



# Standard Details of Road Elements

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Land Transport Authority

## GENERAL NOTES

- 1) THE STANDARD DETAILS OF ROAD ELEMENTS (SDRE) ARE APPLICABLE TO ALL ROAD INFRASTRUCTURE PROJECTS.
- 2) PRIOR APPROVAL SHALL BE SOUGHT FROM LTA FOR ANY CHANGES TO THE FORM, SHAPE & DIMENSIONS OF THE ELEMENTS IN SDRE.
- 3) FOR THE ADOPTION OF DETAILS IN THE SDRE THAT REQUIRES SUBMISSION TO THE BUILDING & CONSTRUCTION AUTHORITY (BCA) AS STIPULATED IN THE BUILDING CONTROL ACT, THE PE / QP SHALL BE RESPONSIBLE FOR THE DESIGNS OF ALL STRUCTURAL AND GEOTECHNICAL WORKS IN ACCORDANCE WITH THE REQUIREMENTS IN THE BUILDING CONTROL ACT.
- 4) FOR THE ADOPTION OF DETAILS IN THE SDRE THAT DO NOT REQUIRE SUBMISSION TO BCA AS STIPULATED IN THE BUILDING CONTROL ACT, THE QP/ PE SHALL CHECK THE SITE CONDITIONS AND VERIFY THAT THE STRUCTURAL / GEOTECHNICAL DETAILS FALL WITHIN THE DESIGN ASSUMPTION / PARAMETERS. HE SHALL ENDORSE THE AS-CONSTRUCTED DRAWINGS OF THE ELEMENT UPON COMPLETION AND SUBMIT TO LTA.
- 5) THE CHARACTERISTIC 10-MINUTE MEAN WIND VELOCITY FOR DESIGN OF STRUCTURES IN THE SDRE AND FIXINGS SHALL BE 22m/s. THE WIND ACTIONS SHALL BE DERIVED FROM SS EN 1991-1-4 AND IT'S SINGAPORE NATIONAL ANNEX.
- 6) THE SDRE SHALL BE READ IN CONJUNCTION WITH THE LTA MATERIALS AND WORKMANSHIP (M&W) SPECIFICATIONS AND DESIGN CRITERIA.
- 7) ALL CROSS REFERENCES BETWEEN STANDARD DETAILS SHALL BE TO THE LATEST REVISION.
- 8) ALL STANDARDS AND CODES REFERRED SHALL BE THE LATEST VERSION.
- 9) ALL DIMENSIONS SHOWN ARE IN MM UNLESS OTHERWISE STATED.
- 10) THE FOLLOWING CONCRETE GRADES SHALL BE USED, UNLESS OTHERWISE STATED:  
REINFORCED CONCRETE - C25/30  
MASS CONCRETE - C16/20  
LEAN CONCRETE - C12/15
- 11) THE MINIMUM CHARACTERISTIC YIELD STRENGTH OF THE REINFORCEMENT BARS SHALL BE 500 N/mm<sup>2</sup>.
- 12) ALL CORNERS OF TRAFFIC SIGNS ARE TO BE OF 50mm RADIUS AND ON EXPRESSWAYS THE 600mm X 600mm TRAFFIC SIGNS SHALL BE INCREASED TO HAVE DIMENSIONS OF 900mm X 900mm.
- 13) ALL ALUMINIUM SHEETS SHALL COMPLY WITH BS EN 485, BS EN 515 AND BS EN 573.

