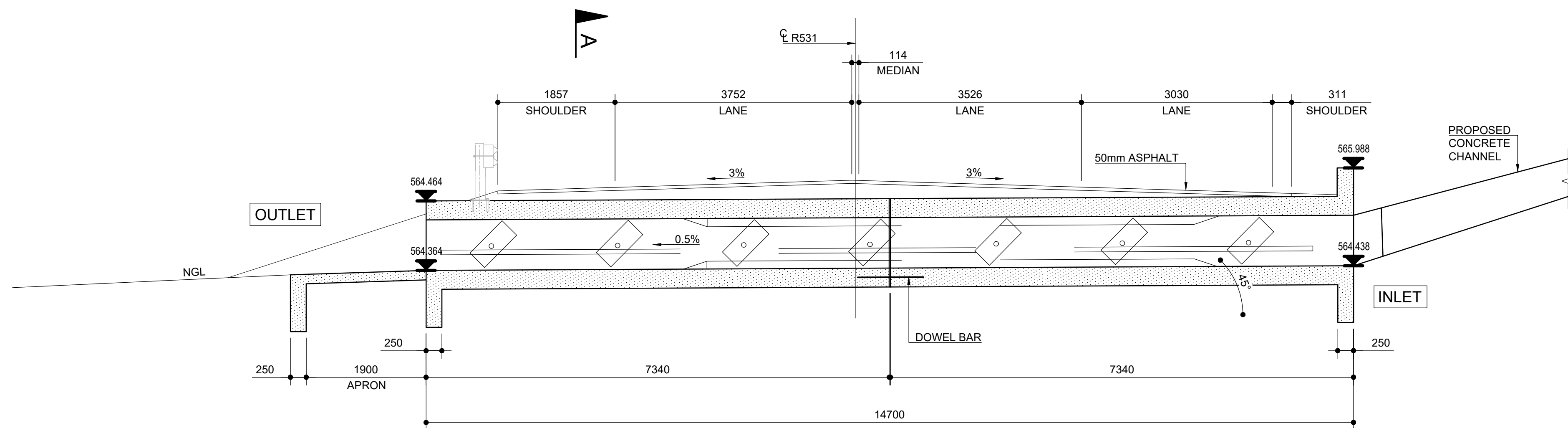
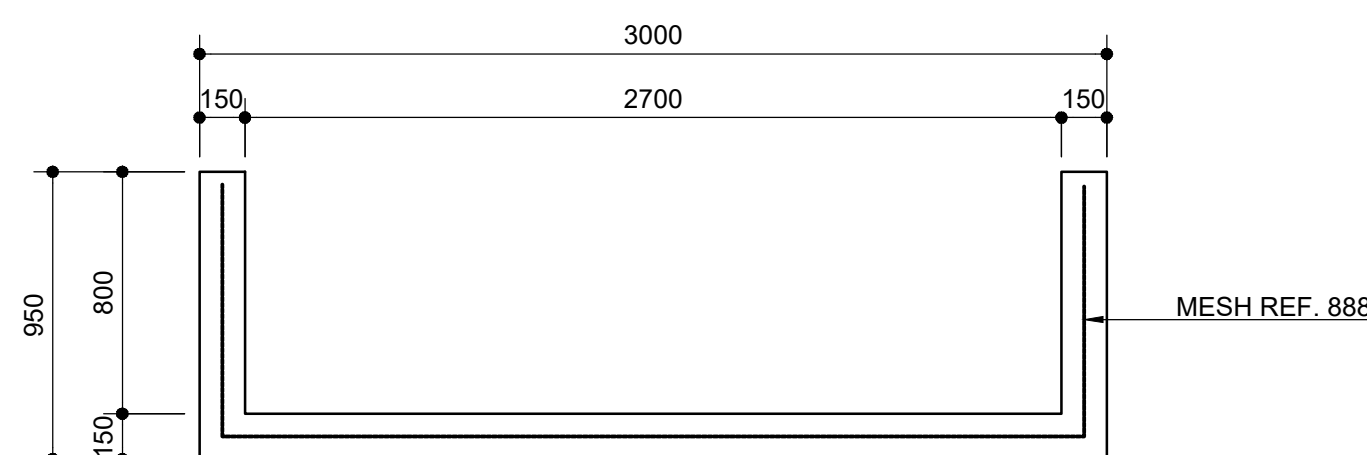


