



SOUTHERN
AFRICAN
DEVELOPMENT
COMMUNITY

GUIDANCE SIGNS – 8 TOLL DIRECTION SIGNS

SECTIONS

- 15.0 Contents
- 15.1 Introduction
- 15.2 Toll Signface Details
- 15.3 Stack Type Arrows
- 15.4 Other Arrows

MAY 2012



SADC RTSM – VOL4

CHAPTER

15

GA1

Refer
V1 4.14.9
V4 15.2.2
15.2.4
15.4.1



Pre-Advance Exit Direction
(Class A1 Freeway)

GA2

Refer
V1 4.14.9
V4 15.2.2
15.2.4



Advance Exit Direction
(Class A1 Freeway)

GA2/3

Refer
V1 4.14.10
V4 15.2.4



Supplementary Exit Direction
(Class A1 Freeway)

GA3

Refer
V1 4.14.11
V4 15.2.4



Exit Direction
(Class A1 Freeway)

GA5



Refer V1 4.14.12 V4 15.2.4

Advance Off-Ramp Terminal Direction
(Class A1 or Class A2 Freeway)

GA6



Refer V1 4.14.12 V4 15.2.4

Off-Ramp Terminal Direction
(Class A1 or Class A2 Freeway)

GA7A



Refer V1 4.14.13 V4 15.2.5

Confirmation-Alternative Route
(Class A1)

GA7R



Refer V1 4.14.13 V4 15.2.7

Confirmation-Toll Route Ahead
(Class A1)

GA7P



Refer V1 4.14.13 V4 15.2.8

Confirmation-Toll Plaza Ahead
(Class A2)

GA8P

Refer V1 4.14.13 V4 15.2.9
Toll Plaza Sequence
(Class A2 Freeway)

GB1

Refer V1 4.14.14 V4 15.2.3
Cross-Road Advance Direction

GB3(+IN24)

	R	10.00
		25.00
		39.00
		63.50

Including VAT
THE SOUTH AFRICAN NATIONAL ROADS AGENCY

Refer V1 4.14.15 V4 15.2.3
Near Side Advance Direction / Toll
Tariff Combination

GB2

Refer V1 4.14.14 V4 15.2.3
Near Side On-Ramp
Direction

GB3(+IN125)

	R	3.50
		8.20
		11.00
		16.50

Including VAT
THE SOUTH AFRICAN NATIONAL ROADS AGENCY

Refer V1 4.14.15 V4 15.2.3
Far Side Advance Direction
Toll Tariff Combination

GB4

Refer V1 4.14.16 V4 15.2.3/15.3.1
Far Side On-Ramp / Straight On
Direction Combination

Reproduced unc

Reproduced under Government Printers Authorization No. 11542 dated 7th July 2017

CHAPTER 15: GUIDANCE SIGNS - 8 TOLL DIRECTION SIGNS

15.1 INTRODUCTION

15.1.1 General

1 Due to the number of signs involved the contents of Volume 1, Chapter 4, Guidance Signs have been split into eight chapters for coverage in this Volume. The content of these eight chapters is as follows:

Chapter 4	- Guidance Signs 1 -	Location Signs and Route Marker Signs
Chapter 5	- Guidance Signs 2 -	Direction Signs
Chapter 6	- Guidance Signs 3 -	Freeway Direction Signs
Chapter 7	- Guidance Signs 4 -	Tourism Direction Signs
Chapter 8	- Guidance Signs 5 -	Diagrammatic Signs
Chapter 13	- Guidance Signs 6 -	Local Direction Signs
Chapter 14	- Guidance Signs 7 -	Pedestrian Signs
Chapter 15	- Guidance Signs 8 -	Toll Direction Signs

2 There are TOLL ROUTE versions of LOCATION and ROUTE MARKER signs and these are covered in Chapter 4. Under the existing systems of operation, TOLL ROUTES are limited to freeways, although these may be of either Class A1 (dual carriageway) or Class A2 (single carriageway). The TOLL DIRECTION signs covered in this Chapter are therefore all variations of standard FREEWAY DIRECTION signs as dealt with in detail in Chapter 6.

3 The way in which this Chapter is structured, and the type of detail given, is somewhat different to other guidance sign chapters. Since sign types covered in Chapter 6 are modified for use on TOLL ROUTES, the standard way in which these modifications should be carried out is detailed in this Chapter, and generally not complete signs.

4 The modifications which are required to be made to standard freeway sign types to indicate that a route is a toll route should consist of one or both of the following, as necessary:

- (a) the "attachment" of TOLL ROUTE symbol GDS-9 to the route number of the tolled route;
- (b) the inclusion of PAY TOLL sign R132, either within an arrow, or in limited cases following a destination name.

5 TOLL ROUTE symbol GDS-9 indicates that the route is a tolled route, but does not indicate where, or when toll shall be paid.

6 PAY TOLL sign R132 is used to indicate that beyond the sign, or the exit to which it refers, drivers shall pay toll. By implication there is no other exit, beyond the one they are approaching, that they may choose to leave the freeway.

7 At strategic points drivers may choose to leave the freeway and continue to their destination *via* an ALTERNATIVE ROUTE. This route is identified in a similar way to the toll route, by means of ALTERNATIVE ROUTE symbol GDS-10 which is "attached" to the appropriate route number on the sign.

8 Dimensional details covering the rules for the use of symbols GDS-9 and GDS-10 are given in Section 15.2.

15.1.2 Use of Sign R132

1 In order to make drivers aware, that by moving in one particular direction or another, they will be making themselves liable to pay a toll for the use of a section of road, PAY TOLL sign R132 is incorporated into an arrow which points in the appropriate direction.

2 In Section 15.3 all appropriate stack-type arrows are dimensionally detailed for the inclusion, within their main shaft, of PAY TOLL sign R132.

3 Section 15.4 details how PAY TOLL sign R132 may be incorporated into map-type and upward-pointing overhead arrows. It is not uncommon that changes in freeway status occur at systems interchanges (interchanges between two freeways). This can lead to some complex demands as to just how a sign R132 can be incorporated into the arrow or arrows. It has become standard practice to include the PAY TOLL sign R132 in a wide, horizontal white bar, which straddles several arrows. This horizontal bar depicts the presence of a main line toll plaza a short distance ahead. Examples of this technique are given on pages 15.4.3 and 15.4.4. The example on page 15.4.5 shows a special arrow/R132 combination as the specific solution to a problem of signing a toll plaza on a ramp.

15.2 TOLL SIGNFACE DETAILS

15.2.1 Indication of Toll Route

- 1 The fact that a route is, or is about to become, a TOLL ROUTE is indicated on guidance signs by the "attachment" of TOLL ROUTE symbol GDS-9 to the relevant route number. Irrespective of where this route number appears on the sign, therefore, it is followed by symbol GDS-9.
- 2 A signface message indicating that a route is a TOLL ROUTE can be given as follows:
 - (a) on the in-line approach at the beginning of the TOLL ROUTE, and at subsequent interchanges thereafter; and
 - (b) on a crossroad which intersects the TOLL ROUTE at an access interchange.
- 3 Indications of TOLL ROUTES can also be given at systems interchanges, particularly if this is where the TOLL ROUTE actually starts.
- 4 The route number plus GDS-9 symbol message can thus be provided on advance signs to indicate that the freeway on which drivers are travelling is about to become a TOLL ROUTE up head, and, that if they continue in the direction in which they are travelling, they will enter the TOLL ROUTE. This entry to the TOLL ROUTE may carry an immediate commitment to pay toll, in which case sign R132 will be incorporated into the signface (see Sections 15.3 and 15.4, and Volume 1, Chapter 4, Section 4.14). If sign R132 is not displayed, drivers are able to travel for some distance on the TOLL ROUTE without paying a toll. They will normally be given a subsequent option to take an ALTERNATIVE ROUTE before being committed to pay toll. Examples of how symbol GDS-9 is added to the route number on map-type signs are given on page 15.2.2.
- 5 The same TOLL ROUTE message can be included on the stack-type signs used on a crossroad approach to a TOLL ROUTE. Examples of typical signface details are given on page 15.2.3.

15.2.2 Indication of Alternative Route

- 1 An ALTERNATIVE ROUTE to a TOLL ROUTE is indicated on guidance signs by the "attachment" of ALTERNATIVE ROUTE symbol GDS-10 to the relevant route number, in exactly the same manner as symbol GDS-9 is used to indicate a TOLL ROUTE.
- 2 The indication of an ALTERNATIVE ROUTE will normally occur on the freeway in advance of a "Point of Commitment (see Volume 1, Chapter 4 and Volume 2, Chapter 6)." The message will be displayed as part of the exit information, and will be carried forward to signs GAS (when used) and GA6 on the off ramp. Examples of typical signface details are given on page 15.2.4.

15.2.3 Route Distances

- 1 CONFIRMATION sign GA7A is a special version of freeway CONFIRMATION sign GA7, on which a comparison of route distances is given between the distance to the next destination via the TOLL ROUTE, and via the ALTERNATIVE ROUTE.
- 2 On sign GA7A both symbols GDS-9 and GDS-10 are displayed. For aesthetic reasons the symbols are aligned vertically irrespective of differences in the lengths of the TOLL ROUTE and ALTERNATIVE ROUTE letter/number groupings. In one of the two lines, therefore, the

"attachment" to the route number is modified to achieve an improved signface appearance.

