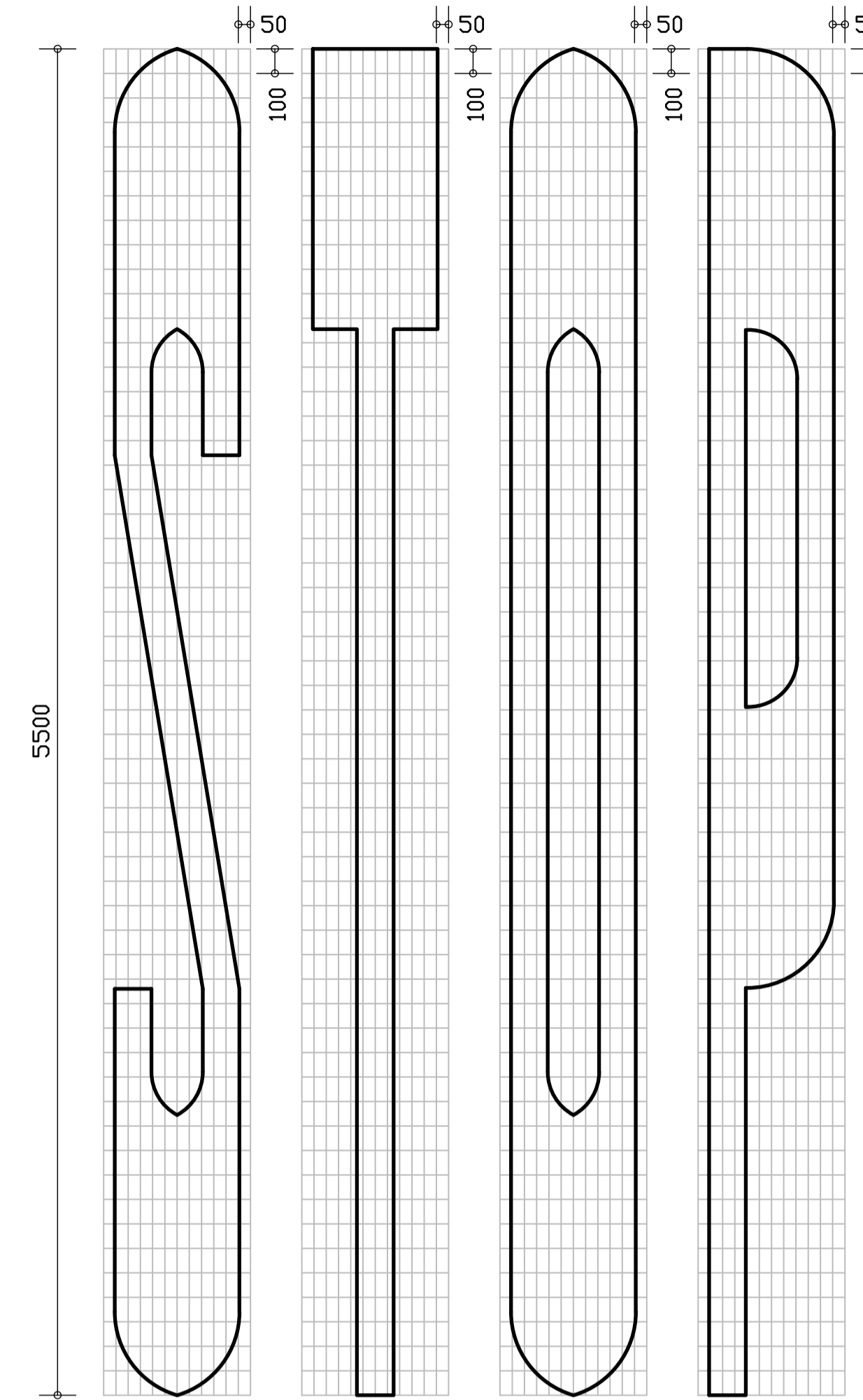
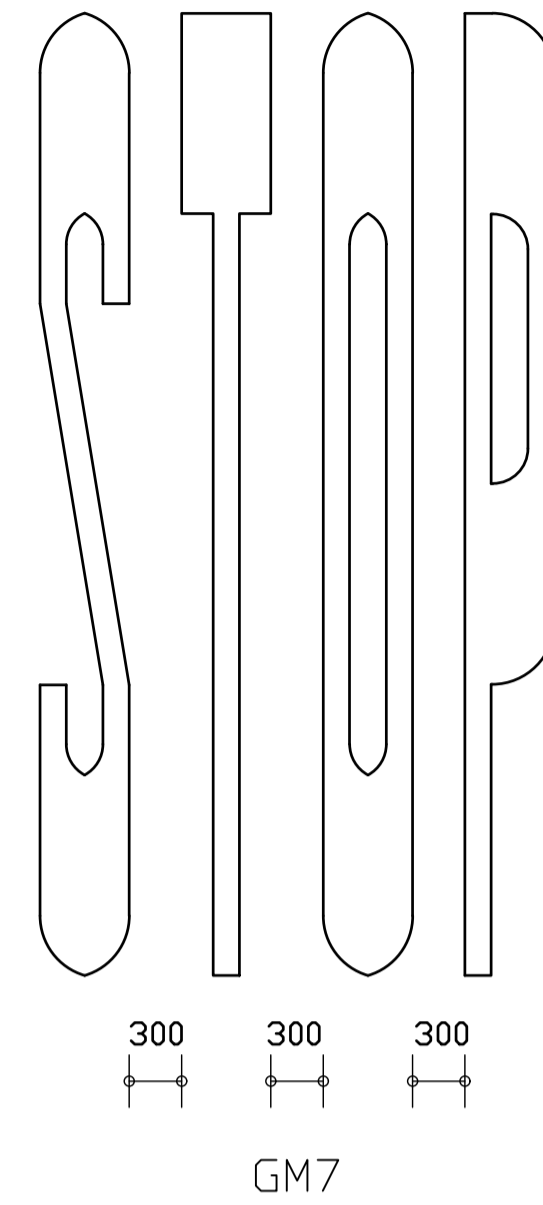


