#### STORMWATER DRAINAGE NOTES:

- ALL PIPES TO BE 100mm Ø uPVC, LAID AT 1% MINIMUM GRADE TO AS1254.2002 U.N.O.
- ALL PIPES SHALL BE LAID ON A 75mm SAND BED. COMPACTED TO 100% S.M.D.D BELOW PAVEMENTS. (NO COMPACTION IS REQUIRED BELOW LANDSCAPING)
- COVER TO SURFACE FROM TOP OF PIPE TO BE 300mm MINIMUM. BACKFILL TO BE ADEQUATELY CONSOLIDATED AROUND PIPES BY METHOD OF RAMMING AND WATERING IN. TRENCHES TO BE FILLED WITH GRANULAR MATERIAL AS SPECIFIED.
- DOWNPIPE LOCATIONS ARE INDICATIVE ONLY. LOCATIONS TO BE CONFIRMED WITH ARCHITECT PRIOR TO COMMENCEMENT OF WORK.
- PROVIDE CLEANING EYES AND LEAF CATCHERS TO ALL DOWNPIPES.
- ALL WORK TO BE IN ACCORDANCE WITH LOCAL COUNCIL STANDARDS AND SPECIFICATIONS.
- ALL LEVELS SHOWN ARE TO AHD.
- ENSURE THAT ALL PITS AND STORMWATER PIPES ARE LOCATED CLEAR FROM TREE ROOT SYSTEMS.
- ALL EXISTING EARTHENWARE PIPES TO BE UPGRADED TO uPVC.
- ALL WORKS TO BE IN ACCORDANCE WITH AS3500.3-2003 NATIONAL PLUMBING AND DRAINAGE CODE PART 3 - STORMWATER DRAINAGE.
- SUBSOIL DRAINS ARE TO BE INSTALLED IN ACCORDANCE WITH AS3500.3 ALONGSIDE WALLS THAT IMPEDE THE NATURAL FLOW OF GROUNDWATER. THIS MAY ALSO INVOLVE TRENCHING INTO THE CLAY OR ROCK SUBGRADE TO DIRECT GROUNDWATER AWAY FROM STRUCTURES.
- EXISTING ROOF DRAINAGE AND SITE DRAINAGE SYSTEM TO BE CHECKED AND UPGRADED AS REQUIRED. BUILDER TO INSPECT AND UPGRADE DRAINAGE IN ACCORDANCE WITH AS3500.3 IF REQUIRED

### RAINWATER STORAGE / REUSE NOTES:

- THE RAINWATER TANK IS TO BE INSTALLED AND USED AS PER BASIX REQUIREMENTS AND SYDNEY WATER AND NSW HEALTH REQUIREMENTS FOR NON DRINKING USE ONLY.
- ALL CONNECTIONS TO PLUMBING AND RAINWATER TANKS IS TO BE IN ACCORDANCE WITH SYDNEY WATERS 'GUIDE TO INSTALLING A RAINWATER TANK' AVAILABLE AT: WWW.SYDNEYWATER.COM.AU.
- PROVIDE 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.
- IF NOT SPECIFIED ON PLANS, THE FIRST FLUSH SYSTEM IS TO HAVE A MINIMUM SIZE OF 20L PER 100 m2 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.
- 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.
- · FIRST FLUSH DEVISED, OR APPROVED ALTERNATIVE TO BE INSTALLED WITH AND AUTOMATED DIVERSION AND DRAINAGE SYSTEM, THAT IS, NO MANUAL DIVERSION AND DRAINAGE VALVES. REFER TYPICAL FLUSH OUT PIT FOR DETAILS.
- 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.
- 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.
- RAINWATER TANK TO BE WATERPROOFED IN ACCORDANCE WITH HB-230-2008.
- · ORIFICE PLATE (IF APPLICABLE) TO BE INSTALLED PRIOR TO THE INSTALLATION OF THE ROOF DRAINAGE SYSTEM AND CONNECTION OF THE STORMWATER SYSTEM TO THE OSD TANK.

