

22 RAVEN CIRCUIT, WARRIEWOOD STORMWATER MANAGEMENT PLANS

STORMWATER DESIGN NOTES

1. ALL DRAINAGE WORKS ARE TO BE IN ACCORDANCE WITH AS/NZS 3500.3
- STORMWATER DRAINAGE, NORTHERN BEACHES COUNCIL - PART 1
CONSOLIDATED STORMWATER MANAGEMENT
POLICY AND THE LATEST BASIX CERTIFICATE (IF APPLICABLE).

2. THE SITE AREA = 362.3 m²

- TOTAL SITE EXISTING IMPERVIOUS AREA = 0 m² (0%)
- TOTAL SITE PROPOSED IMPERVIOUS AREA = 178 m² (50%)

3. RAINWATER TANK IS REQUIRED FOR THIS DEVELOPMENT BASED ON A DESKTOP ASSESSMENT OF NORTHERN BEACHES COUNCIL - PART 1 CONSOLIDATED STORMWATER MANAGEMENT POLICY.

4. OSD IS REQUIRED FOR THE DEVELOPMENT BASED ON A DESKTOP ASSESSMENT OF NORTHERN BEACHES COUNCIL – PART 1 CONSOLIDATED STORMWATER MANAGEMENT POLICY.

5. THE POINT OF DISCHARGE FOR THE DEVELOPMENT SHALL BE VIA EXISTING KERB AND GUTTER CONNECTION.

ABBREVIATIONS









LEVELS

FFL	FINISHED FLOOR LEVEL
IL	INVERT LEVEL
RL	REDUCED LEVEL
H/L	HIGH LEVEL
L/L	LOW LEVEL
+	NEW REDUCED LEVEL
×	EXISTING LEVEL
AHD	AUSTRALIAN HEIGHT DATUM
OPF	OVERLAND FLOW PATH
SSL	STRUCTURAL SLAB LEVEL
SRZ	STRUCTURAL ROOT ZONE
TRZ	TREE ROOT ZONE
UNO	UNLESS NOTED OTHERWISE

FIXTURES

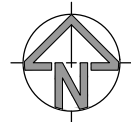
RWO	RAINWATER OUTLET
SWP	STORMWATER PIT (GRATE/SEALED)
PBO	PLANTER BOX OUTLET
CO	CLEAR OUT
GD	GRATED TRENCH DRAIN
RWT	RAINWATER TANK
KIP	KERB INLET PIT

SERVICES LEGEND

	EXISTING WATER MAIN
	EXISTING GAS MAIN
	EXISTING SEWER MAIN
	EXISTING ELECTRICAL SERVICE
	EXISTING STORMWATER PIPEWORK
	STORMWATER PIPEWORK
	RAINWATER PIPEWORK
	SUBSOIL PIPEWORK

ROOF DRAINAGE FIXTURES

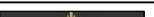
RHS	RECTANGULAR HOLLOW SECTION
O/F	OVERFLOW
SP	SPREADER
DP	DOWN PIPE
RH	RAINWATER HEAD
BO	BALCONY OUTLET

