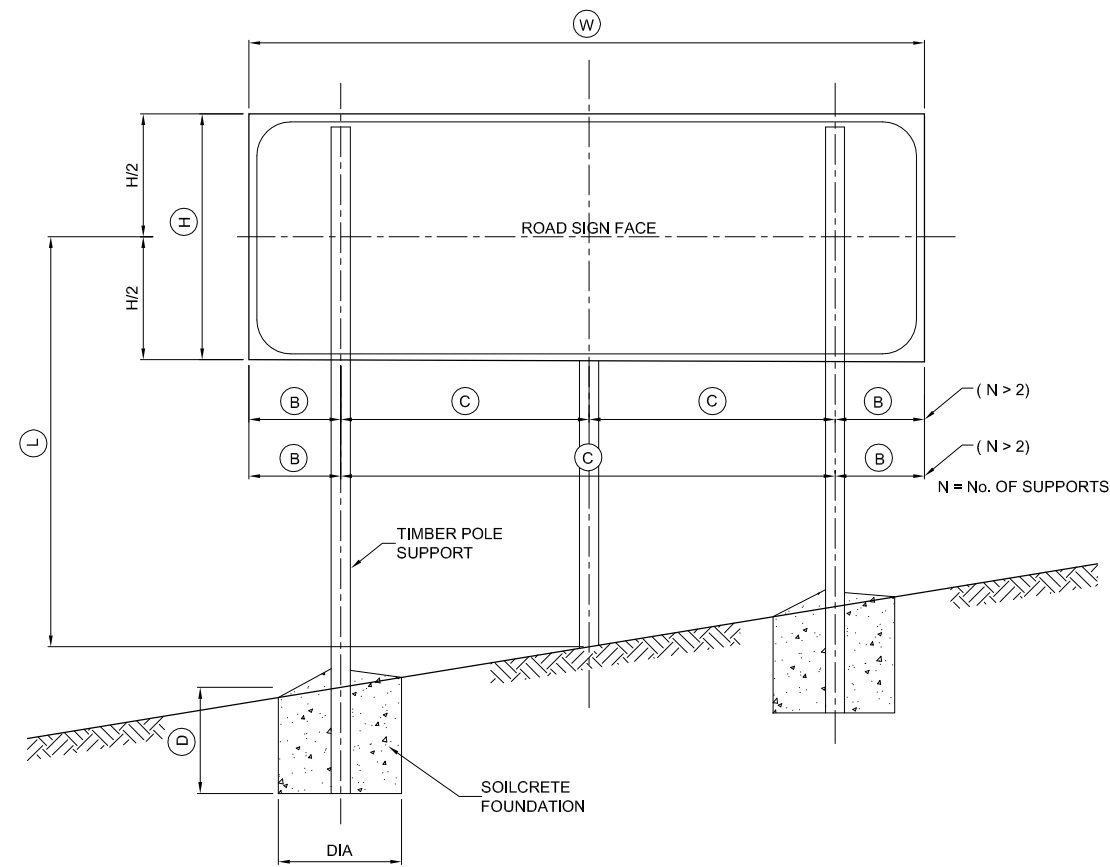
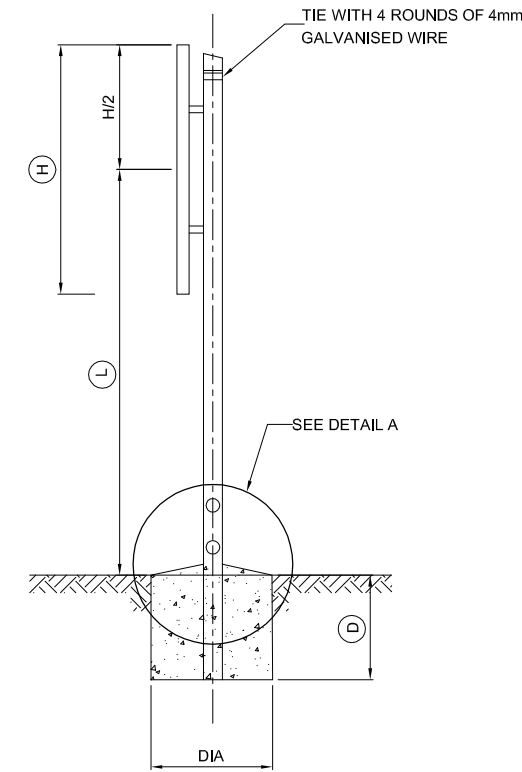