15.2.4 Overhead-Signs

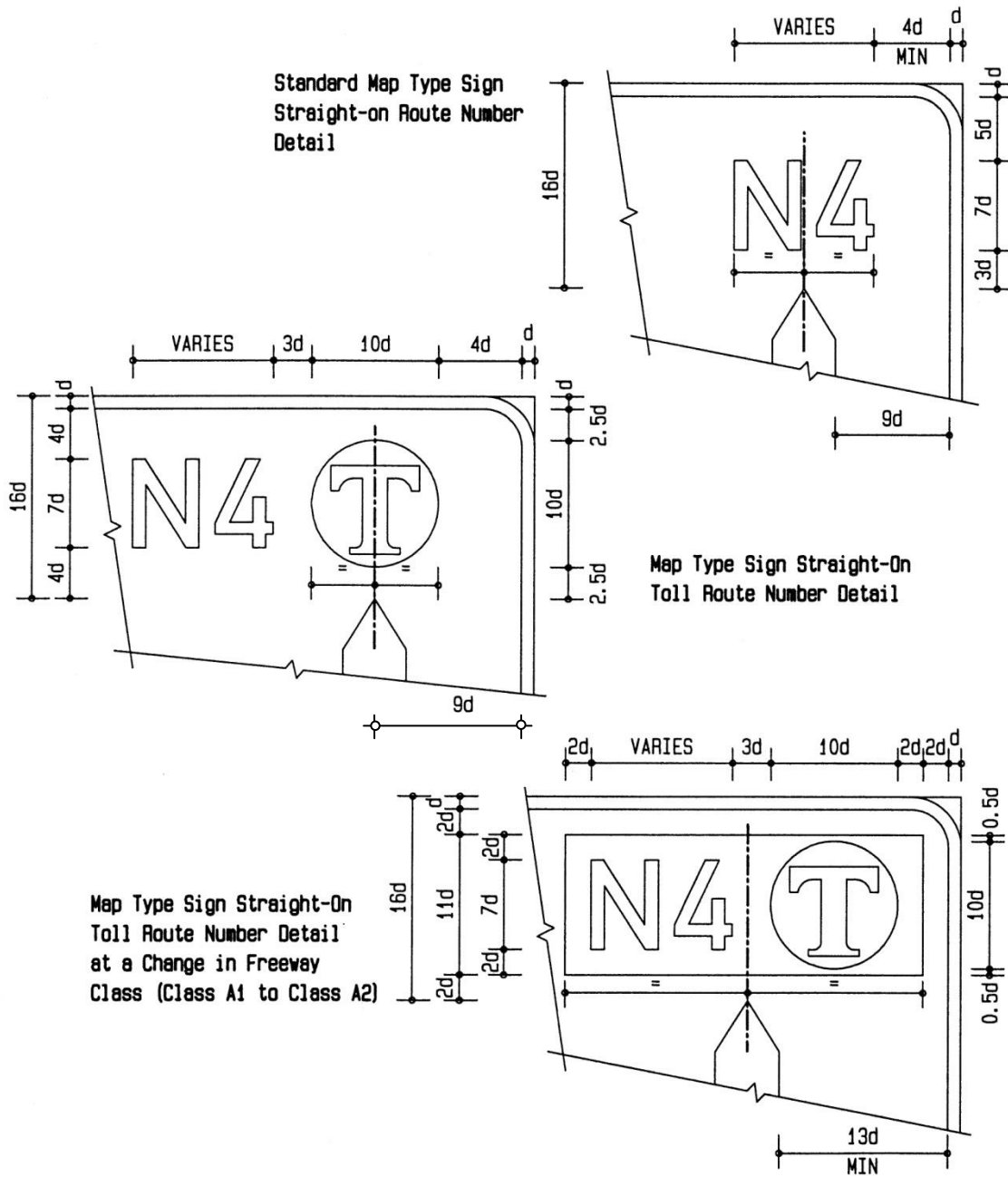
- 1 The examples on page 15.2.6 show the route number/symbol grouping for a TOLL ROUTE centred over the destination to which they apply. This is the standard treatment for an overhead straight on display (GC6U). Also illustrated is the concept of a reduction in class of freeway and how this is indicated by placing the information, in this case the TOLL ROUTE number and next destination, in an appropriately coloured insert panel.

15.2.5 Specific Toll Sign Types

- 1 There are a limited number of variations of standard guidance signs, used on TOLL ROUTES, which are sufficiently different in layout and function to justify being allocated a unique sign number. These signs are:
 - (a) TOLL ROUTE AHEAD CONFIRMATION sign GA7R (an adaptation of FREEWAY CONFIRMATION sign GA7);
 - (b) TOLL PLAZA AHEAD CONFIRMATION sign GA7P (also an adaptation of sign GA7);
 - (c) TOLL PLAZA SEQUENCE sign GASP (an adaptation of EXIT SEQUENCE sign GAB).
- 2 Full dimensional details of signs GA7R, GA7P and GASP are given on pages 15.2.7 to 15.2.9.



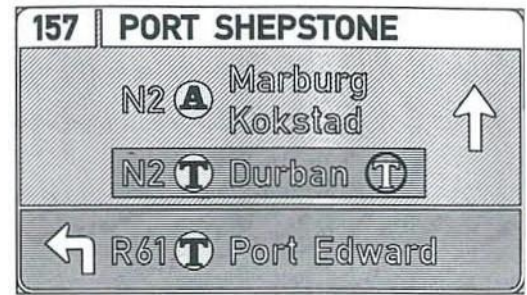
GA2 Variations



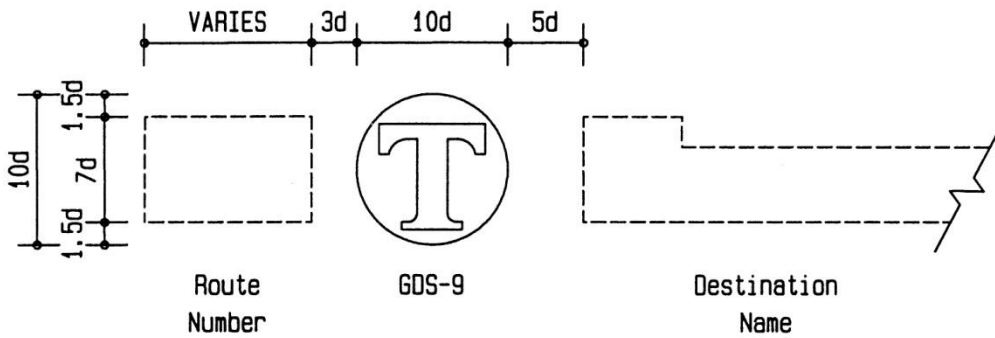
2017

Rep.

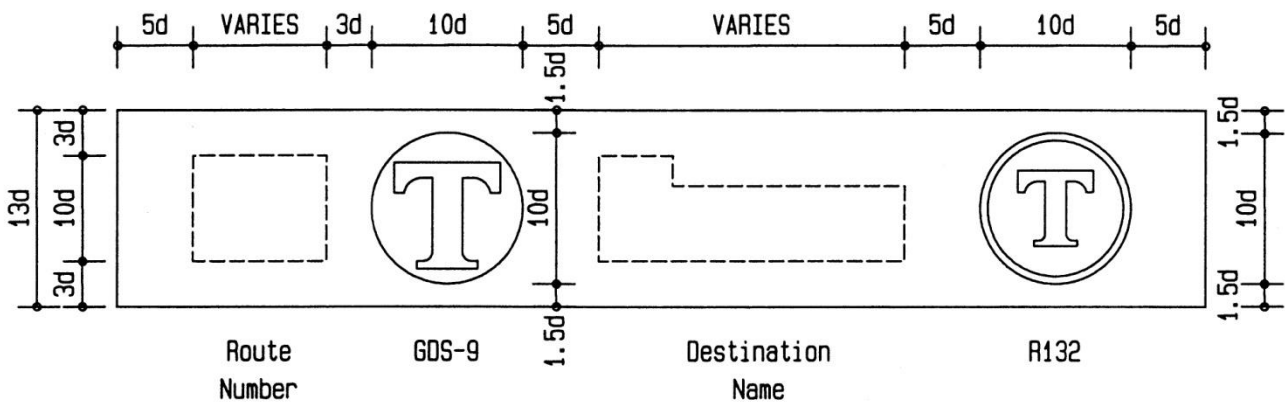
INDICATION OF TOLL ROUTE - MAP TYPE SIGNS



GB1 Variations

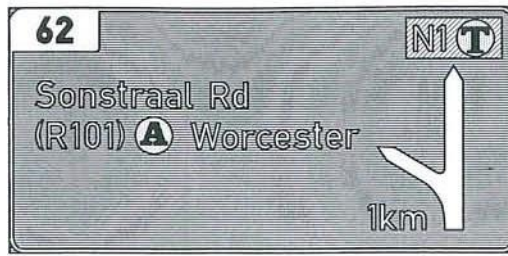
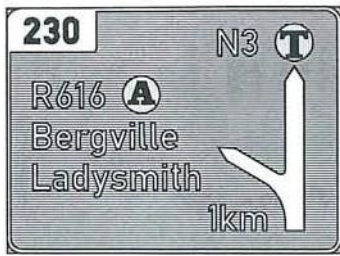


Standard Stack Type Sign Toll Route Number Detail

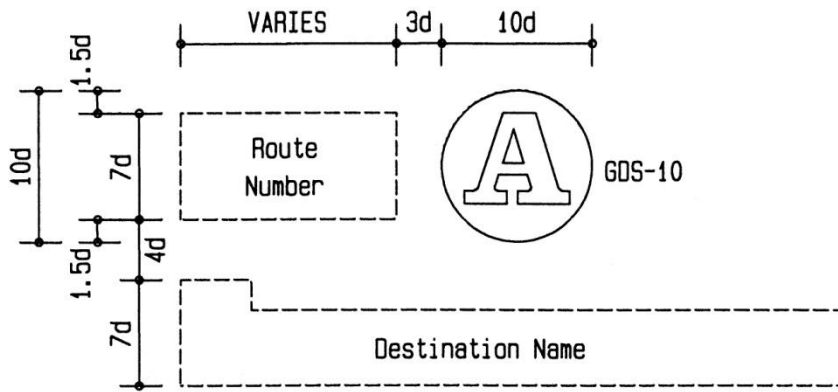


Special Stack Type Sign Toll Route Number Detail for Far Side On-Ramp Turn with Point of Commitment