#### SITE INFORMATION SUMMARY

NORTHERN BEACHES (REGION 1) COUNCIL

SITE AREA 770.6 m<sup>2</sup>

**EXISTING IMPERVIOUS AREA (APPROXIMATE)** 283 m<sup>2</sup> (37%)

378 m<sup>2</sup> (49%) PROPOSED IMPERVIOUS AREA (APPROXIMATE)

**INCREASE** 95 m<sup>2</sup>

SINCE THE IMPERVIOUS AREA EXCEEDS 50 m<sup>2</sup>. OSD IS REQUIRED FOR THIS DEVLEOPMENT

#### ONSITE DETENTION REQUIREMENTS PROVIDED BELOW:

 $SSR = 6 \text{ m}^3$ 

OSD DISCHARGE RATE = 3 l/s (1% AEP)

PRE DEVELOPMENT SITE DISCHARGE

20% AEP = 19 l/s

5% AEP = 30 l/s

1% AEP = 44 l/s

POST DEVELOPMENT SITE DISCHARGE

20% AEP = 19 l/s (3 l/s FROM OSD)

5% AEP = 29 I/s (3 I/s FROM OSD)

1% AEP = 42 l/s (3 l/s FROM OSD)

BYPASS =  $676 \text{ m}^2$ 

			Cli
С	PLANS FOR DA SUBMISSION - NOT FOR CONSTRUCTION - LEVEL SPREADER ADDED	25/06/25	Ar
В	PLANS FOR DA SUBMISSION - NOT FOR CONSTRUCTION - OSD SUMMARY AMENDED	17/06/25	
Α	PLANS FOR DA SUBMISSION - NOT FOR CONSTRUCTION	10/06/25	
	AMENDMENT	DATE	

