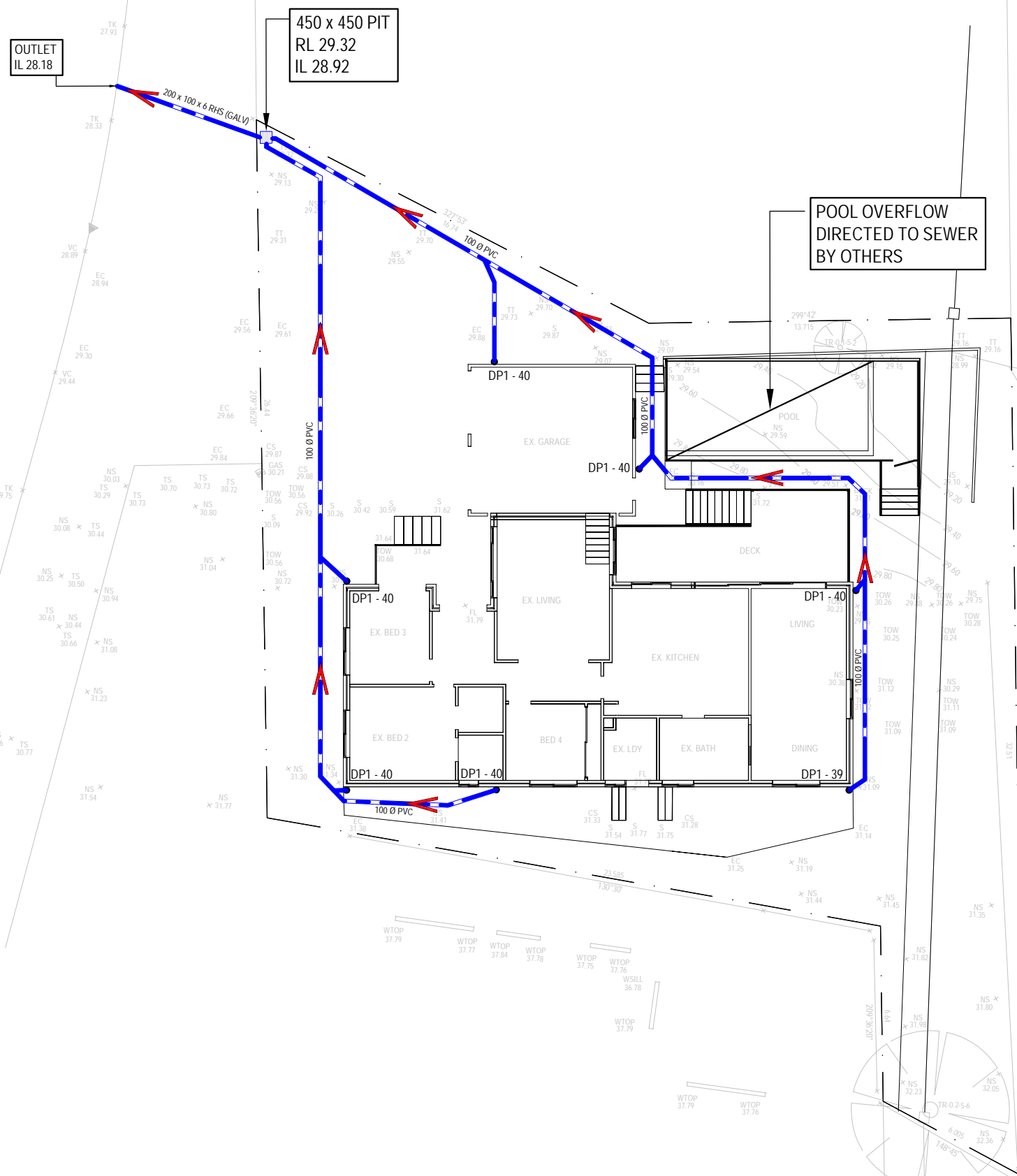
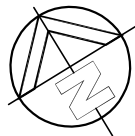


