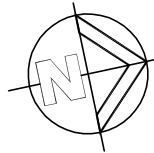


<div>STORMWATER DRAINAGE NOTES:</div> <div><div><div>- ALL PIPES TO BE 100mm Ø uPVC, LAID AT 1% MINIMUM GRADE TO AS1254.2002 U.N.O.</div><div>- ALL PIPES SHALL BE LAID ON A 75mm SAND BED, COMPACTED TO 100% S.M.D.D BELOW PAVEMENTS. (NO COMPACTION IS REQUIRED BELOW LANDSCAPING).</div><div>- COVER TO SURFACE 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><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>			<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 BOUNDARY PIT 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 200 (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>BG1</div><div>300 WIDE x 140 (DEEP AT HIGH POINT) BOX GUTTER WITH 1% (MIN) FALL TO SUMP.</div></div><div><div>SD1</div><div>400 (L) x 300 (W) x 150 (D) SUMP + 300 (W) x 75 (D) OVERFLOW IN ACCORDANCE WITH AS3500.3</div></div></div></div>			<div><div>SITE INFORMATION SUMMARY</div><div><div>COUNCIL</div><div>NORTHERN BEACHES (WARRINGAH)</div></div><div><div>SITE AREA</div><div>583.1 m<sup>2</sup></div></div><div><div>EXISTING IMPERVIOUS AREA</div><div>149 m<sup>2</sup> (26 %)</div></div><div><div>PROPOSED IMPERVIOUS AREA</div><div>310 m<sup>2</sup> (53 %)</div></div><div><div>INCREASE</div><div>161 m<sup>2</sup></div></div><div>OSD CALCULATION SUMMARY</div><div><div>PRE DEVELOPED RUNOFF (GREENFIELD)</div><div><div>5 YR</div><div>14 l/s</div></div><div><div>100 YR</div><div>30 l/s</div></div><div>POST DEVELOPED RUNOFF</div><div><div>5 YR</div><div>7 l/s (3 l/s FROM OSD)</div></div><div><div>100 YR</div><div>14 l/s (3 l/s FROM OSD)</div></div><div>OSD TANK BYPASS</div><div>248 m<sup>2</sup> (0 %)</div><div>ORIFICE</div><div>40 mm</div><div>DESIGN METHOD</div><div>DRAINS (ILSAX)</div></div><div>DETENTION / RETENTION REQUIREMENTS</div><div><div>OSD STORAGE REQUIRED (DRAINS)</div><div>14.0 m<sup>3</sup></div></div><div><div>OSD STORAGE PROVIDED</div><div>15.0 m<sup>3</sup></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>1100</div><div>BEFORE YOU DIG</div></div></div></div></div>					
			MIKE NIKOTIN	<div><div></div><div>GREENWOOD CONSULTING ENGINEERS</div><div>2/25 Seabeach Avenue, Mona Vale ABN - 90 625 916 341</div></div>	Project	3 CURL CURL PARADE CURL CURL		EG	EG	18/09/2020	
			Architect		Checked	EG	Approved	EG	Scale	1 : 200	
-	ISSUE FOR DA APPROVAL	18/9/2020	RAPID PLANS		Title	GENERAL NOTES		Drawing number	Job number	Revision	
REVISION	AMENDMENT	DATE						SW01	2020127	-	

