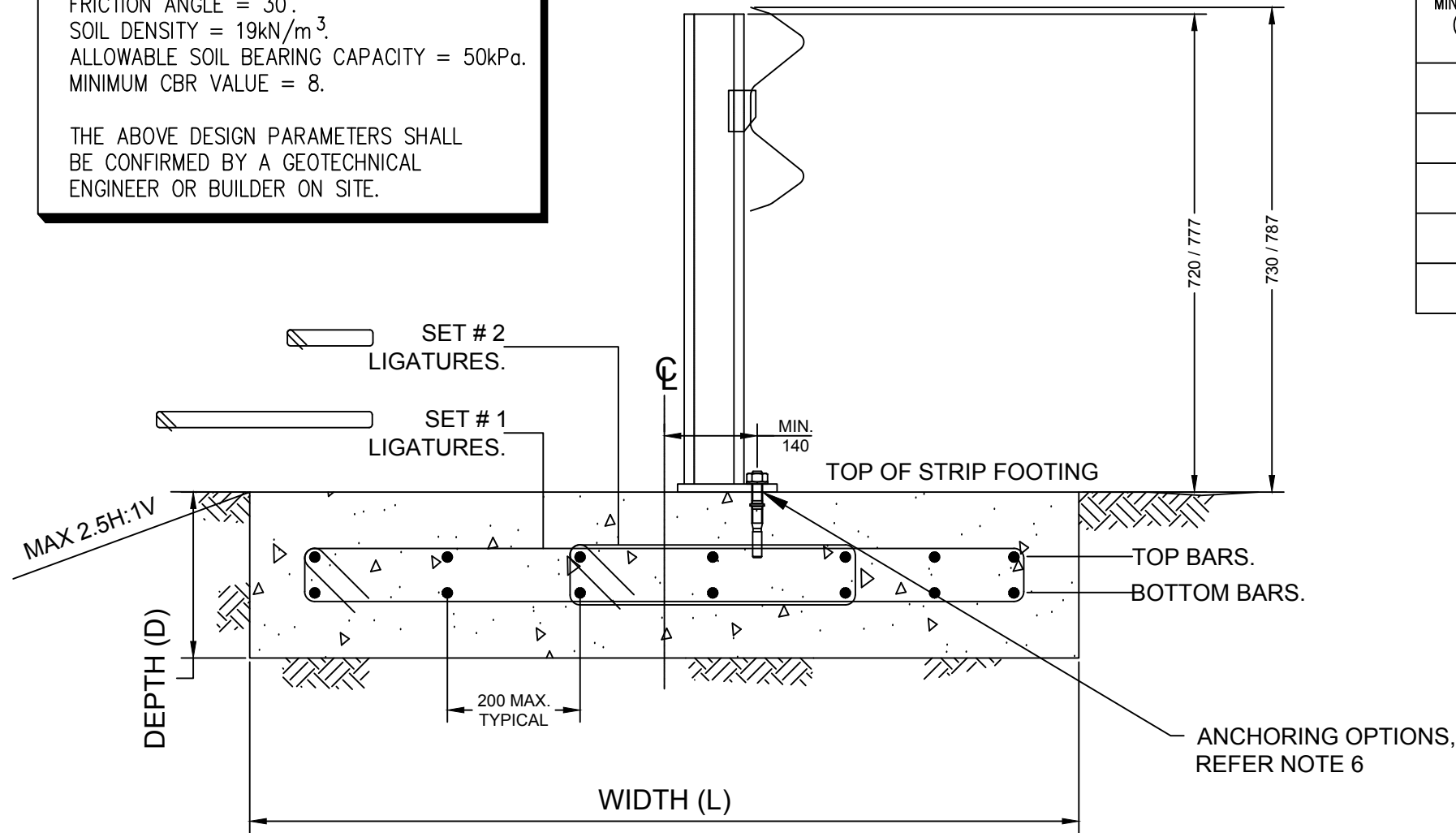


**DESIGN PARAMETERS/ASSUMPTIONS**

FOUNDATION SOIL  
 FRICTION ANGLE = 30°  
 SOIL DENSITY = 19kN/m<sup>3</sup>  
 ALLOWABLE SOIL BEARING CAPACITY = 50kPa.  
 MINIMUM CBR VALUE = 8.

THE ABOVE DESIGN PARAMETERS SHALL BE CONFIRMED BY A GEOTECHNICAL ENGINEER OR BUILDER ON SITE.