Area m ²				
Marking	a	Area	a*	Area
WM1	4000	1.84		
	7500	6.00		
GM4.1/ GM4.2(a*)	1250	0.59	2000	1.05
	2500	1.17	4000	2.10
	4000	1.88	6400	3.36
WM5	450	0.20		
	850	0.83		
	1350	2.15		
GM7	5500	6.88		

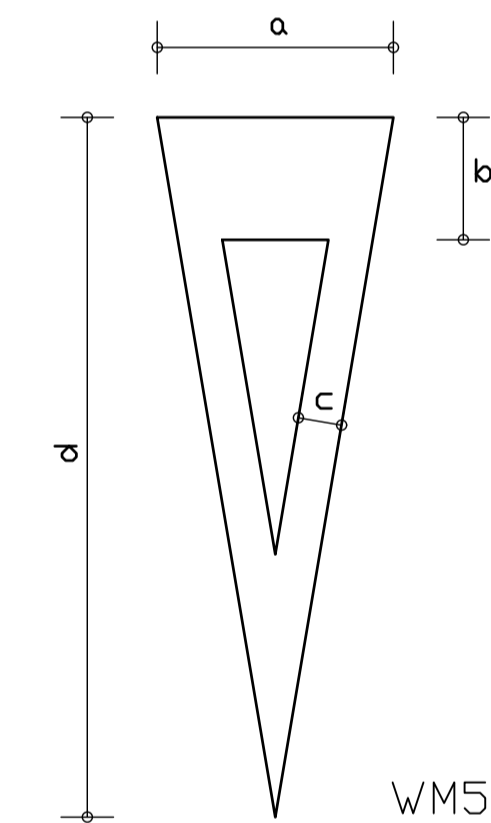


GM4.2 REVERSIBLE FLOW ARROW/GM4.1 INFORMATION ARROW

GM4.1

DIMENSIONS (mm)

Operating speed km/h	Typical applications	a	a*	b	c	c*	d	e	f	g
30 - 40	City centre	1250	2000	1250	450	400	50	750	500	250
50 - 60	Urban	2500	4000	1250	900	800	100	1500	500	250
70 - 90	Urban arterial/Rural expressway	4000	6400	1250	1440	1280	160	2400	500	250
100 - 120	Rural and freeways	5000	8000	1250	1800	1600	200	3000	500	250