# TABLE OF CONTENTS

CHAPTER NO.	DRAWING TITLE	CHAPTER NO.	DRAWING TITLE
1	<p><b><u>PAVEMENTS OF ROADS</u></b></p> <p>FLEXIBLE PAVEMENT , RECAMBERING &amp; WIDENING OF CARRIAGEWAY            RIGID PAVEMENT (SHEET 1 OF 2)            RIGID PAVEMENT (SHEET 2 OF 2)            PUBLIC LIGHTING            TRAFFIC LIGHT CABLE</p>	4	<p><b><u>GRATINGS &amp; MANHOLE COVERS</u></b></p> <p>PEDESTRIAN GRATING FOR SUMP / DRAIN - WITHOUT MILD STEEL PLATE            PEDESTRIAN CONCRETE IN-FILL GRATING FOR SUMP / DRAIN            FRAME FOR PEDESTRIAN GRATING            VEHICULAR GRATING FOR MANHOLES (SHEET 1 OF 2)            VEHICULAR GRATING FOR MANHOLES (SHEET 2 OF 2)            VEHICULAR GRATING FOR DRAINS (SHEET 1 OF 2)            VEHICULAR GRATING FOR DRAINS (SHEET 2 OF 2)            MANHOLE COVER AND FRAME            ROADSIDE MANHOLE GRATING</p>
2	<p><b><u>DRAINS &amp; CULVERTS</u></b></p> <p>PRECAST CONCRETE CHANNEL AND DRAIN            CAST-IN-SITU BOX CULVERT            PRECAST OPEN U-DRAIN            PRECAST SLABBED OVER U-DRAIN            PRECAST CONCRETE DROP-INLET CHAMBER            SUB-SOIL DRAIN AND SUMP ALONG EXPRESSWAY            SUB-SOIL DRAIN AND SUMP ALONG MAJOR ARTERIAL</p>	5	<p><b><u>RAILINGS</u></b></p> <p>PEDESTRIAN ALUMINIUM ALLOY RAILINGS - TYPE A, B, C, D, E &amp; F (SHEET 1 OF 2)            PEDESTRIAN ALUMINIUM ALLOY RAILINGS - TYPE A, B, C, D, E &amp; F (SHEET 2 OF 2)</p>
3	<p><b><u>KERBS &amp; FOOTPATHS</u></b></p> <p>KERBS            KERB PAINTING (SHEET 1 OF 2)            KERB PAINTING (SHEET 2 OF 2)            CIVIC DISTRICT KERB - TYPE C1, C2, C3 &amp; C4            FOOTPATH RAMP - TYPE 1 PEDESTRIAN CROSSING POINTS            FOOTPATH RAMP - TYPE 2 PEDESTRIAN CROSSING POINTS            FOOTPATH RAMP - TRAFFIC ISLAND            FOOTPATH RAMP - SIDE ROAD            FOOTPATH RAMP - DRIVEWAY            FOOTPATH / DRIVEWAY RAMP BESIDE OPEN DRAIN            CAST-IN-SITU CONCRETE PAVEMENT            HOMOGENEOUS TACTILE TILES AND ARRANGEMENT OF TACTILE TILES            KERB WITH SLOT HOLES</p>	6	<p><b><u>GUARDRAILS</u></b></p> <p>VEHICULAR IMPACT GUARDRAILS - TYPE A &amp; B TERMINALS            VEHICULAR IMPACT GUARDRAILS - CRASH CUSHION            CONCRETE BARRIER AT CENTER MEDIAN            ARRANGEMENT AND CONNECTION DETAILS OF VEHICULAR IMPACT GUARDRAILS            VEHICULAR IMPACT GUARDRAILS - THRIE-BEAM TRANSITION            DOUBLE SIDED VEHICULAR IMPACT GUARDRAIL            GUARDRAILS IN FRONT OF COLUMN - WITHOUT ADJOINING VEHICULAR IMPACT GUARDRAILS            GUARDRAILS IN FRONT OF COLUMN - WITH ADJOINING VEHICULAR IMPACT GUARDRAILS</p>

