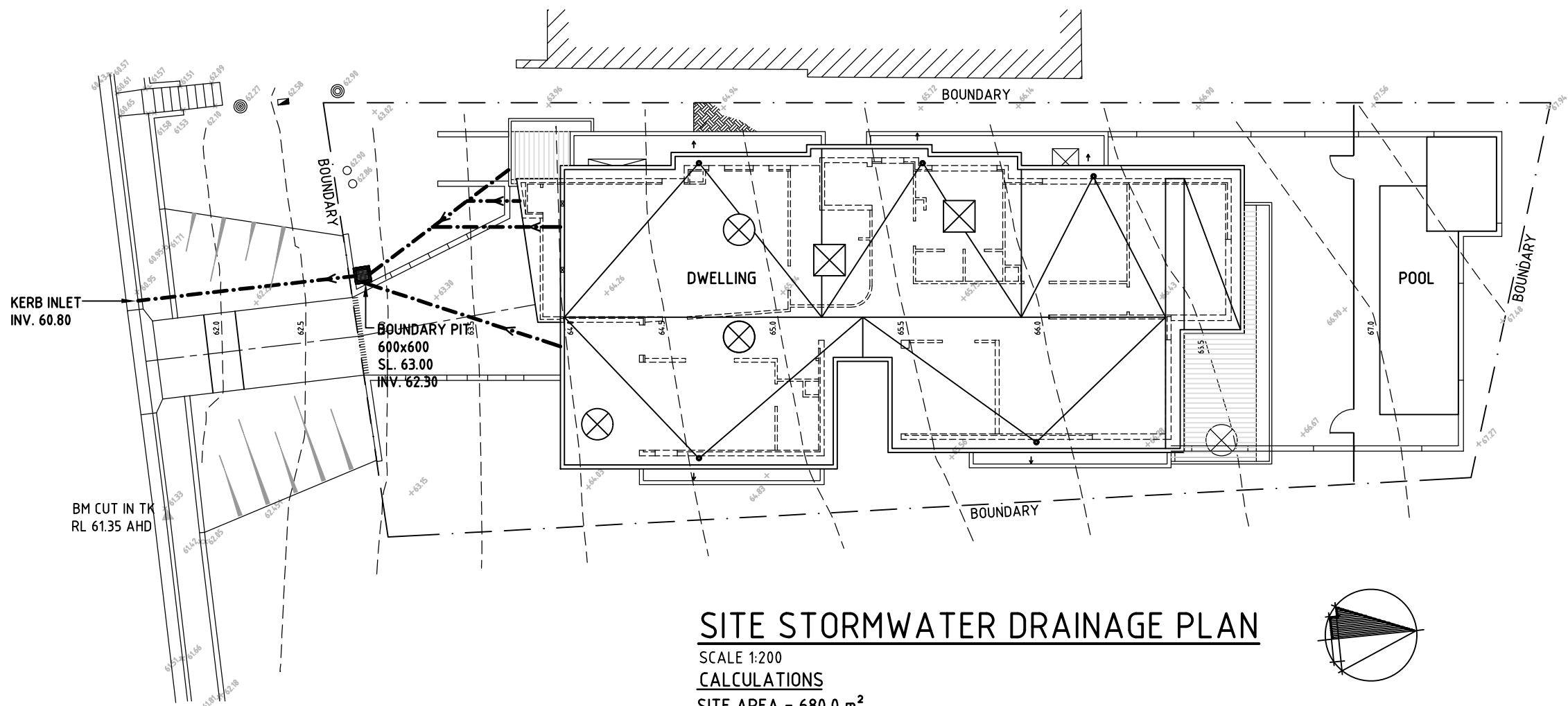




SITE STORMWATER DRAINAGE PLAN

SCALE 1:200

CALCULATIONS

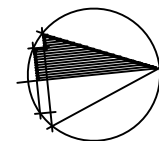
SITE AREA = 680.0 m²

REGION 2

O.S.D. STORAGE REQUIREMENT (200m³/ha x 0.086) = 13.6 m³

OFFSET RAINWATER REQUIREMENT OF = 13.5 m³ (BASIX) AT 100%

NETT O.S.D. STORAGE = 0.1 m³ (NEGLIGIBLE)



CONCEPT STORMWATER

GENERAL NOTES – STORM WATER

- SW1 All S.W. pipework to be carried out in U.P.V.C. to AS 1260 CLASS SH.
- SW2 All D.P. to be carried out in U.P.V.C. to AS 1415 parts 1-5 CLASS SWV.
- SW3 All S.W. pipes to grade at 1% min. U.N.O.
- SW4 All S.W. pipework to be 100Ømm U.N.O.
- SW5 All gutters to be as noted in schedule.
- SW6 All D.P.'S to be as noted.
- SW7 All grated pits to be 300x300 precast concrete U.N.O.
- SW8 All covered pits to be 600x600 precast concrete U.N.O.
- SW9 Rainwater Tank to Basix
- SW10 All covers, grates & frames to be heavy duty where subject to vehicular traffic.
- SW11 All covers, grates & frames to be medium duty where subject to pedestrian traffic or landscaped areas.
- SW12 All drainage to maintain a min. cover of 100mm.
- SW13 For exact location of buildings, levels, walls, d.p.'s etc. refer to architectural detail drawings.

