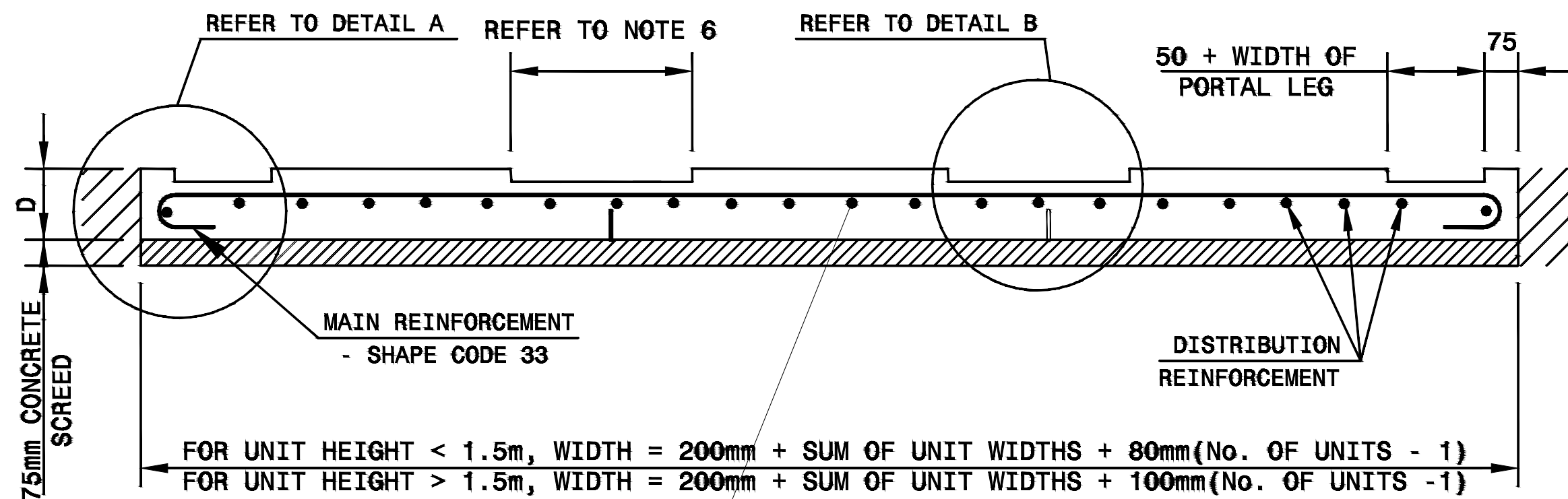
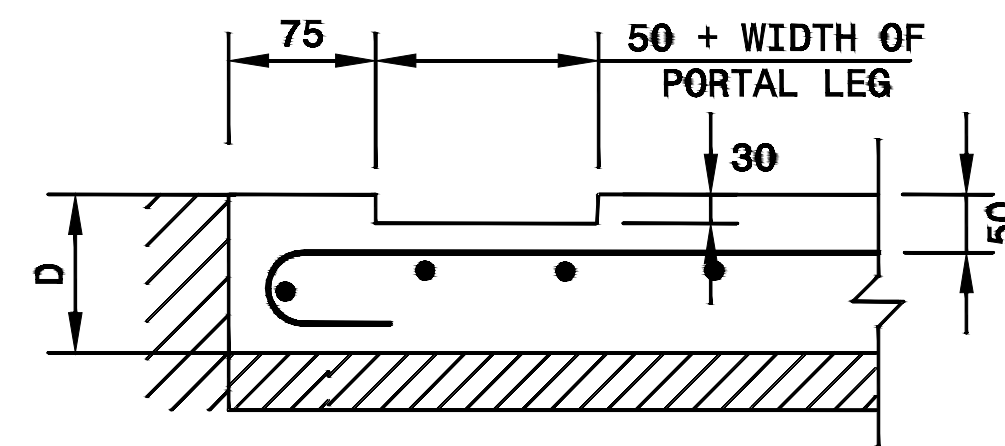