## DR BERNHARD HURZELER

Architect / Designer

JJ DRAFTING

PO BOX: 1510, DEE WHY ABN - 90 645 409 801



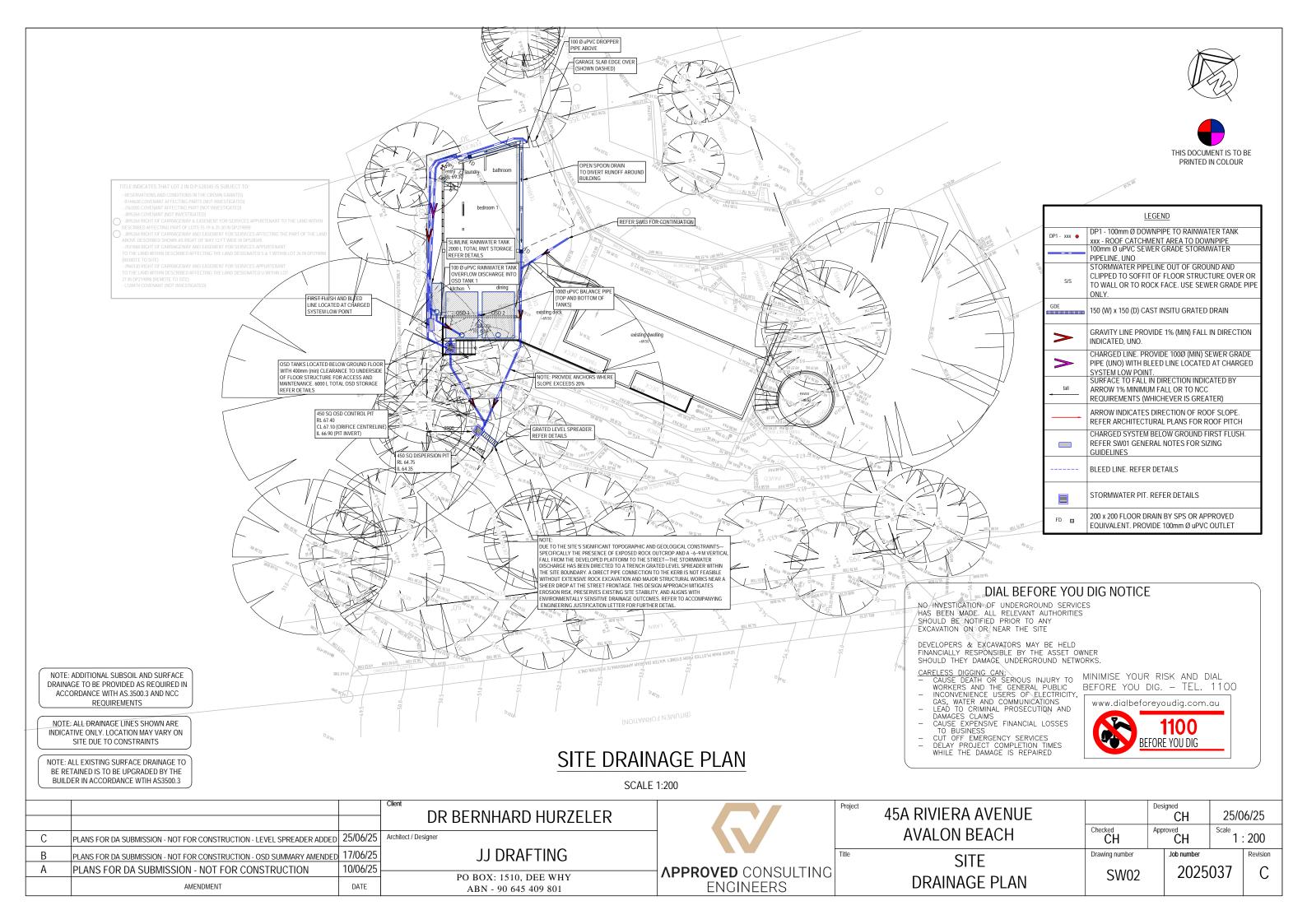
45A RIVIERA AVENUE
<b>AVALON BEACH</b>

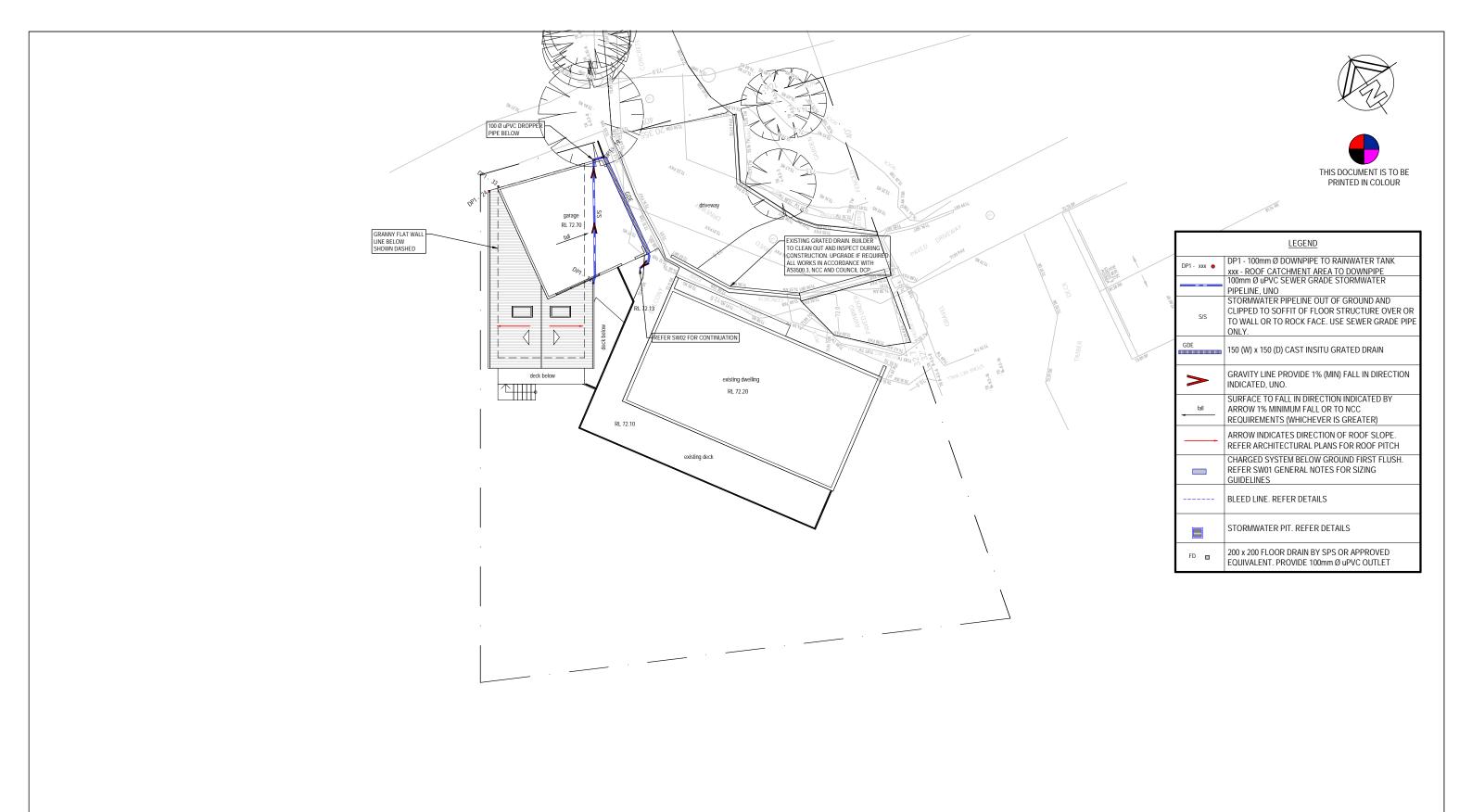
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GENERAL NOTES