- SW14 The contractor shall submit to the builder for approval, samples of the nominated equipment, fittings and fixtures to be used for the project. This also applies and must be strictly adhered to when offering alternatives to specified items.
- SW15 Any discrepancy or variations of design shall be referred to 'The Principle' for decision prior to the commencement of any such work.
- SW16 The contractor shall be responsible for the set out and placement of all core holes, wall, floor and beam penetrations. All penetrations shall be approved prior placement, seal holes and repair chases in walls after installation of pipework.
- SW17 All floor and wall penetrations shall be fire rated to comply with the requirements of the Building Code of Australia.
- SW18 The drawings documented hereafter do not purport to show all architectural, structural or hydraulic services details. They are a guide only, and it shall be the contractors responsibility to allow for all necessary fittings, pipes, penetrations, droppers, risers and ancillary items for a complete and compliant installation.

- SW19 The contractor shall test all installed services to the requirements and satisfaction of the relevant authorities and superintendent.
- SW20 Provide fail safe overflow spitters no less than 50mm diameter for all balconies and terraces.
- SW21 All drainage pipes less than 300mm in diameter shall be sewer grade U.P.V.C. with solvent welded joints (U.N.O.) All pipe junctions and tapers shall be via proprietary made fittings.
- SW22 Final location of rainwater downpipes shall be co-ordinated on-site with the builder, to the approval of the architect and engineer and in accordance with AS3500, AS4198 and AR&R97.
- SW23 All box gutters and rainwater heads shall be fitted with failsafe overflows sized and installed to AS3500.
- SW24 All drainpipes located in noise sensitive areas as deemed by the architect, acoustic engineer or equivalent persons, shall be acoustically insulated using a system no less in standard than 'SOUNDLAGG 4525C' installed to the manufacturers recommendations.

SUBSOIL DRAINAGE

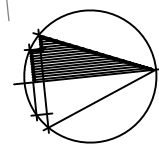
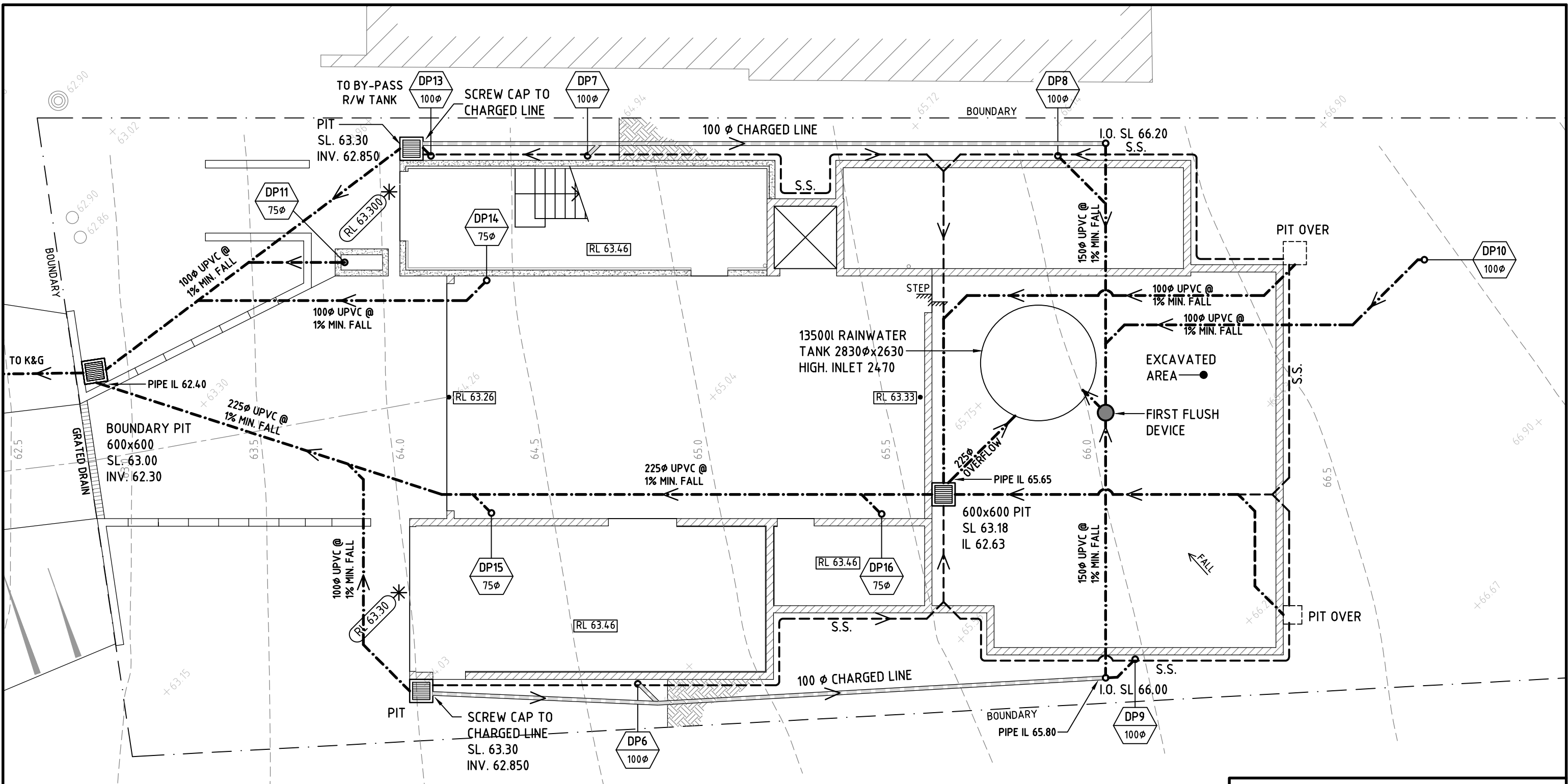
- SS1 Subsoil drainage shall be consistent with the structural engineers details and subject to the findings of the geotechnical report.
- SS2 Subsoil drains shall be slotted flexible U.P.V.C. 100mm diameter fitted with geo-fabric filter sock.
- SS3 Subsoil drainage shall be laid at a minimum grade of 0.5% U.N.O.
- SS4 Subsoil drainage should be installed on the upstream end of any proposed paved areas and connected to the piped drainage system or watercourse.
- SS5 Additional subsoil drainage shall be laid to suit site conditions and groundwater presence as directed.
- SS6 Inspection openings are to be provided at each end and regular intervals for clean-out purposes.