<div>STORMWATER DRAINAGE NOTES:</div> <div><div>- ALL PIPES TO BE 100mm Ø uPVC, LAID AT 1% MINIMUM GRADE TO AS1254.2002 U.N.O.</div><div>- ALL PIPES SHALL BE LAID ON A 75mm SAND BED, COMPACTED TO 100% S.M.D.D BELOW PAVEMENTS. (NO COMPACTION IS REQUIRED BELOW LANDSCAPING).</div><div>- COVER TO SURFACE 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.</div><div>- DOWNPIPE LOCATIONS ARE INDICATIVE ONLY. LOCATIONS TO BE CONFIRMED WITH ARCHITECT PRIOR TO COMMENCEMENT OF WORK.</div><div>- PROVIDE CLEANING EYES AND LEAF CATCHERS TO ALL DOWNPIPES.</div><div>- ALL WORK TO BE IN ACCORDANCE WITH LOCAL COUNCIL STANDARDS AND SPECIFICATIONS.</div><div>- ALL LEVELS SHOWN ARE TO AHD.</div><div>- ENSURE THAT ALL PITS AND STORMWATER PIPES ARE LOCATED CLEAR FROM TREE ROOT SYSTEMS.</div><div>- ALL EXISTING EARTHENWARE PIPES TO BE UPGRADED TO uPVC.</div><div>- ALL WORKS TO BE IN ACCORDANCE WITH AS3500.3-2003 NATIONAL PLUMBING AND DRAINAGE CODE PART 3 - STORMWATER DRAINAGE.</div><div>- 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.</div><div>- 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.</div></div> <div>RAINWATER STORAGE / REUSE NOTES:</div> <div><div>- 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.</div><div>- 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.</div><div>- 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.</div><div>- 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.</div></div>			<div><div>- 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.</div><div>- FIRST FLUSH DEVIDED, 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.</div><div>- 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.</div><div>- 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.</div><div>- RAINWATER TANK TO BE WATERPROOFED IN ACCORDANCE WITH HB-230-2008.</div><div>- 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.</div></div> <div>LEGEND</div> <div><div><div>DP1 - xxx</div><div>DP1 - 100mm Ø DOWNPIPE TO RWT/OSD TANK xxx - ROOF CATCHMENT AREA TO DOWNPIPE</div></div><div><div>SP</div><div>100mm Ø DOWNPIPE SPREADER TO LOWER ROOF 100mm Ø uPVC STORMWATER PIPELINE, UNO</div></div><div><div>GDE</div><div>150 (W) x 150 (D) GRATED DRAIN</div></div><div><div></div><div>GRAVITY LINE PROVIDE 1% (MIN) FALL, UNO.</div></div><div><div></div><div>CHARGED LINE PROVIDE SEWER GRADE PIPE, UNO</div></div><div><div>SS</div><div>PIPELINE SUSPENDED FROM SOFFIT OVER</div></div><div><div>RL</div><div>REDUCED LEVEL TO AHD</div></div><div><div>IL</div><div>INVERT LEVEL OF OUTLET TO AHD</div></div><div><div>GI</div><div>INVERT LEVEL OF GUTTER TO AHD</div></div></div>			<div>SITE INFORMATION SUMMARY</div> <div><div>COUNCIL</div><div>NORTHERN BEACHES (PITTWATER)</div><div><div>SITE AREA</div><div>702.4 m<sup>2</sup></div></div><div><div>EXISTING IMPERVIOUS AREA</div><div>365 m<sup>2</sup> (52%)</div></div><div><div>PROPOSED IMPERVIOUS AREA</div><div>386 m<sup>2</sup> (55%)</div></div><div><div>INCREASE</div><div>21 m<sup>2</sup></div></div><div>SINCE THE INCREASE IN IMPERVIOUS AREA IS LESS THEN 50 m<sup>2</sup> , OSD IS NOT REQUIRED FOR THIS DEVELOPMENT.</div></div> <div>DIAL BEFORE YOU DIG NOTICE</div> <div><div>NO INVESTIGATION OF UNDERGROUND SERVICES HAS BEEN MADE. ALL RELEVANT AUTHORITIES SHOULD BE NOTIFIED PRIOR TO ANY EXCAVATION ON OR NEAR THE SITE</div><div>DEVELOPERS &amp; EXCAVATORS MAY BE HELD FINANCIALLY RESPONSIBLE BY THE ASSET OWNER SHOULD THEY DAMAGE UNDERGROUND NETWORKS.</div><div>CARELESS DIGGING CAN:<div><div>- CAUSE DEATH OR SERIOUS INJURY TO WORKERS AND THE GENERAL PUBLIC</div><div>- INCONVENIENCE USERS OF ELECTRICITY, GAS, WATER AND COMMUNICATIONS</div><div>- LEAD TO CRIMINAL PROSECUTION AND DAMAGES CLAIMS</div><div>- CAUSE EXPENSIVE FINANCIAL LOSSES TO BUSINESS</div><div>- CUT OFF EMERGENCY SERVICES</div><div>- DELAY PROJECT COMPLETION TIMES WHILE THE DAMAGE IS REPAIRED</div></div></div><div>MINIMISE YOUR RISK AND DIAL BEFORE YOU DIG. – TEL. 1100</div><div><div>www.dialbeforeyoudig.com.au</div><div><div><div></div></div><div>1100 BEFORE YOU DIG</div></div></div></div>					
			MATT & KELLY VALE		<div><div></div><div>GREENWOOD CONSULTING ENGINEERS</div><div>2/25 Seabeach Avenue, Mona Vale ABN - 90 625 916 341</div></div>	Project	1A DELWOOD CLOSE MONA VALE	EG	Designed EG	22/02/2021	
			Architect			Title	GENERAL NOTES	Checked EG	Approved EG	Scale 1 : 200	
			RAPID PLANS					Drawing number SW01	Job number 2021037	Revision -	
-	ISSUE FOR DA SUBMISSION	22/02/21									
REVISION	AMENDMENT	DATE									



