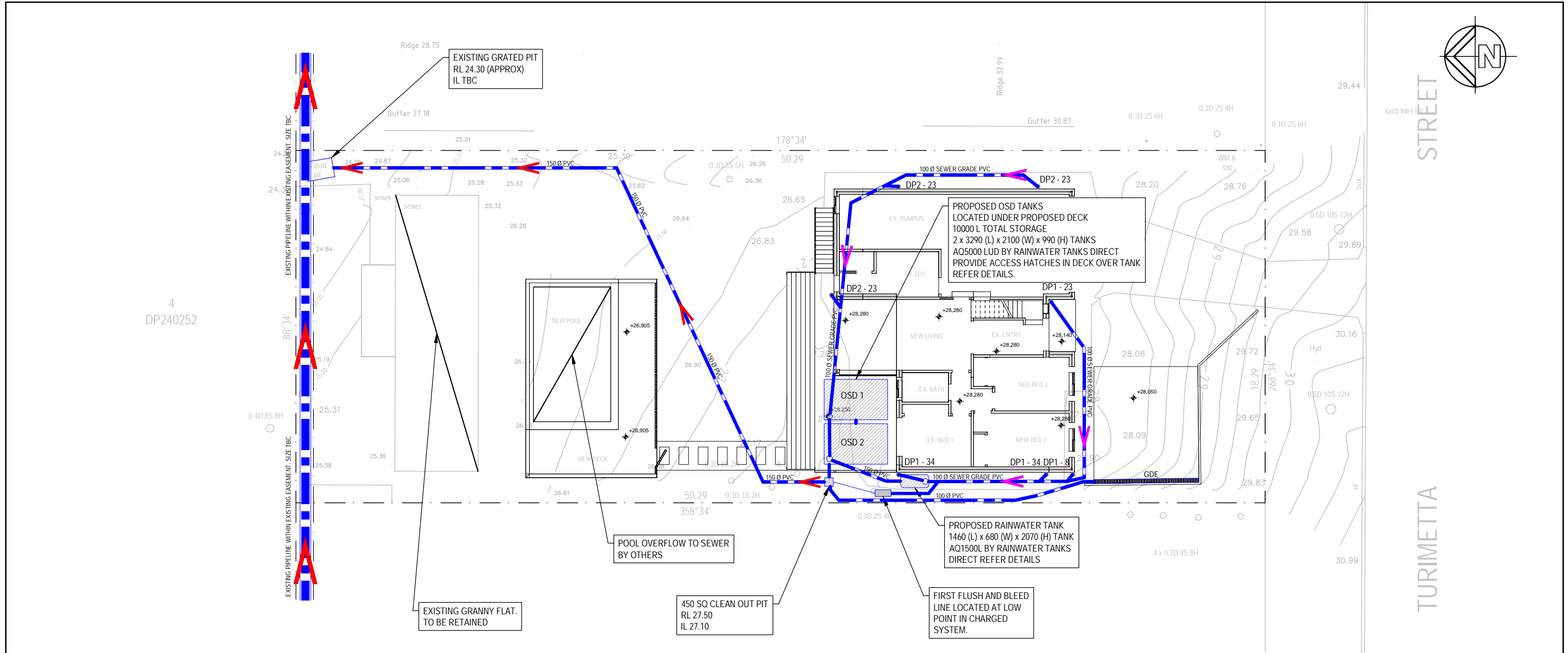


<div>STORMWATER DRAINAGE NOTES:</div> <div><div>- ALL PIPES TO BE 100mm Ø uPVC, LAID AT 1% MINIMUM GRADE TO AS1254.2002 U.N.O.</div><div>- ALL PIPES SHALL BE LAID ON A 75mm SAND BED, COMPACTED TO 100% S.M.D.D BELOW PAVEMENTS. (NO COMPACTION IS REQUIRED BELOW LANDSCAPING).</div><div>- COVER TO SURFACE 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 RAINWATER TANK xxx - ROOF CATCHMENT AREA TO DOWNPIPE</div></div><div><div>DP2 - xxx</div><div>DP1 - 100mm Ø DOWNPIPE TO OSD TANK xxx - ROOF CATCHMENT AREA TO DOWNPIPE</div></div><div><div>SP</div><div>100mm Ø DOWNPIPE SPREADER TO LOWER ROOF</div></div><div><div></div><div>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>SITE INFORMATION SUMMARY</div> <div><div>COUNCIL</div><div>NORTHERN BEACHES (REGION 1)</div><div><div>SITE AREA</div><div>916.9 m²</div><div>EXISTING IMPERVIOUS AREA</div><div>311 m² (34%)</div><div>PROPOSED IMPERVIOUS AREA (DEVELOPMENT AREA)</div><div>461 m² (50%)</div><div>INCREASE</div><div>150 m²</div></div><div>SINCE THE INCREASE IN IMPERVIOUS AREA IS GREATER THEN 50 m², OSD IS REQUIRED FOR THIS DEVELOPMENT.</div></div> <div>ONSITE DETENTION REQUIREMENTS</div> <div><div>OSD REQUIREMENT</div><div>9.0 m³</div><div>PSD</div><div>4 L/s</div><div>DRAINS OSD CHECK SUMMARY:</div><div><div>PRE DEVELOPMENT RUNOFF</div><div>20% AEP</div><div>14 L/s</div><div>1% AEP</div><div>39 L/s</div><div>POST DEVELOPMENT RUNOFF</div><div>20% AEP</div><div>14 L/s (1 L/s FROM OSD)</div><div>1% AEP</div><div>33 L/s (1L/s FROM OSD)</div></div></div> <div>RAINWATER RETENTION REQUIREMENTS</div> <div><div>RAINWATER TANK PROVIDED</div><div>1219 L</div><div>MINIMUM ROOF AREA TO TANK (BASIX)</div><div>86 m²</div><div>MINIMUM TANK RE-USE (BASIX):</div><div>- 1 TAP WITHIN 10m OF POOL EDGE</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 & 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>1100</div><div>BEFORE YOU DIG</div></div></div></div>																																								