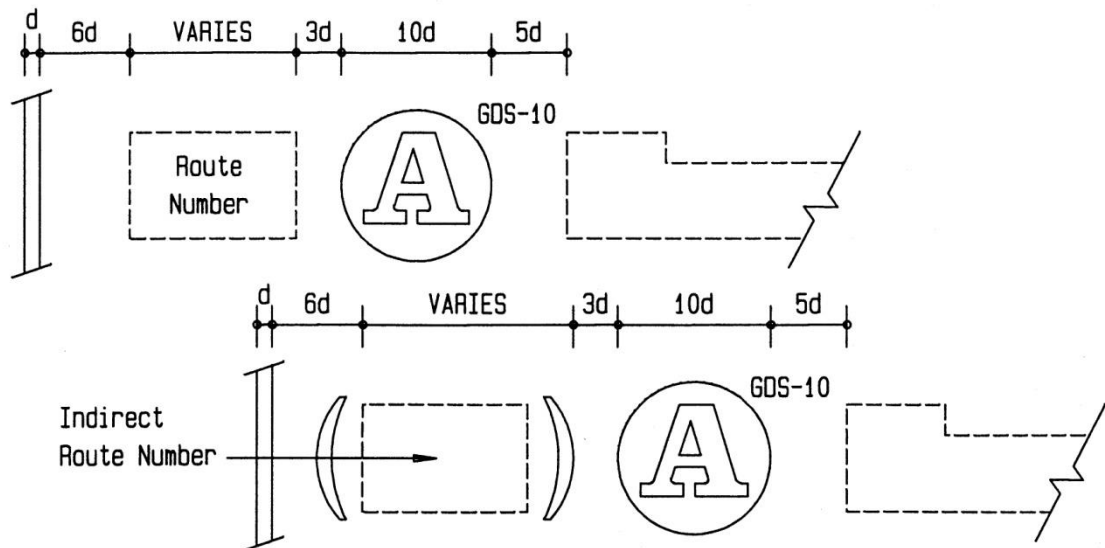
INDICATION OF TOLL ROUTE -STACK TYPE SIGNS



GA2 Variations (Map Type)

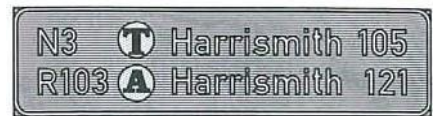


Standard Map Type Sign Alternative Route Number Detail
(Alternative Route intersects directly with Toll Route)



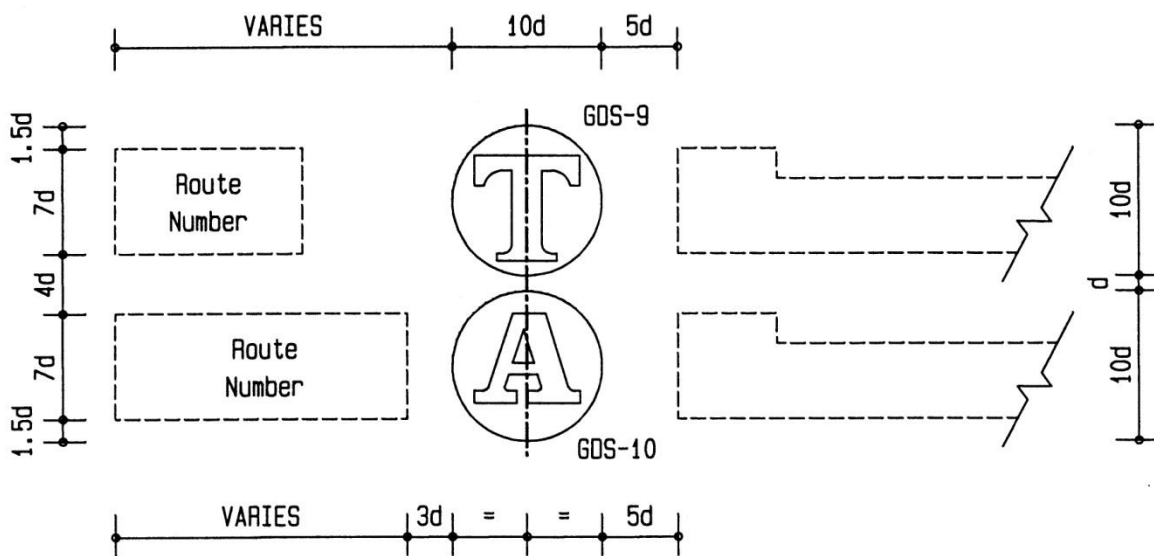
Standard Stack Type Sign Alternative Route Number Detail/
or Indirect Map Type Sign (with brackets)

INDICATION OF ALTERNATIVE ROUTE (to a TOLL ROUTE)



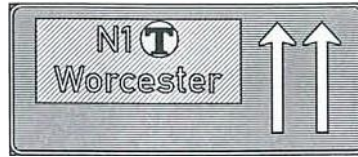
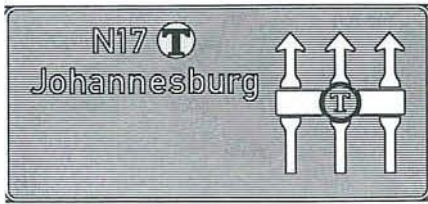
GA7A

7th July 2017

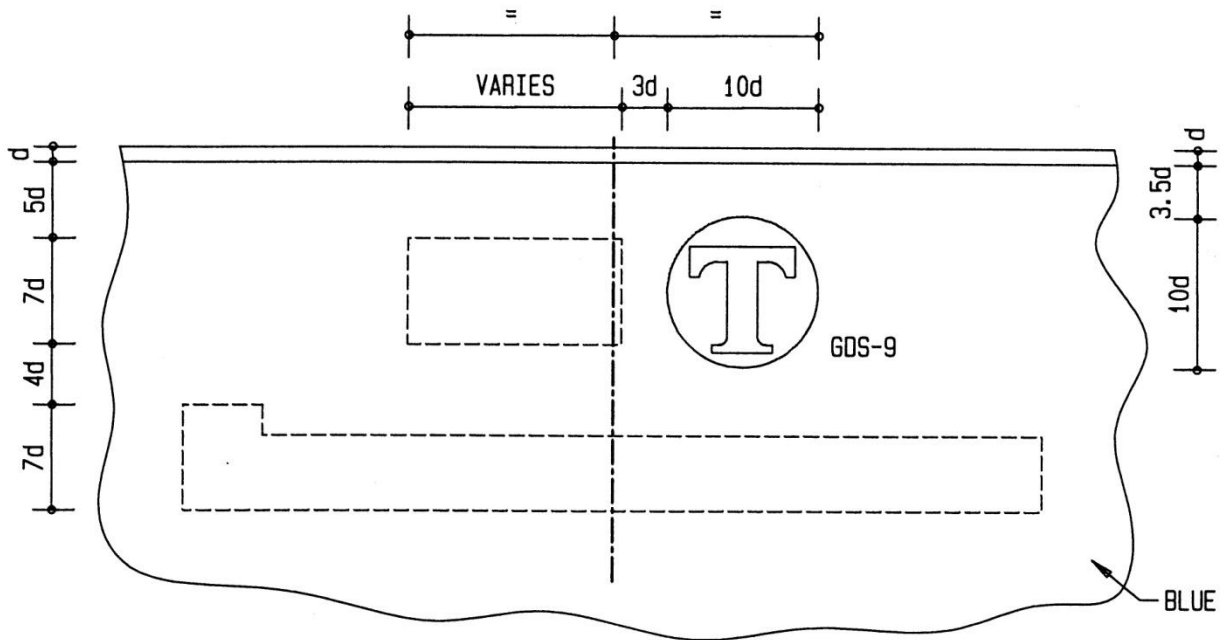


Reproduced under Government

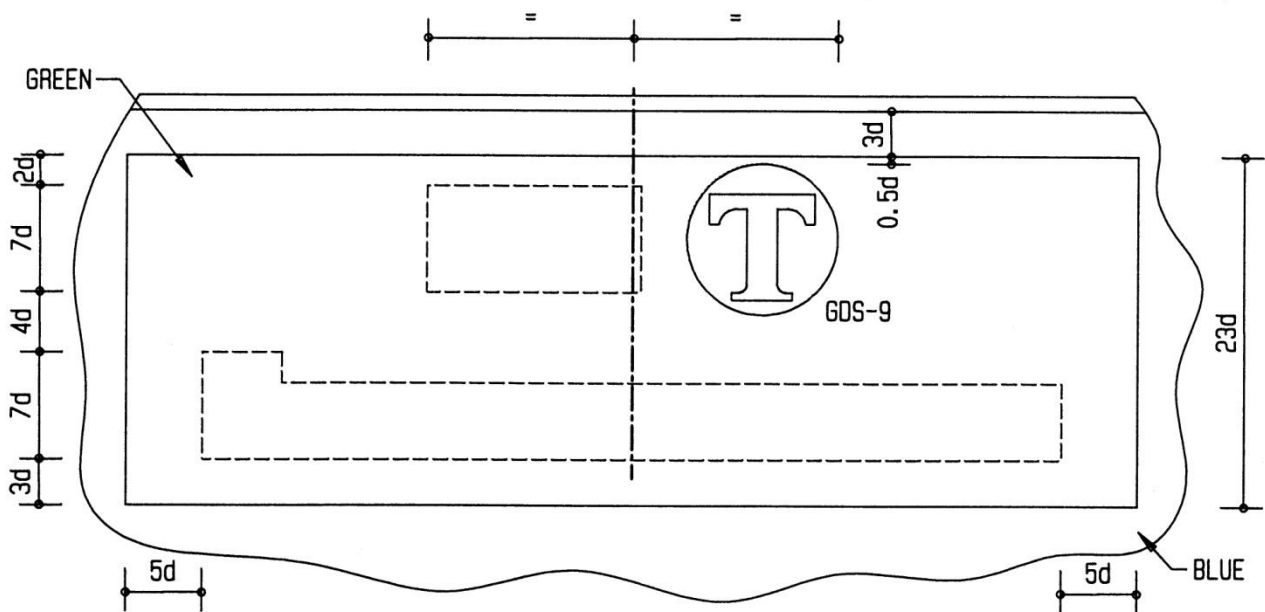
INDICATION OF ROUTE DISTANCES BY TOLL ROUTE AND ALTERNATIVE ROUTE



Typical Overhead Variations



Standard Overhead Straight-On Sign Detail - Class A1



Standard Overhead Straight-On Sign Detail - Class A2

INDICATION OF TOLL ROUTE - OVERHEAD SIGNS

NOTES:

- 1 For details of sign use refer to SADC – RTSM VOL 1, page 4.14.3 and to VOL 2, Chapter 6.
- 2 See Chapter 5 for details of symbols used on toll direction signs.
- 3 Use DIN 1451 Part 2, Style “B” lettering. Toll route operating authority name to be indicated in “B MOD” lettering.
- 4 $R = 4d$ subject to a maximum of 200 mm.
- 5 “d” for IN11.6 is approximately 50% of the value of “d” used on the main sign.

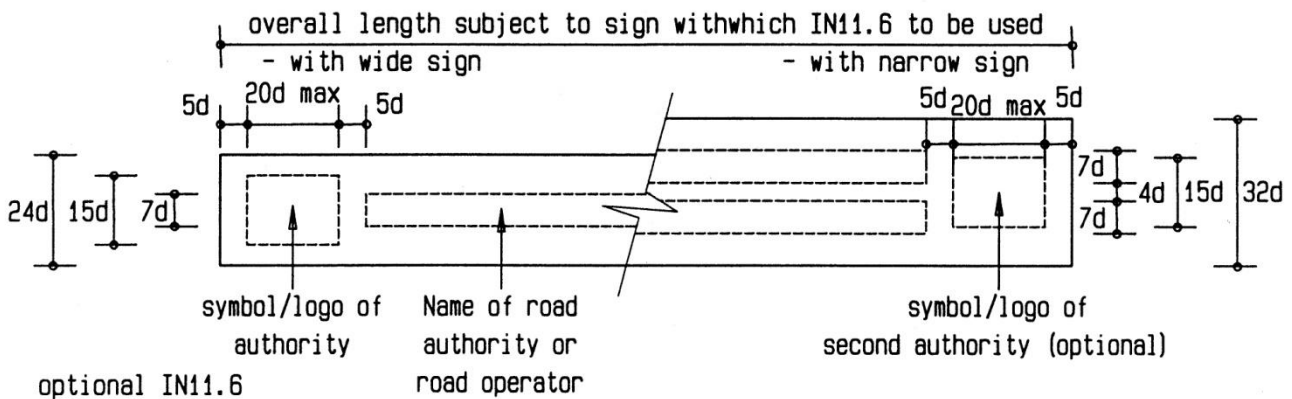
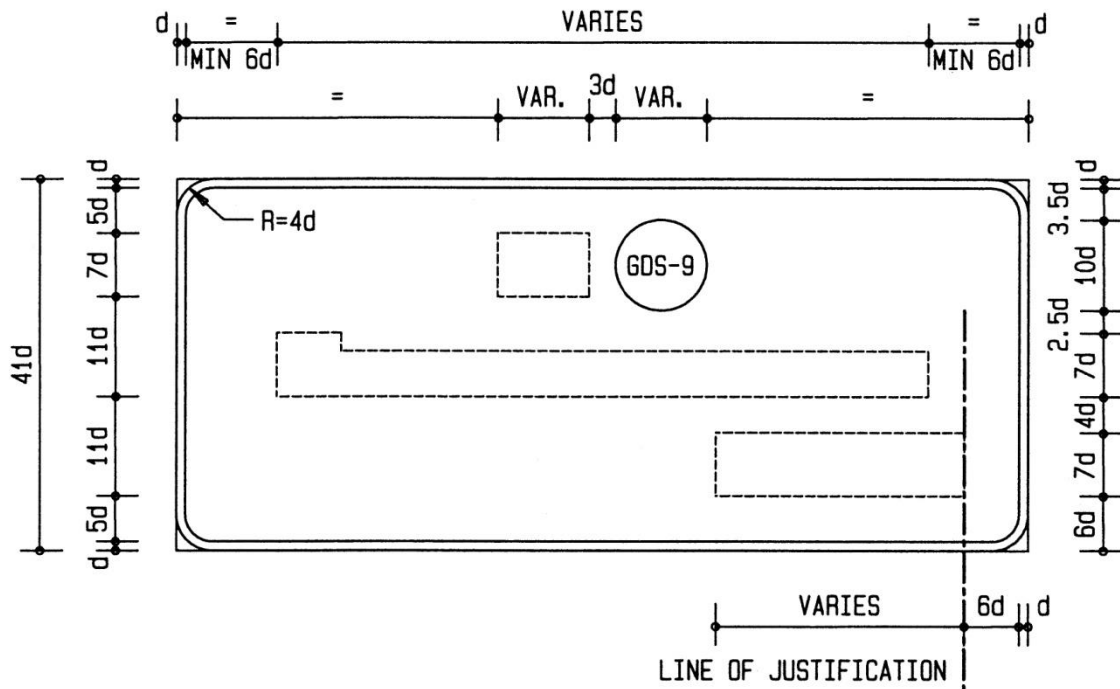
COLOURS:

- PERMANENT
- Border: White retroreflective
 - Route number: Yellow retroreflective
 - Symbol: Black semi-matt on yellow retroreflective
- Legend:
- Background: Blue or green retroreflective
- IN11.6
- Background: White retroreflective
 - Legend: Black semi-matt
 - Symbol & line: Green retroreflective (DoT)

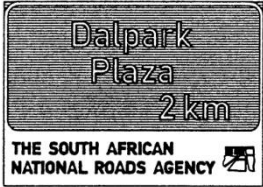


GA7R

dated 7th July 2011



CONFIRMATION SIGN - TOLL ROUTE AHEAD



COLOURS:

PERMANENT

- Border: White retroreflective
- Route number: Yellow retroreflective
- Symbol: Black semi-matt on yellow retroreflective
- Legend: White retroreflective
- Background: Blue or green retroreflective

IN11.6

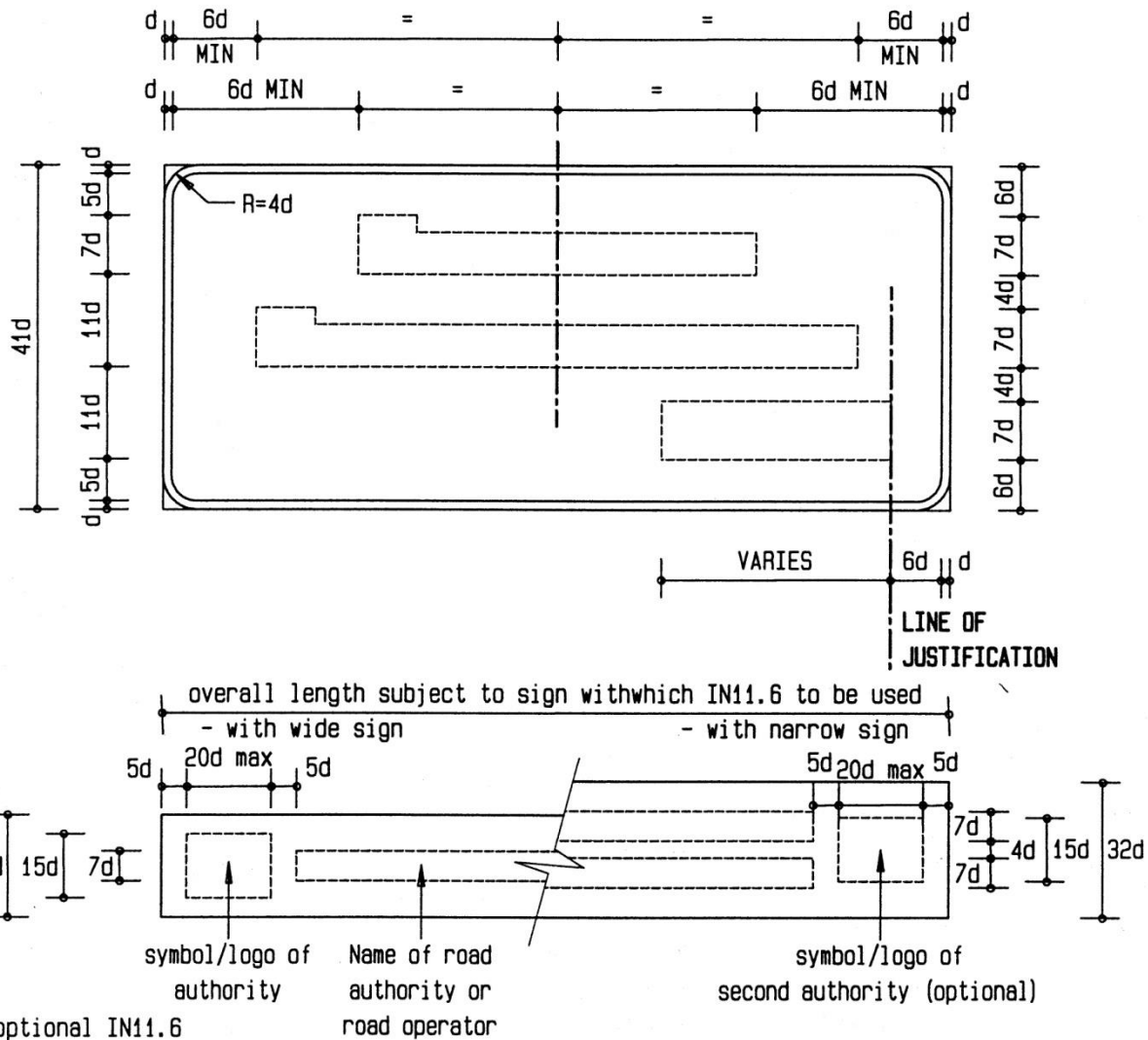
- Background: White retroreflective
- Legend: Black semi-matt
- Symbol & line: Green retroreflective (DoT)