LEGEND

FFL	Finished floor level	SPR.	Spreader
IL	Invert level	S.S.	Sub-soil drainage
RL	Reduced level	◊	Existing surface level
US	Underside	oDP	Down pipe
CIS	Cast into slab	ØRWO	Rainwater outlet
CIC	Cast into column	ØRWH	Rainwater head
STW	Stormwater	▨	Grated stormwater pit
TOW	Top of wall	●	Dropper
U.N.O	Unless noted otherwise	○	First flush device

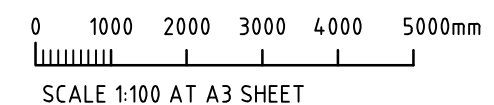
Law & Dawson Pty Ltd Consulting Structural & Civil Engineers		A.C.N. 003 543 913 PO Box 3420, Putney N.S.W. 2112 Tel: (02) 9419 3511, Fax: (02) 9419 6040 Email: enquiries@lawdawson.com.au	
Architect :		pirrello design associates po box 3201 putney nsw 2112 mobile 0414 49 59 79	
Project :		PROPOSED NEW DWELLING, POOL & SITE WORKS AT 6 LINCOLN AVENUE, COLLAROY.	
Title :		SITE STORMWATER DRAINAGE PLAN AND STORMWATER NOTES	
Date	Scale	Project Number	Revision No.
FEB. 2021	1:200	2020/140-SW1	A
Checked	Approved		

A	18.3.21	ISSUE FOR DA	
No.	Date	Revision	App'd



BASEMENT STORMWATER DRAINAGE PLAN
SCALE 1:100

NOTE:-
PROVIDE CLEAN-OUTS TO
AG LINES AT HIGH POINTS



CONCEPT
STORMWATER

No.	Date	Revision	App'd	Checked	Approved	Project Number	Revision No.
A	18.3.21	ISSUE FOR DA				2020/140-SW2	A

