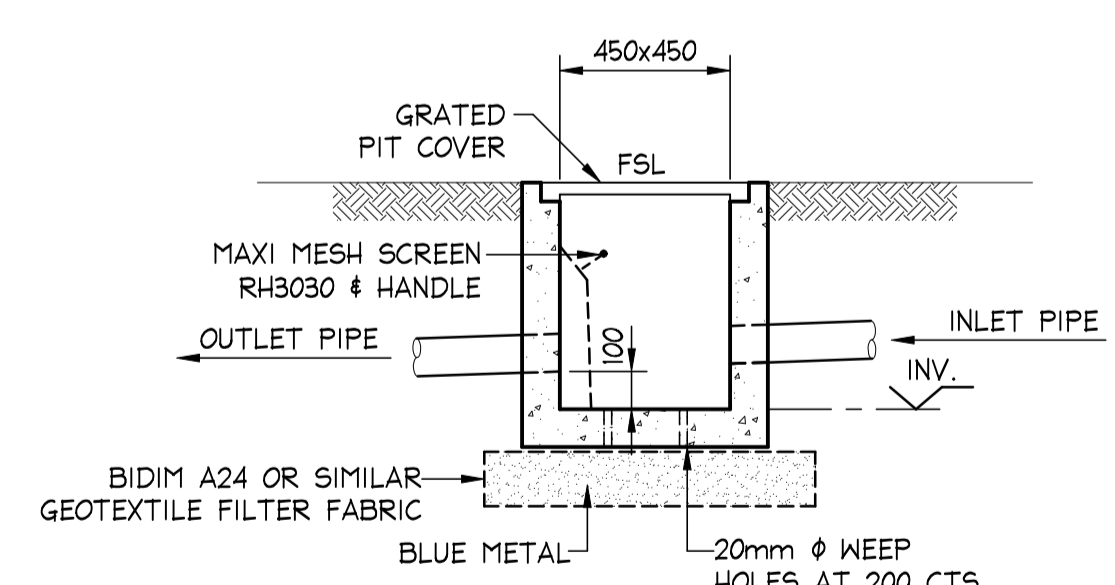
SPREADER PIPE 'SPI' DETAIL OPTION 1
 SCALE = NTS



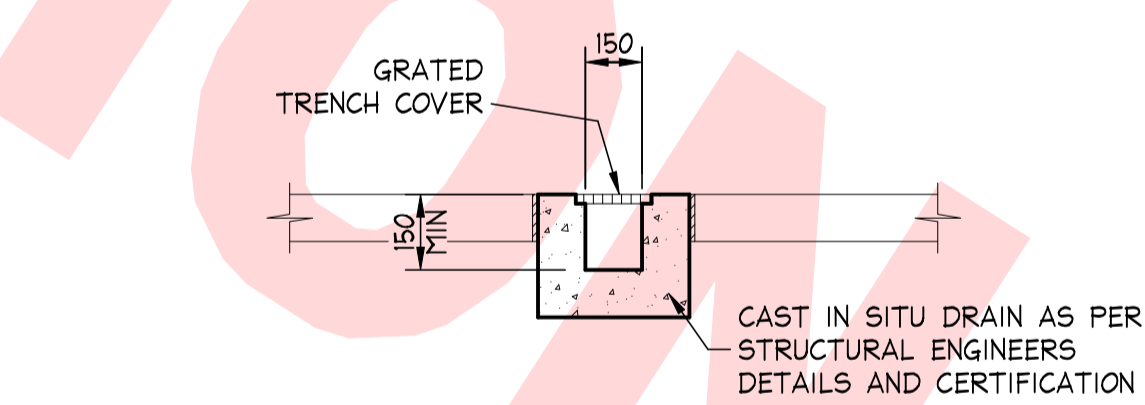
SPREADER PIPE 'SPI' DETAIL OPTION 2
 SCALE = NTS



PRECAST OR CAST INSITU PIT REFER STORMWATER NOTES
 ALTERNATE POLYPROPYLENE PIT BY MANUFACTURER
350x350 PIT DETAIL
 SCALE = 1 : 20



PRECAST OR CAST INSITU PIT REFER STORMWATER NOTES
 ALTERNATE POLYPROPYLENE PIT BY MANUFACTURER
450x450 PIT DETAIL
 SCALE = 1 : 20



OR PRECAST GRATED DRAIN BY MANUFACTURER
 ALTERNATE POLYPROPYLENE DRAIN BY MANUFACTURER
TYPE 'GDI' GRATED DRAIN
 SCALE = 1 : 20