NOTE: SUBSOIL DRAINAGE TO BE PROVIDED AS REQUIRED IN ACCORDANCE WITH AS.3500.3 AND NCC REQUIREMENTS

NOTE: ALL DRAINAGE LINES SHOWN ARE INDICATIVE ONLY. LOCATION MAY VARY ON SITE DUE TO CONSTRAINTS

NOTE: ALL EXISTING SURFACE DRAINAGE TO BE RETAINED IS TO BE UPGRADED BY THE BUILDER IN ACCORDANCE WITH AS3500.3

**DIAL BEFORE YOU DIG NOTICE**

NO INVESTIGATION OF UNDERGROUND SERVICES HAS BEEN MADE. ALL RELEVANT AUTHORITIES SHOULD BE NOTIFIED PRIOR TO ANY EXCAVATION ON OR NEAR THE SITE.

DEVELOPERS & EXCAVATORS MAY BE HELD FINANCIALLY RESPONSIBLE BY THE LAND OWNER SHOULD THEY DAMAGE UNDERGROUND NETWORKS.

**CARELESS DIGGING CAN:**

- CAUSE DEATH OR SERIOUS INJURY TO WORKERS AND THE GENERAL PUBLIC.
- INTERRUPT SUPPLIES OF ELECTRICITY, GAS, WATER AND COMMUNICATIONS.
- LEAD TO CRIMINAL PROSECUTION AND DAMAGES CLAIMS.
- CAUSE EXPENSIVE FINANCIAL LOSSES TO BUSINESS.
- CUT OFF EMERGENCY SERVICES.
- DELAY PROJECT COMPLETION TIMES WHILE THE DAMAGE IS REPAIRED.