# TABLE OF CONTENTS

CHAPTER NO.	DRAWING TITLE	CHAPTER NO.	DRAWING TITLE
7	<p><b><u>DIRECTIONAL SIGNS</u></b></p> <p>LETTERINGS FOR DIRECTIONAL SIGNS - UPPER CASE (SHEET 1 OF 2)</p> <p>LETTERINGS FOR DIRECTIONAL SIGNS - UPPER CASE (SHEET 2 OF 2)</p> <p>LETTERINGS FOR DIRECTIONAL SIGNS - LOWER CASE (SHEET 1 OF 2)</p> <p>LETTERINGS FOR DIRECTIONAL SIGNS - LOWER CASE (SHEET 2 OF 2)</p> <p>NUMBERS FOR DIRECTIONAL SIGNS</p> <p>ARROWS FOR DIRECTIONAL SIGNS</p> <p>NOTES FOR DIRECTIONAL SIGNS (SHEET 1 OF 2)</p> <p>NOTES FOR DIRECTIONAL SIGNS (SHEET 2 OF 2)</p>	9	<p><b><u>TRAFFIC MANAGEMENT MEASURES</u></b></p> <p>SPEED REGULATING STRIPS</p> <p>CHANNELISING ISLANDS &amp; U-TURN</p> <p>PHYSICAL NOSING WITH DRAINAGE - FOR EXPRESSWAY &amp; NON-EXPRESSWAY</p> <p>PAVEMENT MARKINGS FOR PEDESTRIAN CROSSINGS</p> <p>RAISED ZEBRA CROSSING</p> <p>ROAD HUMP</p> <p>BUS FRIENDLY ROAD HUMP</p> <p>BUS FRIENDLY ROAD HUMP CUM RAISED ZEBRA CROSSING</p> <p>WAITING AREA FOR MOTORCYCLISTS</p>
8	<p><b><u>ROAD MARKINGS &amp; SIGNS</u></b></p> <p>LANE MARKINGS (SHEET 1 OF 3)</p> <p>LANE MARKINGS (SHEET 2 OF 3)</p> <p>LANE MARKINGS (SHEET 3 OF 3)</p> <p>ARROW MARKINGS</p> <p>MULTI-HEAD ARROW FOR TURNING MOVEMENTS</p> <p>TYPICAL ACCELERATION LANE AT EXPRESSWAY</p> <p>TYPICAL DECELERATION LANE AT EXPRESSWAY</p> <p>CHEVRON MARKINGS</p> <p>ROAD SIGNS &amp; MARKINGS AT INTERSECTIONS</p> <p>BUS LANE MARKINGS</p> <p>MANDATORY GIVE WAY TO BUS (MGWTB)</p> <p>PAVEMENT MARKINGS FOR SHARP CURVE</p> <p>CURVE ALIGNMENT MARKERS (CAM)</p> <p>GUIDING LINES AND TURNING POCKETS AT INTERSECTIONS</p>	10	<p><b><u>SUPPORTS FOR ROAD SIGNS</u></b></p> <p>SUPPORT FOR DIRECTIONAL AND INFORMATION SIGNS (SHEET 1 OF 3)</p> <p>SUPPORT FOR DIRECTIONAL AND INFORMATION SIGNS (SHEET 2 OF 3)</p> <p>SUPPORT FOR DIRECTIONAL AND INFORMATION SIGNS (SHEET 3 OF 3)</p> <p>SUPPORT FOR TRAFFIC SIGN (SHEET 1 OF 4)</p> <p>SUPPORT FOR TRAFFIC SIGN (SHEET 2 OF 4)</p> <p>SUPPORT FOR TRAFFIC SIGN (SHEET 3 OF 4)</p> <p>SUPPORT FOR TRAFFIC SIGN (SHEET 4 OF 4)</p> <p>ROAD GANTRY TRUSS (SHEET 1 OF 2)</p> <p>ROAD GANTRY TRUSS (SHEET 2 OF 2)</p> <p>ROAD GANTRY SIGN</p> <p>SUPPORT FOR CANTILEVER DIRECTIONAL SIGNS (SHEET 1 OF 3)</p> <p>SUPPORT FOR CANTILEVER DIRECTIONAL SIGNS (SHEET 2 OF 3)</p> <p>SUPPORT FOR CANTILEVER DIRECTIONAL SIGNS (SHEET 3 OF 3)</p> <p>TYPICAL STEEL BRACKETS FOR 4.5m HEIGHT LIMIT SIGN (900mm X 900mm)</p> <p>SUPPORT FOR TRAFFIC SIGN (FOR ARTERIAL &amp; EXPRESSWAY)</p>