<table><tr><td></td><td></td><td></td><td rowspan="2">C. GAMARRA & T. LIDDEN</td><td rowspan="2"><div><div></div><div>GREENWOOD CONSULTING ENGINEERS</div></div><div>2/25 Seabeach Avenue, Mona Vale ABN - 90 625 916 341</div></td><td>Project</td><td rowspan="2">34 TURIMETTA ROAD MONA VALE</td><td>EG</td><td>Designed EG</td><td>18/06/2021</td></tr><tr><td></td><td></td><td></td><td>Architect</td><td>Title</td><td>GENERAL NOTES</td><td>Checked EG</td><td>Approved EG</td><td>Scale 1 : 200</td></tr><tr><td></td><td></td><td></td><td rowspan="2">RAPID PLANS</td><td rowspan="2"></td><td rowspan="2"></td><td rowspan="2"></td><td rowspan="2">Drawing number SW01</td><td rowspan="2">Job number 2021135</td><td rowspan="2">Revision -</td></tr><tr><td>-</td><td>ISSUE FOR DA SUBMISSION</td><td>18/06/21</td></tr><tr><td>REVISION</td><td>AMENDMENT</td><td>DATE</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>				C. GAMARRA & T. LIDDEN	<div><div></div><div>GREENWOOD CONSULTING ENGINEERS</div></div> <div>2/25 Seabeach Avenue, Mona Vale ABN - 90 625 916 341</div>	Project	34 TURIMETTA ROAD MONA VALE	EG	Designed EG	18/06/2021				Architect	Title	GENERAL NOTES	Checked EG	Approved EG	Scale 1 : 200				RAPID PLANS				Drawing number SW01	Job number 2021135	Revision -	-	ISSUE FOR DA SUBMISSION	18/06/21	REVISION	AMENDMENT	DATE									
			C. GAMARRA & T. LIDDEN			<div><div></div><div>GREENWOOD CONSULTING ENGINEERS</div></div> <div>2/25 Seabeach Avenue, Mona Vale ABN - 90 625 916 341</div>		Project	34 TURIMETTA ROAD MONA VALE	EG	Designed EG	18/06/2021																																
				Architect	Title		GENERAL NOTES	Checked EG		Approved EG	Scale 1 : 200																																	
			RAPID PLANS				Drawing number SW01	Job number 2021135	Revision -																																			
-	ISSUE FOR DA SUBMISSION	18/06/21																																										
REVISION	AMENDMENT	DATE																																										



NOTE: SURFACE DRAINAGE NOT SHOWN FOR DA SUBMISSION AND IS TO BE PROVIDED IN FUTURE DESIGN PENDING COUNCIL APPROVAL OF PROPOSED DISCHARGE METHODOLOGY