MINIMISE YOUR RISK AND DIAL BEFORE YOU DIG. - TEL. 1100

[www.dialbeforeyoudig.com.au](http://www.dialbeforeyoudig.com.au)

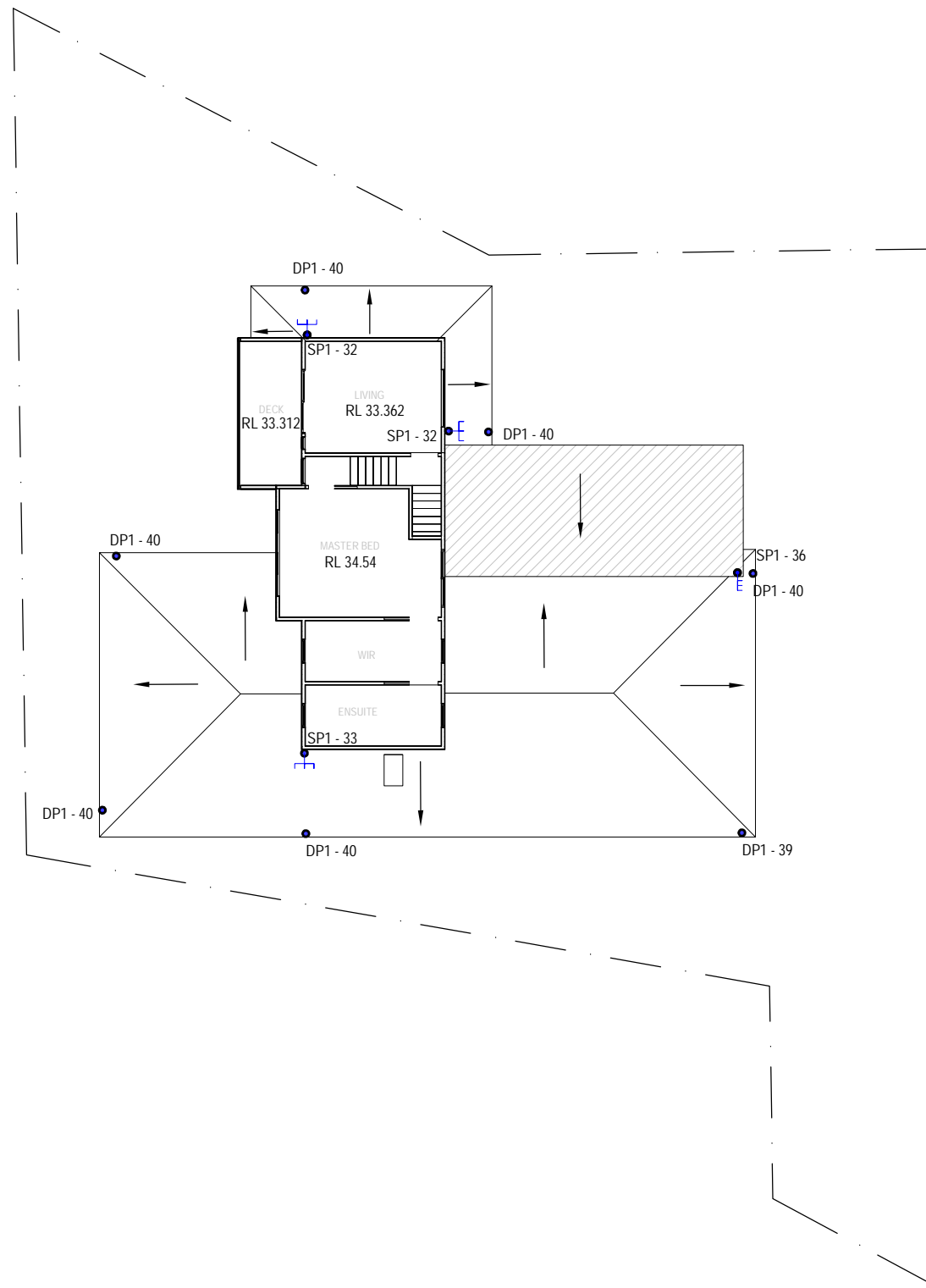
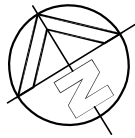
**1100 BEFORE YOU DIG**