ROAD SIGNS: SUPPORTS AND FOUNDATIONS - GENERAL DETAILS



ELEVATION



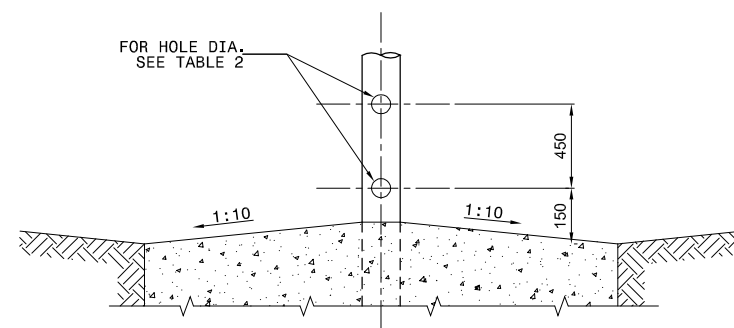
TYPICAL SECTION

FREE STANDING SUPPORT
SCALE - N.T.S

TABLE 1

WIDTH OF SIGN (W)	No. OF SUPPORTS (N)	DIMENSIONS	
		(B)	(C)
1,2m OR LESS	1	W/2	-
1,2m - 4,0m	2	W/5	3W/5
4,0m - 7,2m	3	W/2N	W/N
7,2m - 9,6m	4		
9,6m - 12,0m	5		

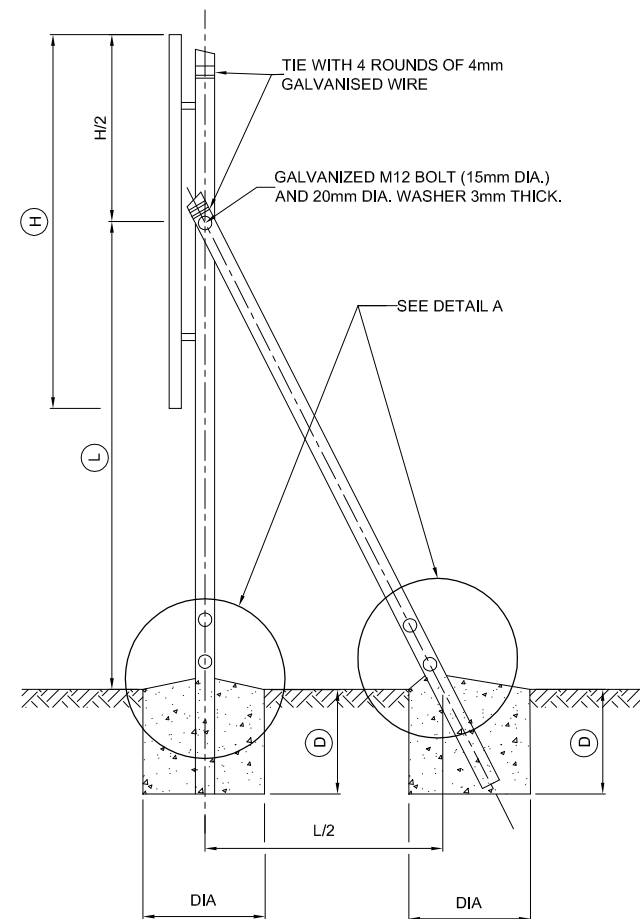
NOTE : MAXIMUM DISTANCE BETWEEN SUPPORTS = 2,4 m



DETAIL A
SCALE - N.T.S

TABLE 2

TIMBER POLE DIA. AT GROUND LEVEL (mm)	HOLE DIA. (mm)
< 140	NONE
141 - 170	40
171 - 200	50
201 - 225	65



TYPICAL SECTION
BRACED SUPPORT
SCALE - N.T.S

GENERAL NOTES:

SIZE AND SPACING OF ROAD SIGN SUPPORTS AND FOUNDATIONS:
SIZE AND SPACING OF SUPPORTS AND FOUNDATIONS SHALL BE DETERMINED FROM INFORMATION SHOWN ON PLAN AND ON THE DESIGN CHARTS SHOWN ON DRAWING. THE SIZES AND SPACING OBTAINED ARE FOR USE WITH THE SIGN FACE SHOWN ON DRAWING. DETAILS OF SINGLE POLE SIGNS (LESS THAN 1,5m² IN AREA) ARE SHOWN ON DRAWING 932/J7.