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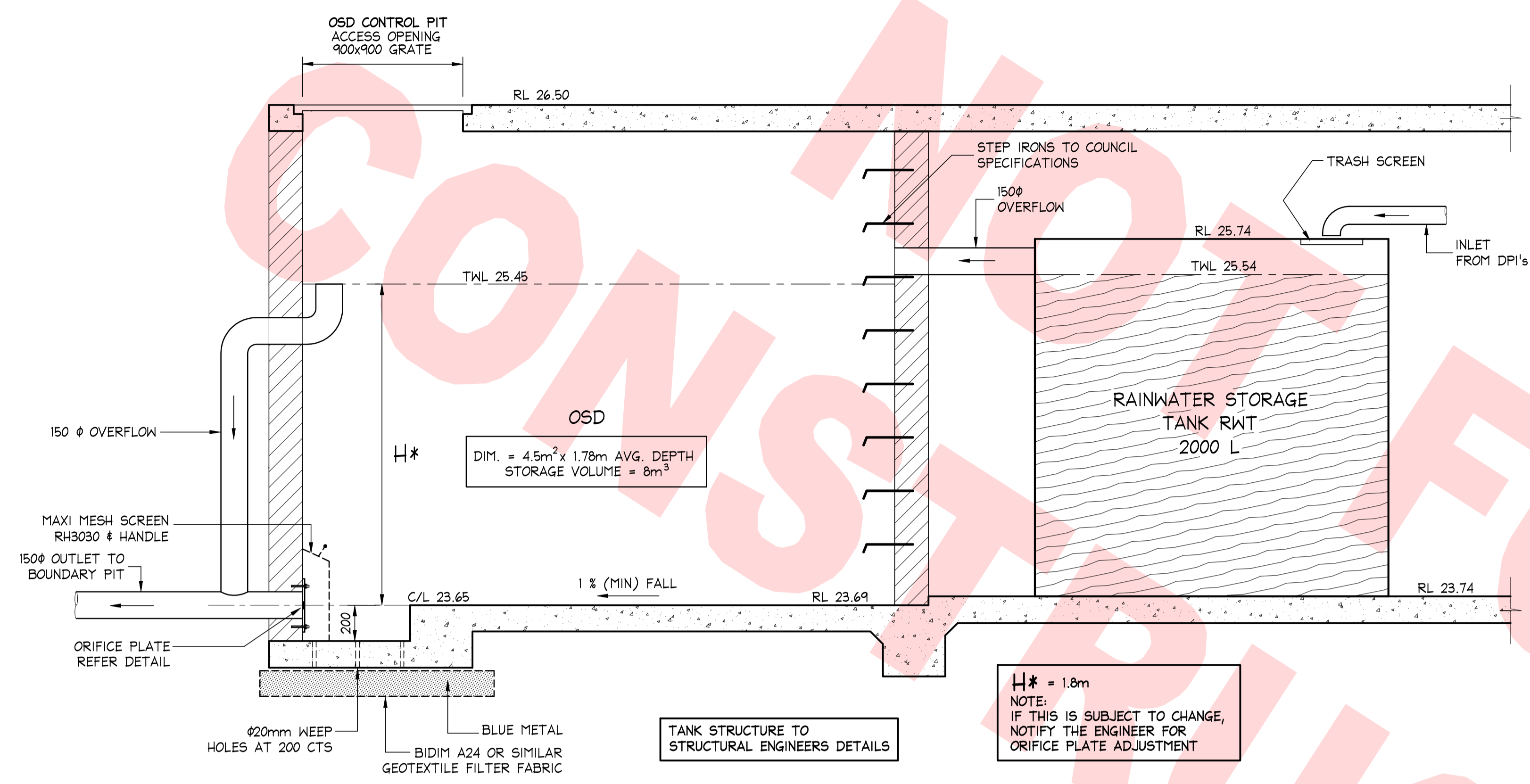
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Date: 05.12.2024		Issue: A		Description: ISSUED FOR DA SUBMISSION ONLY - NOT FOR CONSTRUCTION		By: LS		Client: REDSQUARE PTY LTD		Drawing Title: STORMWATER DRAINAGE DETAILS AND SECTIONS SHEET 1		Job No: 2410101		Drawing No: D10		Issue: A	