TYPICAL SECTION THROUGH CULVERT SHOWING FLOOR SLAB REINFORCEMENT

SCALE : SCHEMATIC

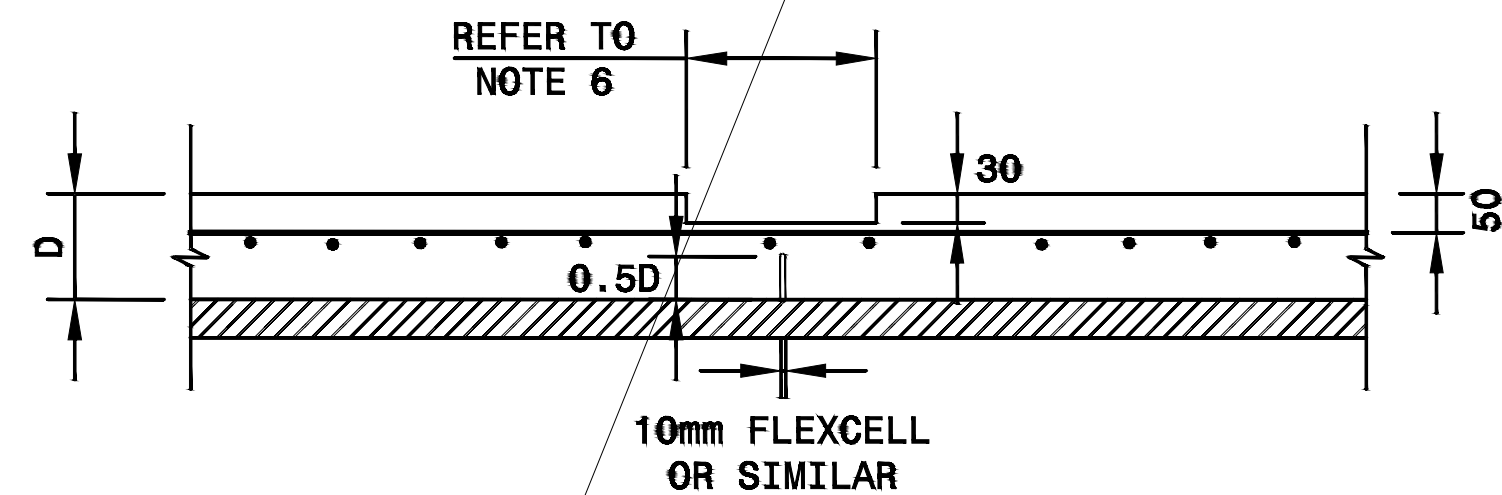


DETAIL A

SCALE : SCHEMATIC

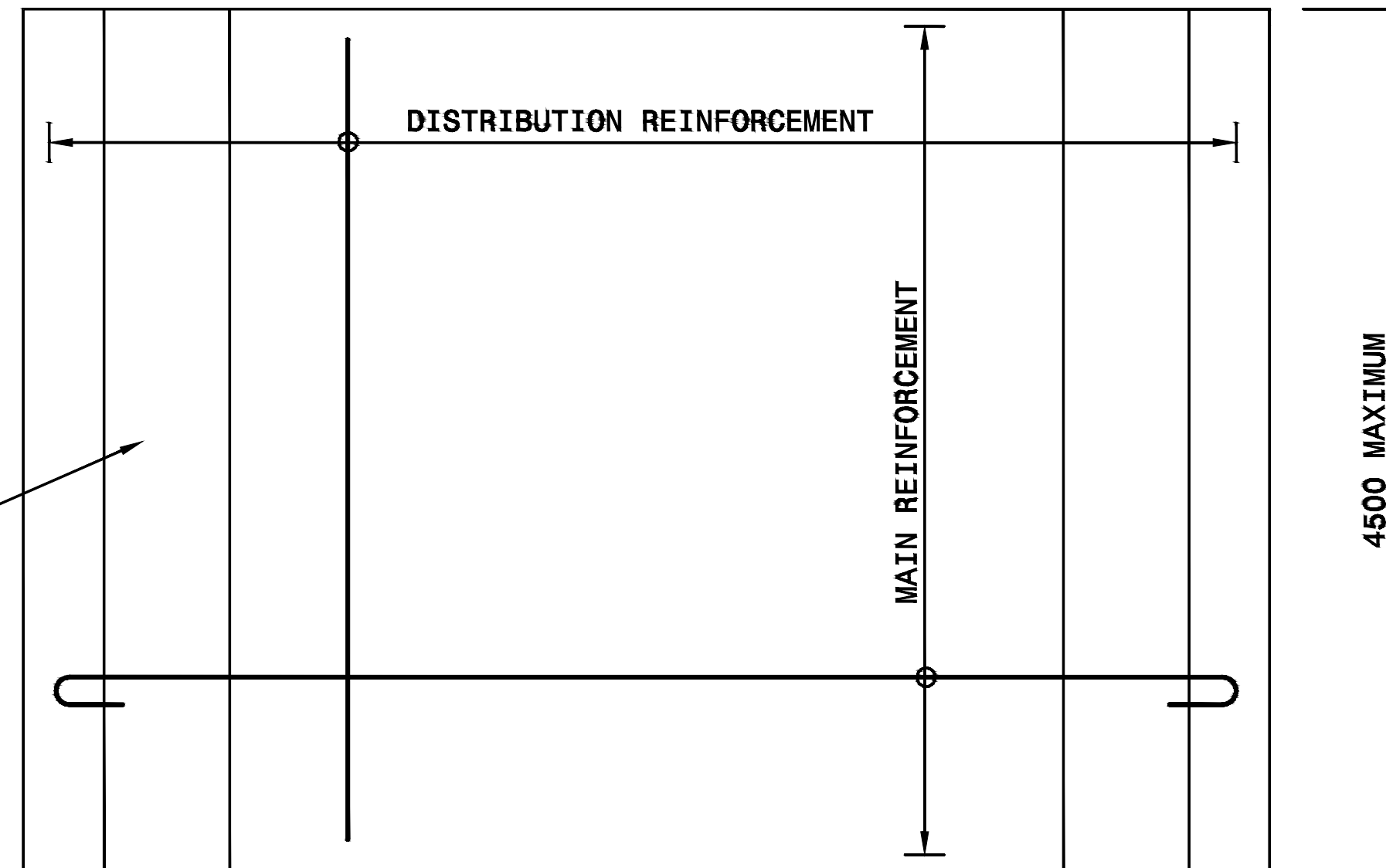
NOTES:

1. CONCRETE CLASS 30/19.
 2. MINIMUM COVER TO REINFORCEMENT IS 50mm.
 3. ALL MAIN REINFORCEMENT TO BE FULLY ANCHORED BOTH SIDES.
 4. STOOLS SHALL BE PROVIDED TO SUPPORT THE REINFORCEMENT WHERE THE SPAN OF THE PORTAL IS GREATER THAN 1 200mm.
 5. THE COMBINATIONS OF FOUNDATION AND INSTALLATION CONDITIONS USED ARE DEFINED AS FOLLOWS:
 - CONDITION 1: CULVERTS IN TRENCH ON UNYIELDING FOUNDATION WITH NO PROJECTION.
 - CONDITION 2: CULVERTS UNTRENCHED ON YIELDING FOUNDATION.
 - CONDITION 3: CULVERTS UNTRENCHED ON UNYIELDING FOUNDATION FOR $h > 1.7 \times b$.
 - CONDITION 4: CULVERTS UNTRENCHED ON UNYIELDING FOUNDATION FOR $h < 1.7 \times b$.
- WHERE h = FILL HEIGHT IN METRES
 b = OVERALL TRENCH WIDTH OR, IF UNTRENCHED, OVERALL CULVERT WIDTH, IN METRES.
6. FOR $H < 1.5m$, THE WIDTH = 130mm + 2 x WIDTH OF PORTAL LEG,
FOR $H > 1.5m$, THE WIDTH = 150mm + 2 x WIDTH OF PORTAL LEG.