# TABLE OF CONTENTS

CHAPTER NO.	DRAWING TITLE	CHAPTER NO.	DRAWING TITLE
11	<p><b><u>BUS STOPS</u></b></p> <p>BUS BAY (SHEET 1 OF 2)            BUS BAY / LAYBY FOR AUTHORISED VEHICLES (SHEET 2 OF 2)            BUS BAY DETAILS            BUS SHELTER - TYPE A TEMPORARY USE ONLY            BUS STOP LAYOUT &amp; ELEVATION</p>	16	<p><b><u>TRAFFIC PROHIBITORY SIGNS</u></b></p> <p>TRAFFIC PROHIBITORY SIGNS (SHEET 1 OF 6)            TRAFFIC PROHIBITORY SIGNS (SHEET 2 OF 6)            TRAFFIC PROHIBITORY SIGNS (SHEET 3 OF 6)            TRAFFIC PROHIBITORY SIGNS (SHEET 4 OF 6)            TRAFFIC PROHIBITORY SIGNS (SHEET 5 OF 6)            TRAFFIC PROHIBITORY SIGNS (SHEET 6 OF 6)</p>
12	<p><b><u>PLANTING REQUIREMENT</u></b></p> <p>APPROVED SOIL MIXTURE (ASM)</p>	17	<p><b><u>TRAFFIC WARNING SIGNS</u></b></p> <p>TRAFFIC WARNING SIGNS (SHEET 1 OF 9)            TRAFFIC WARNING SIGNS (SHEET 2 OF 9)            TRAFFIC WARNING SIGNS (SHEET 3 OF 9)            TRAFFIC WARNING SIGNS (SHEET 4 OF 9)            TRAFFIC WARNING SIGNS (SHEET 5 OF 9)            TRAFFIC WARNING SIGNS (SHEET 6 OF 9)            TRAFFIC WARNING SIGNS (SHEET 7 OF 9)            TRAFFIC WARNING SIGNS (SHEET 8 OF 9)            TRAFFIC WARNING SIGNS (SHEET 9 OF 9)</p>
13	<p><b><u>PROJECT SIGNS</u></b></p> <p>PROJECT SIGN BOARD FOR LTA PROJECT - TIMBER SIGN BOARD            PROJECT SIGN BOARD FOR LTA PROJECT - ALUMINIUM SIGN BOARD            FLYOVER SIGNAGE &amp; BRIDGE INFORMATION SIGN            PROJECT SIGN BOARD</p>		
14	<p><b><u>BOLLARDS</u></b></p> <p>BOLLARDS            SPRING LOADED POST &amp; FLEXIBLE POST            SAFETY BOLLARD AT BUS STOP - POSTED SPEED : 60km/h &amp; 70km/h (SHEET 1 OF 2)            SAFETY BOLLARD AT BUS STOP - POSTED SPEED : 60km/h &amp; 70km/h (SHEET 2 OF 2)            SAFETY BOLLARD AT TURFED AREA - POSTED SPEED : 60km/h &amp; 70km/h</p>		
15	<p><b><u>TRAFFIC MANDATORY SIGNS</u></b></p> <p>TRAFFIC MANDATORY SIGNS (SHEET 1 OF 2)            TRAFFIC MANDATORY SIGNS (SHEET 2 OF 2)</p>		

