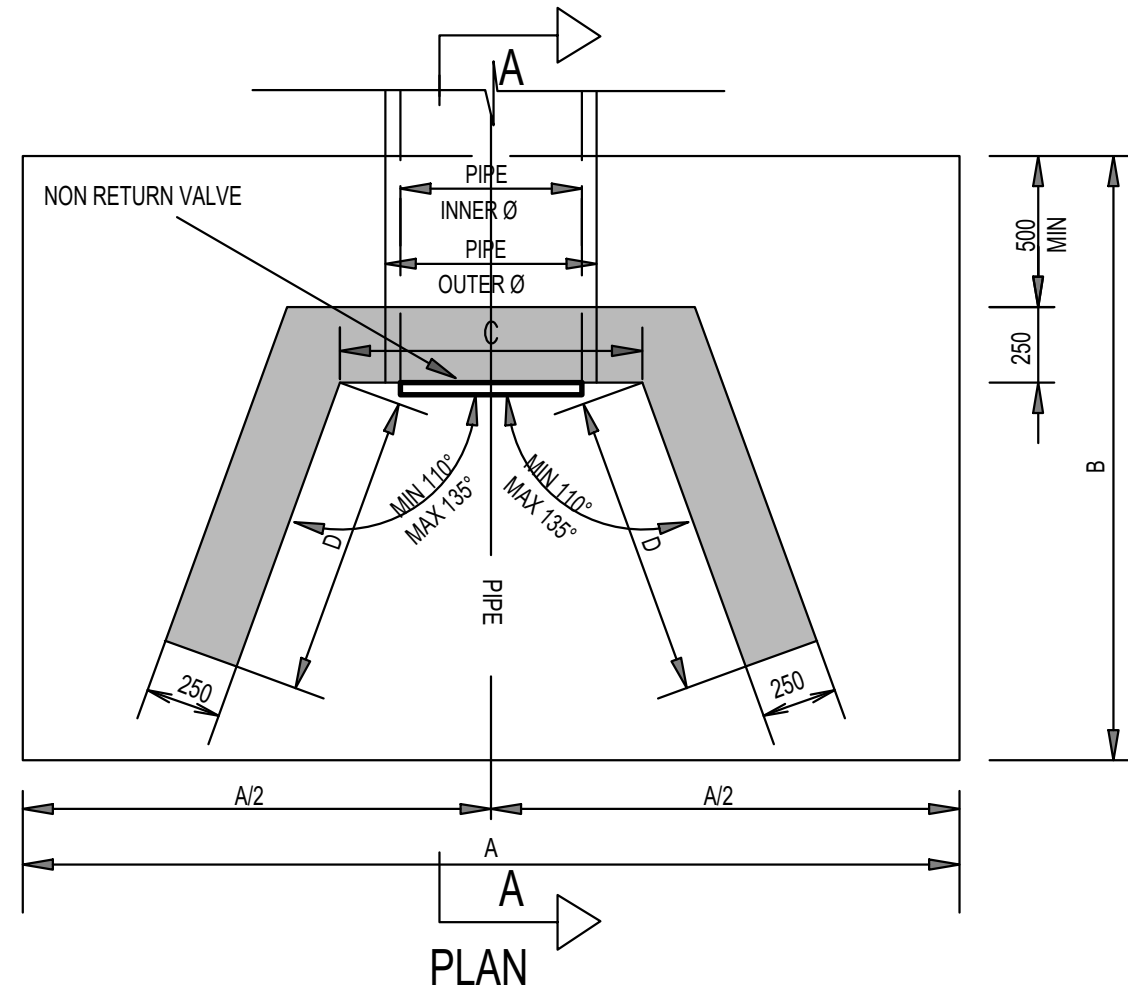
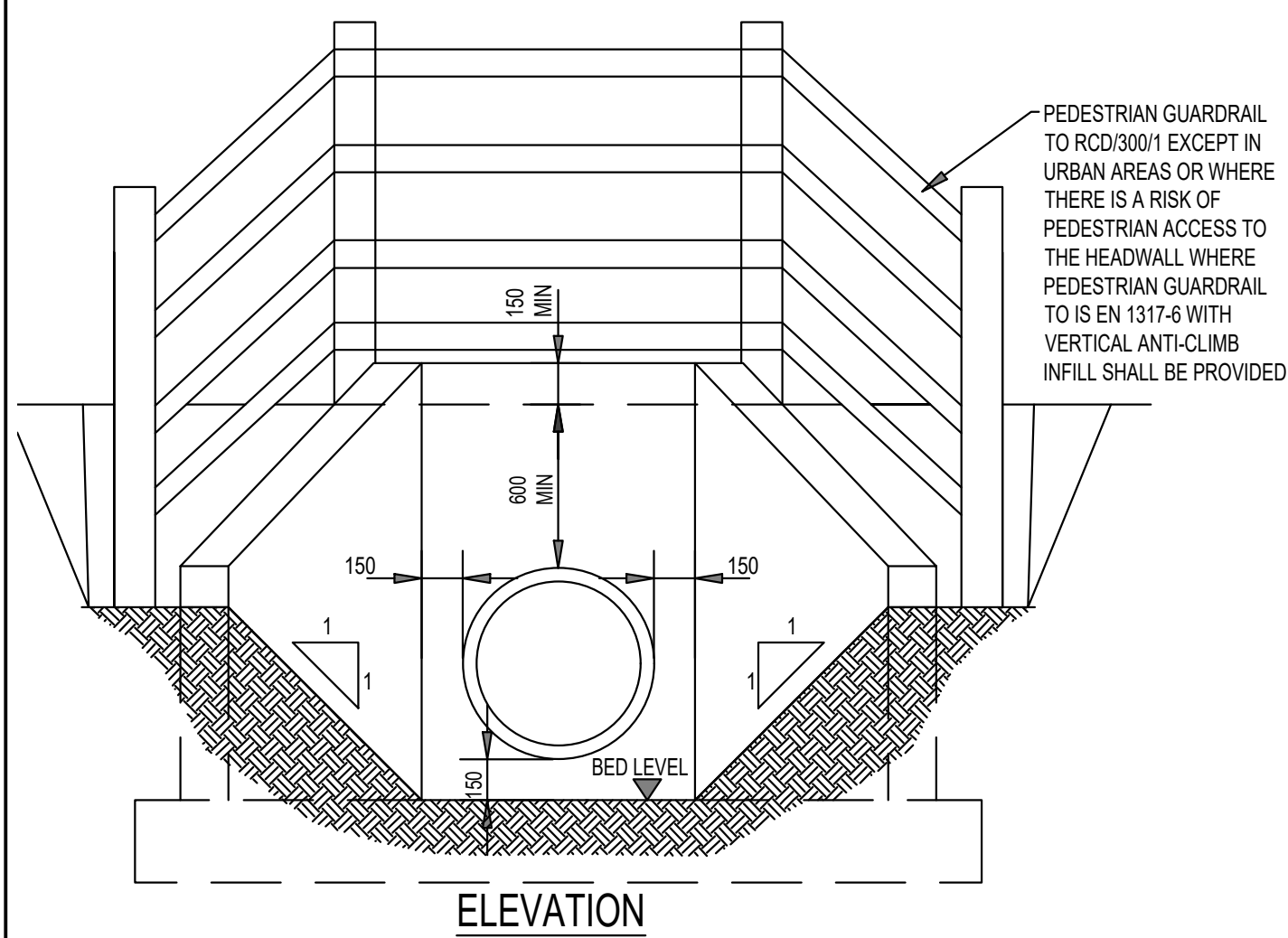




SCALE 1:25
NRA HEADWALL DETAIL

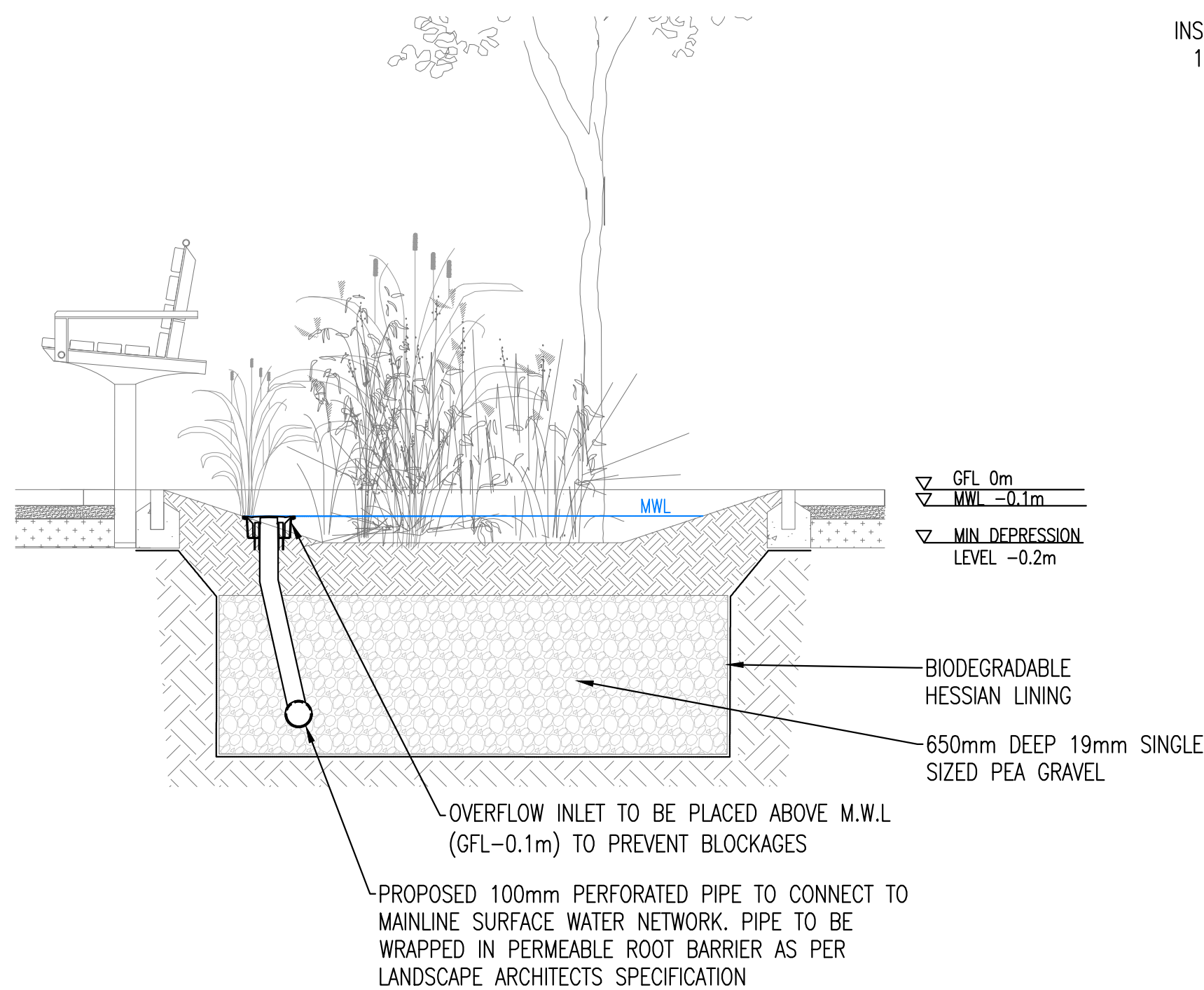
PIPE INNER Ø	A	B	C	D	E	F
<= 300	2000	2000	PIPE OUTER Ø + 300	1000	400	500