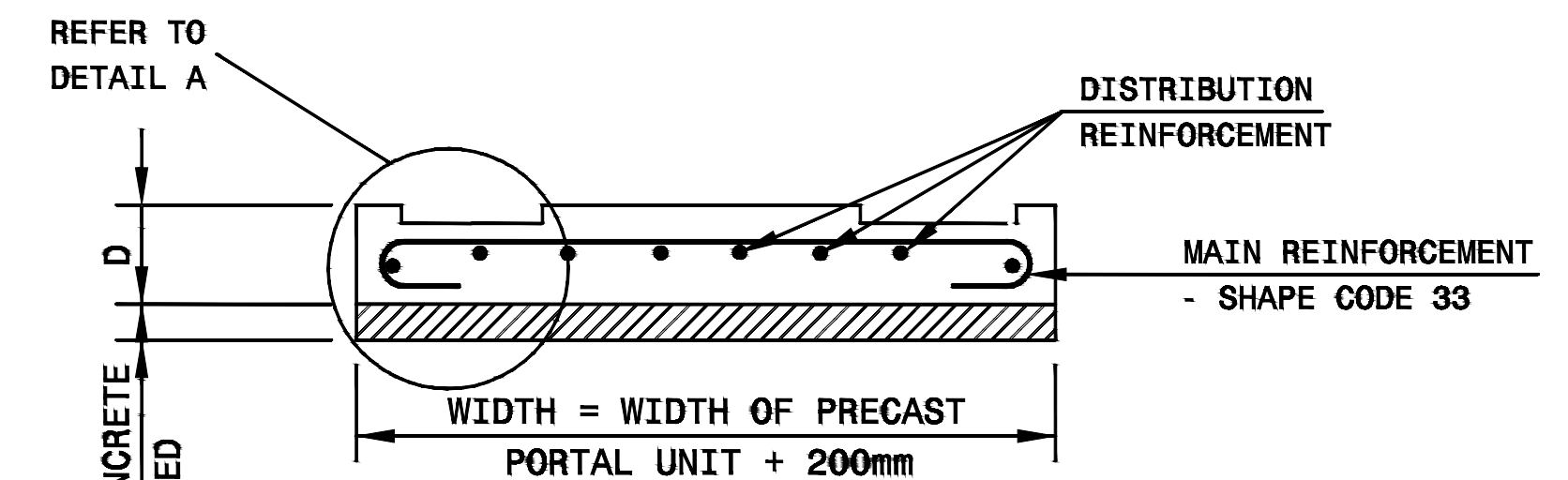
DETAIL B

SCALE : SCHEMATIC



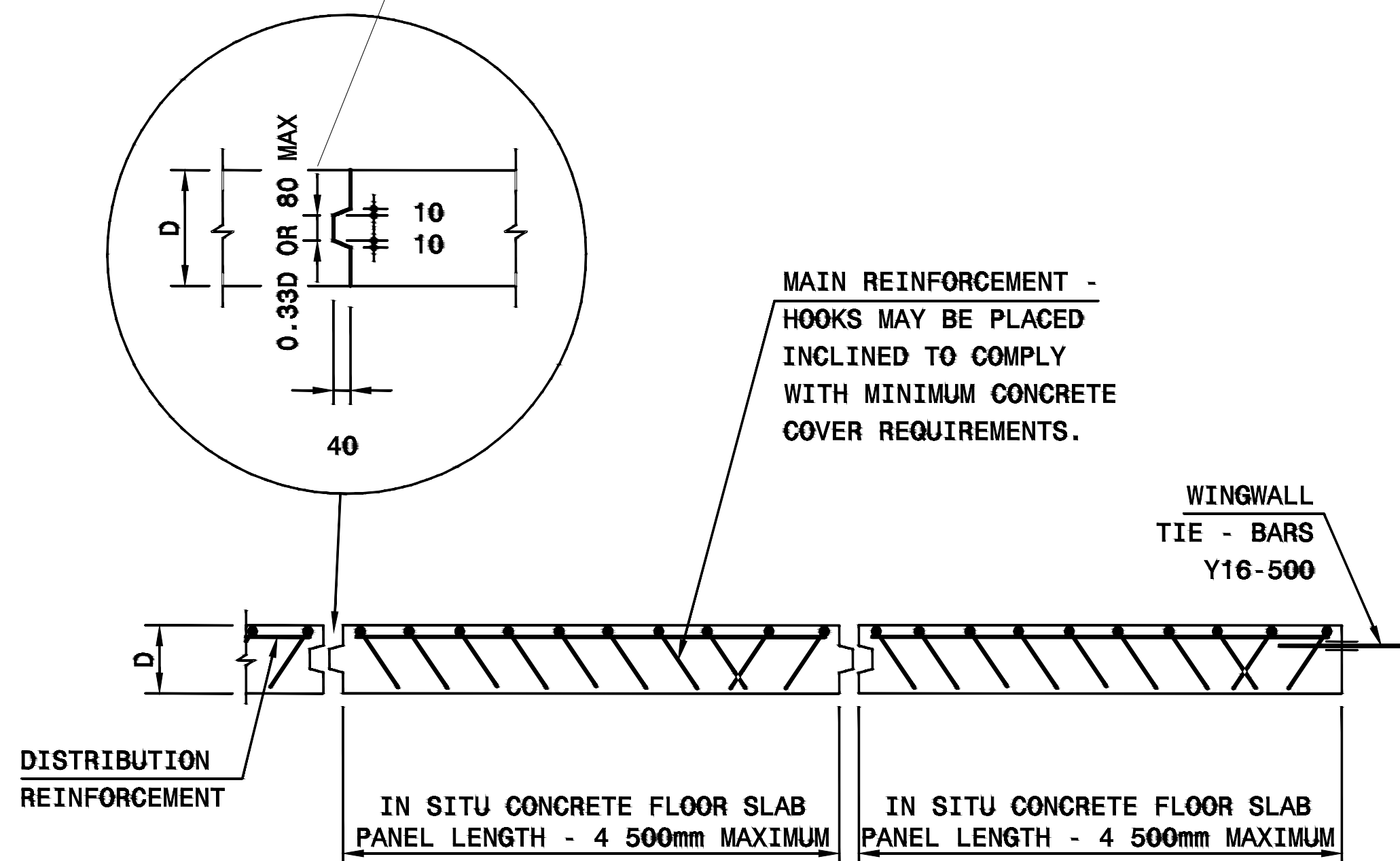
PLAN VIEW FOR SLAB REINFORCEMENT

SCALE : SCHEMATIC



TYPICAL SECTION THROUGH FLOOR SLAB REINFORCEMENT

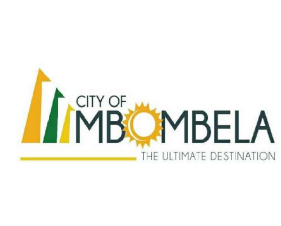
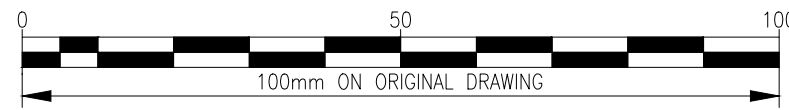
SCALE : SCHEMATIC



JOINT DETAILS BETWEEN FLOOR SLAB SECTIONS

SCALE : SCHEMATIC

FOUNDATION CONDITIONS 1 & 2					FOUNDATION CONDITIONS 3 & 4			
TRENCHED ON UNYIELDING AND UNTRENCHED ON YIELDING					UNTRENCHED ON UNYIELDING			
SPAN (mm)	CLASS	FLOOR THICKNESS D - (mm)	MAIN REINFORCEMENT	DISTRIBUTION REINFORCEMENT	CLASS	FLOOR THICKNESS D - (mm)	MAIN REINFORCEMENT	DISTRIBUTION REINFORCEMENT
600	200 S	150	Y12-150	Y10-250	200 S	150	Y10-200	Y10-250
750	175 S	150	Y12-150	Y10-250	175 S	150	Y10-200	Y10-250
900	175 S	150	Y12-120	Y10-250	175 S	150	Y10-200	Y10-250
1200	150 S	160	Y12-100	Y10-200	150 S	160	Y12-200	Y10-200
1500	100 S	175	Y12-100	Y10-200	100 S	175	Y12-200	Y10-200
1800	75 S	190	Y12-100	Y10-200	75 S	190	Y12-200	Y10-200