## SITE DRAINAGE PLAN

SCALE 1:200

ISSUE FOR DA SUBMISSION

			MATT & KELLY VALE	 <b>GREENWOOD CONSULTING ENGINEERS</b>	Project 1A DELWOOD CLOSE MONA VALE	EG	Designed EG	22/02/2021			
						Architect	Checked EG	Approved EG	Scale 1 : 200		
			RAPID PLANS	2/25 Seabeach Avenue, Mona Vale ABN - 90 625 916 341	Title SITE DRAINAGE PLAN	Drawing number SW02		Job number 2021037		Revision -	
-	ISSUE FOR DA SUBMISSION	22/02/21									
REVISION	AMENDMENT	DATE									

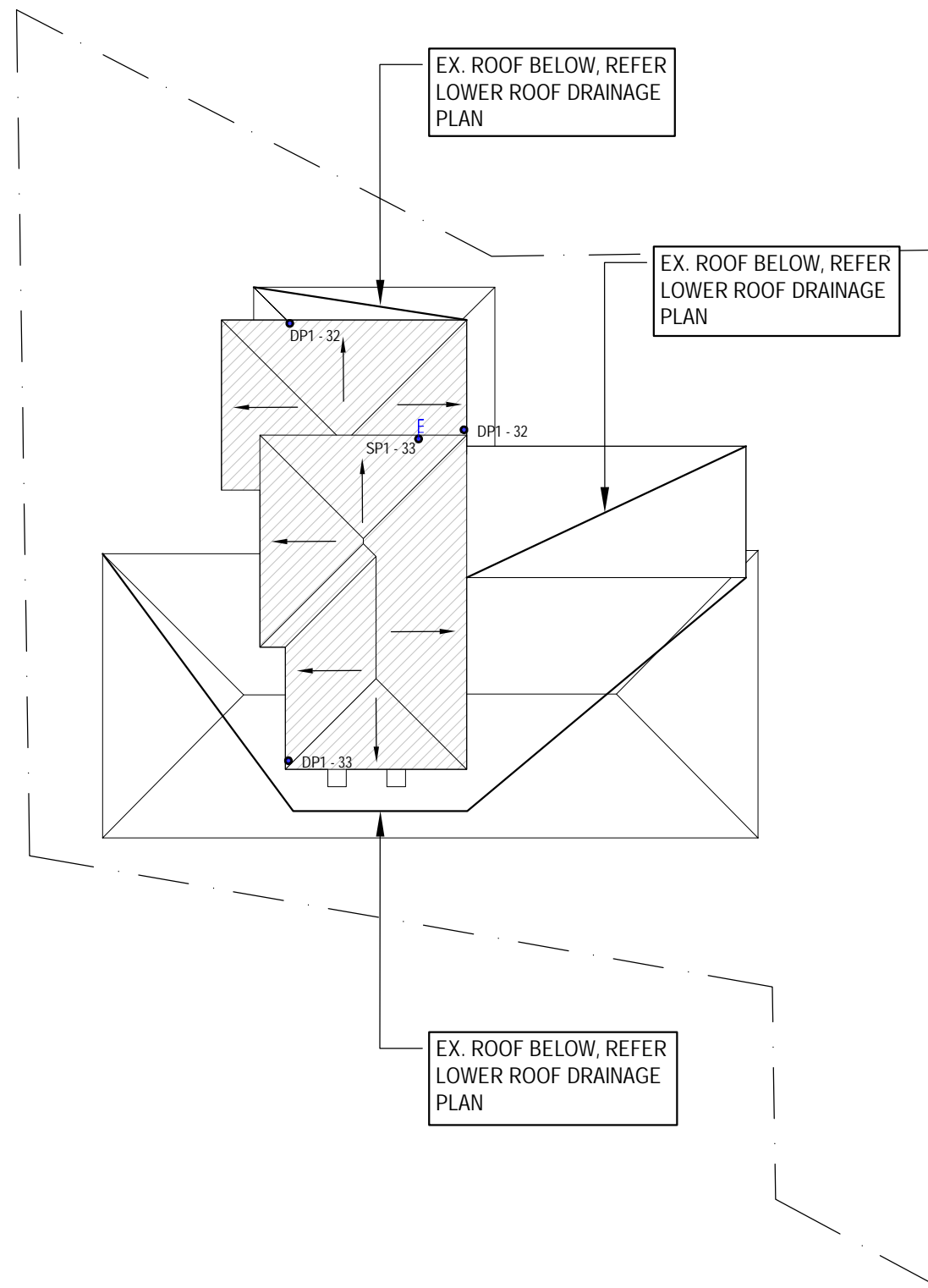


## LOWER ROOF DRAINAGE PLAN

SCALE 1:200

ISSUE FOR DA  
SUBMISSION

			MATT & KELLY VALE  Architect  RAPID PLANS	 <b>GREENWOOD CONSULTING</b> ENGINEERS  2/25 Seabeach Avenue, Mona Vale ABN - 90 625 916 341	Project	1A DELWOOD CLOSE MONA VALE		EG	Designed EG	22/02/2021
								Checked EG	Approved EG	Scale 1 : 200
					Title	LOWER ROOF DRAINAGE PLAN		Drawing number SW03	Job number 2021037	Revision -
REVISION	AMENDMENT	DATE								
-	ISSUE FOR DA SUBMISSION	22/02/21								