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

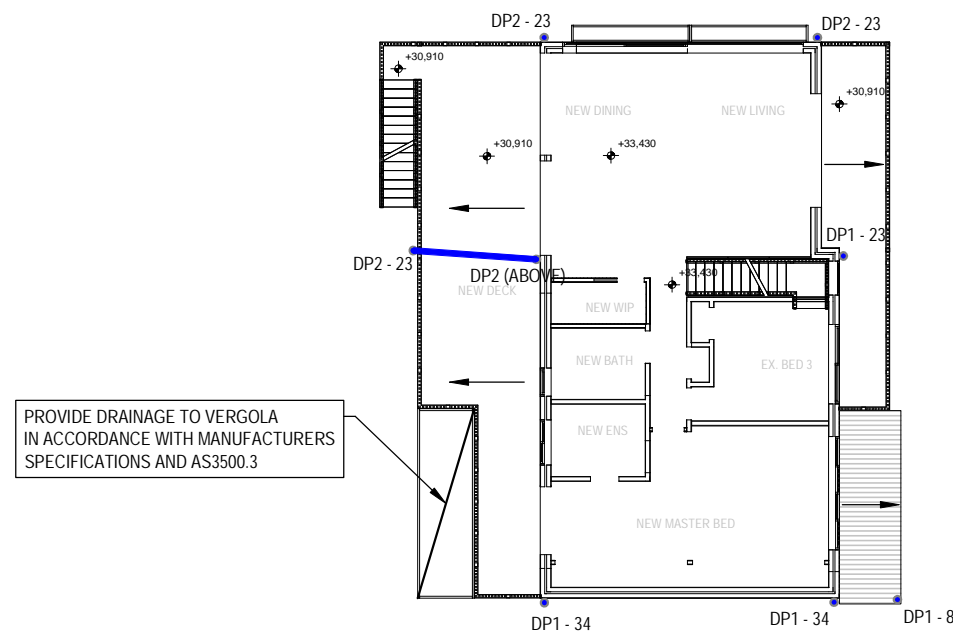
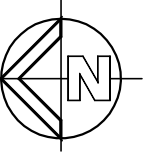
NOTE: ALL DRAINAGE LINES SHOWN ARE INDICATIVE ONLY. LOCATION MAY VARY ON SITE DUE TO CONSTRAINTS

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

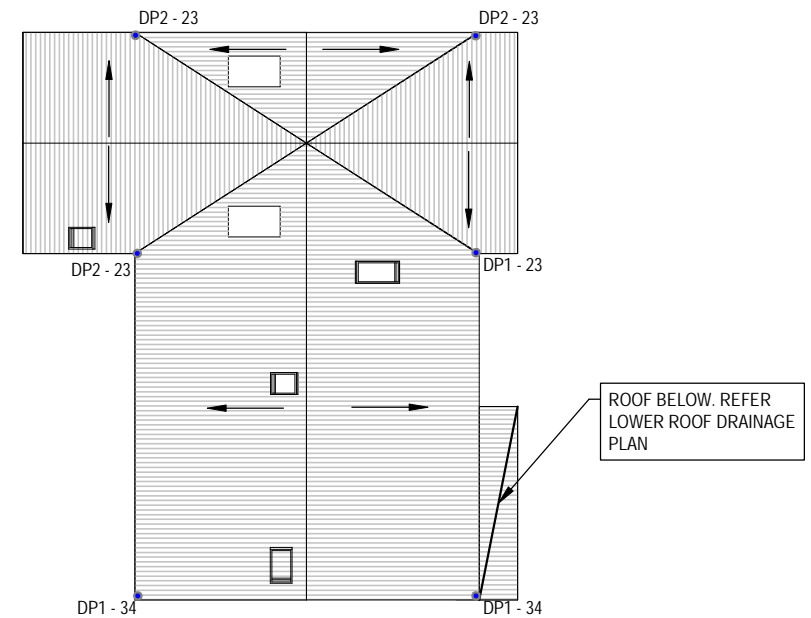
SITE DRAINAGE PLAN

SCALE 1:200


			C. GAMARRA & T. LIDDEN	 GREENWOOD CONSULTING ENGINEERS	Project 34 TURIMETTA ROAD MONA VALE	EG	Designed EG	18/06/2021	
						Architect	Checked EG	Approved EG	Scale 1 : 200
			RAPID PLANS	2/25 Seabeach Avenue, Mona Vale ABN - 90 625 916 341	Title	Drawing number	Job number	Revision	
-	ISSUE FOR DA SUBMISSION	18/06/21			SW02	2021135	-		
REVISION	AMENDMENT	DATE							