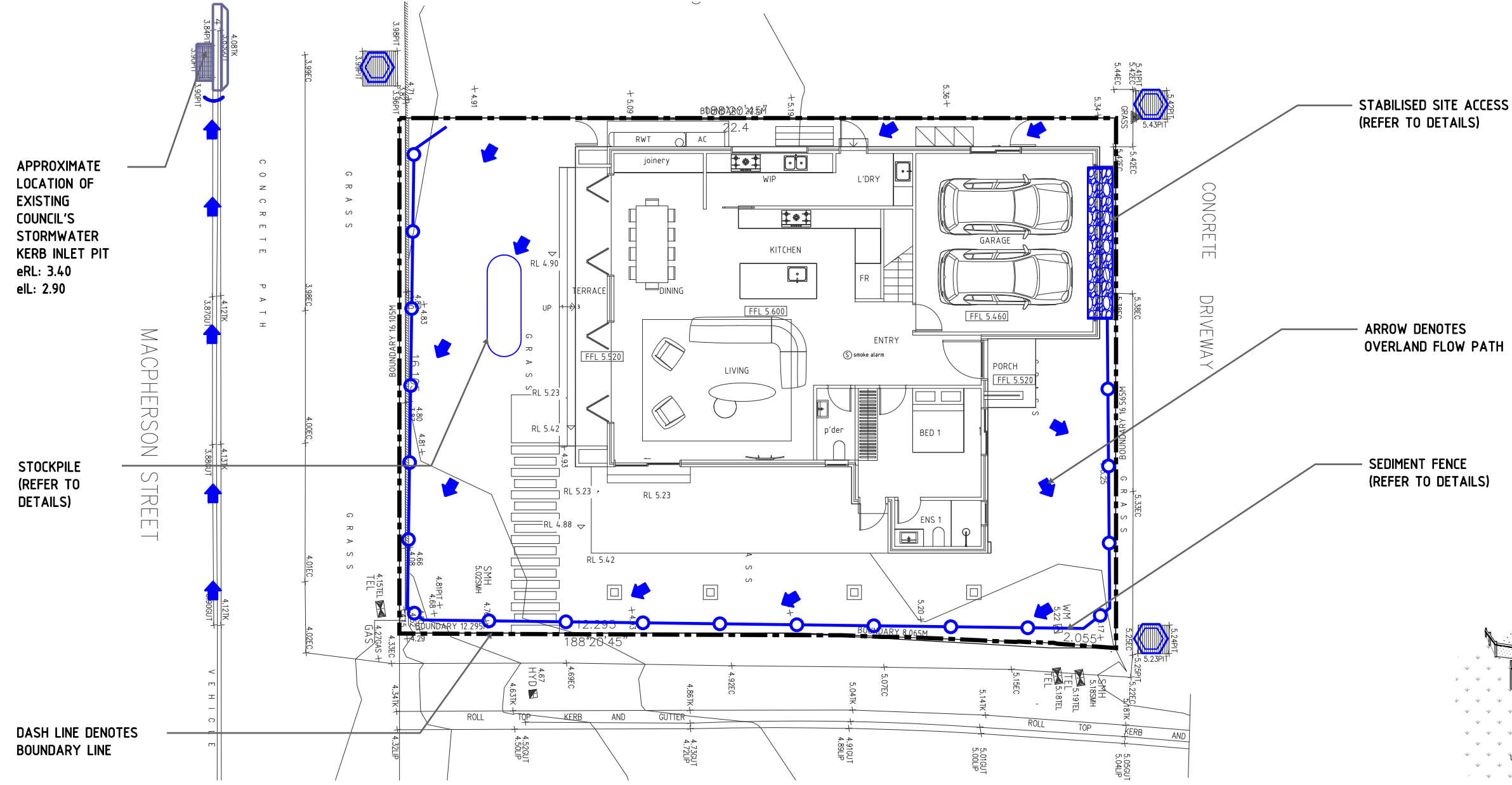


SITE LOCALITY PLAN

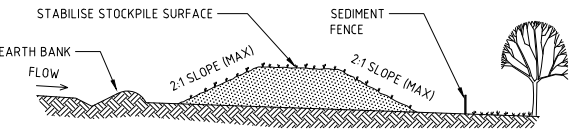
DRAWING LIST

DRAWING LIST	
DRAWING NUMBER	DRAWING NAME
2025H0026-SW01	COVER SHEET, NOTES & LEGEND
2025H0026-SW02	SEDIMENT AND EROSION CONTROL PLAN
2025H0026-SW03	CATCHMENT PLAN
2025H0026-SW04	GROUND FLOOR PLAN
2025H0026-SW05	DETAILS SHEET 01
2025H0026-SW06	DETAILS SHEET 02

					STORMWATER MANAGEMENT PLANS COVER SHEET, NOTES & LEGEND	CLIENT KULVIR SINGH		PROJECT NORTH POINT	DESIGNER W.N	DATE CREATED 23.05.2025	THIS DRAWING IS NOT TO BE USED FOR TENDER/CONSTRUCTION UNLESS ENDORSED BELOW PROJECT SUPERINTENDENT'S SIGNATURE: _____ DATE: _____	 CIVIL AND HYDRAULIC ENGINEERING ABN 85 653 756 042 E: info.mdeengineering@gmail.com
						PROJECT NAME 22 RAVEN CIRCUIT, WARRIEWOOD			ENGINEER D.H	STATUS DA		
P3	W.N	23.05.2025	D.H	REISSUED FOR DA					VERIFIER D.H	SCALE @ A3 AS SHOWN		
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SITE PLAN
SCALE 1: 150

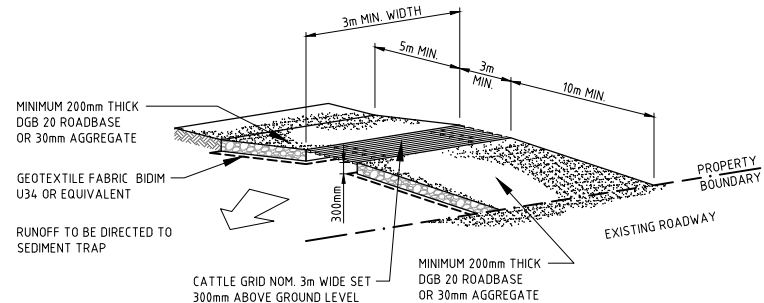


CONSTRUCTION NOTES:

- 1. PLACE STOCKPILES MORE THAN 2 (PREFERABLY 5) METRES FROM EXISTING VEGETATION, CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS.
- 2. CONSTRUCT ON THE CONTOUR AS LOW, FLAT, ELONGATED MOUNDS.
- 3. WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2 METRES IN HEIGHT.
- 4. WHERE THEY ARE TO BE IN PLACE FOR MORE THAN 10 DAYS, STABILISE FOLLOWING THE APPROVED ESCP OR SWMP TO REDUCE THE C-FACTOR TO LESS THAN 0.10.
- 5. CONSTRUCT EARTH BANKS (STANDARD DRAWING 5-5) ON THE UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES AND SEDIMENT FENCES (STANDARD DRAWING 6-8) 1 TO 2 METRES DOWNSLOPE.

STOCK PILE DETAIL

NOT TO SCALE



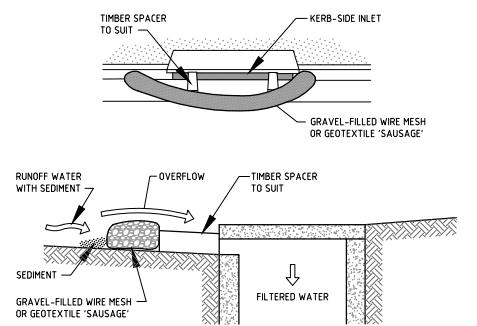
CONSTRUCTION NOTES:

- 1. STRIP THE TOPSOIL, LEVEL THE SITE AND COMPACT THE SUBGRADE.
- 2. COVER THE AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
- 3. CONSTRUCT A 200mm THICK PAD OVER THE GEOTEXTILE USING ROAD BASE OR 30mm AGGREGATE.
- 4. ENSURE THE STRUCTURE IS AT LEAST 15m LONG OR TO BUILDING ALIGNMENT AND AT LEAST 3m WIDE.
- 5. WHERE A SEDIMENT FENCE JOINS ONTO THE STABILISED ACCESS, CONSTRUCT A HUMP IN THE STABILISED ACCESS TO DIVERT WATER TO THE SEDIMENT FENCE.

