

REGULATORY MARKINGS

| Marking Reference Number (Colour) | Descriptions | Dimensions (mm) | |
|-----------------------------------|--------------|-----------------|-------|
| | | Rural | Urban |

4.1 Regulatory Transverse Markings:

| | | | |
|--------------|-----------|----------------|----------------|
| RTM1 (White) | STOP Line | Width 500 ● | Width 300 ● |
|--------------|-----------|----------------|----------------|

N.B. RTM1 stopline shall only be used in conjunction with stop sign R1 or with Traffic Signals. Word "STOP" GM7 in 5500 letters should be used on all applications on Class B road junctions.

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|--------------|------------|---------------------------------------|---------------------------------------|
| RTM2 (White) | YIELD Line | Width 300 ● Line-Gap 600-300 | Width 200 ● Line-Gap 600-300 |
|--------------|------------|---------------------------------------|---------------------------------------|

N.B. RTM2 Yield Line shall only be used in conjunction with Yield Signs R2, R2 1 or R2 2 Markings WM5 should be used on all applications on Class B road junctions.

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| RTM3 (White) | Pedestrian Crossing Lines (2,4 m Apart Min) | Width 100 ● | Width 100 ● |
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4.2 Regulatory Markings:

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|-------------|---|---------------------------------------|--------------------------------------|
| RM1 (White) | No Overtaking Line (Min "Stacking"Length) | Width 150 ● Continuous 12000 | Width 150 ● Continuous 9000 |
|-------------|---|---------------------------------------|--------------------------------------|

N.B. RM1 No Overtaking Line is only used between traffic streams travelling in opposite directions, and is normally used in conjunction with WM3 Dividing Line.

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|-------------|---|---|---|
| RM2 (White) | No Crossing Lines | Width 2X100● | Width 2X100● |
| RM3 (White) | Channelizing (For Stacking) Freeway Applications (Min "Stacking"Length) | Width 100 ● 200 300 Continuous 12000 ● | Width 100 ● 200 -- Continuous 9000 ● |

N.B. RM3 Channelizing Line is only used between traffic streams travelling in the same direction, and is normally preceded by a section of WM2 Continuity Line.

| Marking Reference Number (Colour) | Descriptions | Dimensions (mm) | |
|-----------------------------------|---|-------------------------------------|------------------------------------|
| | | Rural | Urban |
| RM4.1 (Yellow) | Left Edge Line For freeways and 4-lane divided roadways | Width 100 ● 150 Continuous | Width 100 ● -- Continuous |

N.B. RM4.1 Left Edge Line shall be used when the total surface width exceeds 8 m.

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|----------------------|--|---|---|
| RM4.2 (White) | Right Edge Line For freeways and 4-lane divided roadways | Width 100 ● 150 Continuous | Width 100 ● -- Continuous |
| RM5 (White & Yellow) | Painted Islands Speed < 80 km/h Island width < 1500-2400 Speed < 80 km/h Island width > 1500-2400 Speed < 80km/h Island width 2450-3000 Speed > 100 km/h Island width > 3000 | Edge Line Widths 100 ● Bar Widths Solid 400 Solid 1000 Solid 1500 Hollow 1500 | Edge Line Widths 100 ● Bar Widths Solid 400 Solid 1000 Solid 1500 Hollow 1500 |

N.B. 1. Bar dimensions measured along centre line; spacing is double Bar Width.
2. These dimensions to be assessed for individual applications.

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| RM8.1 to RM8.6 (Yellow) | Mandatory Direction Arrows 50-90 km/h 100-120 km/h | Length - 5000 | Length 4000 5000 |
|-------------------------|--|---------------------|------------------------|

NOTE :

- INDICATES MANDATORY MINIMUM DIMENSION PRESCRIBED BY LEGISLATION

WARNING MARKINGS

| Marking Reference Number (Colour) | Descriptions | Dimensions (mm) | |
|-----------------------------------|--------------|-----------------|-------|
| | | Rural | Urban |

4.3 Warning Markings:

| | | | |
|-------------|----------------------------------|--|--|
| WM2 (White) | Continuity Line Minimum Freeways | Width 200 ● 300 Module 12000 | Width 200 ● -- Module 9000 |
| WM2-1 | Reduced | Line/Gap 2m/10 m | Line/Gap 1,5 m/7,5 m |
| WM2-2 | Standard | Line/Gap 2m/4 m | Line/Gap 1,5 m/3 m |
| WM2-3 | Extra | Line/Gap 2m/2 m | Line/Gap 1,5 m/1,5 m |

N.B. WM2 Continuity Lines are normally only used between traffic streams travelling in the same direction, and are usually followed by RM3 Channelizing Line.