2100	75 S	220	Y12-100	Y10-200	75 S	220	Y12-200	Y10-200
2400	75 S	260	Y12-100	Y10-200	75 S	260	Y12-100	Y10-200
3000	75 S	320	Y16-120	Y10-200	75 S	320	Y16-200	Y10-200
3600	75 S	330	Y16-100	Y10-200	75 S	330	Y16-200	Y10-200

AS-BUILT RECORD				VERSION/AMENDMENTS				 HOXANA CONSULTING ENGINEERS Tel: +27(0) 13 010 1261 Fax: 086 663 1259		PROJECT TITLE:		 CITY OF MBOMBELA MUNICIPALITY P O Box 45, NELSPRUIT, 1200 Tel: +27(0) 13 759 2181 Fax: +27(0) 13 759 2259				DRAWN: F. MURWIRA		CHECKED: T. VUNDLA	
CONTRACT No.	DESCRIPTION	CERTIFIED BY	DATE	No.	DATE	DESCRIPTION	AUTHORISED BY			UPGRADING SILINDA ROAD VIA CHAKAZA SCHOOL (WARD 36)				DESIGNED: F. MURWIRA		APPROVED: L. M. MASHELE			
CERTIFIED AS-BUILT FOR CONTRACT :								DRAWING TITLE:		CO-ORDINATE SYSTEM: WGS84		Pr. Eng No: 2018300248							
ENGINEER: _____ DATE: _____								PRECAST PORTAL CULVERT BASE SLAB DETAILS, SHEET 2 OF 2		APPROVED ON BEHALF OF HOXANA CONSULTING ENGINEERS:		ENGINEER'S SIGNATURE: _____ DATE: _____							
										DRAWING No.: MLM 213/2020 - STW 005		VERSION: 01							