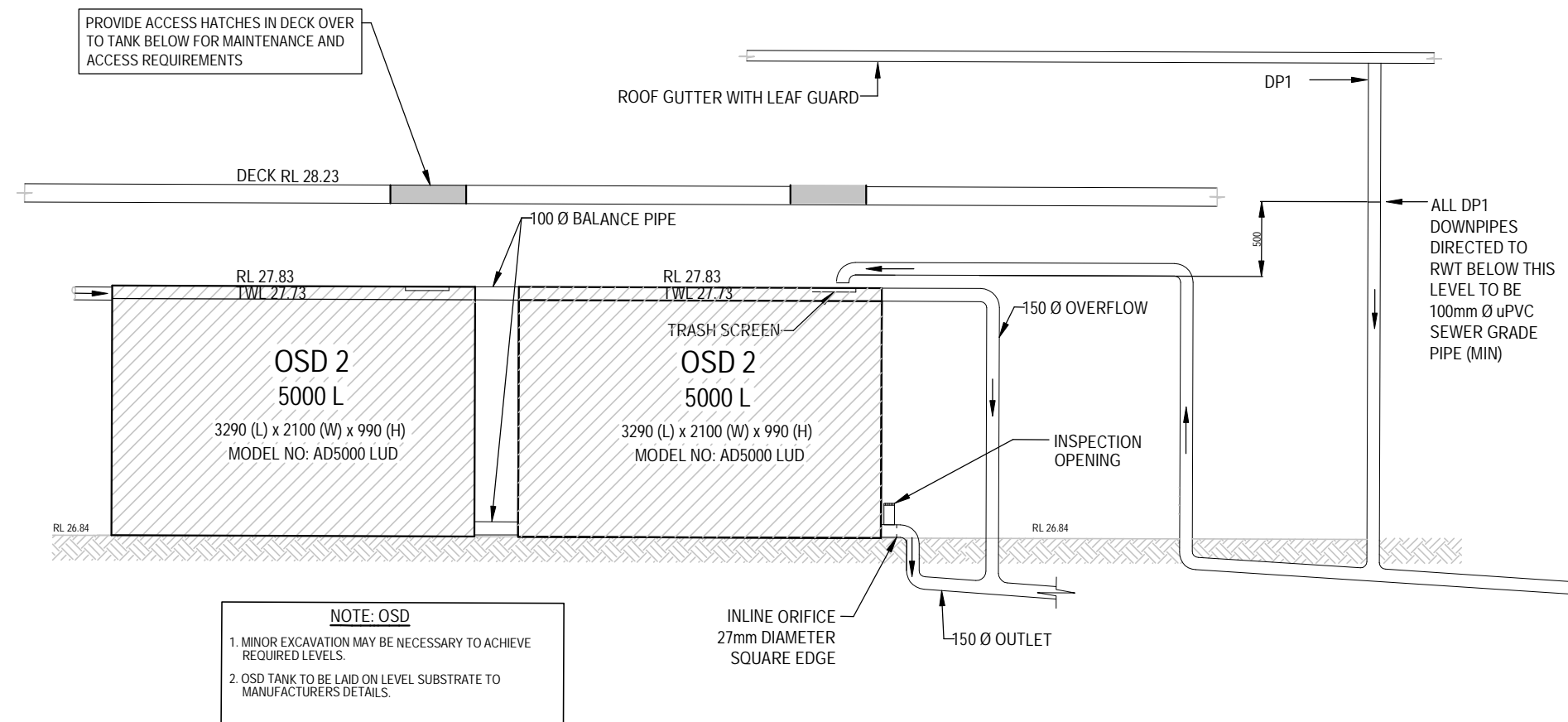


LOWER ROOF DRAINAGE PLAN
SCALE 1:200



UPPER ROOF DRAINAGE PLAN
SCALE 1:200

REVISION			C. GAMARRA & T. LIDDEN Architect RAPID PLANS	 <div>GREENWOOD CONSULTING ENGINEERS</div> 2/25 Seabeach Avenue, Mona Vale ABN - 90 625 916 341	Project 34 TURIMETTA ROAD MONA VALE		Designed EG	18/06/2021
					Title ROOF DRAINAGE PLAN		Checked EG	Scale 1 : 200
	ISSUE FOR DA SUBMISSION	18/06/21			Drawing number SW03		Approved EG	Job number 2021135
	AMENDMENT	DATE						Revision -



OSD TANK DETAIL
SCALE = NTS

			C. GAMARRA & T. LIDDEN	 GREENWOOD CONSULTING ENGINEERS 2/25 Seabeach Avenue, Mona Vale ABN - 90 625 916 341	Project 34 TURIMETTA ROAD MONA VALE	EG	Designed EG	18/06/2021	
						Checked EG	Approved EG	Scale 1 : 200	
-	ISSUE FOR DA SUBMISSION	18/06/21	Architect	RAPID PLANS	Title DETAILS	Drawing number SW05		Job number 2021135	Revision -
REVISION	AMENDMENT	DATE							