301-600	2500	2500	PIPE OUTER Ø + 300	1250	400	600
601-900	3200	3200	PIPE OUTER Ø + 300	1550	500	700
901-1200	3900	3900	PIPE OUTER Ø + 300	1850	500	800
1201-1500	4700	4700	PIPE OUTER Ø + 300	2150	500	900
1501-1800	5200	5200	PIPE OUTER Ø + 300	2350	500	1000

THE DIMENSIONS CONTAINED IN THE TABLE ABOVE ARE MINIMUMS ONLY AND THE DESIGNER SHALL CONFIRM DETAILS FOR SPECIFIC SITE CONDITIONS THE DIMENSIONS CONTAINED IN THE TABLE ABOVE ARE BASED ON THE FOLLOWING CONSTRAINTS:

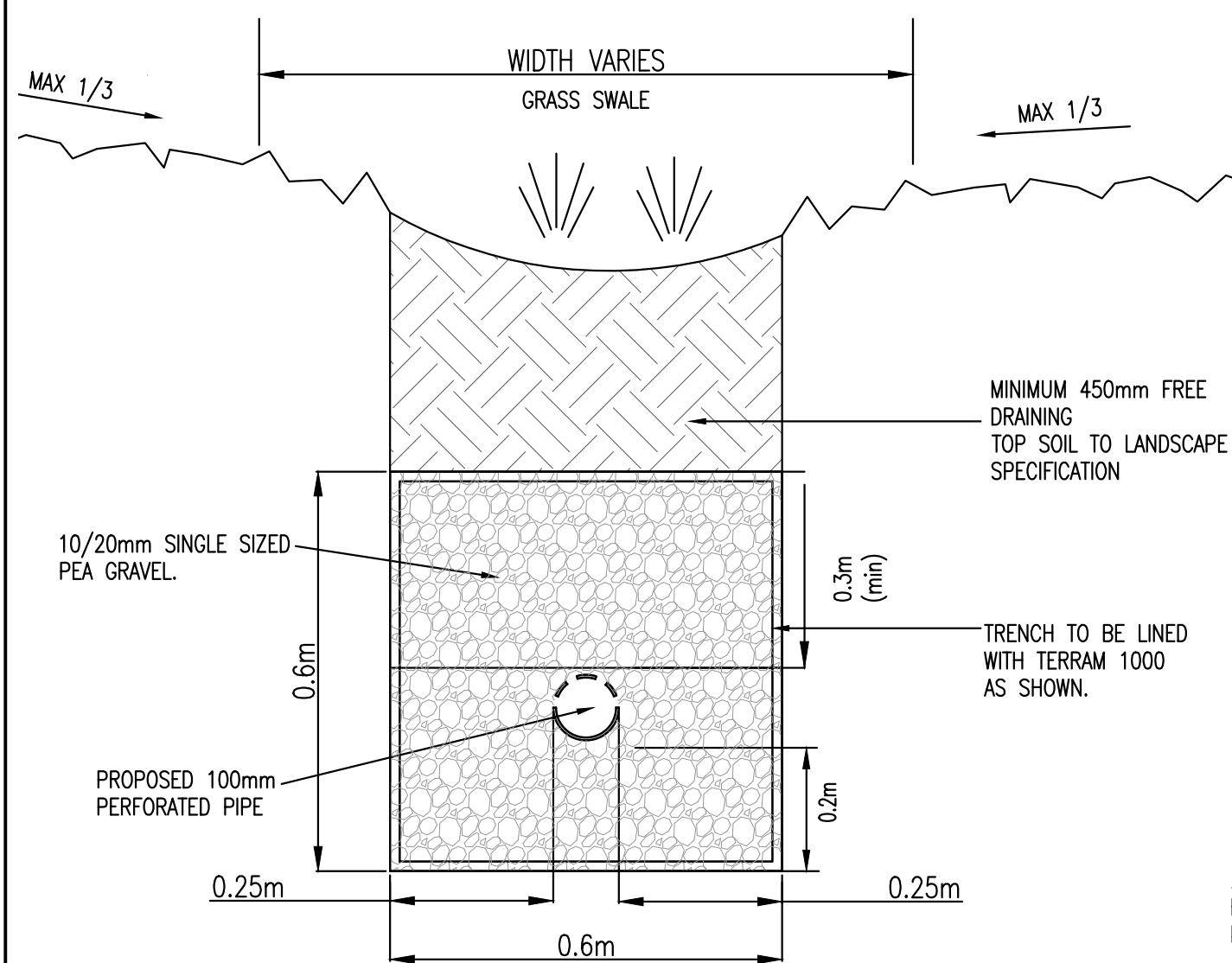
- ANGLE BETWEEN HEADWALL AND WINGWALL IS 110°;
- BACKFILL MATERIAL IS FREE DRAINING;
- THERE ARE NO LIVE LOAD EFFECTS ON THE HEADWALL;
- CHARACTERISTIC VALUE OF INTERNAL FRICTION $\phi(0)$ OF THE BACKFILL MATERIAL = 37.5°;
- 600mm COVER TO THE PIPE AT THE REAR OF THE HEADWALL.