POSITION:
ROAD SIGNS SHALL BE ERECTED IN THE POSITIONS SHOWN ON THE DRAWINGS OR INDICATED BY THE ENGINEER.
STANDARD CLEARANCES ARE SHOWN IN THE SADC ROAD TRAFFIC SIGNS MANUAL.

EXCAVATION:
EXCAVATIONS FOR FOUNDATIONS MUST BE MADE TO THE NEAT DIMENSIONS SPECIFIED. WHERE THE FOUNDATION DEPTHS 1,5m OR GREATER, EXCAVATIONS MUST BE SUITABLY SHORED FOR THE PROTECTION OF WORKMEN.

TIMBER POLE SUPPORTS:
TIMBER SUPPORTS SHALL BE STRAIGHT ROUND POLES COMPLYING WITH THE REQUIREMENTS OF SANS 457-3 AND SHALL NOT EXHIBIT EXCESSIVE CRACKING AT THE ENDS

- **LENGTH:**
WHEREVER POSSIBLE POLE LENGTHS CORRESPONDING TO AVAILABLE NOMINAL LENGTHS SHALL BE USED.

- **CUTTING:**
WHERE CUTTING TO LENGTH AFTER PRESERVATIVE TREATMENT IS UNAVOIDABLE, ONLY ONE CUT PER POLE SHALL BE ALLOWED. THE CUT SHALL BE NEAR THE TOP END OF THE POLE AND THE EXPOSED SURFACE SHALL BE TREATED WITH TWO COATS OF THE APPLICABLE PRESERVATIVE AND THE POLE BANDED IN ACCORDANCE WITH SANS 457-3.

- **PRESERVATIVE TREATMENT:**
THE POLES SHALL BE TREATED WITH EITHER A MIXTURE OF COPPER-CHROMIUM-ARSENIC COMPOUNDS COMPLYING WITH THE REQUIREMENTS OF TYPE II OF SANS 673 (HICKSONS 'TANALITH C' OR EQUAL)

- **ERECTION:**
POLES SHALL BE SELECTED FOR STRAIGHTNESS AND ERECTED AT AN ORIENTATION WHICH WILL PERMIT THE SIGN FACE TO BE FASTENED IN A VERTICAL PLANE WITHOUT UNDUE DISTORTION.

- **BREAKAWAY HOLES:**
ALL TIMBER POLES HAVING A DIAMETER >140mm SHALL BE DRILLED WITH TWO HOLES PERPENDICULAR TO THE DIRECTION OF TRAFFIC AS SHOWN IN DETAIL A. THE EXPOSED TIMBER SURFACES SHALL BE TREATED WITH TWO COATS OF THE APPLICABLE PRESERVATIVE.

SOILCRETE FOUNDATIONS:
SOILCRETE SHALL CONSIST OF 12 PARTS APPROVED GRANULAR SOIL OR GRAVEL MIXED WITH 1 PART PORTLAND CEMENT AND ONLY SUFFICIENT WATER TO GIVE IT A CONSISTENCY THAT WILL PERMIT THE SOILCRETE TO BE VIBRATED OR TAMPED TO EXCLUDE VOIDS. TIMBER SUPPORT POLES SHALL BE SET VERTICAL AND FIRMLY PROPPED IN POSITION PRIOR TO PLACING OF THE SOILCRETE. PROPS SHALL REMAIN IN POSITION FOR A MINIMUM OF 12 HOURS AFTER PLACING THE SOILCRETE. THE SURFACE OF THE SOILCRETE SHALL BE NEATLY FINISHED WITH SUFFICIENT FALL TO ENSURE PROPER DRAINAGE. CONCRETE SHALL NOT BE SUBSTITUTED FOR SOILCRETE. TOPPING OF SOILCRETE FOUNDATION TO BE STEEL FLOATED.