STRIP FOOTING SPECIFICATIONS—REINFORCING BAR OPTION						
D MIN. DEPTH (mm)	L MIN. WIDTH (mm)	B MIN. LENGTH OF FOOTING (mm)	REINFORCEMENT			
			(TOP BARS)	(BOTTOM BARS)	LIGATURES, 80 COVER	
					SET # 1	SET # 2
250	950	19000	5-N16	5-N16	R10-300 CTS.	R10-300 CTS.
350	800	19000	5-N16	5-N16	R10-300 CTS.	-
400	750	19000	4-N16	4-N16	R10-300 CTS.	-
350	1100	11000	6-N16	6-N16	R10-300 CTS.	R10-300 CTS.
250	1250	11000	7-N16	7-N16	R10-300 CTS.	R10-300 CTS.

**NOTES:**

- ALL DIMENSIONS IN MILLIMETRES.
- MINIMUM STRENGTH OF CONCRETE FOOTING - 32MPa.
- MINIMUM CLEAR COVER TO BE 80mm
- FOR SITES WITH UNCONVENTIONAL GEOMETRIES, HIGH WATER TABLES, ALTERNATIVE SOIL TYPES OR UNUSUAL SITE SPECIFIC VARIABLE, ALTERNATIVE FOOTING DESIGNS WILL BE REQUIRED. PLEASE SEEK ADVICE FROM A QUALIFIED GEOTECHNICAL ENGINEER OR YOUR LOCAL INGAL SALES REPRESENTATIVE.
- FOR MIXED SOIL TYPES, A CONSERVATIVE APPROACH OF ASSUMING THE WEAKER SOIL PROPERTIES FOR THE FULL DEPTH IS RECOMMENDED.

**NOTES CONTINUED:**

- ANCHORING OPTIONS:  
 OPTION 1: REID ELEPHANT FOOT FERRULES M20 x 95 (FE20095GH), WITH M20 x 40 G8.8 SET SCREW AND WASHER. WHERE POSSIBLE, REO CROSSBAR SHOULD BE THREADED THROUGH CROSS HOLE IN FERRULE TO IMPROVE ANCHOR ALIGNMENT. REID THREADED INSERT M20 x 120 (TIM20X120) ALSO SUITABLE.  
 OPTION 2: RAMSET CHEMSET ANCHOR STUDS WITH EPCON C8 CHEMICAL ANCHOR EPOXY. M20 x 215 m Grade 8.8 WITH MIN EMBEDMENT 150mm. IF USED IN RETROFIT LOCATIONS, THE DESIGNER SHALL CONFIRM SUITABILITY OF FOUNDATION BEFORE INSTALLATION.  
 OPTION 3: NZTA CAST IN BRACKET, REFER DRAWING EZY-SM-125.

REV	DATE	DESCRIPTION	DRAWN	CHECKED	APPROVED
9	14-11-2018	STRIP FOOTING UPDATED TO REINFORCING BAR OPTION	VB	LG	LG
8	14-09-2018	POST & RAIL HEIGHTS MODIFIED, MAX SLOPE SPECS ADDED	VB	LG	LG
7	08-08-2018	STRIP FOOTING SPECIFICATIONS UPDATED	VB	LG	LG
6	04-04-2018	NOTE UPDATED RE NZ ANCHORING OPTIONS	WD	LG	LG
5	05-03-2018	NOTE UPDATE RE CROSSBAR	LG	SE	LG
4	02-03-2018	OPTION 1 UPDATED WITH TWO FERRULES	LG	SE	LG
3	26-02-2018	NOTES UPDATED RE NZ ANCHORING OPTIONS	LG	SE	LG
2	21-02-2018	NOTES UPDATED RE ANCHORING OPTIONS	LG	SE	LG

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4	02-03-2018	OPTION 1 UPDATED WITH TWO FERRULES	LG	SE	LG
3	26-02-2018	NOTES UPDATED RE NZ ANCHORING OPTIONS	LG	SE	LG
2	21-02-2018	NOTES UPDATED RE ANCHORING OPTIONS	LG	SE	LG

NAME	DATE
DRAWN DK	06-11-2014
CHECKED LG	07-11-2014
APPROVED LG	07-11-2014
SCALE	N.T.S. @ A3
ISSUE FOR	INFORMATION ONLY

<p>INGAL CIVIL PRODUCTS                  57-65 AIRDS ROAD                  MINTO, N.S.W                  AUSTRALIA 2566                  PH. +61 2 9827 3333                  FAX +61 2 9827 3300                  www.ingalcivil.com.au</p>	PROJECT  TITLE <b>EZY-GUARD 4 SURFACE MOUNT CAST IN ASSY                  NZTA SPEC                  GROUND BEAM DETAIL</b>
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INGAL CIVIL PRODUCTS PART No.  DRAWING No. <b>EZY-SM-136</b>	Rev. 9
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