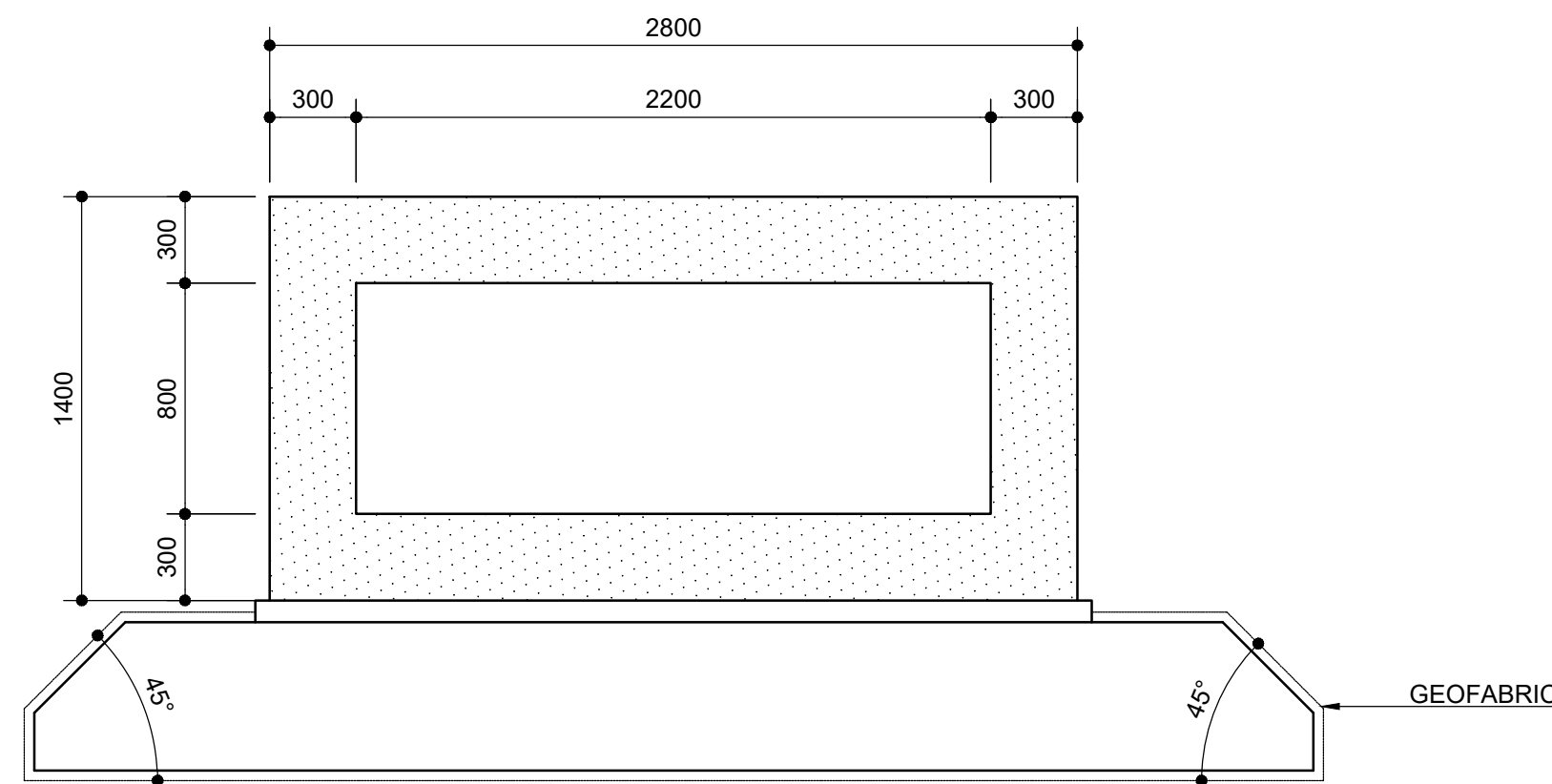
PLAN
1: 100



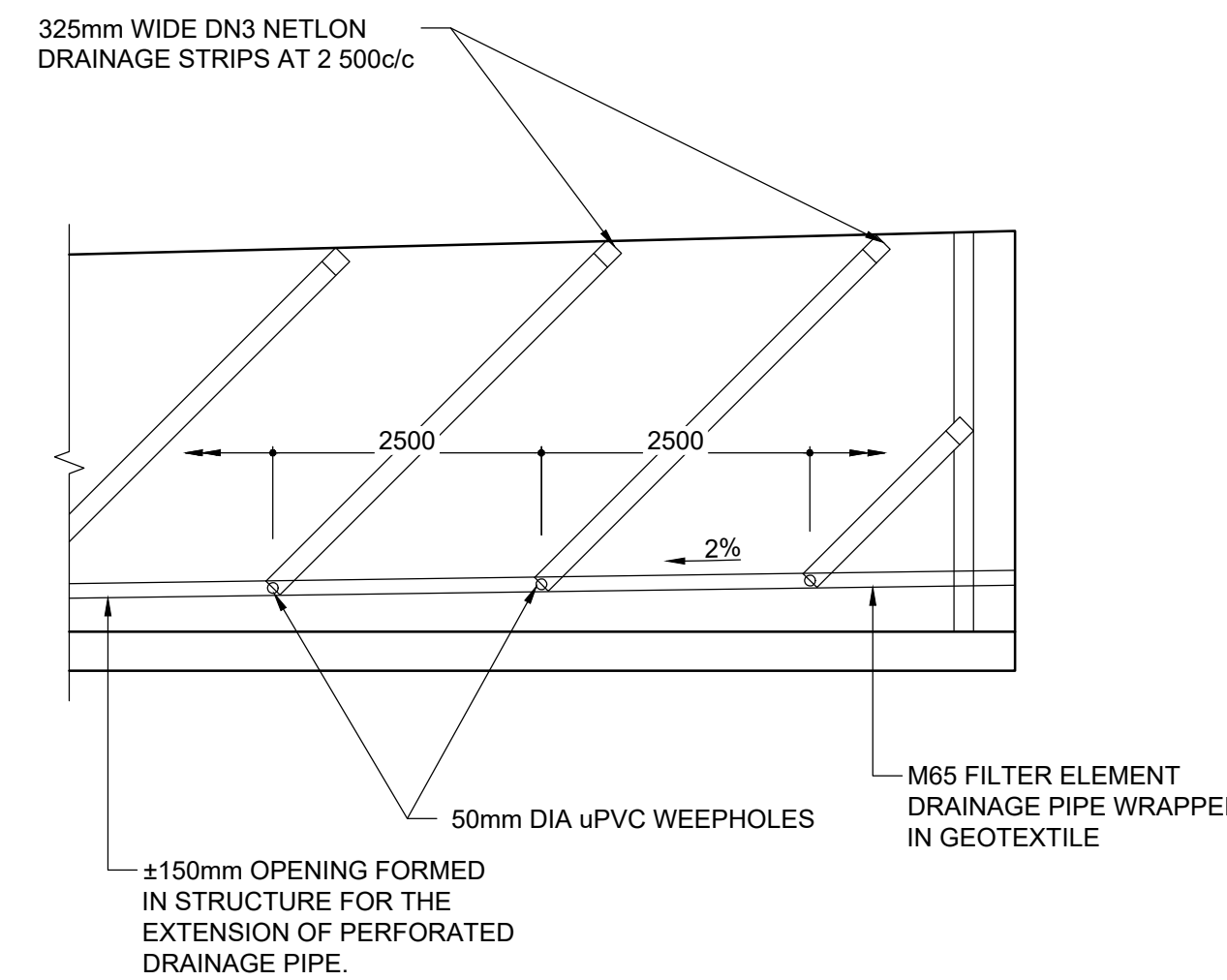
LONGITUDINAL SECTION
1: 50



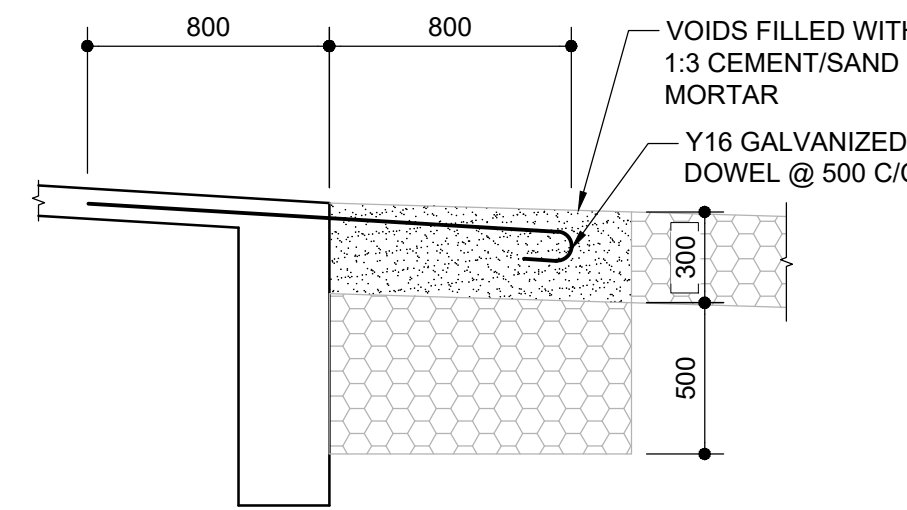
SECTION B - B
1: 25



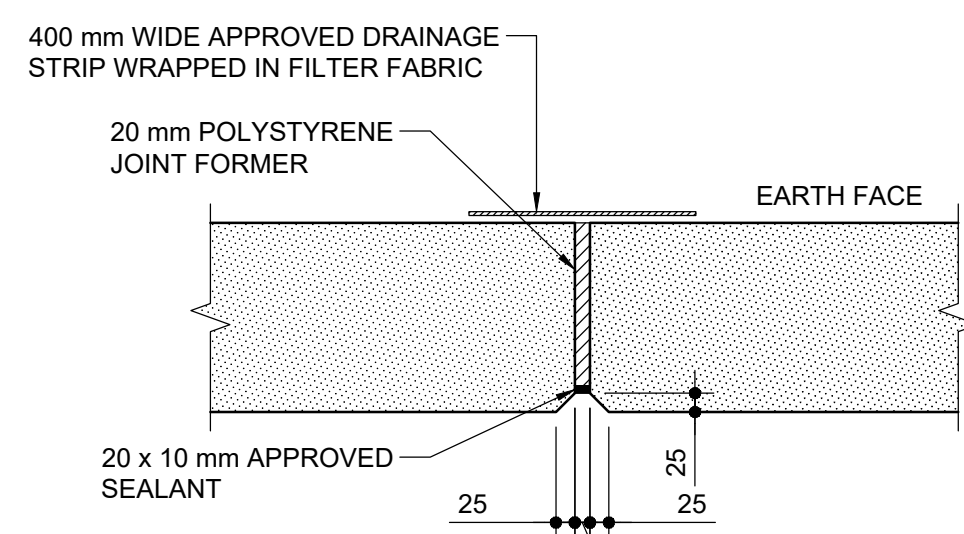
CROSS SECTION
1: 25



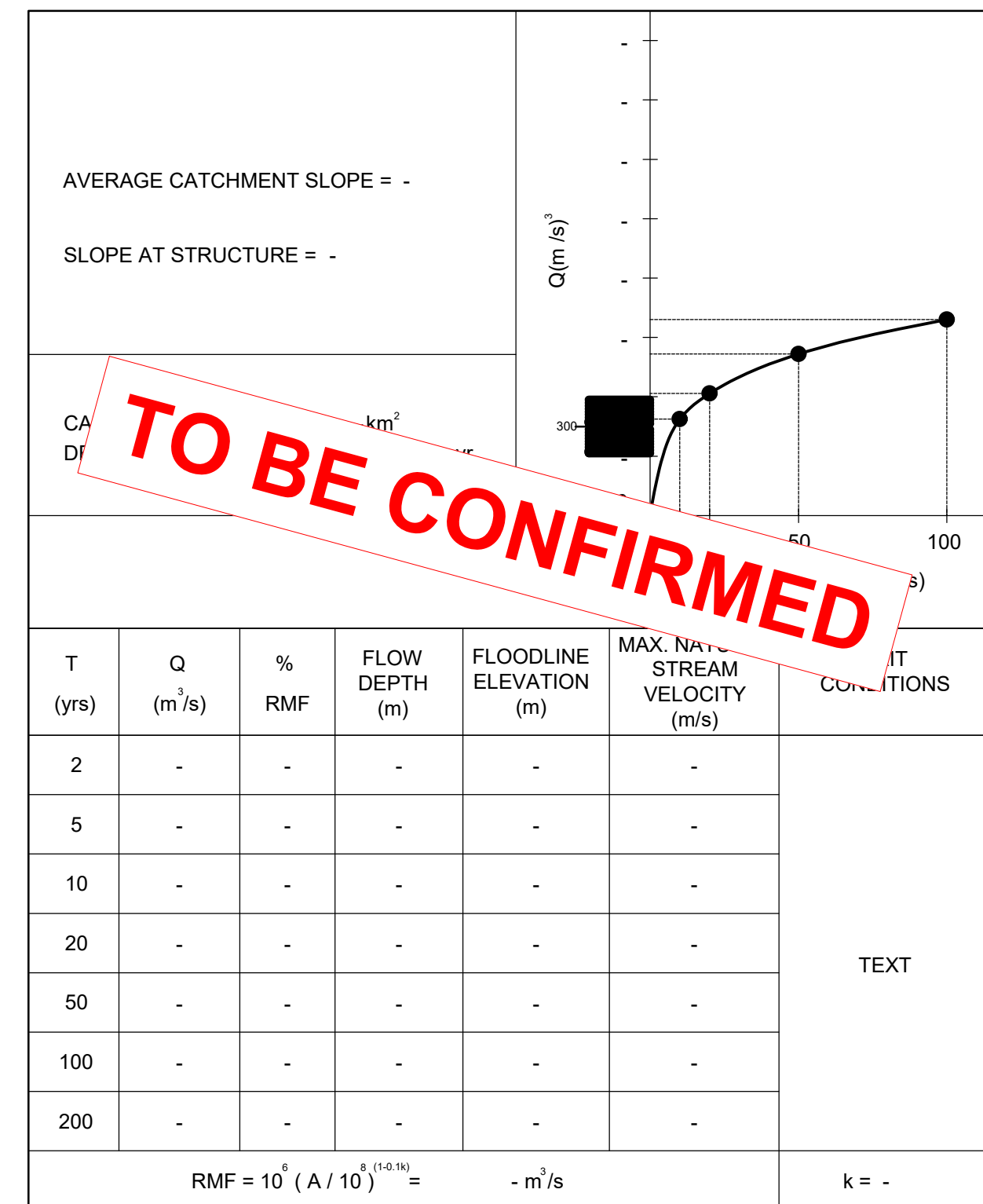
TYPICAL ARRANGEMENT OF
FILTER ELEMENTS AND DRAINAGE PIPES
1: 75



DETAIL 1
1: 25



MOVEMENT JOINT DETAIL
1: 10



HYDROLOGIC AND HYDRAULIC DATA

GENERAL NOTES:		
1. CONCRETE CLASSES		
BLINDING	- 15/19	