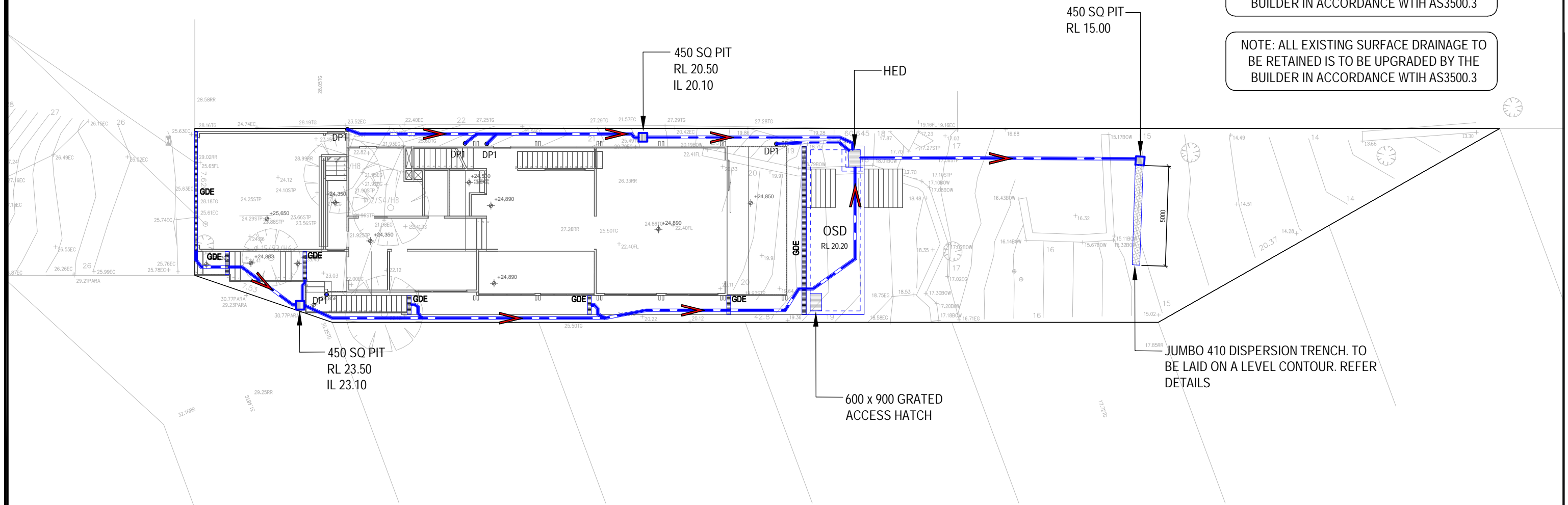


NOTE: DESIGN IS BASED ON EASEMENT REFUSAL. SIGNED REFUSAL LETTERS FROM DOWNSTREAM NEIGHBOURS ARE TO BE SUBMITTED ALONG WITH THESE DRAWINGS