SW01

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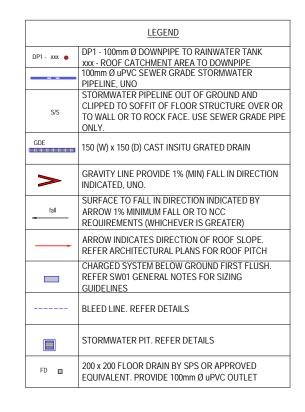


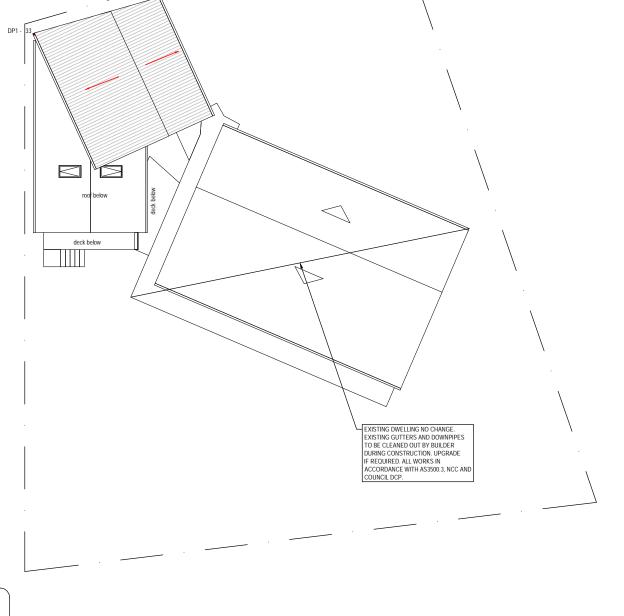
## LOWER ROOF LEVEL - DRAINAGE PLAN

SCALE 1:200

		DR BERNHARD HURZELER	Project	45A RIVIERA AVENUE	Chackad	Designed CH	25/06/25 Scale
C PLANS FOR DA SUBMISSION - NOT FOR CONSTRUCTION - LEVEL SPREADER ADDED	25/06/25	Architect / Designer		AVALON BEACH	Checked CH	Approved CH	1:200
B PLANS FOR DA SUBMISSION - NOT FOR CONSTRUCTION - OSD SUMMARY AMENDED		00 2 1 11 1 1 1 1 0	Title	LOWER ROOF LEVEL	Drawing number	Job number	Revision
A PLANS FOR DA SUBMISSION - NOT FOR CONSTRUCTION	10/06/25	PO BOX: 1510, DEE WHY	APPROVED CONSULTING		SW03	2025	037   C
AMENDMENT	DATE	ABN - 90 645 409 801	ENGINEERS	DRAINAGE PLAN	3003		