STABILISED SITE ACCESS WITH SHAKER GRID DETAIL

NOT TO SCALE

- LEGEND
- SEDIMENT FENCE
 - GEOTEXTILE INLET FILTER (FOR PITS WITHIN LANDSCAPED AREAS)
 - GEOTEXTILE INLET FILTER (FOR PITS WITHIN PAVEMENT AREAS)
 - MESH & GRAVEL INLET FILTER
 - STABILISED SITE ACCESS
 - STOCK PILE

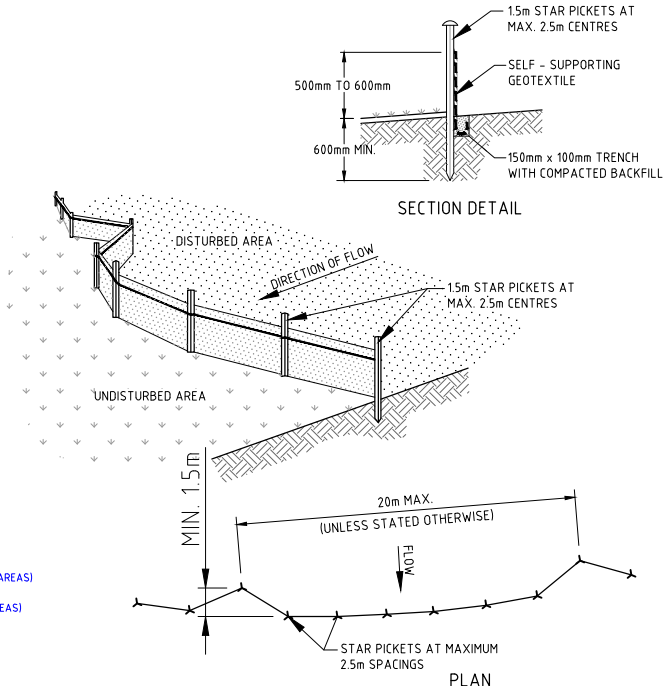


CONSTRUCTION NOTES:

- 1. INSTALL FILTERS TO KERB INLETS ONLY AT SAG POINTS.
- 2. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25mm TO 50mm GRAVEL.
- 3. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE.
- 4. PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH SPACER BLOCKS.
- 5. FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
- 6. SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE PLACED SO THAT THEY FIRMLY ABUT EACH OTHER AND SEDIMENT-LADEN WATERS CANNOT PASS BETWEEN.

MESH AND GRAVEL INLET FILTER DETAIL

NOT TO SCALE



SECTION DETAIL

PLAN

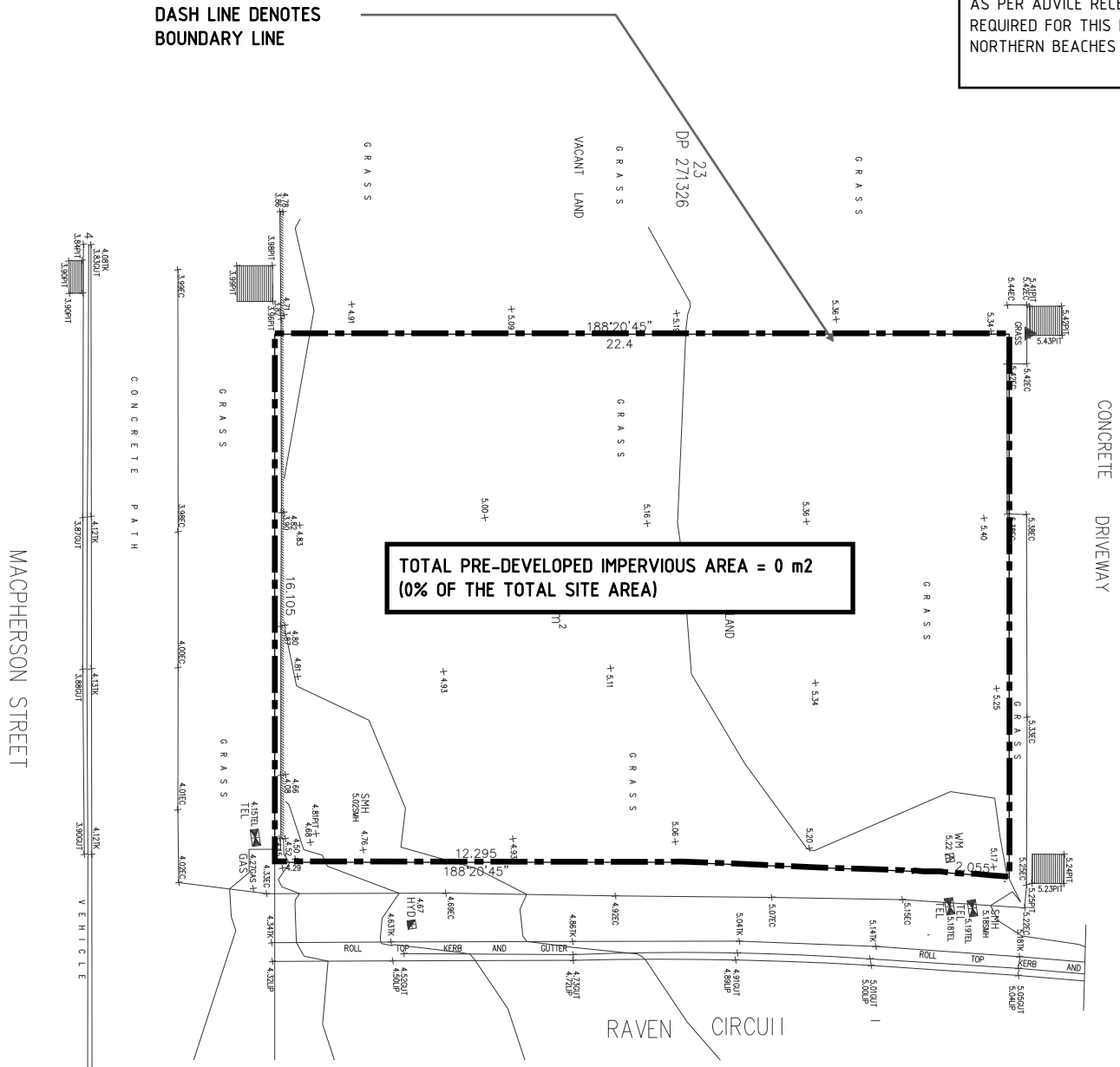
CONSTRUCTION NOTES:

- 1. CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10-YEAR EVENT.
- 2. CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
- 3. DRIVE 15 METRE LONG STAR PICKETS INTO THE GROUND AT 2.5 METRE INTERVALS (MAX) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
- 4. FIX SELF SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE POSTS ENSURING IT GOES TO THE BASE OF THE TRENCH. FIX THE GEOTEXTILE WITH WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR THIS PURPOSE IS NOT SATISFACTORY.
- 5. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150-mm OVERLAP.
- 6. BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.

SEDIMENT FENCE DETAIL

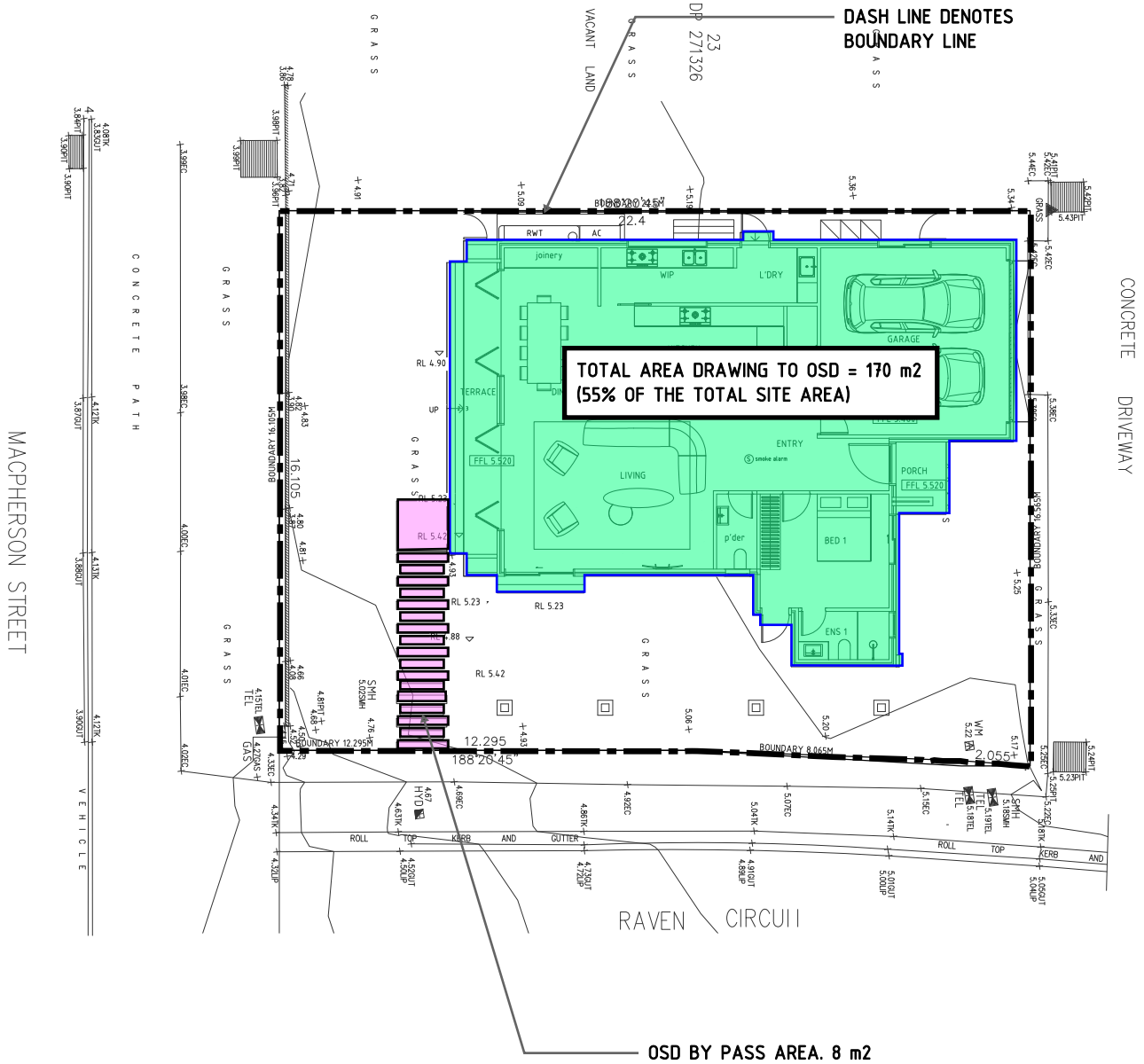
NOT TO SCALE

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P2	P.D	22.05.2025	D.H	REISSUED FOR DA								VERIFIER D.H	SCALE @ A3 1:150			
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PRE-DEVELOPED IMPERVIOUS CATCHMENT PLAN
SCALE 1:200