NOTES:

- 1 For details of sign use refer to SADC – RTSM VOL 1, page 4.14.3 and to VOL 2, Chapter 6.
- 2 See Chapter 5 for details of symbols used on toll direction signs.
- 3 Use DIN 1451 Part 2, Style “B” lettering. Toll route operating authority name to be indicated in “B MOD” lettering.
- 4 $R = 4d$ subject to a maximum of 200 mm.
- 5 “d” for IN11.6 is approximately 50% of the value of “d” used on the main sign.

GA7P

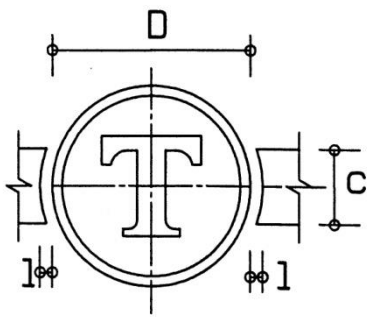
dated 7th July 20...



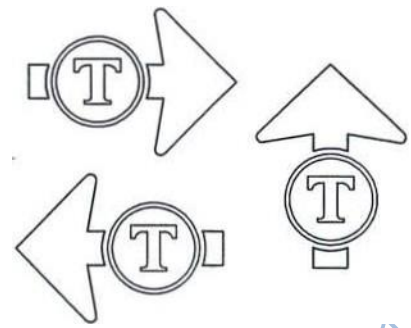
CONFIRMATION SIGN - TOLL PLAZA AHEAD

NOTES:

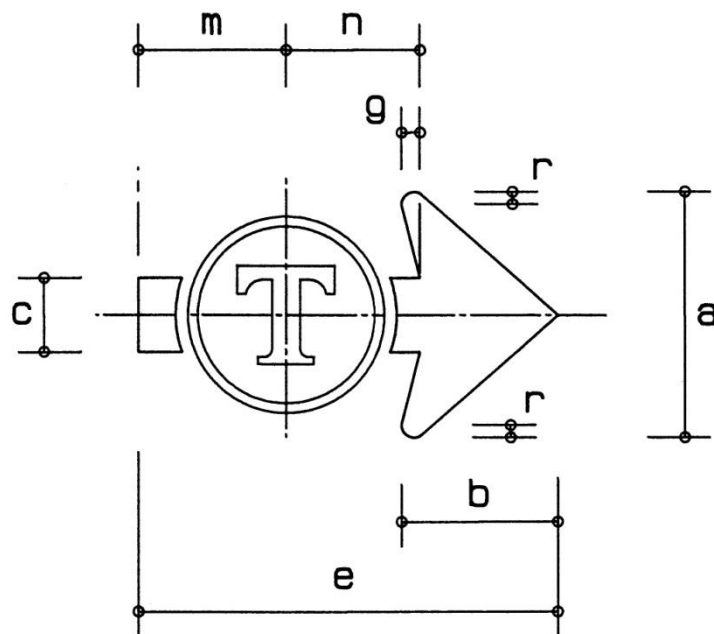
COLOURS:



Detail 15.3.1

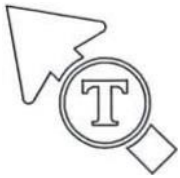


TOLL STACK TYPE 1T
ARROW

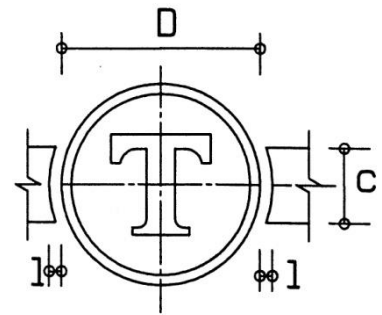


DIMENSIONS (mm):

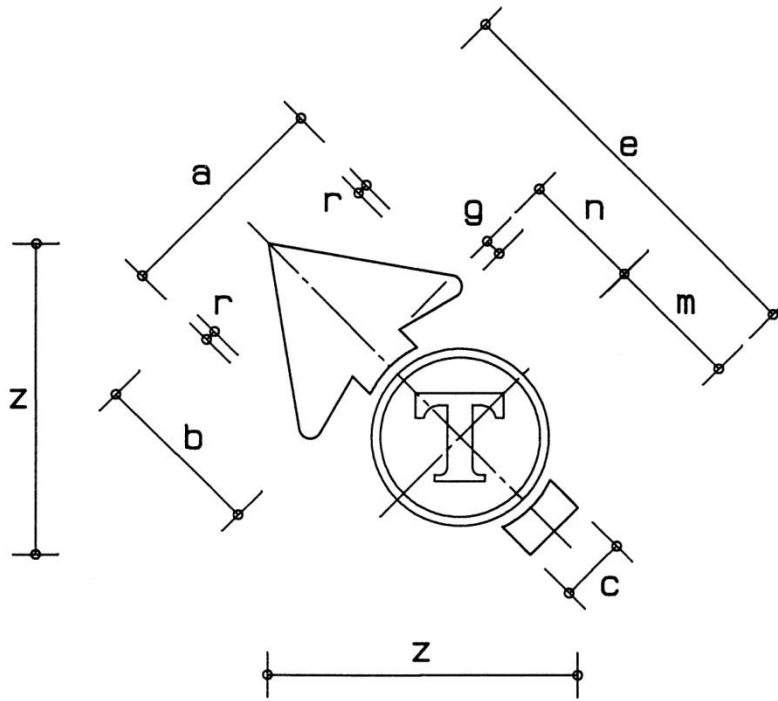
Sign Text	a	b	c	g	e	r/l	m	n	D	
7d/5d	d	(10d)	(6.3d)	(3d)	(0.75d)	(17d)	(0.5d)	(6d)	(5.45d)	(8d)
210/150	30	300	189	90	23	510	15	180	164	240
280/210	40	400	252	120	30	680	20	240	218	320
350/250	50	500	315	150	38	850	25	300	273	400



TOLL STACK TYPE
2T ARROW

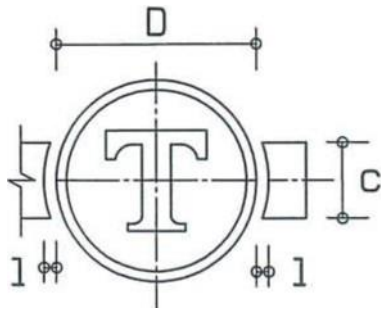


Detail 15.3.1

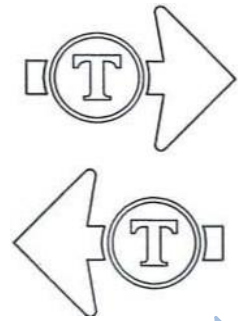


DIMENSIONS (mm):

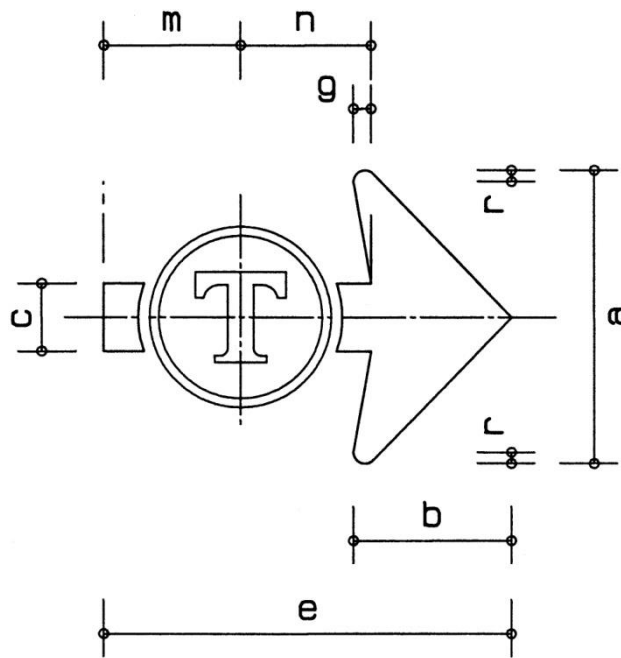
Sign Text	a	b	c	g	e	r/l	m	n	D	z	
7d/5d	d	(10d)	(7.7d)	(3d)	(0.75d)	(18.3d)	(0.5d)	(6d)	(5.45d)	(8d)	(14d)
210/150	30	300	231	90	23	550	15	180	162	240	420
280/210	40	400	308	120	30	732	20	240	216	320	560
350/250	50	500	385	150	38	915	25	300	270	400	700