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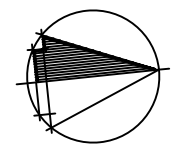
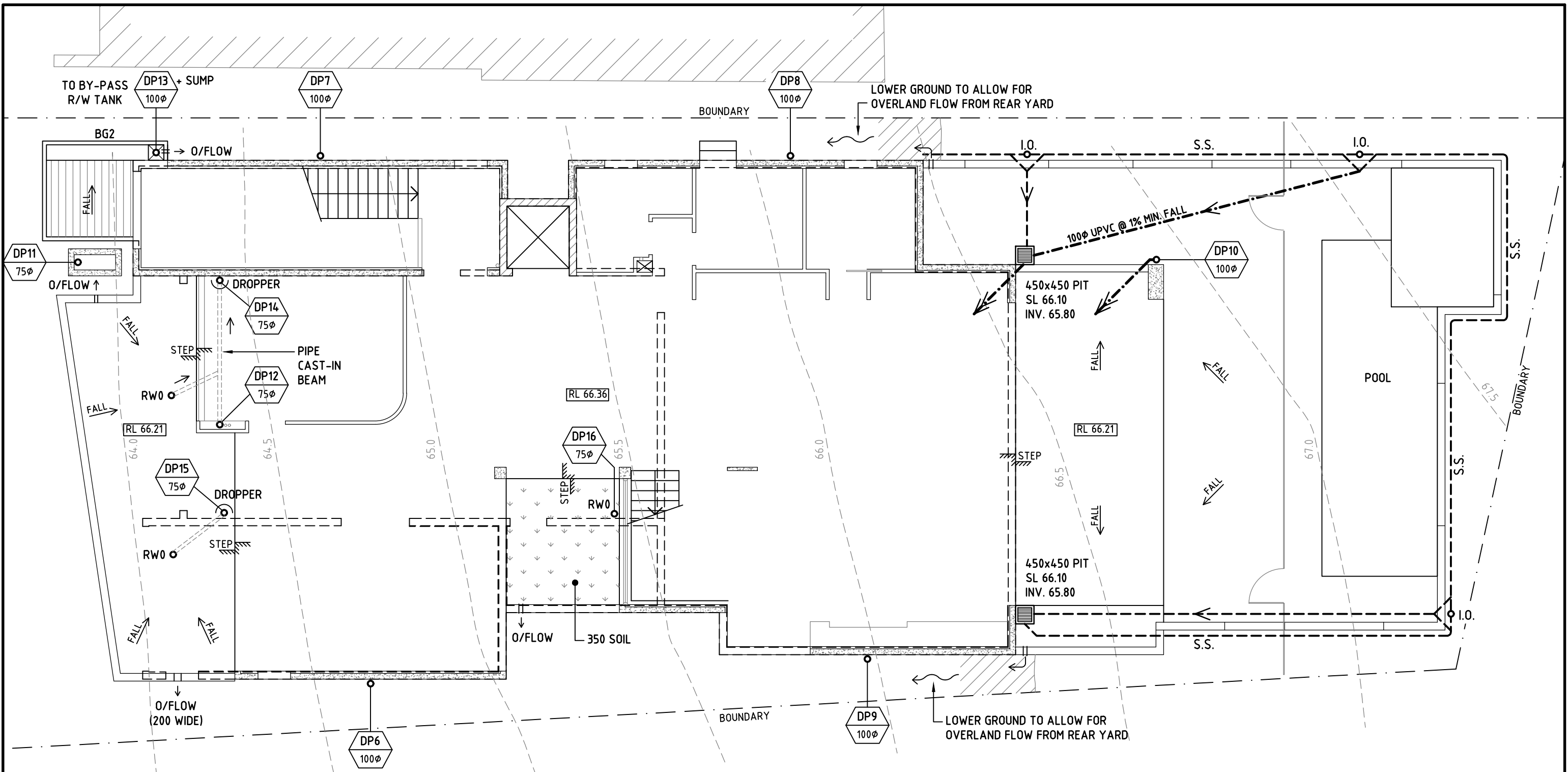
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Architect : pirrello design associates
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Project : **PROPOSED NEW DWELLING,
POOL & SITE WORKS AT
6 LINCOLN AVENUE, COLLAROY.**

Title : **BASEMENT
STORMWATER DRAINAGE PLAN**

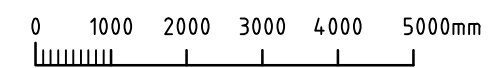
Date FEB. 2021	Scale 1:100	Project Number 2020/140-SW2	Revision No. A
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GROUND FLOOR STORMWATER DRAINAGE PLAN

SCALE 1:100

**CONCEPT
STORMWATER**



SCALE 1:100 AT A3 SHEET

No.	Date	Revision	App'd	Checked	Approved	Project Number	Revision No.
A	18.3.21	ISSUE FOR DA				2020/140-SW3	A