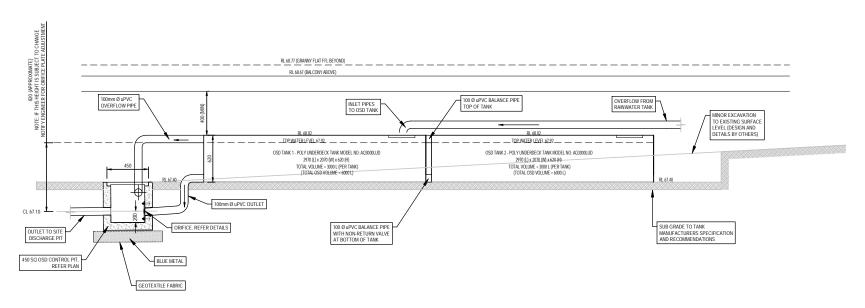
#### ROOF DRAINAGE NOTES:

- 1. THE MAXIMUM ROOF CATCHMENT AREA DRAINING TO ANY ONE DOWNPIPE SHALL NOT EXCEED 35 m. (UNLESS NOTED OTHERWISE). INSTALL ADDITIONAL DOWNPIPES AS REQUIRED.
- 2. ALL ROOF DRAINAGE IS TO BE CAPTURED IN AN EAVES GUTTER WITH A MINIMUM EFFECTIVE CROSS-SECTIONAL AREA OF 8100 mm<sup>2</sup> (MINIMUM) AND TO SUIT THE SPECIFIED DOWNPIPE SIZE.
  3. EAVES GUTTERS ARE TO BE INSTALLED WITH A SLOPE THAT IS
- STEEPER THAN 1:500.
- 4. OVERFLOW SLOTS SHOULD BE LOCATED IN THE FRONT OF THE EAVES GUTTER (UNLESS NOTED OTHERWISE).

## **ROOF DRAINAGE PLAN**

SCALE 1:200

			DR BERNHARD HURZELER		Project	45A RIVIERA AVENUE		Designed CH	25/06/2	 25
С	PLANS FOR DA SUBMISSION - NOT FOR CONSTRUCTION - LEVEL SPREADER ADDED	25/06/25	Architect / Designer			AVALON BEACH	Checked CH	Approved CH	Scale 1:20	)0
В	PLANS FOR DA SUBMISSION - NOT FOR CONSTRUCTION - OSD SUMMARY AMENDED	17/06/25	JJ DRAFTING		Title	ROOF	Drawing number	Job number	Re	vision
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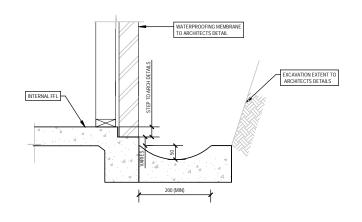
### ONSITE DETENTION TANK DETAIL - TYPICAL



## ORIFICE PLATE DETAIL

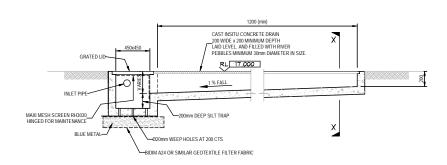
SCALE = NTS

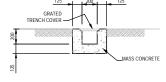
### OSD TANK PLAQUE SCALE = N.T.S.



#### NOTE: GRATED LEVEL SPREADER

- DISPERSION TRENCH TO BE LAID ON A LEVEL CONTOUR. 2. GROUND LEVEL ABOVE TRENCH MUST BE LEVEL SO AS TO EVENLY DISPERSE WATER DOWN HILL OF THE TRENCH