Detail 15.3.1

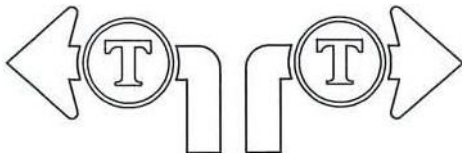


TOLL STACK TYPE
3T ARROW

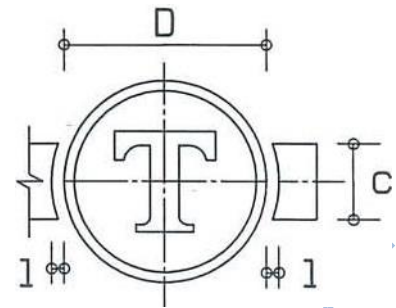


DIMENSIONS (mm):

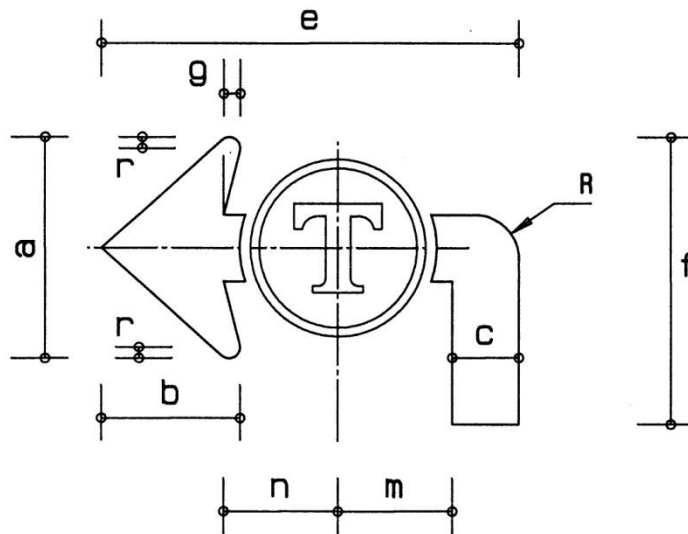
Sign Text	a	b	c	g	e	r/l	m	n	D	
7d/5d	d	(13d)	(7d)	(3d)	(0.75d)	(18d)	(0.5d)	(6d)	(5.77d)	(8d)
210/150	30	390	210	90	23	540	15	180	173	240
280/210	40	520	280	120	30	720	20	240	230	320
350/250	50	650	350	150	38	900	25	300	288	400



**TOLL STACK TYPE 5T
ARROW**

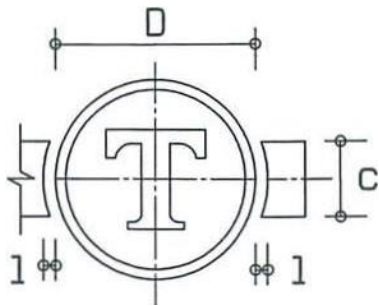


Detail 15.3.1

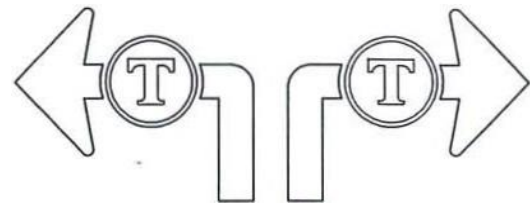


DIMENSIONS (mm):

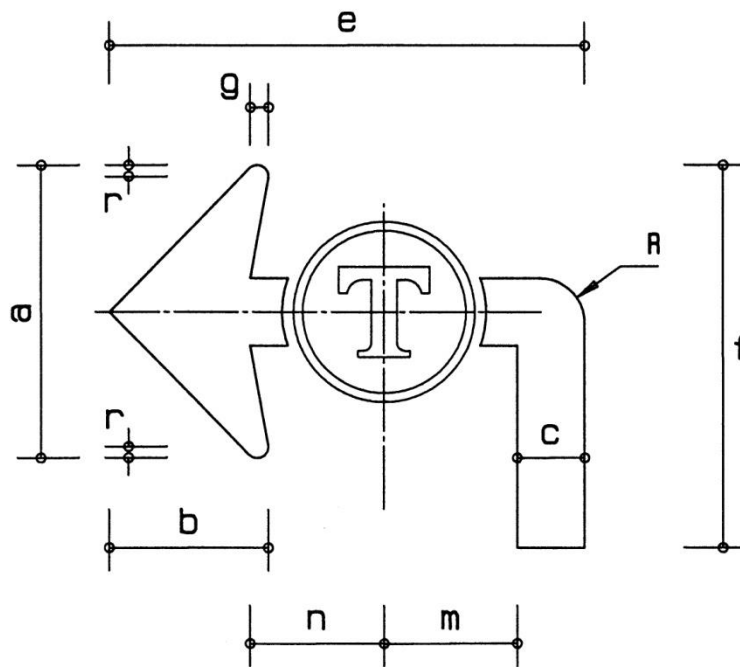
Sign Text	a	b	c	g	e	f	r/l	R	m	n	D	
7d/5d	d	(10d)	(6.3d)	(3d)	(0.75d)	(19d)	(13d)	(0.5d)	(2d)	(5.2d)	(5.2d)	(8d)
210/150	30	300	189	90	23	570	390	15	60	156	156	240
280/210	40	400	252	120	30	760	520	20	80	208	208	320
350/250	50	500	315	150	38	950	650	25	100	261	261	400



Detail15.3.1



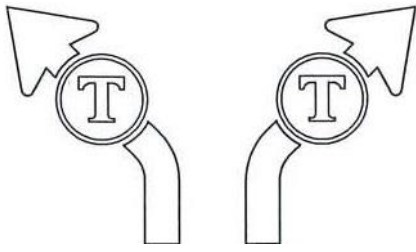
TOLL STACK TYPE 6T ARROW



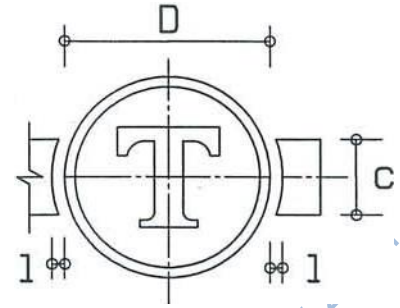
ated 7th July 2017

DIMENSIONS (mm):

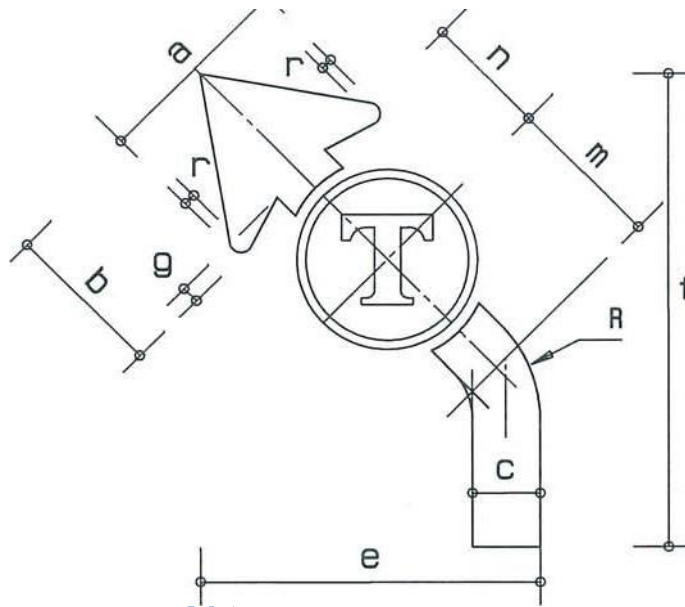
Sign Text	a	b	c	g	e	f	r/l	R	m	n	D	
7d/5d	d	(13d)	(7d)	(3d)	(0.75d)	(21d)	(17d)	(0.5d)	(2d)	(5.88d)	(5.88d)	(8d)
210/150	30	390	210	90	23	630	510	15	60	177	177	240
280/210	40	520	280	120	30	840	680	20	80	235	235	320
350/250	50	650	350	150	38	1050	850	25	100	294	294	400