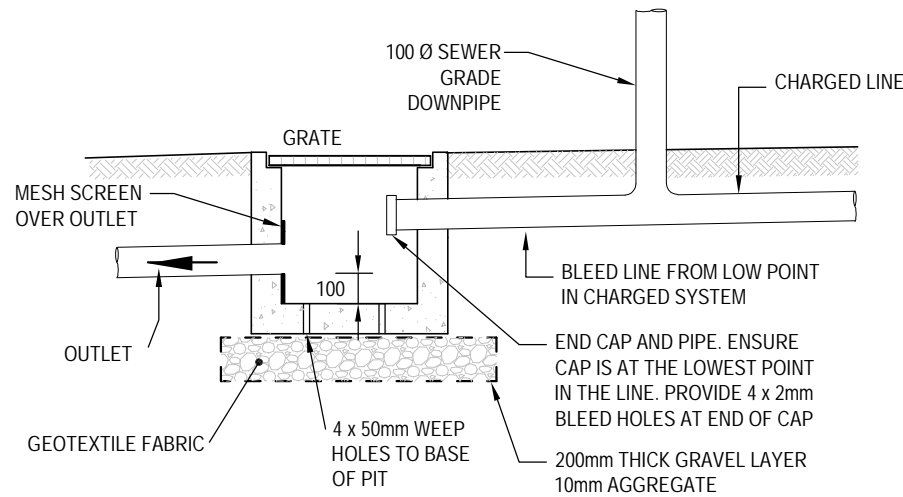


# UPPER ROOF DRAINAGE PLAN

SCALE 1:200

ISSUE FOR DA  
SUBMISSION

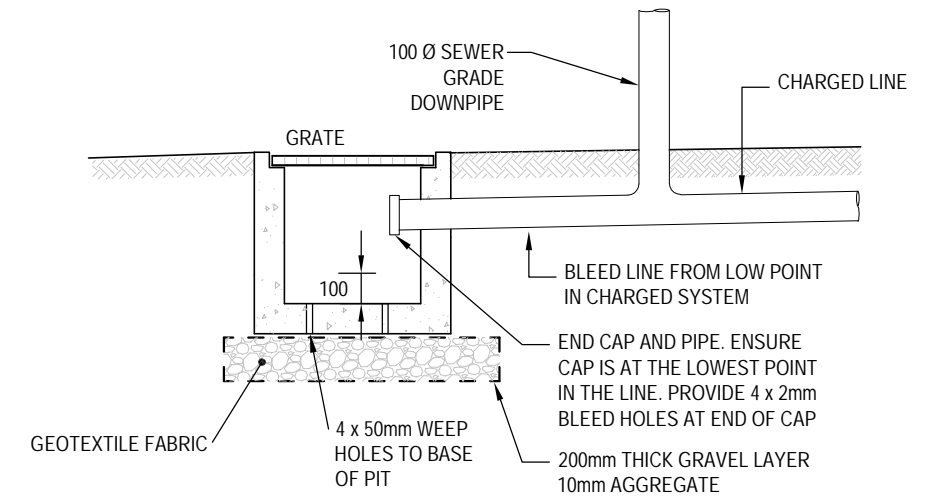
			MATT & KELLY VALE	 <b>GREENWOOD CONSULTING ENGINEERS</b> 2/25 Seabeach Avenue, Mona Vale ABN - 90 625 916 341	Project	1A DELWOOD CLOSE MONA VALE		EG	Designed EG	22/02/2021
					Architect		Checked EG	Approved EG	Scale 1 : 200	
					RAPID PLANS	Title	UPPER ROOF DRAINAGE PLAN	Drawing number SW04	Job number 2021037	Revision -
-	ISSUE FOR DA SUBMISSION	22/02/21								
REVISION	AMENDMENT	DATE								



NOTE: END CAP TO BE CLEANED REGULARLY

## CLEAN-OUT PIT DETAIL (WITH OUTLET)

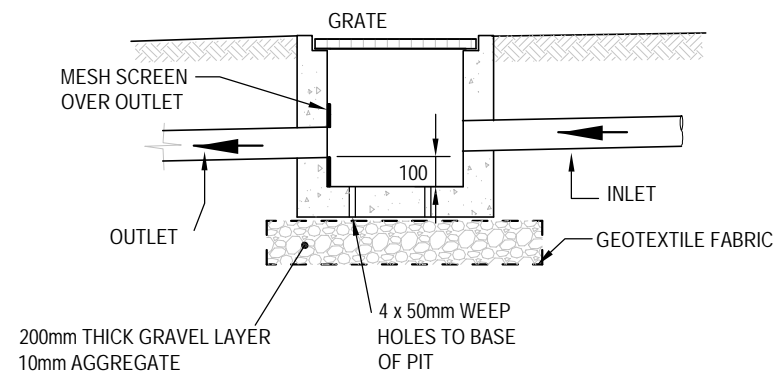