IMPORTANT NOTES:
AS PER ADVICE RECEIVED FROM THE COUNCIL OF NORTHERN BEACHES, OSD IS REQUIRED FOR THIS DEVELOPMENT IN ACCORDANCE WITH THE COUNCIL NORTHERN BEACHES ON-SITE STORMWATER DETENTION POLICY



POST-DEVELOPED IMPERVIOUS CATCHMENT PLAN
SCALE 1:200

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					CATCHMENT PLAN	PROJECT NAME	22 RAVEN CIRCUIT, WARRIEWOOD		ENGINEER	D.H	STATUS	DA	PROJECT SUPERINTENDENT'S SIGNATURE: _____ DATE: _____	
									VERIFIER	D.H	SCALE @ A3	1:200		
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FIRST FLUSH SYSTEM
WITH MINIMUM
CAPACITY OF 100L.

- RAINWATER HARVESTING TANK WITH MINIMUM EFFECTIVE VOLUME IN ACCORDANCE WITH BASIX CERTIFICATE & COUNCIL'S REQUIREMENTS.

EX SWP
RL: 5.42
IL: UNKNOWN

— ACO K200 KLASSIK
DRAIN CLASS D
GRATE OR
APPROVED
EQUIVALENT.



**BALCONY
DRAINAGE
PROVISION**

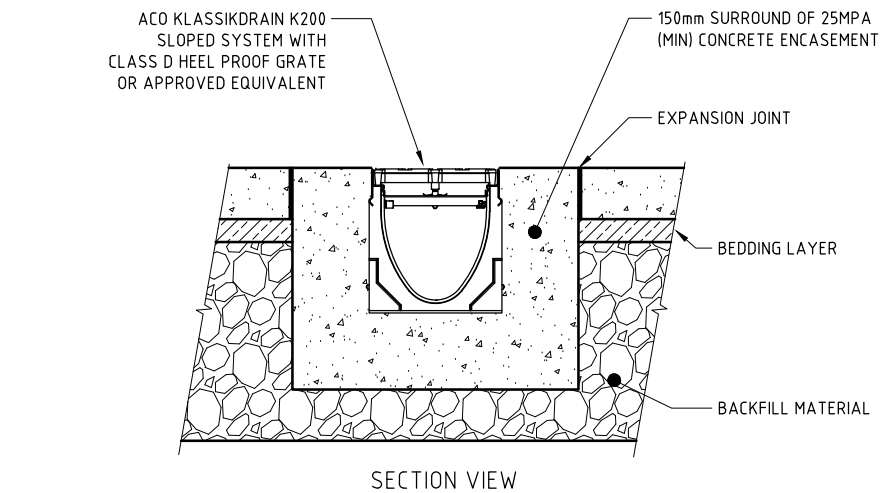
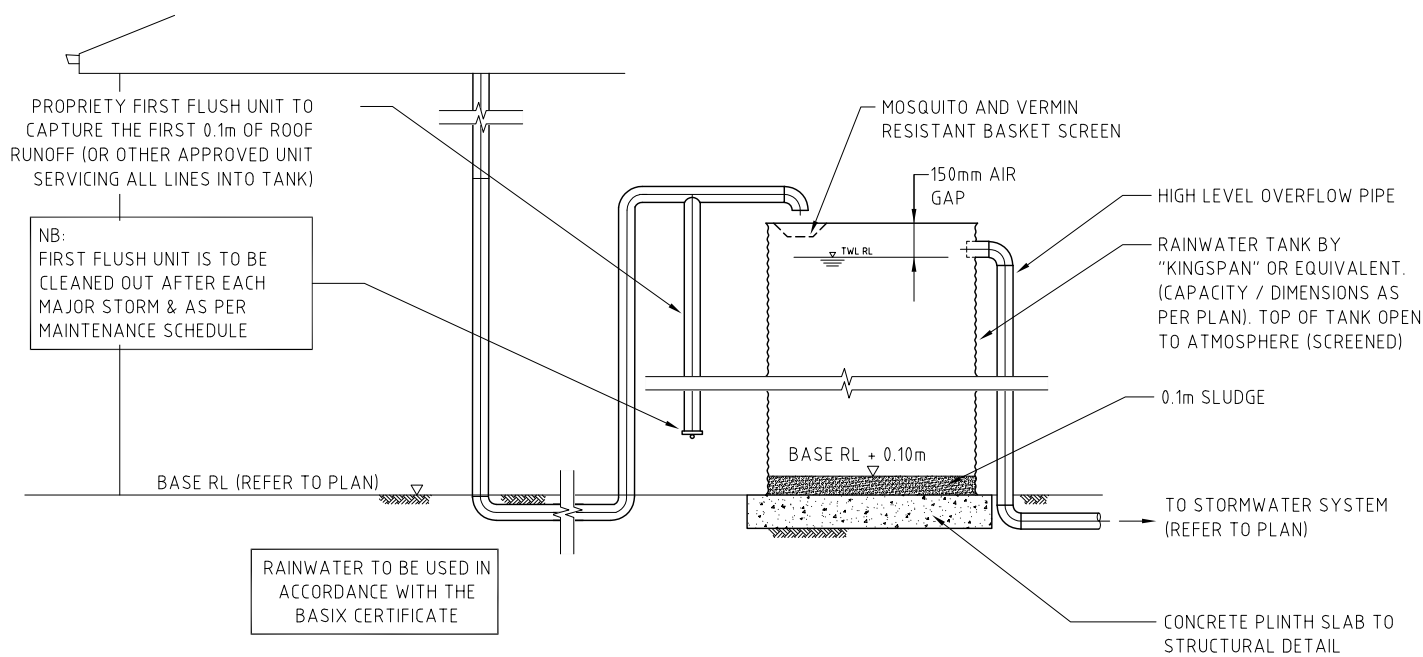
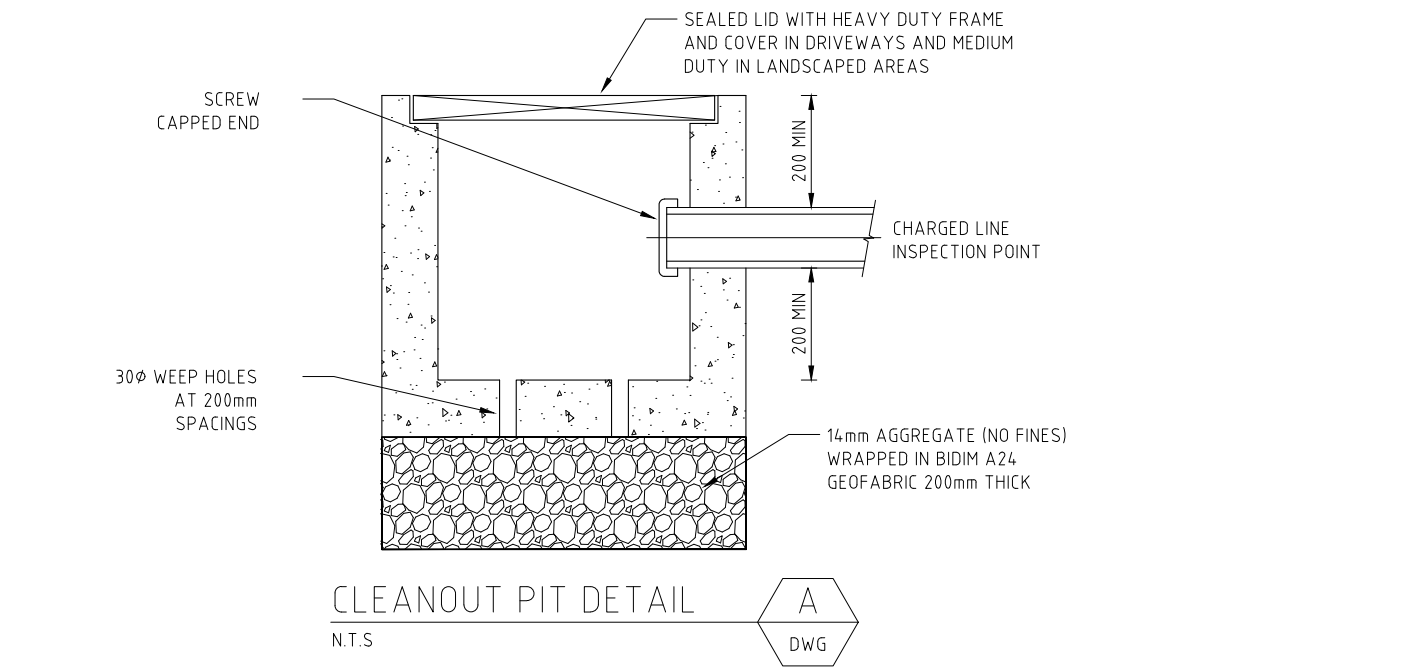
— DASH LINE
DENOTES
BOUNDARY LINE