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

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

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

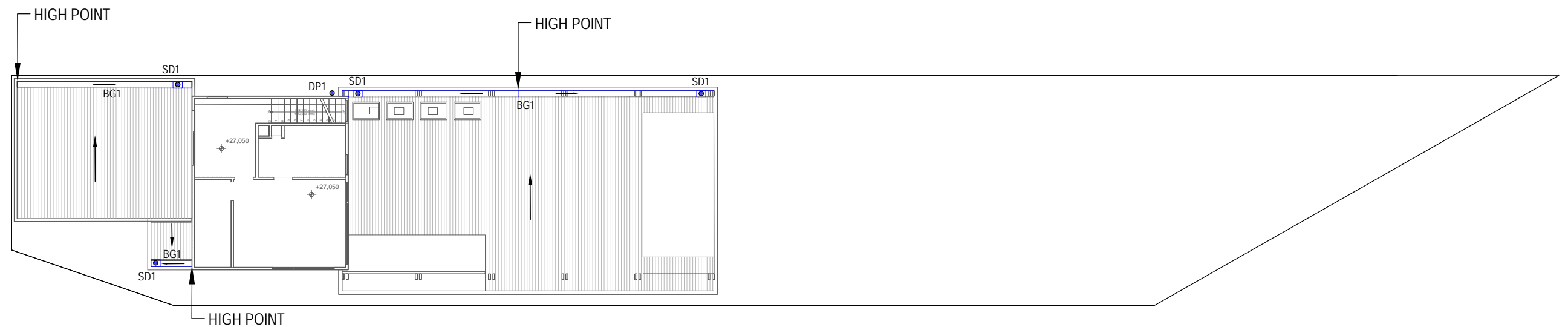


**SITE DRAINAGE PLAN**

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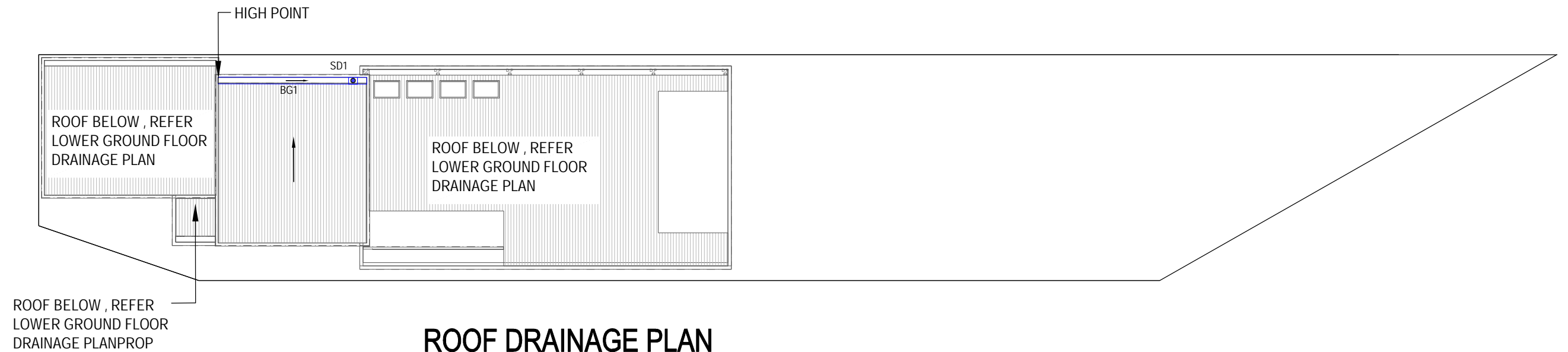
ISSUE FOR DA  
NOT FOR CONSTRUCTION

			Architect	MIKE NIKOTIN	 2/25 Seabeach Avenue, Mona Vale ABN - 90 625 916 341	Project 3 CURL CURL PARADE CURL CURL	EG Checked EG	Designed EG Approved EG	18/09/2020 Scale 1 : 200	Drawing number SW02	Job number 2020127	Revision -
-	ISSUE FOR DA APPROVAL	18/9/2020										
REVISION	AMENDMENT	DATE		RAPID PLANS		Title SITE DRAINAGE PLAN						