# TABLE OF CONTENTS

CHAPTER NO.	DRAWING TITLE	CHAPTER NO.	DRAWING TITLE
18	<p><b><u>TRAFFIC INFORMATORY SIGNS</u></b></p> <p>TRAFFIC INFORMATORY SIGNS (SHEET 1 OF 19)</p> <p>TRAFFIC INFORMATORY SIGNS (SHEET 2 OF 19)</p> <p>TRAFFIC INFORMATORY SIGNS (SHEET 3 OF 19)</p> <p>TRAFFIC INFORMATORY SIGNS (SHEET 4 OF 19)</p> <p>TRAFFIC INFORMATORY SIGNS (SHEET 5 OF 19)</p> <p>TRAFFIC INFORMATORY SIGNS (SHEET 6 OF 19)</p> <p>TRAFFIC INFORMATORY SIGNS (SHEET 7 OF 19)</p> <p>TRAFFIC INFORMATORY SIGNS (SHEET 8 OF 19)</p> <p>TRAFFIC INFORMATORY SIGNS (SHEET 9 OF 19)</p> <p>TRAFFIC INFORMATORY SIGNS (SHEET 10 OF 19)</p> <p>TRAFFIC INFORMATORY SIGNS (SHEET 11 OF 19)</p> <p>TRAFFIC INFORMATORY SIGNS (SHEET 12 OF 19)</p> <p>TRAFFIC INFORMATORY SIGNS (SHEET 13 OF 19)</p> <p>TRAFFIC INFORMATORY SIGNS (SHEET 14 OF 19)</p> <p>TRAFFIC INFORMATORY SIGNS (SHEET 15 OF 19)</p> <p>TRAFFIC INFORMATORY SIGNS (SHEET 16 OF 19)</p> <p>TRAFFIC INFORMATORY SIGNS (SHEET 17 OF 19)</p> <p>TRAFFIC INFORMATORY SIGNS (SHEET 18 OF 19)</p> <p>TRAFFIC INFORMATORY SIGNS (SHEET 19 OF 19)</p>	20	<p><b><u>STREET NAME BOARD</u></b></p> <p>STREET NAME SIGN - GENERAL CONFIGURATION LAYOUT (SHEET 1 OF 3)</p> <p>STREET NAME SIGN - GENERAL CONFIGURATION LAYOUT (SHEET 2 OF 3)</p> <p>STREET NAME SIGN - GENERAL CONFIGURATION LAYOUT (SHEET 3 OF 3)</p> <p>STREET NAME SIGN - STREET NAME SIGN ON SINGLE SUPPORT POST</p> <p>STREET NAME SIGN - STREET NAME SIGN ON DOUBLE SUPPORT POST</p> <p>STREET NAME SIGN - CANTILEVER STREET NAME SIGN ON VERTICAL SUPPORT POST</p> <p>STREET NAME SIGN - CANTILEVER STREET NAME SIGN ON EXISTING LAMP POST</p> <p>STREET NAME SIGN SINGLE SIDE STREET NAME SIGN ON EXISTING LAMP POST</p> <p>STREET NAME SIGN ON TRAFFIC POST</p> <p>STREET NAME SIGN - EXTRUSION</p> <p>STREET NAME SIGN - CASTING PARTS</p> <p>STREET NAME SIGN - TRAFFIC SIGN ON SUPPORT POST</p>
19	<p><b><u>TRAFFIC INFORMATORY SIGNS</u></b></p> <p>TRAFFIC INFORMATORY SIGNS (SHEET 1 OF 2)</p> <p>TRAFFIC INFORMATORY SIGNS (SHEET 2 OF 2)</p>	21	<p><b><u>CYCLING PATH</u></b></p> <p>TREATMENT AT MAJOR JUNCTION</p> <p>TREATMENT AT OTHER JUNCTIONS</p> <p>TREATMENT AT DEVELOPMENT / CARPARK ACCESS (SHEET 1 OF 2)</p> <p>TREATMENT AT DEVELOPMENT / CARPARK ACCESS (SHEET 2 OF 2)</p> <p>BICYCLE CROSSING</p> <p>SHARED TRACK</p> <p>TREATMENT AT BUS STOP WITH BUS BAY</p> <p>TREATMENT AT BUS STOP WITHOUT BUS BAY</p> <p>CYCLING PAVEMENT MARKING DETAILS</p> <p>CYCLING SIGNS (SHEET 1 OF 2)</p> <p>CYCLING SIGNS (SHEET 2 OF 2)</p> <p>CYCLING TRACK LIGHTING</p>