EX SWP
RL: 5.24
IL: UNKNOWN

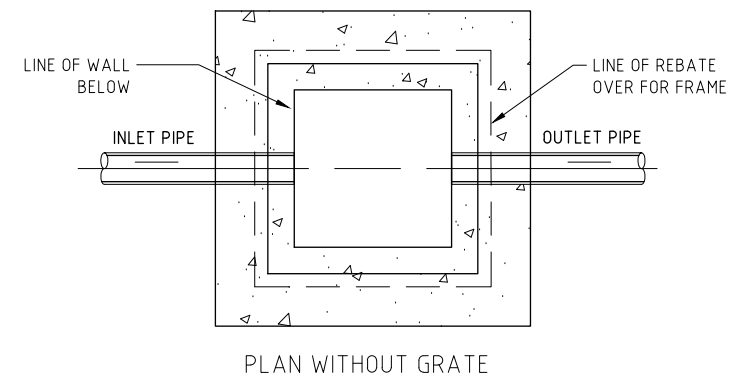
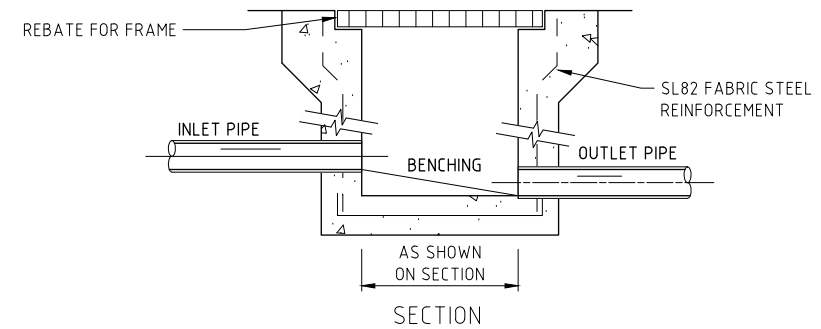
GROUND FLOOR PLAN

SCALE 1:100

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TRENCH GRATE (200mm WIDE) CLASS D
N.T.S.