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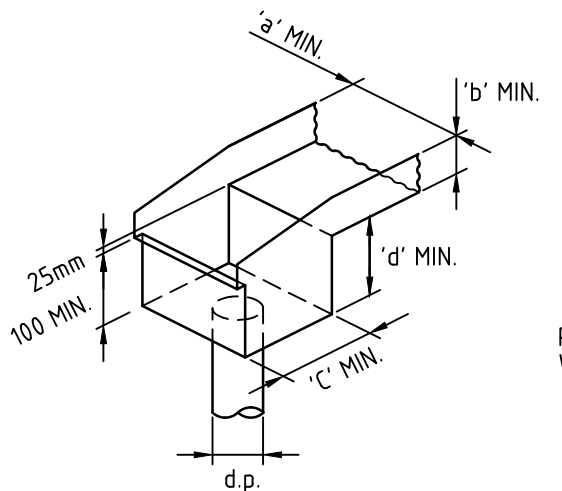
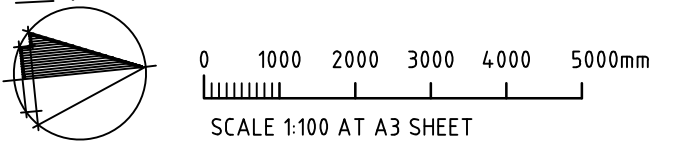
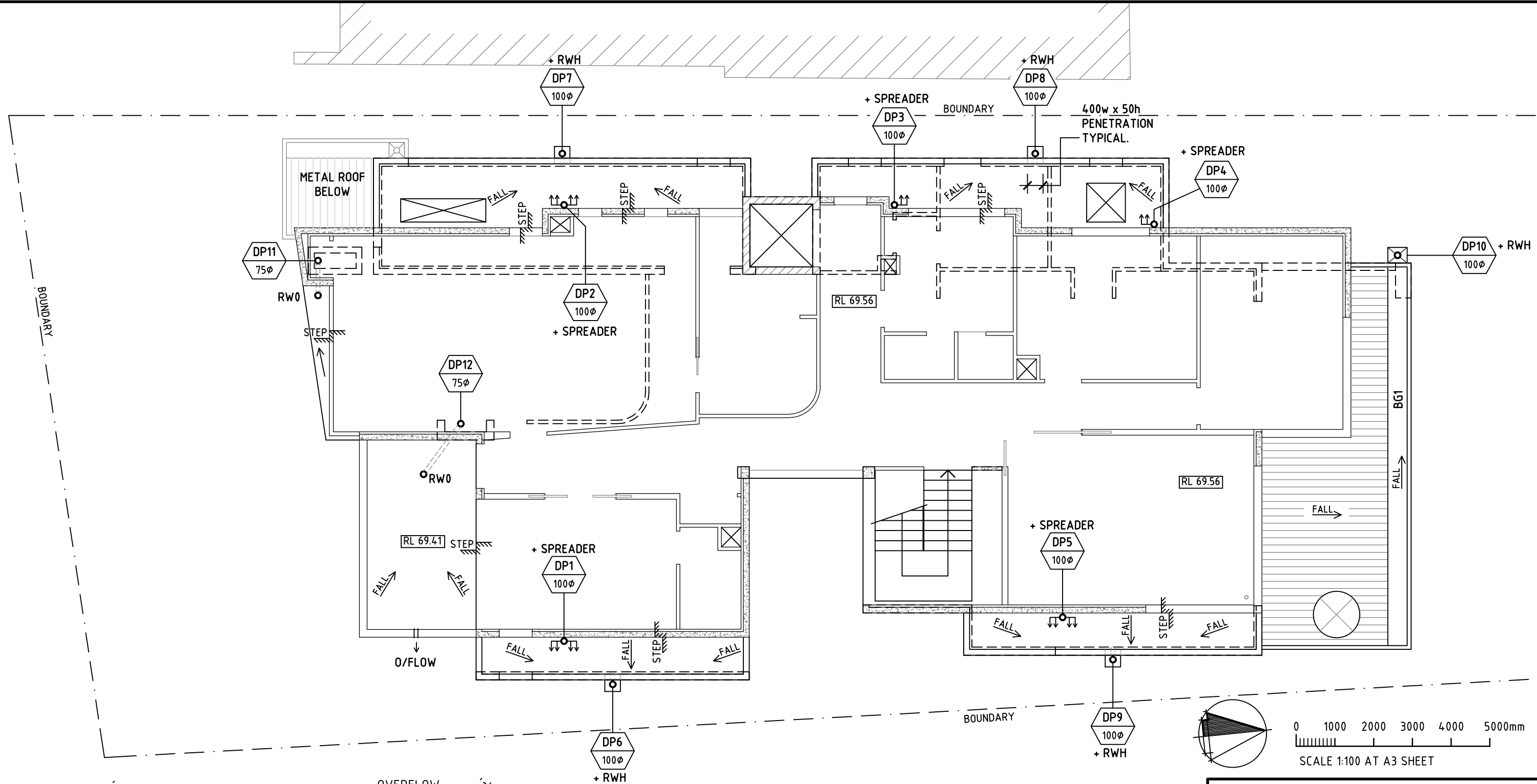
Tel: (02) 9419 3511, Fax: (02) 9419 6040

Email: enquiries@lawdawson.com.au

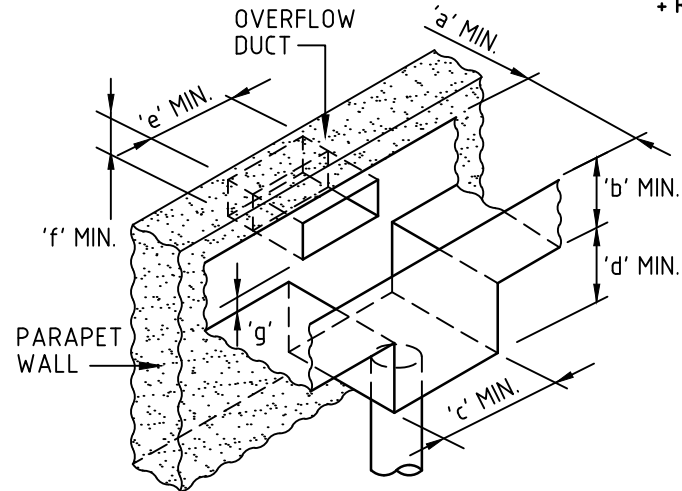
Architect : **pirrello design associates**
po box 3201 putney nsw 2112 mobile 0414 49 59 79