WITH A 200mm WIDE FLAT AREA BEFORE THE COMMENCEMENT OF THE MAIN EARTHWORKS SLOPE;

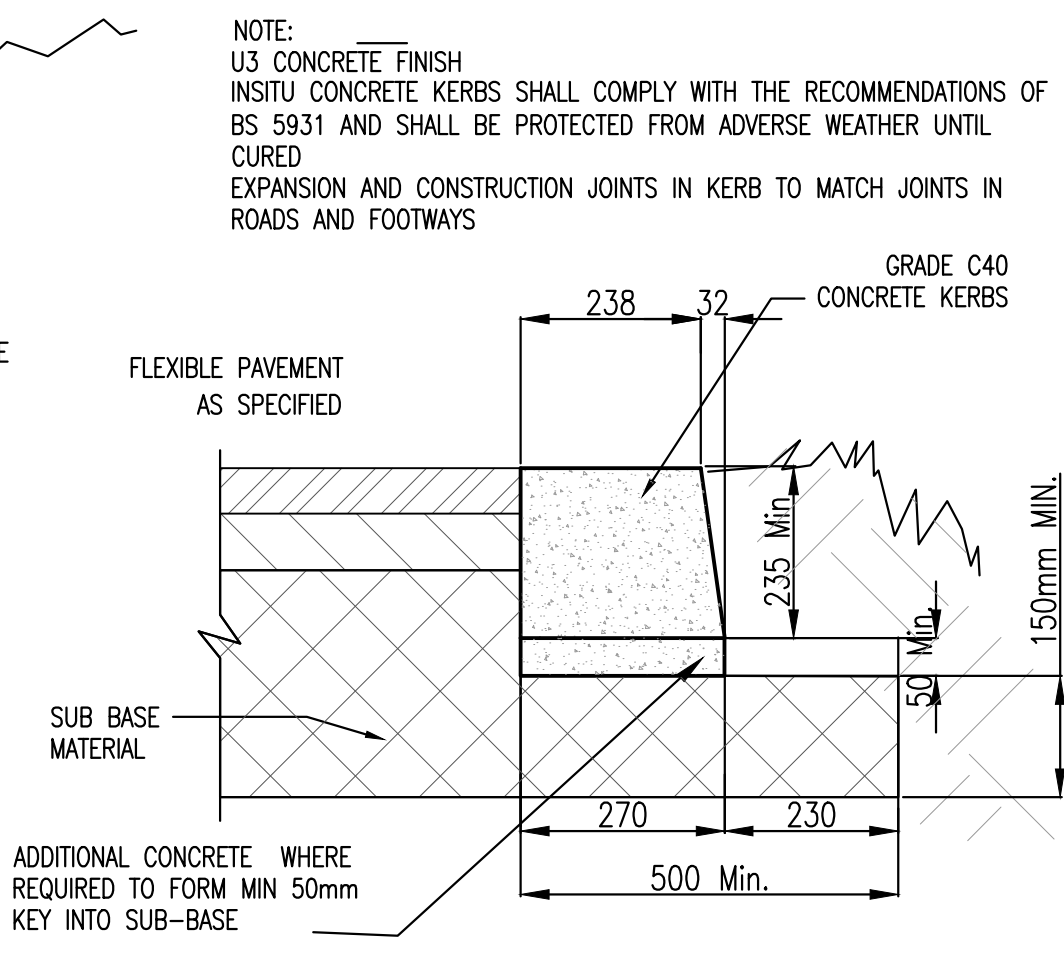
- SLOPE OF FILL MEASURED FROM THE REAR FACE OF THE WINGWALLS DOWNWARDS AND FROM BED LEVEL UPWARDS ARE BOTH TO BE 1:1



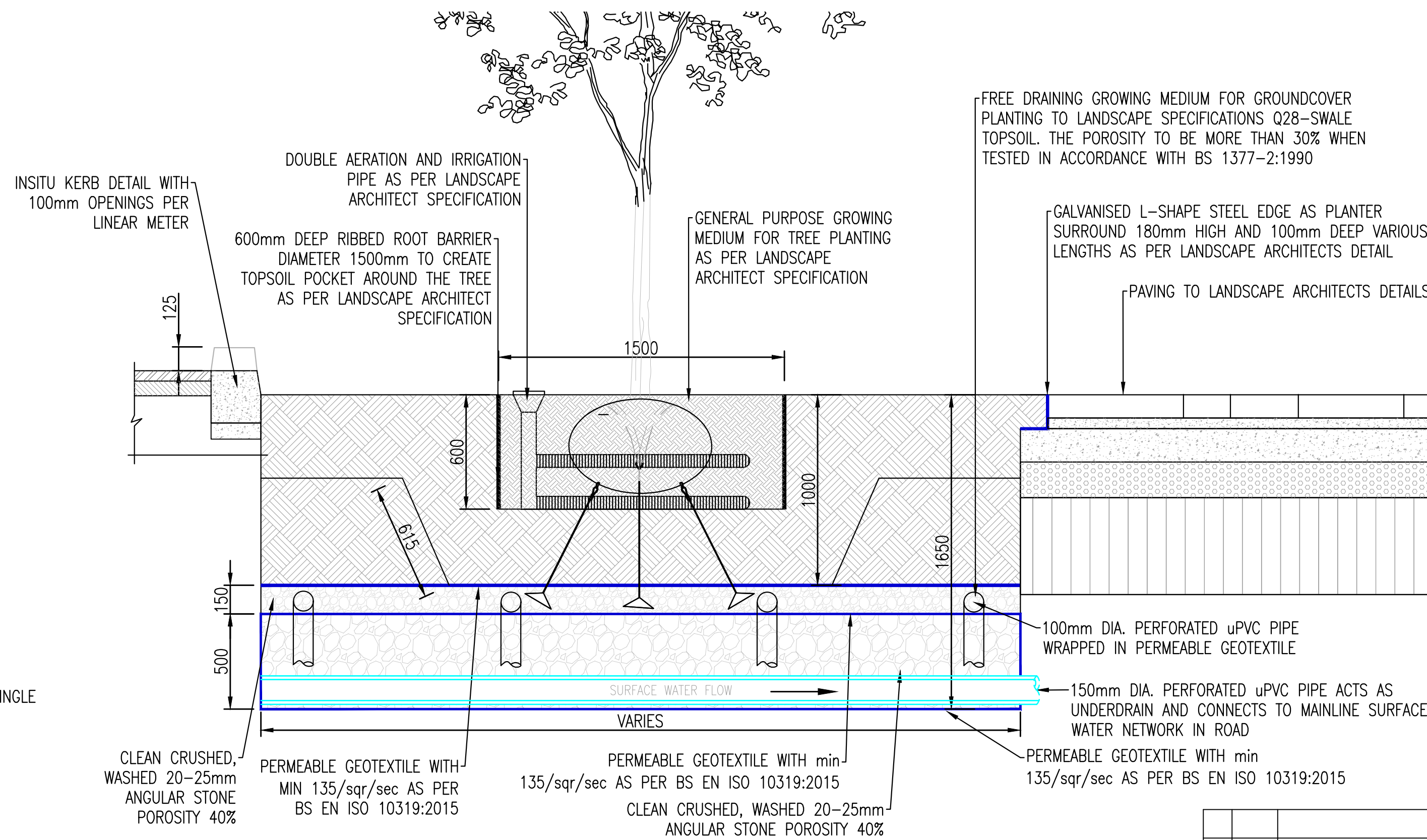
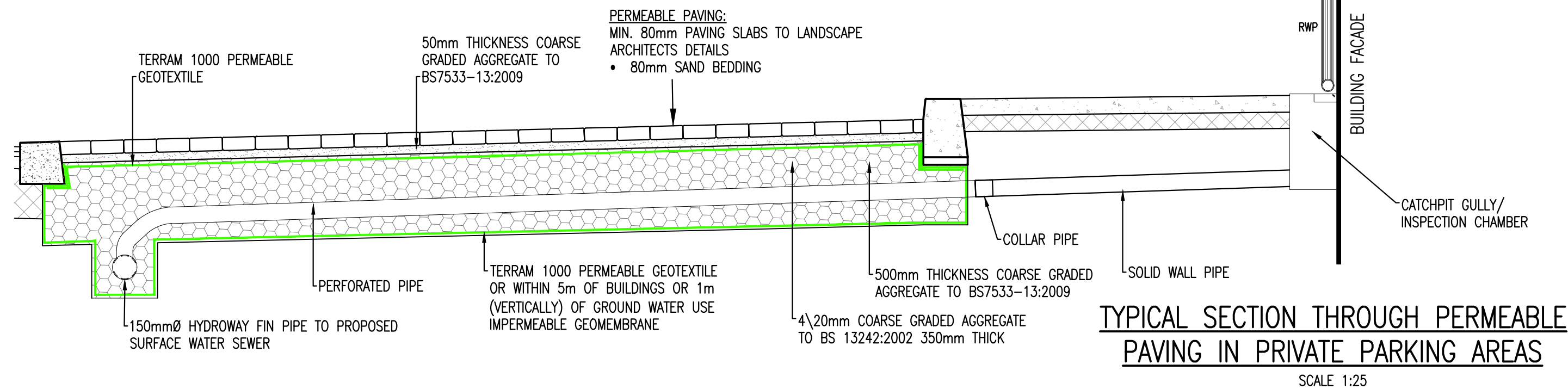
TYPICAL PUBLIC BIORETENTION RAIN GARDEN DETAIL