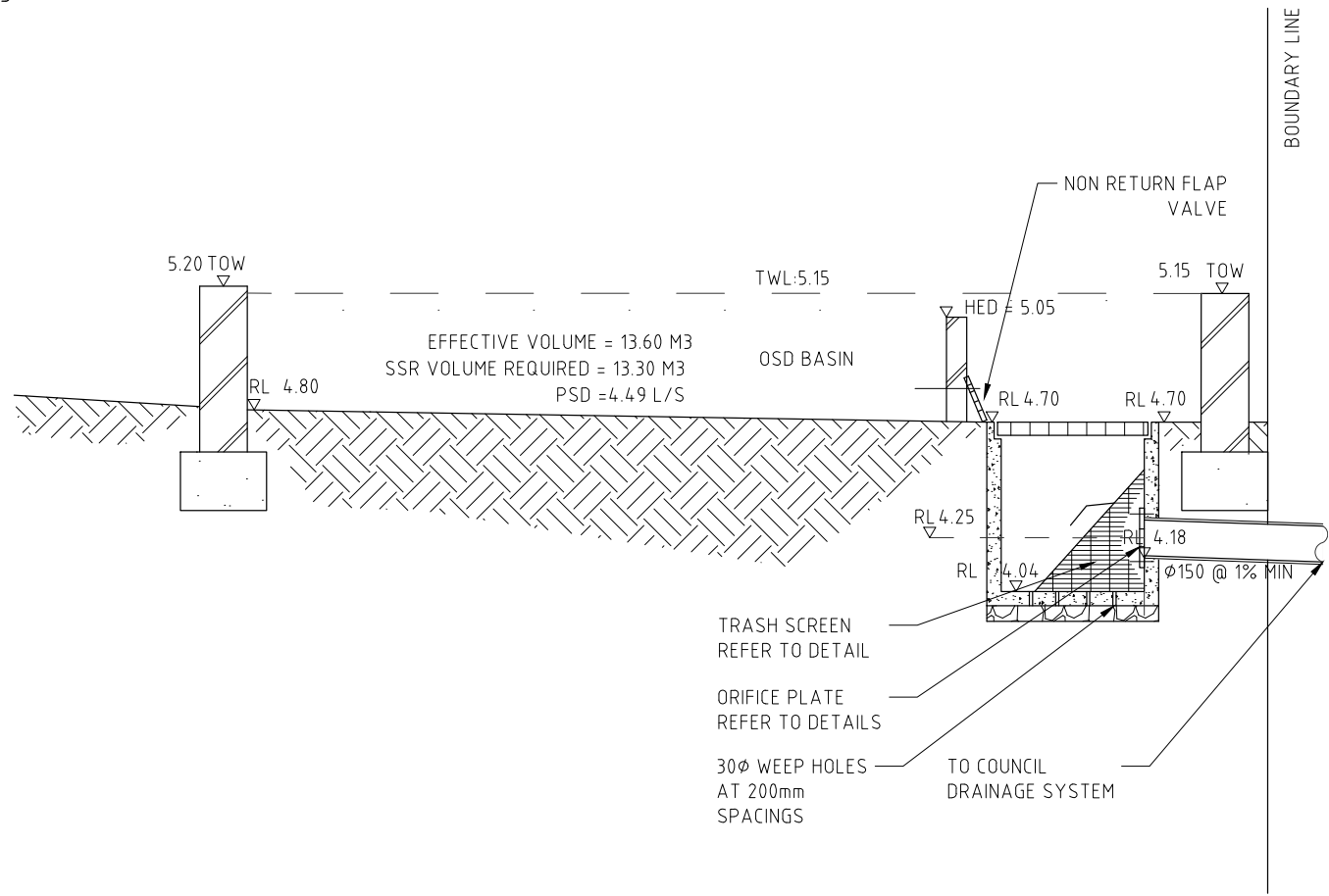


TYPICAL GRATED INLET PIT
N.T.S.