Project : **PROPOSED NEW DWELLING,
POOL & SITE WORKS AT
6 LINCOLN AVENUE, COLLAROY.**

Title : **GROUND FLOOR
STORMWATER DRAINAGE PLAN**



BOX GUTTER TYPE 1 N.T.S.



BOX GUTTER TYPE 2 N.T.S.

FIRST FLOOR / LOWER ROOF STORMWATER DRAINAGE PLAN

SCALE 1:100

BOX GUTTER SCHEDULE									
GUTTER I.D.	STORM EVENT	GUTTER TYPE	NUMBER OF DP's	GUTTER WIDTH (a)	MIN. GUTTER DEPTH (b)	MIN. GUTTER FALL	RAINWATER SUMP/HEAD SIZE (a x c x d)	OVERFLOW SIZE (e),(f) if req'd	BOX GUTTER TYPE 2 & 3 (g), (h)
BG1	100 ARI	1	1	200	120	1:150	200x120x125		
BG2	100 ARI	2	1	200	85	1:150	200x400x50	200,40	10

CONCEPT
STORMWATER

No.	Date	Revision	App'd
A	18.3.21	ISSUE FOR DA	

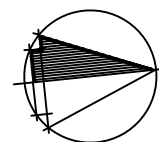
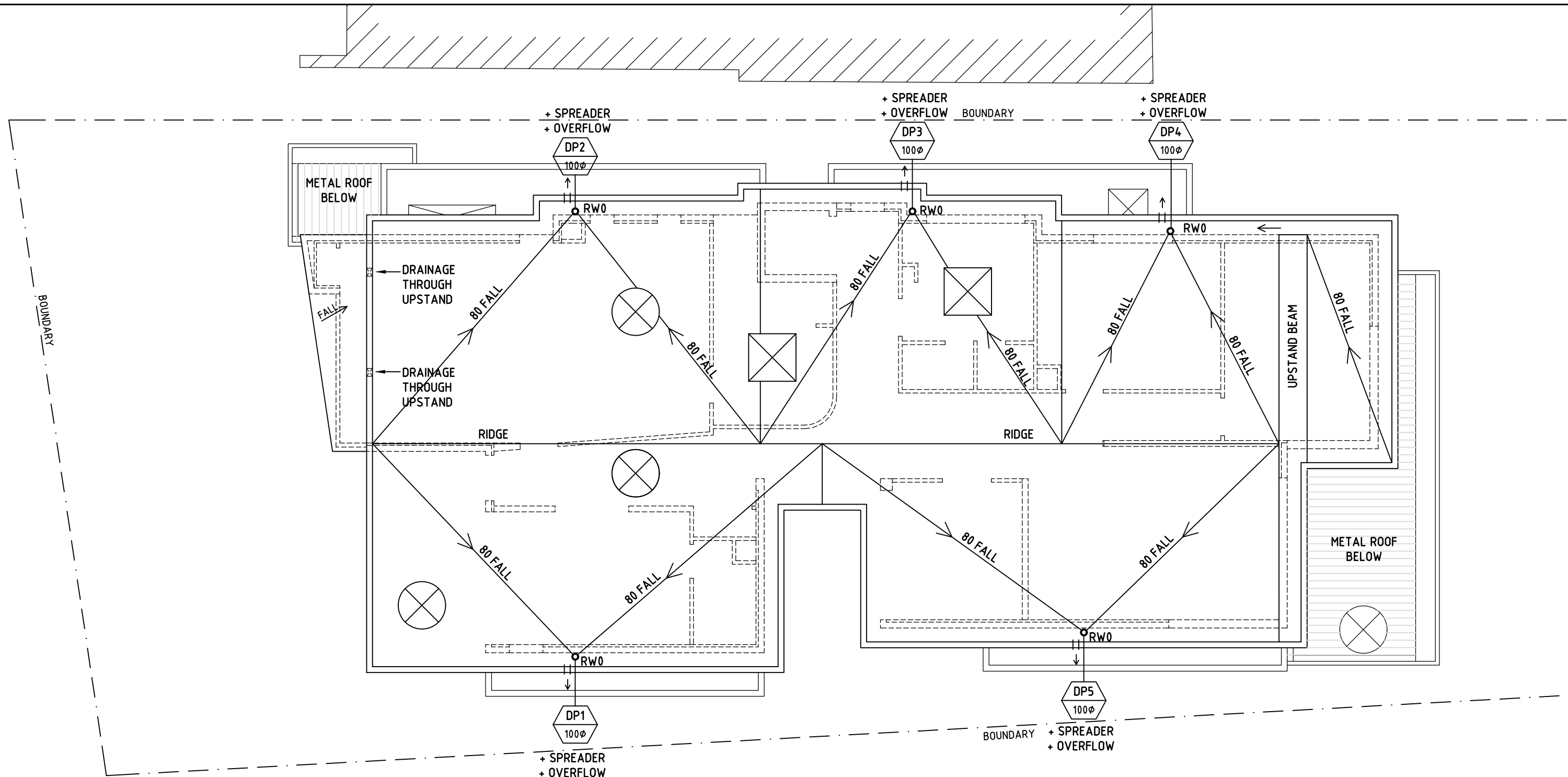
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Project : **PROPOSED NEW DWELLING,
POOL & SITE WORKS AT
6 LINCOLN AVENUE, COLLAROY.**