OR PRECAST GRATED DRAIN ALTERNATE POLYPROPYLENE DRAIN BY MANUFACTURER

SECTION X-X NOT TO SCALE

### TYPICAL DRAINAGE VOID & SPOON DRAIN

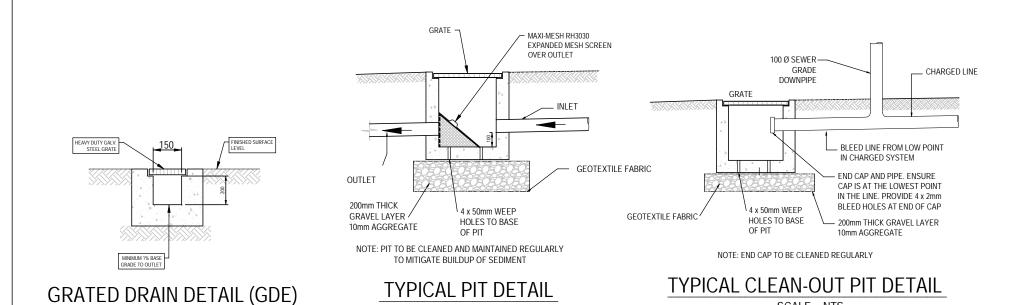
SCALE = NTS

### GRATED LEVEL SPREADER LONGITUDINAL SECTION NOT TO SCALE

			DR BERNHARD HURZELER	
С	PLANS FOR DA SUBMISSION - NOT FOR CONSTRUCTION - LEVEL SPREADER ADDED	25/06/25		
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	AMENDMENT	DATE	ABN - 90 645 409 801	

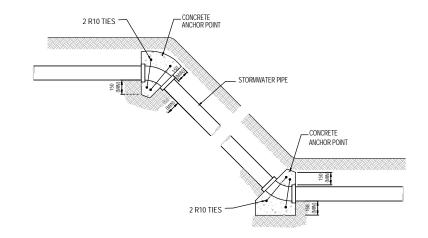
APPROVED CONSULTING ENGINEERS

	45A RIVIERA AVENUE		Des	igned CH	25/0	06/25
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	Title	Drawing number		Job number		Revision
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SCALE = 1:20

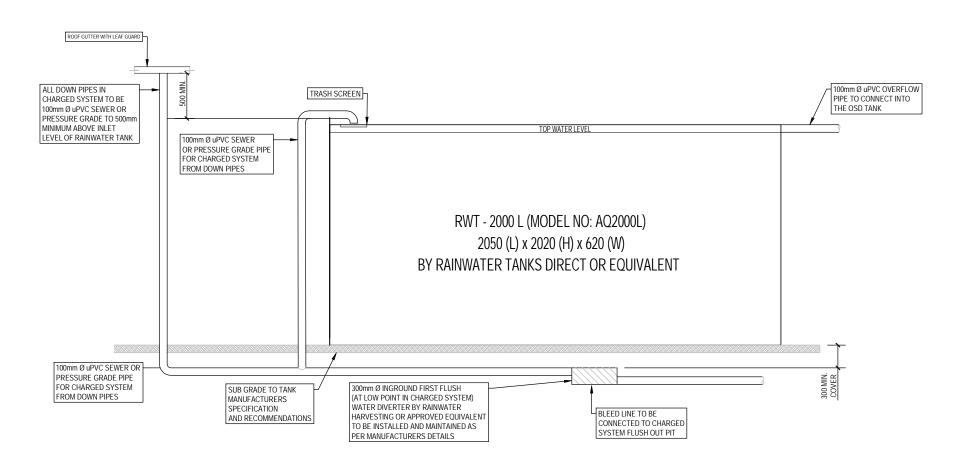
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#### ANCHOR BLOCK NOTE:

ANCHOR BLOCKS TO BE PROVIDED WHEN SURFACE SLOPE EXCEEDS 20%.
BLOCKS LOCATED AT BENDS, JUNCTIONS AND INTERVALS NOT EXCEEDING 3.0m IN LENGTH
AND INSTALLED IN ACCORDANCE WITH ASS500.3 AND COUNCIL REQUIREMENTS. IF
PIPE EXCEEDS DN 150, CONTACT ENGINEER FOR ADDITIONAL DESIGN
REQUIREMENTS.

CONCRETE ANCHOR POINT DETAIL FOR PIPES NOT EXCEEDING DN 150



### RAINWATER RE-USE TANK DETAIL - TYPICAL

SCALE: NTS



# SIGN FOR RWT AND OUTLETS

			Client DD DEDMIADD IIID7ELED	
			DR BERNHARD HURZELER	
С	PLANS FOR DA SUBMISSION - NOT FOR CONSTRUCTION - LEVEL SPREADER ADDED	25/06/25	Architect / Designer	
В	PLANS FOR DA SUBMISSION - NOT FOR CONSTRUCTION - OSD SUMMARY AMENDED	17/06/25	JJ DRAFTING	
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	AMENDMENT	DATE	PO BOX: 1510, DEE WHY ABN - 90 645 409 801	

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	AVALON BEACH	Checked CH	Appı	roved CH	Scale 1	: 200
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