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					DETAILS SHEET 01	PROJECT NAME	22 RAVEN CIRCUIT, WARRIEWOOD		ENGINEER	D.H	STATUS	DA	PROJECT SUPERINTENDENT'S SIGNATURE: DATE:	
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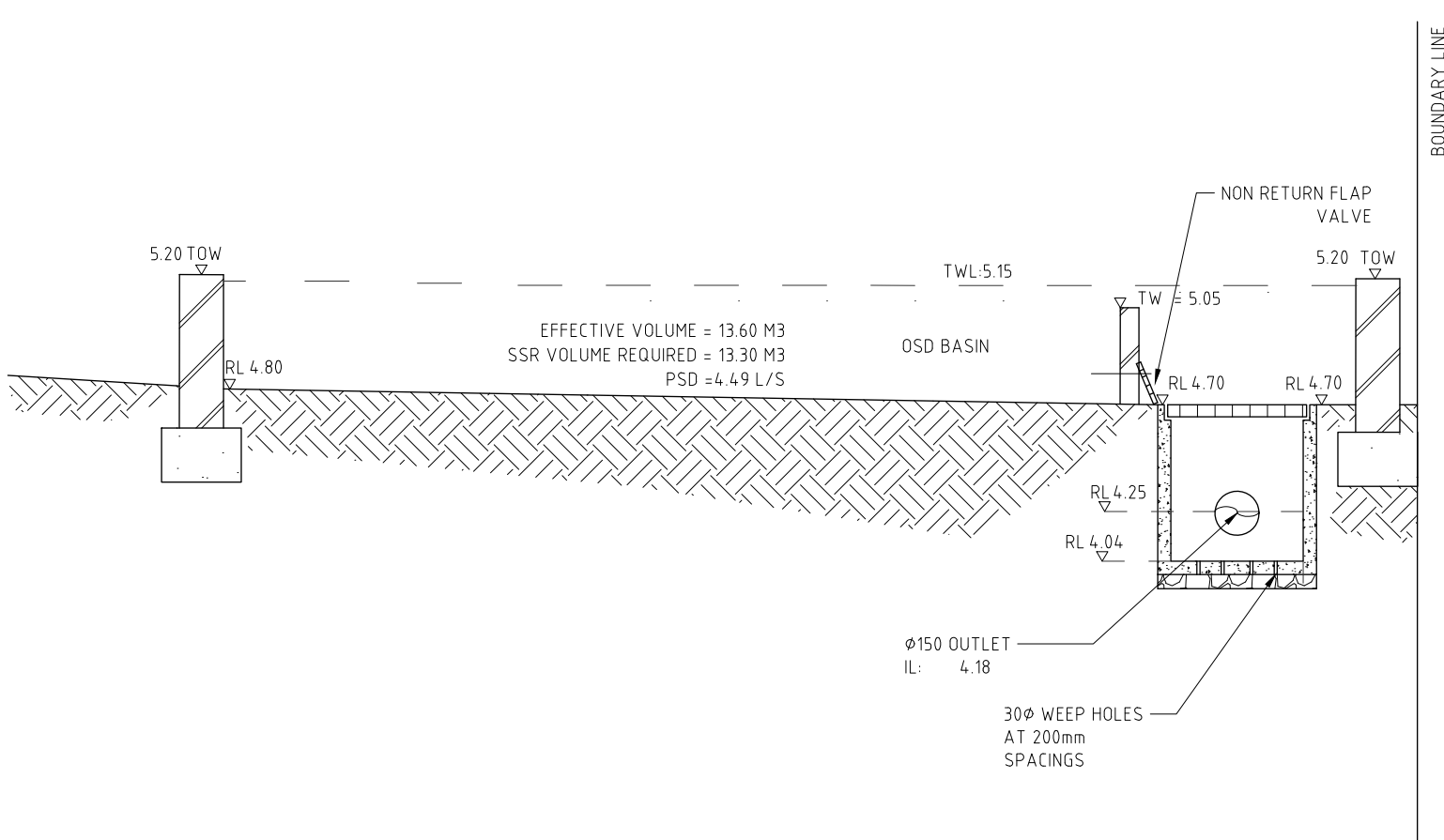


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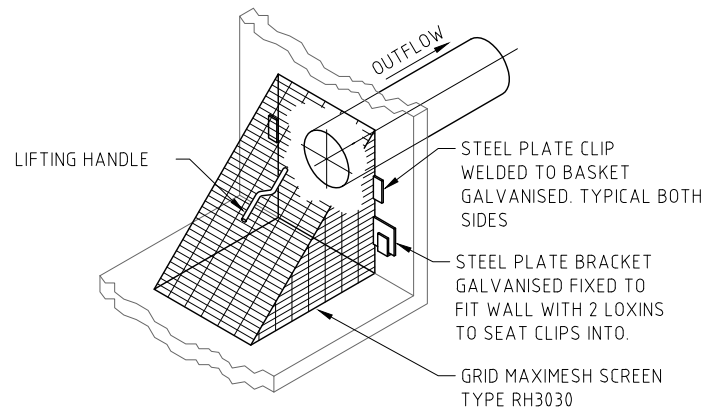
SECTION 1 - OSD BASIN

N.T.S



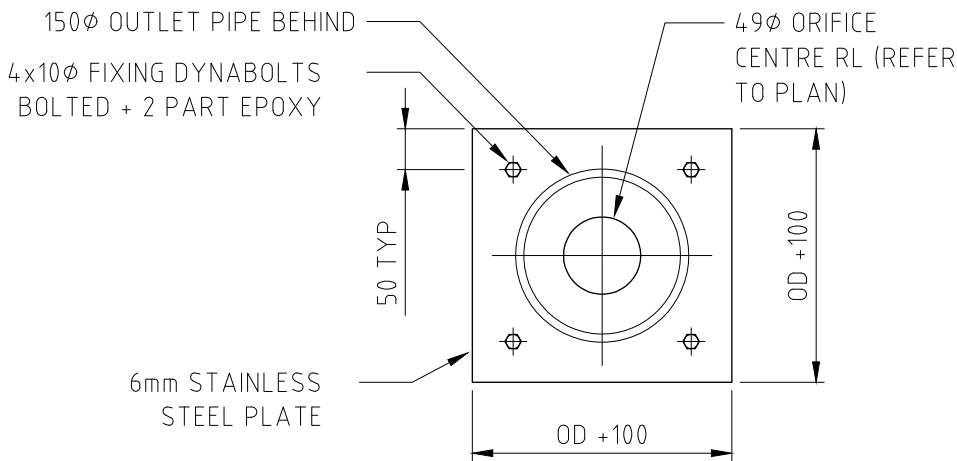
SECTION 2 - OSD BASIN

N.T.S



SILT TRAP TRASH SCREEN DETAIL

N.T.S.



ORIFICE SIZE

$$A = \frac{Q}{Cd \times \sqrt{2} \times g \times H}$$

$$A = \frac{0.00449}{0.62 \times \sqrt{2} \times 9.81 \times 0.8}$$

$$A = 0.0019m^2$$

THEREFORE
D = 49mm

					STORMWATER MANAGEMENT PLANS	CLIENT	KUL VIR SINGH	PROJECT NORTH POINT	DESIGNER	W.N	DATE CREATED	23.05.2025	THIS DRAWING IS NOT TO BE USED FOR TENDER/CONSTRUCTION UNLESS ENDORSED BELOW	
					DETAILS SHEET 02	PROJECT NAME	22 RAVEN CIRCUIT, WARRIEWOOD		ENGINEER	D.H	STATUS	DA	PROJECT SUPERINTENDENT'S SIGNATURE: DATE:	
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