LOWER ROOF DRAINAGE PLAN

SCALE 1:200

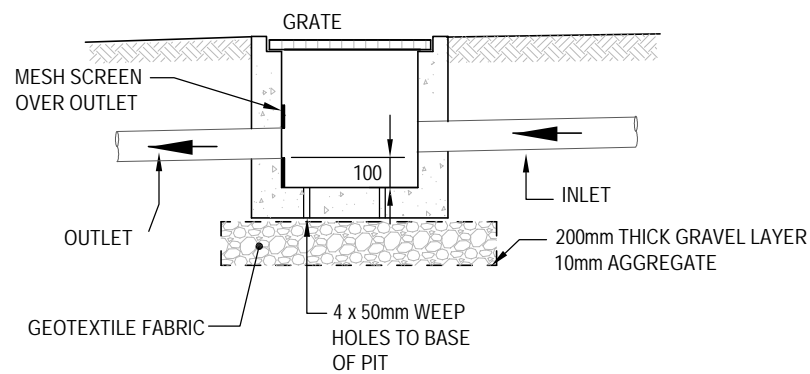
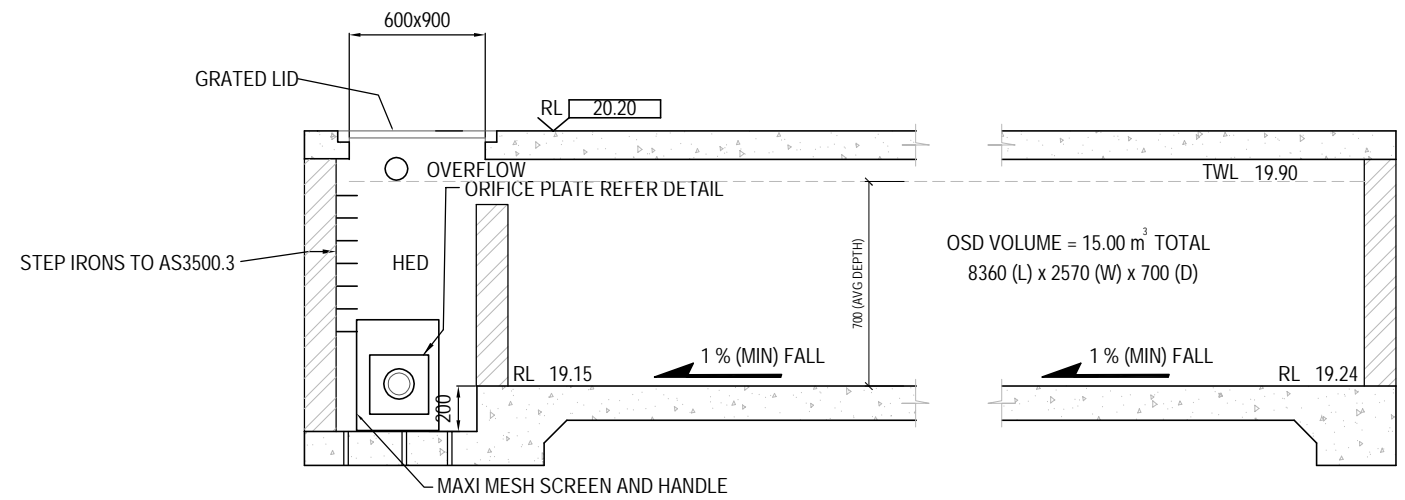
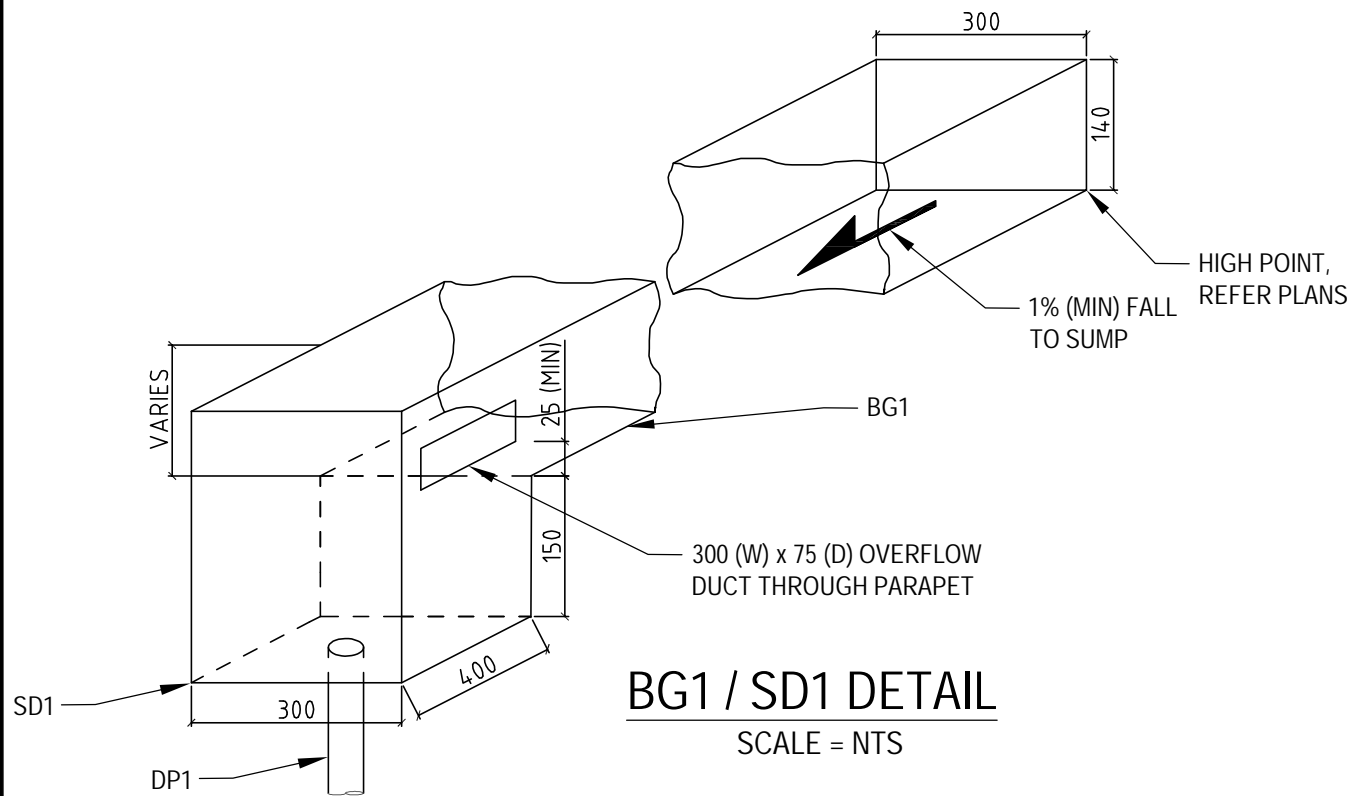