				Date: 13.12.2024		Michael Wachjo											
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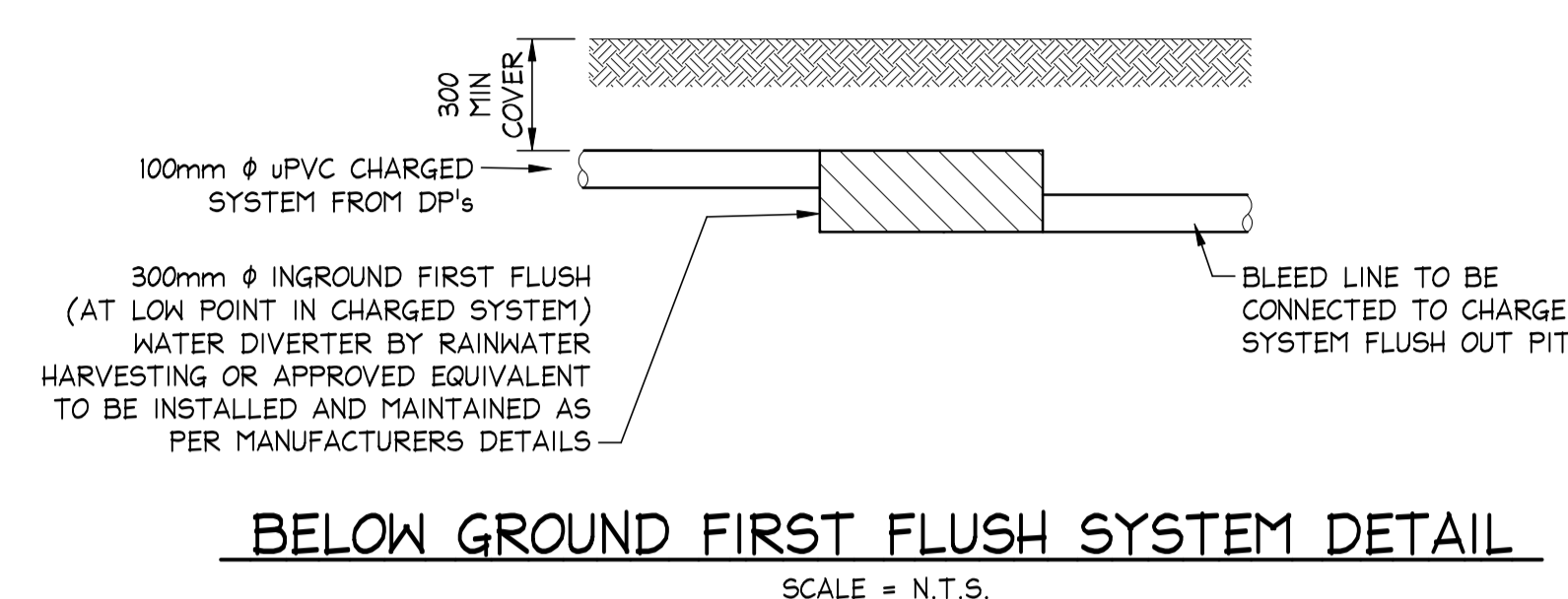
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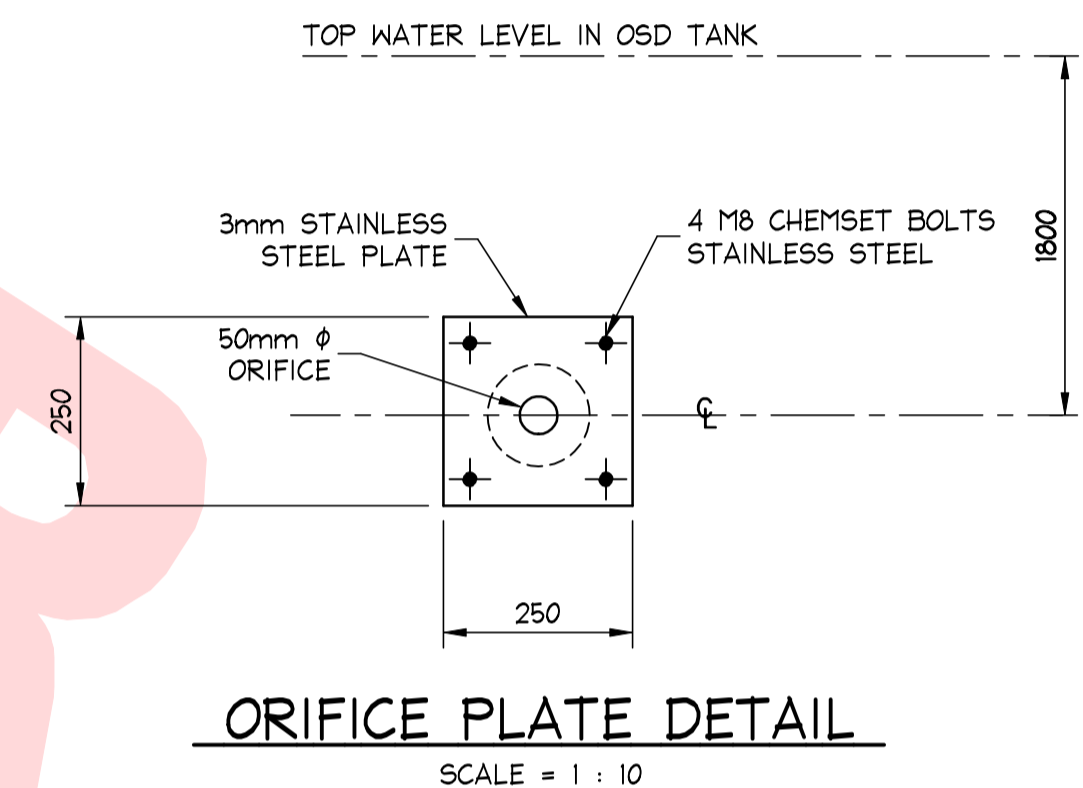
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TYPICAL SECTION RAINWATER RE-USE & ONSITE DETENTION TANK
NOT TO SCALE