PIER	- 40/19	
ABUTMENT	- 40/19	
2. CONCRETE FINISHES		
HIDDEN FACES	- F1	
EXPOSED FACES	- F2	
TOP OF FOOTINGS	- U1	
TOP OF WALLS	- U2	
4. MINIMUM		
5. REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATION FOR REINFORCEMENT SANS 920 AS FOLLOWS:		
i) MILD STEEL - PLAIN ROUND - MINIMUM CHARACTERISTIC STRENGTH 250 MPa		
ii) HIGH YIELD STEEL - DEFORMED - MINIMUM CHARACTERISTIC STRENGTH 450 MPa		
6. MINIMUM SPLICE LENGTH - 45 x BAR DIA, EXCEPT WHERE OTHERWISE SHOWN.		
7. BAR REFERENCING IN ACCORDANCE WITH SANS 282:2011.		

CONSTRUCTION RECORD (AS-BUILT)		DESIGNED BY		CONSULTANT APPROVAL		HEAD OFFICE		EASTERN REGION		ACCEPTANCE		PROJECT DESCRIPTION		PROJECT NUMBER	
WORKS CONTRACT ENGINEER		NAME		NAME		48 Tambotie Avenue		58 van Eck Place		THIS ACCEPTANCE IS FOR PROCEDURAL AND ADMINISTRATIVE REVIEW PURPOSES ONLY AND DOES NOT ATTRACT LEGAL LIABILITY OR LIABILITY OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING		R531 SECTION 2 - EMERGENCY REPAIR OF DAMAGED STEEL ARMCO CULVERT AT KM 6.9 AND SINKHOLE AT KM 11.4		DRAWING LOCATION DATA	
Name		Prof. Reg. No.		Name		Val de Grace		Pietermaritzburg				ROUTE		START	
Date		CHECKED BY		Date		Pretoria		3201				SECTION		END	
SANRAL PROJECT MANAGER		NAME				PO Box 415		P.O. Box 100410				DRAWING km DISTANCE			
		Prof. Reg. No.				South Africa		Scottsville				BRIDGE/STRUCTURE No.			
		Date				Tel: (012) 844 8000		Tel: (033) 392 8100				CONSULTANT DRAWING No.			
												SANRAL DOCUMENT #			
No.	DATE	REVISION	CONSULT. ENG.	SIGN	DATE					SCALE		SHEET		OF	