**TOLL STACK TYPE 7T
ARROW**

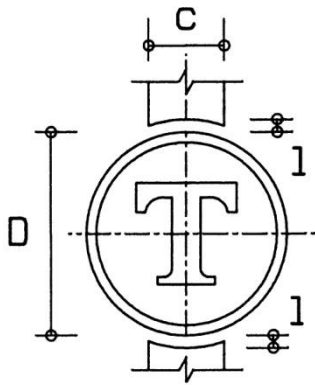


Detail 15.3.1

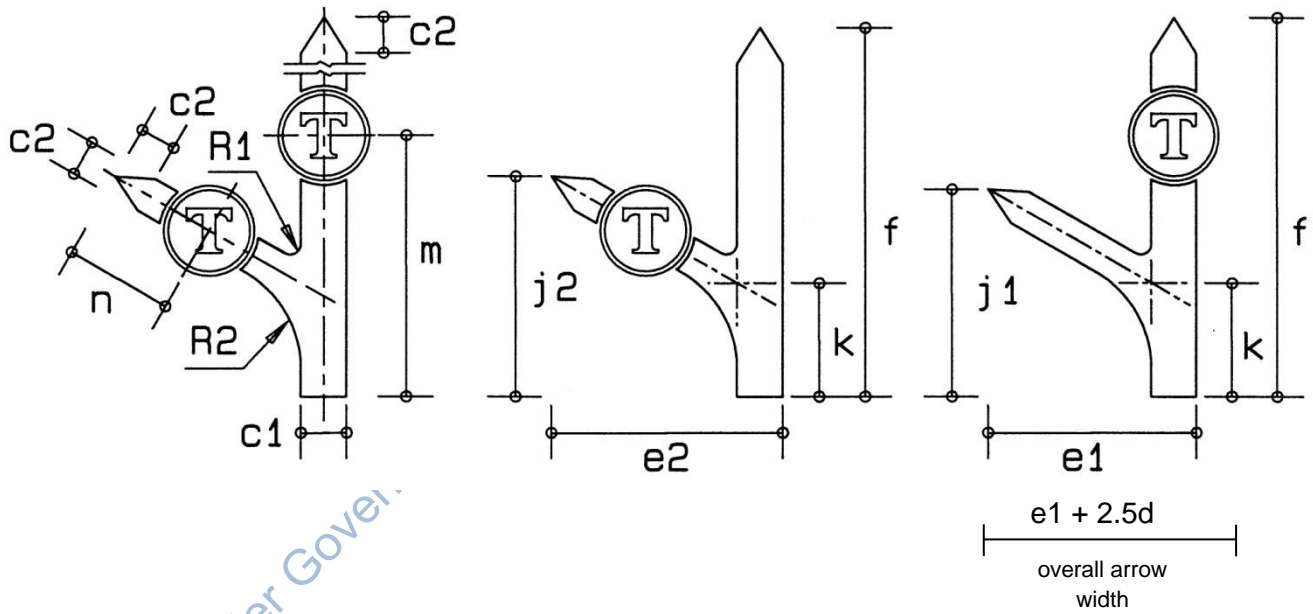
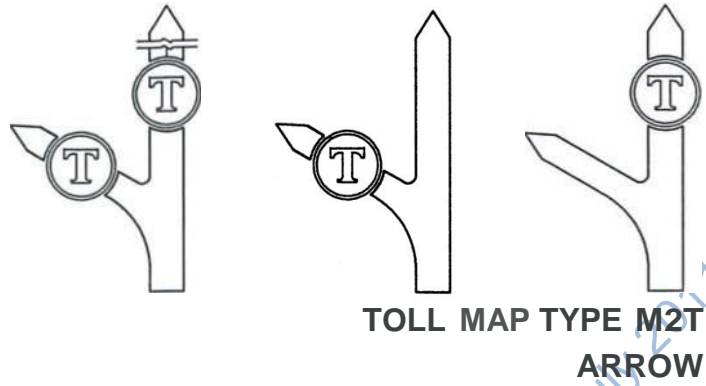


DIMENSIONS (mm):

Sign Text	a	b	c	g	e	f	r/l	R	m	n	D
7d/5d	d	(9d)	(7d)	(3d)	(0.75d)	(15d)	(0.5d)	(6d)	(6.82d)	(5.4d)	(8d)
210/150	30	270	210	90	23	450	15	180	205	162	240
280/210	40	360	280	120	30	600	20	240	273	216	320
350/250	50	450	350	150	38	750	25	300	341	270	400

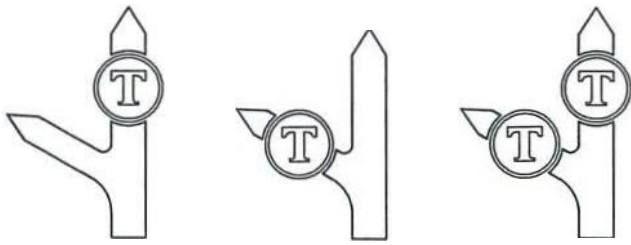


Detail 15.4.1

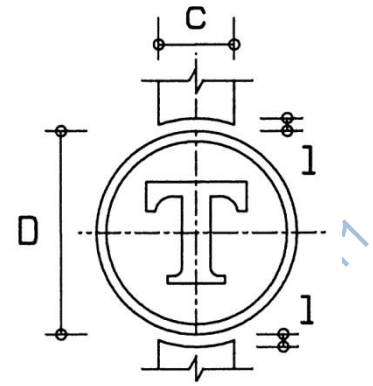


DIMENSIONS (mm):

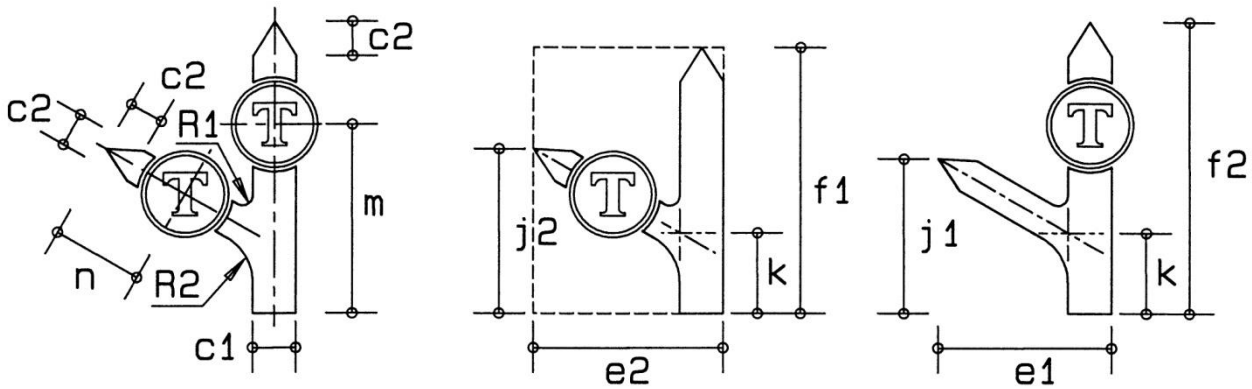
Sign Text	c1	c2	e1	e2	f min	f max	j1	j2	k	l	m	n	R1	R2	D	
7d/5d	d	(5d)	(4d)	(23d)	(43d)	(52d)	(23d)	(24.4d)	(12.6d)	(0.5d)	(29d)	(12d)	(1.2d)	(12.4d)	(10d)	
350/250	50	250	200	1150	1275	2150	2600	1150	1220	630	25	1450	600	60	620	500



TOLL MAP TYPE M10T
ARROW

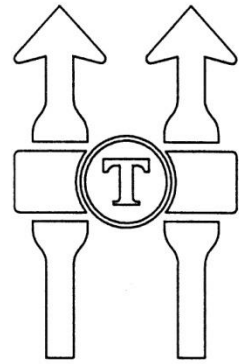


Detail 15.4.1



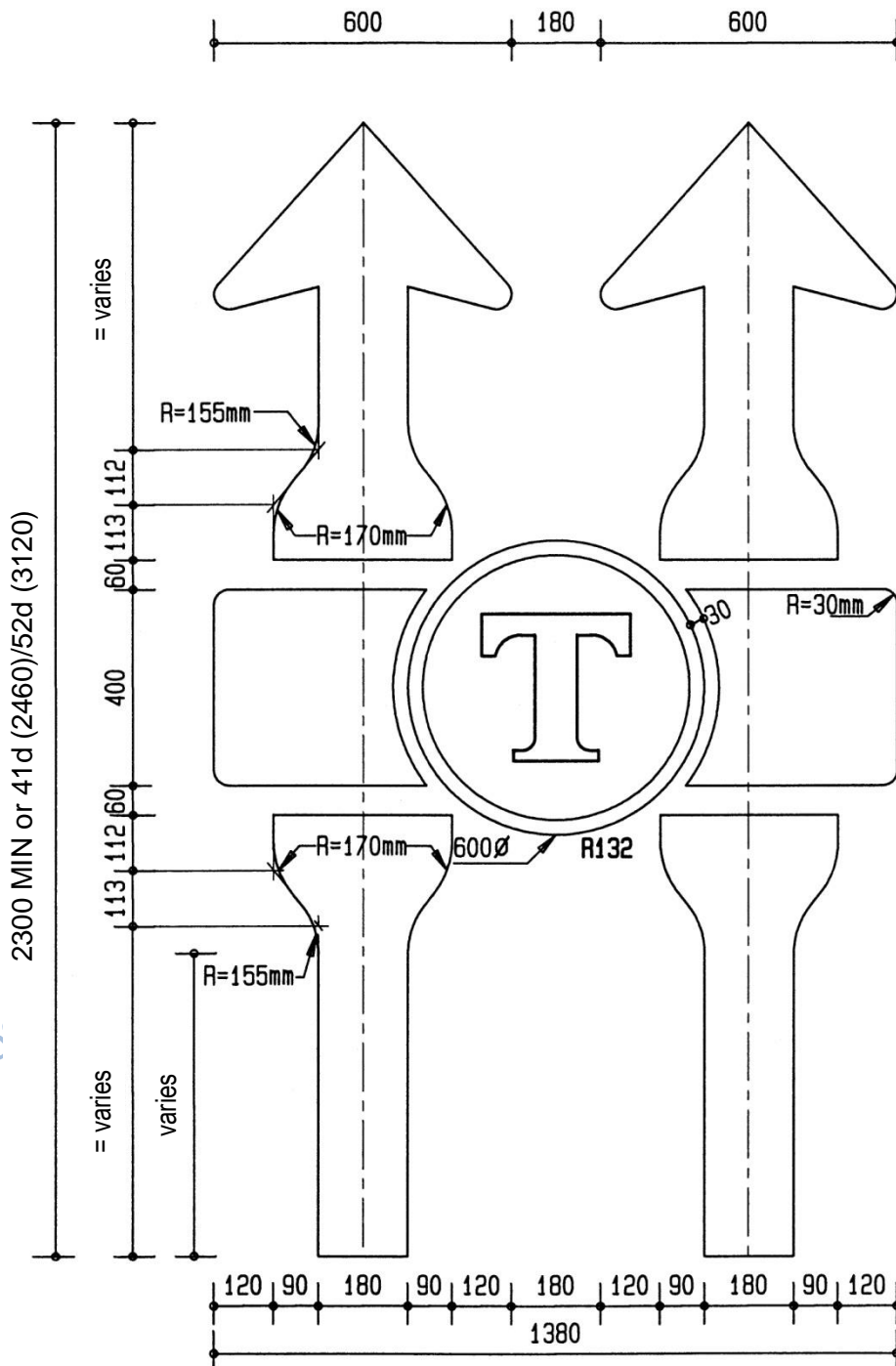
DIMENSIONS (mm):