BOLTS, NUTS AND WASHERS:
EXCEPT WHERE OTHERWISE SPECIFIED STEEL BOLTS AND NUTS SHALL CONFORM TO SANS 135 OR SANS 1143 AND ALL COMPONENTS SHALL HAVE A HOT-DIP (GALVANIZED) ZINC COATING THAT COMPLIES WITH THE REQUIREMENTS OF SANS 121 : 2000 (ISO 1461 : 1999) FOR COATINGS ON TYPE C1 ARTICLES.

ROAD SIGN FACES:
ROAD SIGN FACES SHALL BE MANUFACTURED STRICTLY IN ACCORDANCE WITH THE DETAILS SHOWN ON DRAWING 932/J7. TRANSPORTATION AND ERECTION OF SIGN FACES SHALL BE CARRIED OUT IN SUCH A WAY THAT DAMAGE TO THE SIGN IS PREVENTED. THE LOWER EDGE OF SIGN FACES SHALL BE HORIZONTAL AFTER COMPLETION OF ERECTION. THE MONTH AND YEAR OF ERECTION OF THE ROAD SIGN SHALL BE INDICATED BY MEANS OF WHITE PAINT ON THE BACK OF THE SIGN IN THE BOTTOM RIGHT HAND CORNER. THE LETTERS AND FIGURES SHALL BE 25mm HIGH.

CONSTRUCTION RECORD (AS-BUILT) WORKS CONTRACT ENGINEER Name: G. LOUBSER Prof. Reg. No.: 880359 Date: APRIL 2016		SNA VIA BUILDING 285 ALBERTUS STREET LA MONTAGNE 0184 P. O. Box 72727 LYNNWOOD RIDGE 0040 Tel: 011-842 0030 Fax: 011-803 4429 e-mail: pla@sna.co.za web: www.sna.co.za	BLOCK 8 THORNTON HILL OFFICE PARK 94 BEKKER ROAD MIDRAND PO Box 10817 VORNA VALLEY 1686 Tel: 011-805 8788 Fax: 011-805 8789 gesterhuyzen@tracn4.co.za www.tracn4.co.za	DESIGNED BY NAME: G. LOUBSER Prof. Reg. No.: 880359 CHECKED BY NAME: _____ Prof. Reg. No.: _____ DRAWN BY NAME: L.V.D. MERWE		CONSULTANT APPROVAL Name: J.W.B. STOLTZ Prof. Reg. No.: 980012 Date: APRIL 2016		HEAD OFFICE 48 Tambotie Avenue Val de Grace Pretoria 0184 PO Box 415 Pretoria 0001 South Africa Tel: (012) 844 8000		BUILDING SOUTH AFRICA THROUGH BETTER ROADS		NORTHERN REGION 38 Ida Street Menlo Park Pretoria 0081 Private Bag X17 Lynnwood Ridge 0040 Tel: (012) 426 6200		ACCEPTANCE 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 HOWSOEVER ARISING for the SA NATIONAL ROADS AGENCY SOC.LTD. Date: _____		PROJECT DESCRIPTION MAPUTO DEVELOPMENT CORRIDOR (MDC) PRETORIA TO LEBOMBO BORDER POST ROUTINE ROAD MAINTENANCE DRAWING DESCRIPTION ROAD SIGNS: SUPPORTS AND FOUNDATIONS - GENERAL DETAILS		PROJECT NUMBER TRAC/MAINT-2019-01		DRAWING LOCATION DATA ROUTE SECTION DRAWING TYPE BRIDGE/STRUCTURE No. CONSULTANT DRAWING No. SCALE : AS SHOWN (A0)		START PRETORIA ROADS - TYPICAL DETAILS SNA-TP1915-F5 SHEET 1 OF 1		END LEBOMBO BORDER SNA-TP1915-F5 VER 1	
				SANRAL PROJECT MANAGER Name: _____ Date: _____		SANRAL DOCUMENT #		SHEET 1 OF 1		VER 1															