BELOW GROUND FIRST FLUSH SYSTEM DETAIL
SCALE = N.T.S.



ORIFICE PLATE DETAIL
SCALE = 1 : 10

NOTE:
NOTIFY ENGINEER IF HEIGHT TO ORIFICE IS TO CHANGE.

RAINWATER RE-USE TANKS:

- K1. CONSIDERING THE ROOF CATCHMENT AREA, LOCATION OF PROPERTY, INTENDED USE OF RAINWATER AND GARDEN SIZE WE RECOMMEND PROVIDING A RAINWATER TANK FOR USE AS PER BASIX REQUIREMENTS, SYDNEY WATER AND NSW HEALTH REQUIREMENTS FOR NON DRINKING USE ONLY AS PER BASIX REPORT.
- K2. THE TANKS PROVIDED WILL REDUCE PRESSURE ON COUNCIL'S STORMWATER INFRASTRUCTURE.
- K3. REFERENCES: COOMBS P.J. & KUCZERA G. (2001), "RAINWATER TANK DESIGN FOR WATER SUPPLY AND STORMWATER MANAGEMENT." STORMWATER INDUSTRY ASSOCIATION REGIONAL CONFERENCE. PATRICK DUPONT & STEVE SHACKLE, "RAINWATER" AUSTRALIAN GOVERNMENT (2004), "GUIDANCE ON USE OF RAINWATER TANKS".
- K4. ALL CONNECTIONS TO PLUMBING AND RAINWATER TANKS TO BE IN ACCORDANCE WITH SYDNEY WATERS' GUIDE "INSTALLING A RAINWATER TANK" AVAILABLE AT www.sydneywater.com.au
- K5. PROVIDE A DUAL SUPPLY SYSTEM AND BACKFLOW PREVENTION SYSTEM IN ACCORDANCE WITH 'BASIX-DESIGN GUIDE FOR SINGLE DWELLINGS' BY NSW DEPARTMENT OF INFRASTRUCTURE, PLANNING AND NATURAL RESOURCES.
- K6. IF NOT SPECIFIED ON PLANS, THE FIRST FLUSH SYSTEM IS TO HAVE A MINIMUM SIZE OF 20L PER 100m² OF ROOF CATCHMENT AREA PRIOR TO ENTERING THE RAINWATER TANK. INDIVIDUAL SITE ANALYSIS IS REQUIRED IN HEAVILY POLLUTED AREAS TO DETERMINE IF LARGER VOLUMES OF FIRST FLUSH RAINWATER ARE TO BE DIVERTED. IF IN DOUBT, CHECK WITH LOCAL HEALTH AUTHORITIES.
- K7. SCREENED DOWNPIPE RAINWATER HEAD OR OTHER SUITABLE LEAF AND DEBRIS DEVICE TO BE INSTALLED ON EACH DOWNPIPE. SCREEN MESH TO BE 4-6mm AND DESIGNED TO BE SELF-CLEANING.
- K8. FIRST FLUSH DEVICES, OR APPROVED ALTERNATIVE, TO BE INSTALLED WITH AN AUTOMATED DIVERSION AND DRAINAGE SYSTEM, THAT IS, NO MANUAL DIVERSION AND DRAINAGE VALVES. REFER TYPICAL FLUSH OUT PIT FOR DETAILS.
- K9. BEFORE PURCHASING MATERIALS OR PAINT TO BE USED ON ROOF CATCHMENT AREAS, THE MANUFACTURER'S RECOMMENDATIONS ON LABELS AND BROCHURES FOR RAINWATER TANK SUITABILITY TO BE READ AND ADHERED TO.
- K10. PRE-STORAGE PITS FOR UNDERGROUND RAINWATER STORAGE TANKS AND FLUSH OUT PITS MAY ASSIST IN LIMITING SILT, AND PREVENT VERMIN, INSECTS (INCLUDING MOSQUITOES) AND DEBRIS FROM ENTERING THE RAINWATER STORAGE AREA.
- K11. BUILDER/PLUMBER TO ENSURE THE INSTALLATION OF THE RAINWATER TANK SYSTEM IS IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS AND THE RAINWATER TANK DESIGN AND INSTALLATION HANDBOOK - HB 230-2008. IF IN DOUBT CONTACT ENGINEER.
- K12. RAINWATER TANK TO BE WATER PROOFED IN ACCORDANCE WITH HB 230-2008