ROOF DRAINAGE PLAN

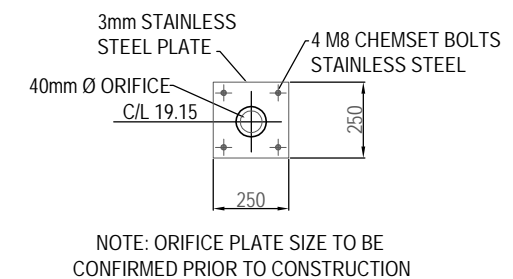
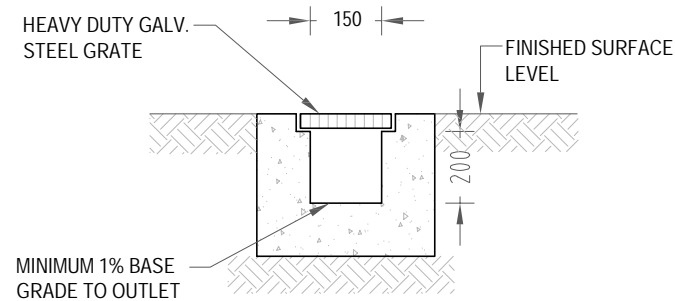
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ISSUE FOR DA  
NOT FOR CONSTRUCTION

			MIKE NIKOTIN	 <div>GREENWOOD CONSULTING ENGINEERS</div> <div>2/25 Seabeach Avenue, Mona Vale ABN - 90 625 916 341</div>	Project 3 CURL CURL PARADE CURL CURL	EG	Designed EG	18/09/2020
			Architect			Checked EG	Approved EG	Scale 1 : 200
					Title ROOF DRAINAGE PLAN	Drawing number SW03	Job number 2020127	Revision
-	ISSUE FOR DA APPROVAL	18/9/2020	RAPID PLANS					-
REVISION	AMENDMENT	DATE						