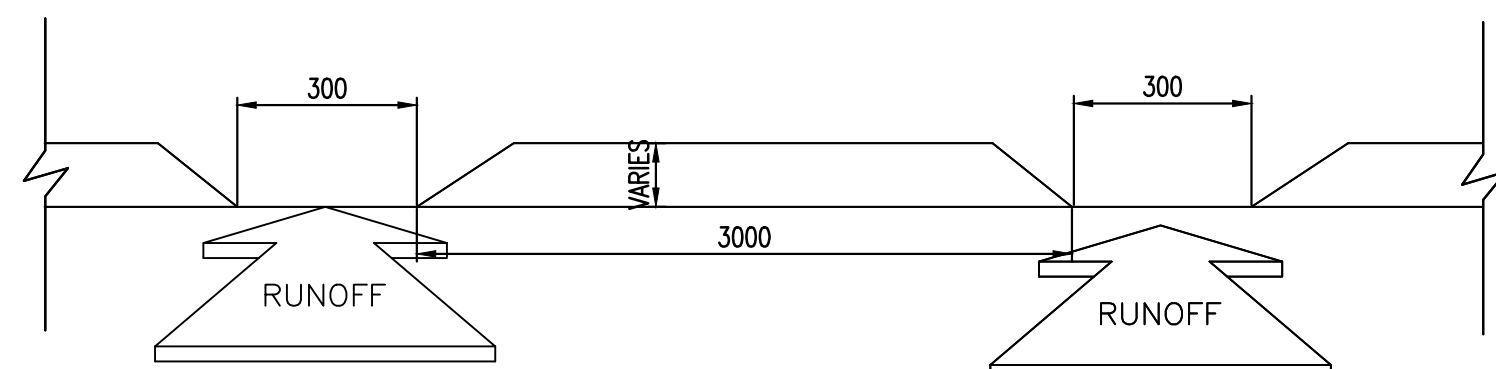
TYPICAL SECTION THROUGH PROPOSED SWALES



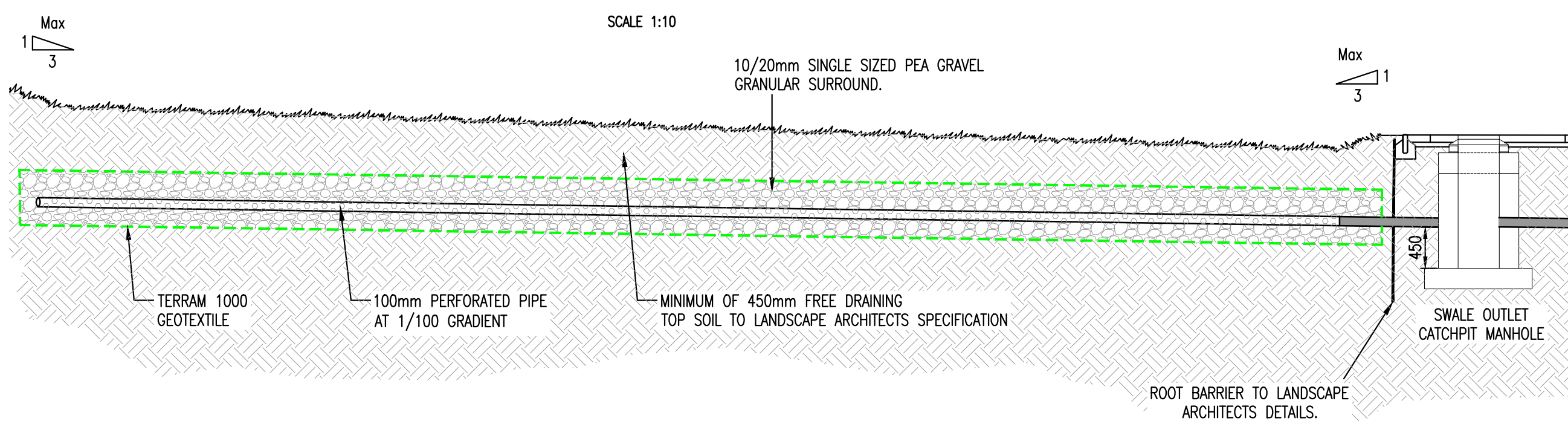
TYPICAL IN SITU CONCRETE KERB
DETAIL AT SWALE LOCATIONS
SCALE 1:10 @ A1



TYPICAL BIORETENTION TREE PIT DETAIL
SCALE 1:25 @ A1



TYPICAL IN SITU CONCRETE KERB DETAIL AT SWALE LOCATIONS



TYPICAL LONG SECTION THROUGH SWALES
SCALE 1:50 @A1

P02	28/08/26	ISSUED FOR PLANNING APPLICATION				IG	IW
P01	07/05/26	ISSUED FOR STAGE 2 APPLICATION				IG	IW
Rev	Date	Description				By	Chk
Amendments							
Project PROPOSED LRD PLANNING APPLICATION 1, BALBRIGGAN, CO. DUBLIN							
Title PROPOSED SuDS DETAILS							
Client LAGAN HOMES LTD.							
 BLOCK S, EASTPOINT BUSINESS PARK, ALFIE BYRNE ROAD, DUBLIN D03 H3F4 IRELAND. Tel: (01) 664 8900 Email: info@waterman-moylan.ie www.waterman-moylan.ie							
Status PLANNING							
Designed By		PI	Approved		IW	Waterman Ref	25-107
Drawn By		IG	Date		MAY, 2026	Scales @ A1	AS SHOWN
Project - Originator - Volume - Level - Type - Role - Number							Revision
FILE - WMC - CA4- XX - DR - C - P0220							P02