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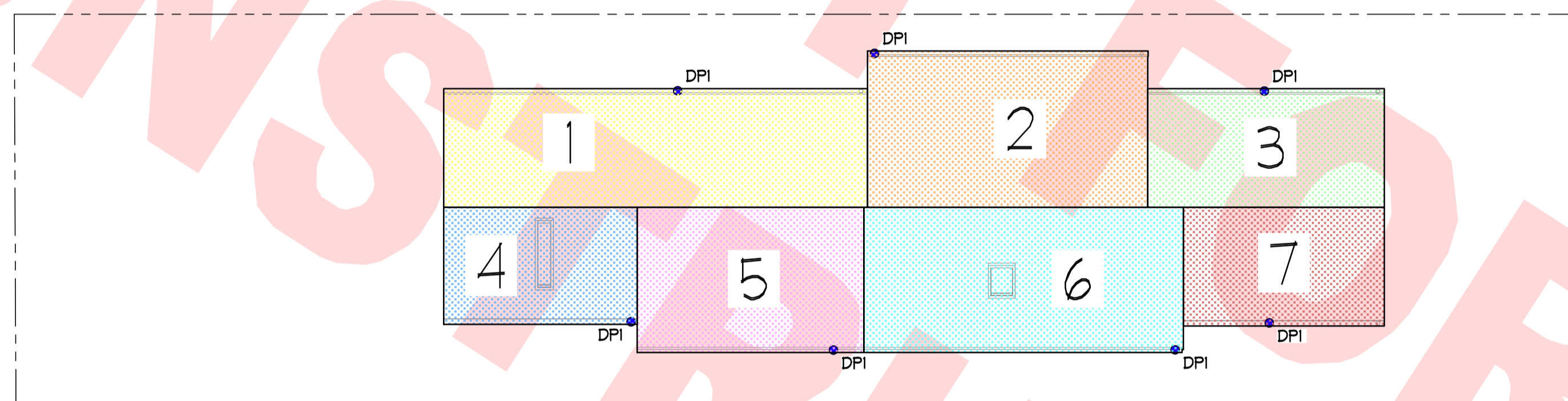
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Date: 05.12.2024		Issue: A		Description: ISSUED FOR DA SUBMISSION ONLY - NOT FOR CONSTRUCTION		By: LS		Review: HS		Drawing Title: STORMWATER DRAINAGE DETAILS AND SECTIONS SHEET 2		Job No: 2410101	Drawing No: D11	Issue: A
Date:		Issue:		Description:		By:		Review:		Drawing Title:		Job No:	Drawing No:	Issue:
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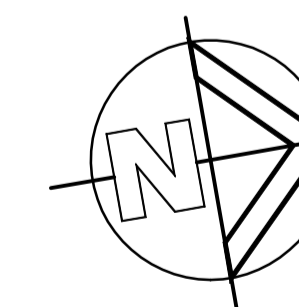


ROOF CATCHMENT PLAN

SCALE = 1 : 100

ROOF CATCHMENT TABLE		
KEY	CATCHMENT AREA	AREA TO DOWNPIPE (m ²)
1	1	27.1
2	2	23.4
3	3	15.1
4	4	12.1
5	5	17.6
6	6	24.8
7	7	13.0
	TOTAL	133.1

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