Title : **FIRST FLOOR
STORMWATER DRAINAGE PLAN**

Date	Scale	Project Number	Revision No.
FEB. 2021	1:100		
Checked	Approved	2020/140-SW4	A



ROOF STORMWATER DRAINAGE PLAN

SCALE 1:100

0 1000 2000 3000 4000 5000mm
SCALE 1:100 AT A3 SHEET

CONCEPT
STORMWATER

No.	Date	Revision	App'd	Checked	Approved	Project Number	Revision No.
A	18.3.21	ISSUE FOR DA				2020/140-SW5	A

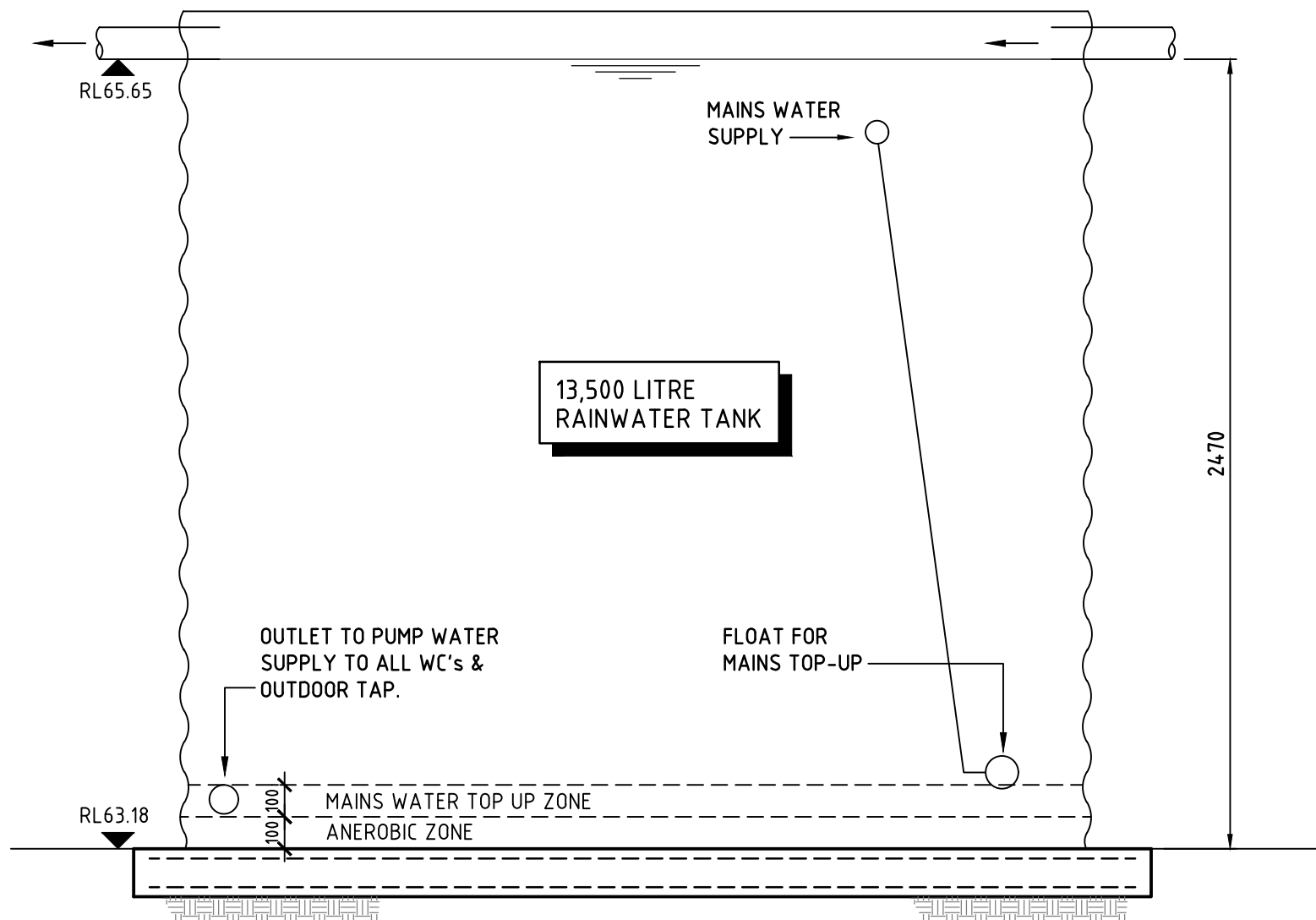
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Architect : **pirrello design associates**
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Project : **PROPOSED NEW DWELLING,
POOL & SITE WORKS AT
6 LINCOLN AVENUE, COLLAROY.**