ALTERNATIVE POLYPROPYLENE PIT BY MANUFACTURER



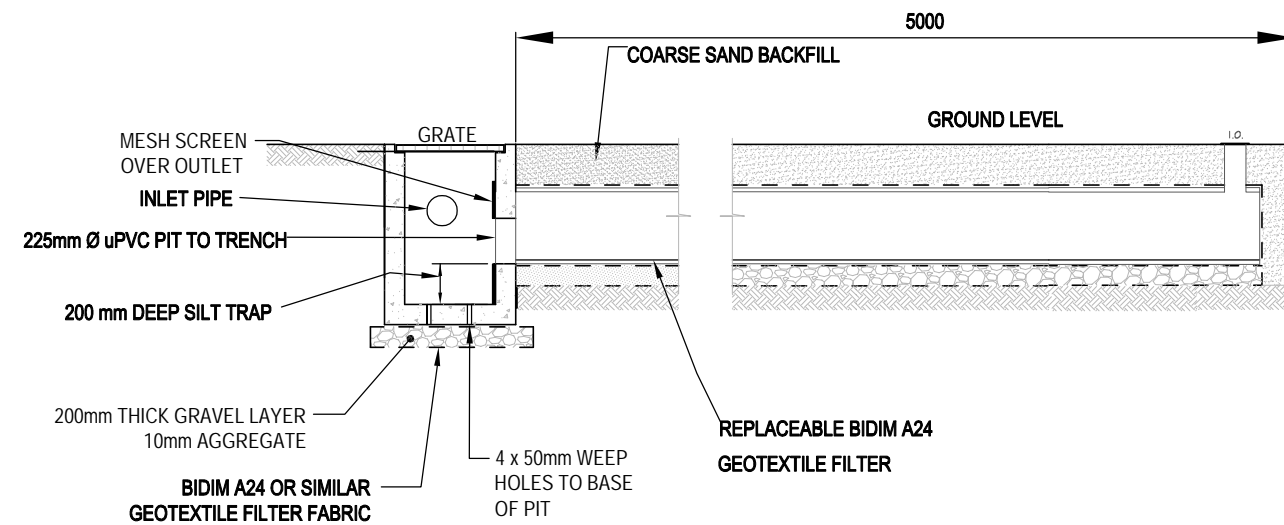
NOTE: ORIFICE PLATE SIZE TO BE CONFIRMED PRIOR TO CONSTRUCTION

ISSUE FOR DA  
NOT FOR CONSTRUCTION

			Architect	<div>MIKE NIKOTIN</div> <div>GREENWOOD CONSULTING ENGINEERS</div> <div>2/25 Seabeach Avenue, Mona Vale ABN - 90 625 916 341</div>	Project	3 CURL CURL PARADE CURL CURL	EG	Designed EG	18/09/2020	
							Checked EG	Approved EG	Scale 1 : 200	
			RAPID PLANS		Title	DETAILS	Drawing number		Job number	Revision
-	ISSUE FOR DA APPROVAL	18/9/2020					SW04		2020127	-
REVISION	AMENDMENT	DATE								

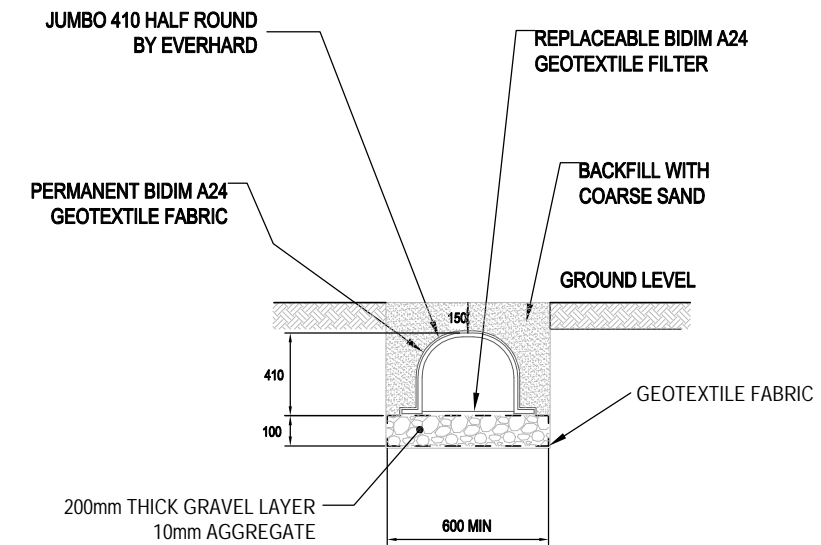
**NOTE: INFILTRATION / DISPERSION TRENCH**

2. TRENCH TO BE LAID ON A LEVEL CONTOUR.
3. GROUND LEVEL ABOVE TRENCH MUST BE LEVEL SO AS TO EVENLY DISPERSE WATER DOWN HILL OF THE TRENCH
4. IF ROCK IS ENCOUNTERED DURING EXCAVATION FOR TRENCH NOTIFY ENGINEER FOR ALTERNATE DETAIL.



**LONGITUDINAL SECTION THROUGH DISPERSION TRENCH**

SCALE = NTS



**CROSS SECTION THROUGH DISPERSION TRENCH**

SCALE = NTS

ISSUE FOR DA  
NOT FOR CONSTRUCTION

			Architect	MIKE NIKOTIN		Project 3 CURL CURL PARADE CURL CURL	EG	Designed EG	18/09/2020
			Architect	RAPID PLANS	2/25 Seabeach Avenue, Mona Vale ABN - 90 625 916 341	Title DETAILS	Checked EG	Approved EG	Scale 1 : 200
-	ISSUE FOR DA APPROVAL	18/9/2020					Drawing number SW05	Job number 2020127	Revision -
REVISION	AMENDMENT	DATE							