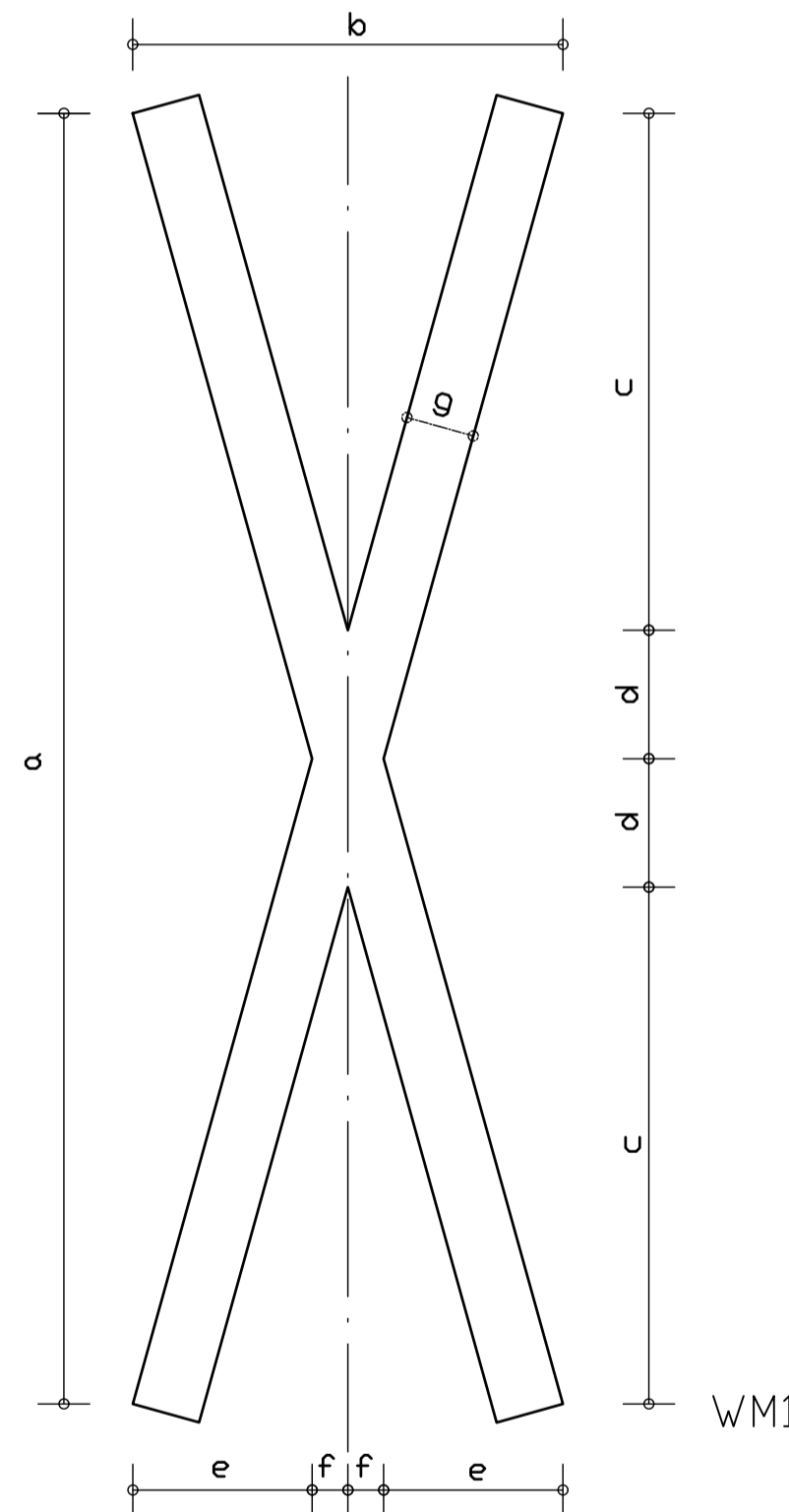
NOTES

- THIS DRAWING DETAILS A RANGE OF GENERAL WARNING OR GUIDANCE SYMBOLS. APPLICATION SHOULD BE IN ACCORDANCE WITH THE SOUTH AFRICAN ROAD TRAFFIC SIGNS MANUAL.
- MARKING WM5 - YIELD CONTROL AHEAD MAY BE REPEATED 1m - 4m FROM THE YIELD LINE MARKING.

WM5 YIELD CONTROL AHEAD

DIMENSIONS (mm)

Operating speed km/h	Typical applications	Distance from yield line	a	b	c	d
30 - 40	City centre	90m	450	250	100	1250
50 - 60	Urban	120m	850	450	150	2500
70 - 120	Rural	155m	1350	700	250	4000



WM1 RAILWAY LEVEL CROSSING AHEAD

Typical applications	a	b	c	d	e	f	g
Urban	4000	2500	1797	203	1135	115	200
Rural	7500	2500	3003	747	1042	208	400

DIMENSIONS (mm)