Title : **ROOF
STORMWATER DRAINAGE PLAN**

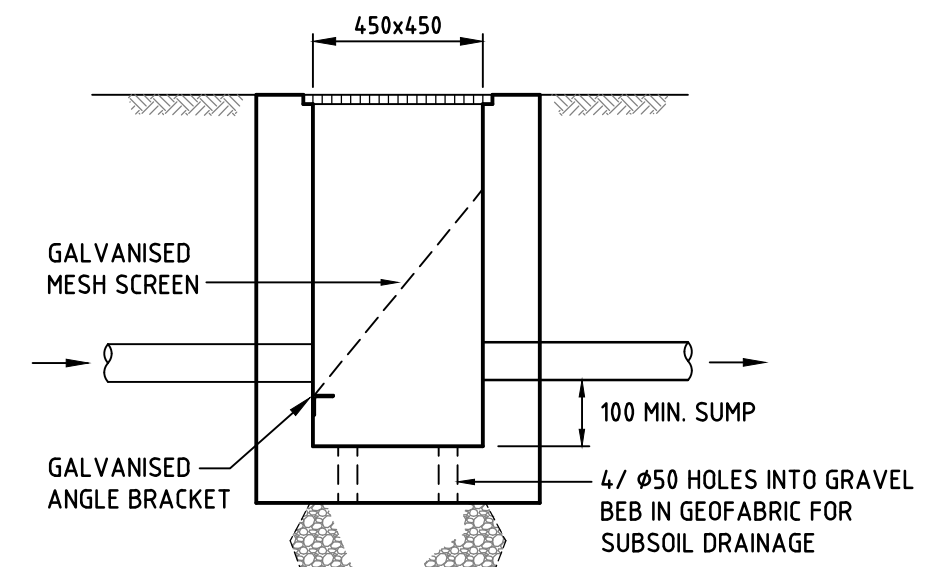
Date FEB. 2021	Scale 1:100	Project Number 2020/140-SW5	Revision No. A
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RAINWATER TANK ELEVATION

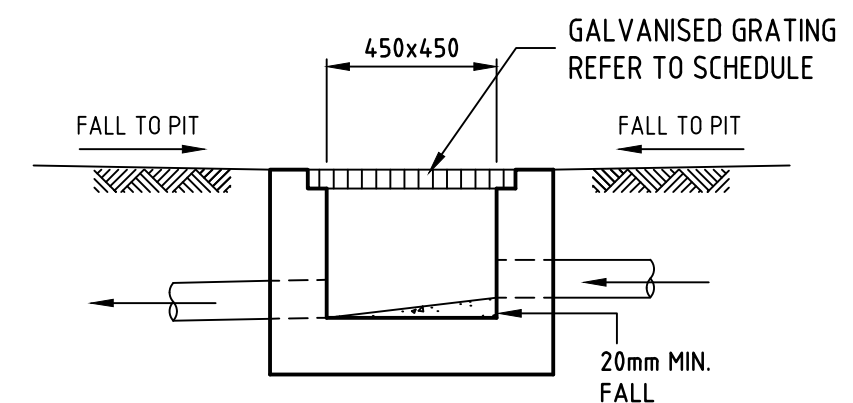
SCALE 1:20

TO COLLECT RUNOFF FROM 340 SQ METRES OF ROOF AREA TO BASIX REQUIREMENTS



BOUNDARY PIT DETAIL

SCALE 1:20



TYPICAL PIT DETAIL

NOTE: PITS DEEPER THAN 1200 TO BE 1000 x 1000 WITH STEPIRONS AS REQUIRED

0 200 400 600 800 1000mm

SCALE 1:20 AT A3 SHEET

No.	Date	Revision	App'd	Date	Scale	Project Number	Revision No.
A	18.3.21	ISSUE FOR DA		FEB. 2021	1:20	2020/140-SW6	A
				Checked	Approved		

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Project: **PROPOSED NEW DWELLING, POOL & SITE WORKS AT 6 LINCOLN AVENUE, COLLAROY.**

Title: **STORMWATER DRAINAGE DETAILS**