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|-------------|---------------|---------------------|---------------------|
| WM3 (White) | Dividing Line | Width 150 ● | Width 150 ● |
| | | Module 12000 | Module 9000 |
| | Standard | Line/Gap 4 m/8 m | Line/Gap 3 m/6 m |

N.B. WM3 Dividing Line is only used between traffic streams travelling in opposite directions, and is normally used in conjunction with RM1 No Overtaking Line.

| Marking Reference Number (Colour) | Descriptions | Dimensions (mm) | |
|-----------------------------------|---|-------------------------|------------------------|
| | | Rural | Urban |
| WM5 (White) | Yield Control Ahead 50-60 km/h 70-120 km/h | Length -- 4000 | Length 2500 4000 |
| WM6.1 to WM6.5 (White) | Lane Reduction Arrows 70-90 km/h 100-120 km/h | Length 7500 12000 | Length 7500 -- |
| WM7.1 to WM7.6 (White) | Mandatory Direction Arrow Ahead 50-90 km/h 100-120 km/h | Length -- 5000 | Length 4000 5000 |
| WM8.1 to WM8.3 (White) | No Overtaking Line Ahead Arrow | Length 4000 | Length 3000 |

N.B. The length of the WM8 marking shall be the same as the length of the Dividing Line Marking WM3.

NOTE :

- INDICATES MANDATORY MINIMUM DIMENSION PRESCRIBED BY LEGISLATION

GUIDANCE MARKINGS

| Marking Reference Number (Colour) | Descriptions | Dimensions (mm) | |
|-----------------------------------|--------------|-----------------|-------|
| | | Rural | Urban |

4.4 Guidance Markings:

| | | | |
|-------------|-----------|-----------------------------------|----------------------------------|
| GM1 (White) | Lane Line | Width 100 ● Module 12000 | Width 100 ● Module 9000 |
| GM1-1 | Reduced | Line/Gap 2 m/1 0m | Line/Gap 1,5 m/7,5 m |
| GM1-2 | Standard | Line/Gap 2 m/4 m | Line/Gap 1,5 m/3 m |
| GM1-3 | Extra | -- | Line/Gap 1,5 m/1,5 m |

N.B. GM1 Lane Line is used between traffic streams travelling in the same direction.

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| GM2 (White) | Guide Line | Width 100 ● Line/Gap 500/1500 | Width 100 ● Line/Gap 500/1500 |
| GM3.1 to GM3.3 (White) | Bifurcation Arrows 70-90 km/h 100-120 km/h | Length -- 7500 | Length 5000 7500 |
| GM7 (White or Yellow) | Word Markings (Including "STOP") | Length -- 5500 | Length 4000 5500 |

NOTE :

- INDICATES MANDATORY MINIMUM DIMENSION PRESCRIBED BY LEGISLATION

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 28 (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 (MUNICHANGLUXm²) |
| 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-W/211

AMENDMENTS

| NR. | DATE | APPROVED | DESCRIPTION | PAR. |
|-----|------|----------|-------------|------|
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|---|------|--|------|
| DESIGNED BY J. CRONJE P/ Tech Eng | DATE | DRAWN BY S. AUDIE | DATE |
| DESIGN CHECKED BY S. NADDO P/ Tech Eng | DATE | INFRASTRUCTURE TECHNICAL INFORMATION MANAGEMENT D.J. CHALMERS | DATE |

| | |
|---|---|
| CITY OF TSHWANE ROADS AND TRANSPORT DEPARTMENT | |
| GROUP HEAD Mr Letloane 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. Swaneppel (Lourens) |
| SIGNATURE: _____ | SIGNATURE: _____ |
| DATE: _____ | DATE: _____ |

| | |
|--|-------------|
| DRAWING APPROVED BY GROUP HEAD Mr Letloane P. (Pheko) | |
| SIGNATURE: _____ | DATE: _____ |

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| TYPICAL STANDARD DETAILS | |
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| ROAD MARKINGS ROAD MARKINGS DETAILS | |
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| CONTRACT No.: | PROJECT No.: |
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| DATE: NOVEMBER 2020 | SCALE: NOT TO SCALE | ORIGINAL PAPER SIZE: A1 |
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| DRAWING NO. STD025 | SHEET NO. 2 OF 5 | REVISION |
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