**ROAD MARKINGS:
REGULATORY / WARNING / GUIDANCE SYMBOLS**

NOT TO SCALE

NOTES AND SPECIFICATIONS

- ROAD MARKING NOTES**
- EXISTING ROAD MARKINGS NOT AFFECTED SHALL BE LEFT AS THEY ARE AND REPAINTED WITHIN THE LIMITS OF CONSTRUCTION.
 - EXISTING ROAD MARKINGS WHICH ARE IN CONFLICT WITH THE NEW ROAD MARKINGS MUST BE REMOVED BEFORE THE NEW MARKINGS ARE PAINTED.
 - ALL REMOVAL OF ROAD MARKINGS WILL BE DONE BY MEANS OF SAND BLASTING OR SIMILAR APPROVED METHOD.
 - ALL ROAD MARKINGS MUST BE CHECKED AND APPROVED AT PRE-MARKING STAGE BY TSHWANE ENGINEERS BEFORE ANY PAINTING TAKES PLACE.
 - ALL ROAD MARKINGS TO BE PAINTED TO THE REQUIREMENTS OF SADC-RTSM.
 - THE LENGTH OF THE ARROW ROAD MARKINGS MUST COMPLY WITH THE ROAD TRAFFIC SIGNS MANUAL VOLUME 4 CHAPTER 12.
 - ALL NEW SURFACING MARKINGS DONE IN THE FIRST 4 WEEKS WILL BE REGARDED AS TEMPORARY.
 - ALL TEMPORARY MARKINGS CAN BE DONE IN WATER BASE PAINT.

ROAD PAINT SPECIFICATIONS

- ALL LONGITUDINAL ROAD MARKINGS TO BE 1.2mm THERMOPLASTIC.
- ALL SMALL HAND TYPE MARKINGS NAMELY STOP LINES, YIELD LINES, PEDESTRIAN CROSSING LINES, BLOCK PEDESTRIAN CROSSINGS, SPEED HUMPS, ARROWS AND SYMBOLS TO BE IN THERMOPLASTIC (1.2mm THICK) OR TWO COMPONENT COLD PLASTIC (MMA - METHYL METHACRYLATE) APPLIED AS A SCREED (1MM THICK), PLASCON BRICK AND CONCRETE MARKING PAINT CODES BTP 1 (WHITE) AND BTP 26 (BLACK) SHALL BE USED FOR PAINTING OF KERBS.
- THE FOLLOWING APPLICATION RULES WILL APPLY:

COLOUR	PAINT MARKING APPLICATION RATES:		
	PAINT APPLICATION RATE (mm)	GLASS BEAD APPLICATION RATE (%)	INITIAL COEFFICIENT OF RETRO-REFLECTIVITY (MINICANDELA/LUX/m ²)
WHITE	1.2	35	250
YELLOW	1.2	35	135

- ALL SERVICE MARKERS LETTERS TO BE PAINTED ON CONCRETE KERBS, WITH BLACK PAINT ON WHITE PAINTED BACKGROUND, ACCORDING TO COT DETAIL DRAWING 7515-W211

AMENDMENTS

NR.	DATE	APPROVED	DESCRIPTION	PAR.

DESIGNED BY J. CRONJIE Pr Tech Eng	DATE	DRAWN BY S. AUDIE	DATE
DESIGN CHECKED BY S. NAIKOO Pr Tech Eng	DATE	INFRASTRUCTURE TECHNICAL INFORMATION MANAGEMENT D.J. CHALMERS	DATE

**CITY OF TSHWANE
ROADS AND TRANSPORT DEPARTMENT**

GROUP HEAD Mr Letloikane P. (Pheko) P.O. BOX 1409 PRETORIA 0001	DIVISIONAL HEAD Mr Marven K Thagale P.O. BOX 1409 PRETORIA 0001
---	---

TRANSPORT INFRASTRUCTURE DESIGN AND CONSTRUCTION DIVISIONAL HEAD Mr K Thagale (Marven)	TRANSPORTATION PLANNING DIVISIONAL HEAD Mr L. Swaneppol (Lourens)
SIGNATURE: _____	SIGNATURE: _____
DATE: _____	DATE: _____

DRAWING APPROVED BY GROUP HEAD
Mr Letloikane P. (Pheko)

SIGNATURE: _____ DATE: _____

LOCATION OF PROJECT:
TYPICAL STANDARD DETAILS

DESCRIPTION OF PROJECT:
**ROAD MARKINGS
SYMBOL & WORD MARKING**

CONTRACT No.: _____ PROJECT No.: _____

DATE: NOVEMBER 2020 SCALE: NOT TO SCALE ORIGINAL PAPER SIZE: A1

DRAWING NO: **STD025** SHEET NO: 5 OF 5