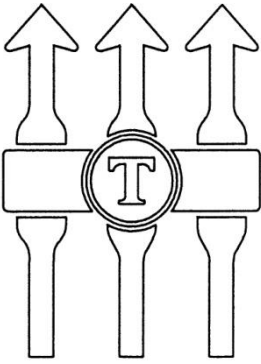
Sign Text	c1	c2	e1	e2	f min	f max	j1	j2	k	l	m	n	R1	R2	D	
7d/5d	d	(5d)	(4d)	(20d)	(22d)	(31d)	(34d)	(18d)	(19.4d)	(9.4d)	(0.5d)	(22d)	(10.6d)	(1.2d)	(6d)	(10d)
350/250	50	250	200	1000	1100	1550	1700	900	970	470	25	1100	530	60	300	500



NOTE:
Toll bar width and arrow cluster width are equal

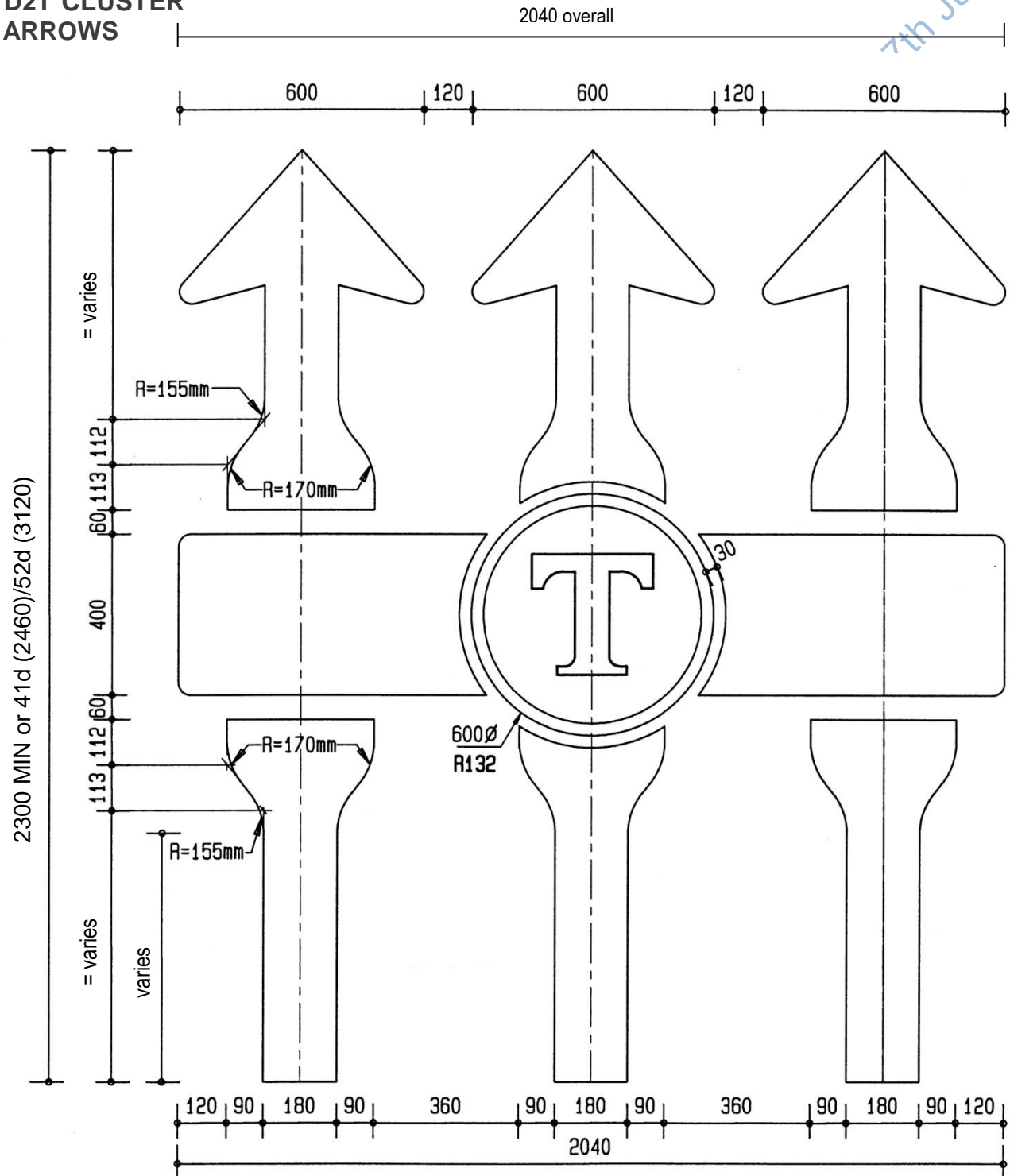
TOLL UPWARD TYPE D1T CLUSTER ARROWS



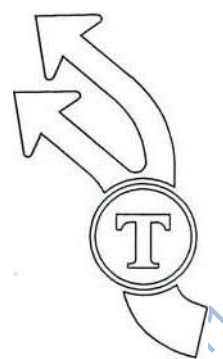


NOTE:
Toll bar width and arrow cluster width are equal

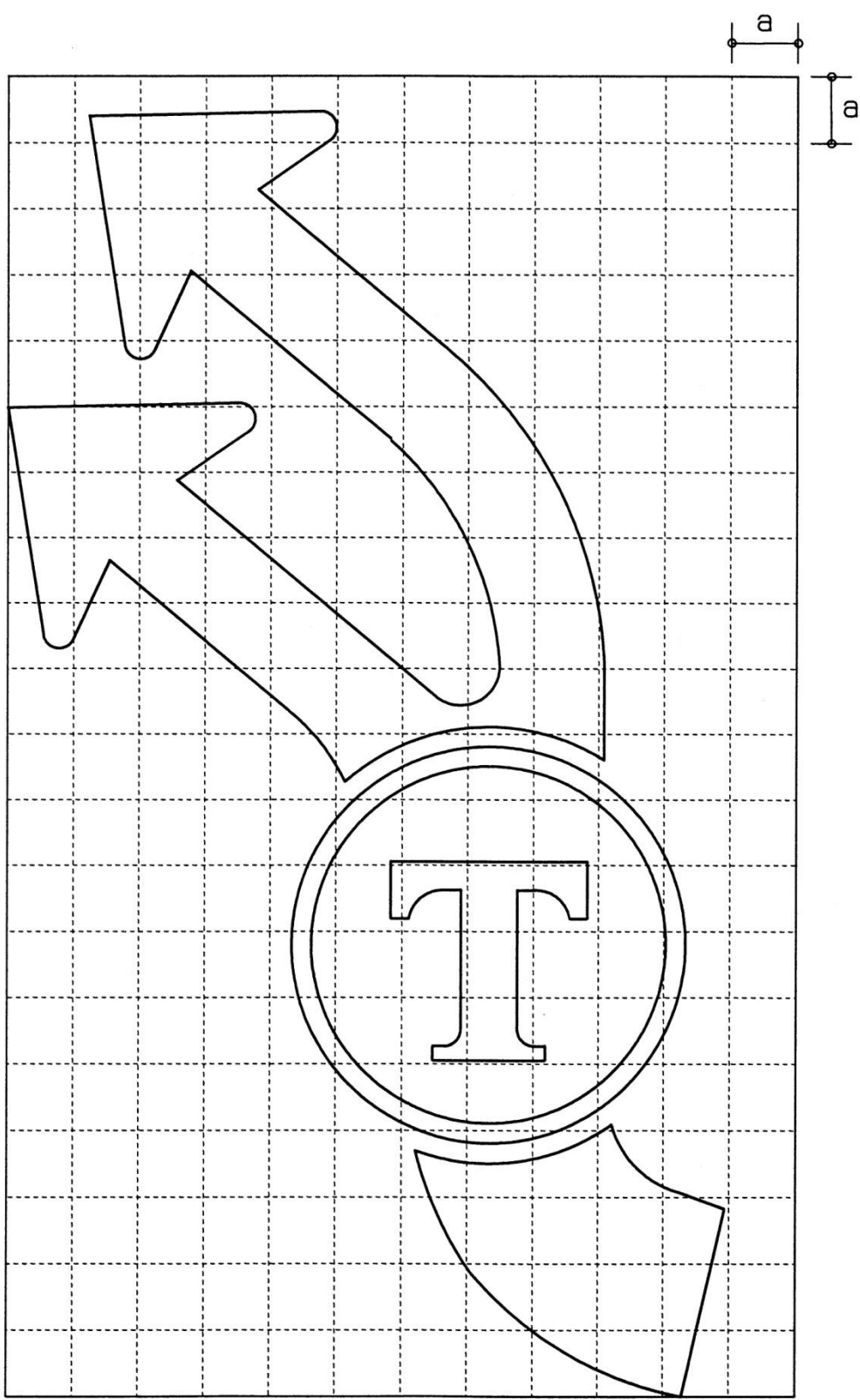
**TOLL UPWARD TYPE
D2T CLUSTER
ARROWS**



7th July 2011



TOLL UPWARD
TYPE ARROW
- SPECIAL 1T



Rer

Reproduced under Government Printers Authorization No. 11542 dated 7th July 2017