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NOTE: END CAP TO BE CLEANED REGULARLY

## CLEAN-OUT PIT DETAIL (NO OUTLET)

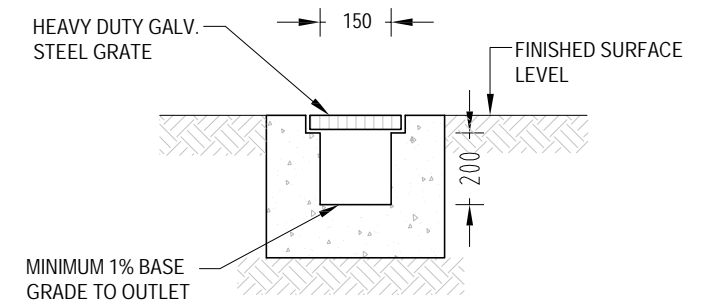
SCALE = NTS



ALTERNATIVE POLYPROPYLENE PIT BY MANUFACTURER

## PIT DETAIL


SCALE = NTS



## GRATED DRAIN DETAIL (GDE)

SCALE = NTS

ISSUE FOR DA SUBMISSION

			MATT & KELLY VALE	 <b>GREENWOOD CONSULTING ENGINEERS</b>  2/25 Seabeach Avenue, Mona Vale ABN - 90 625 916 341	Project	1A DELWOOD CLOSE MONA VALE	EG	Designed EG	22/02/2021	
					Architect		Checked EG	Approved EG	Scale 1 : 200	
					RAPID PLANS	Title	DETAILS	Drawing number SW05	Job number 2021037	Revision -
-	ISSUE FOR DA SUBMISSION	22/02/21								
REVISION	AMENDMENT	DATE								