

**RECYCLED PLASTIC BOLLARD**  
**RECTANGULAR PROFILE ("BROLGA"), FRONT ELEVATION**  
 SCALE 1: 20

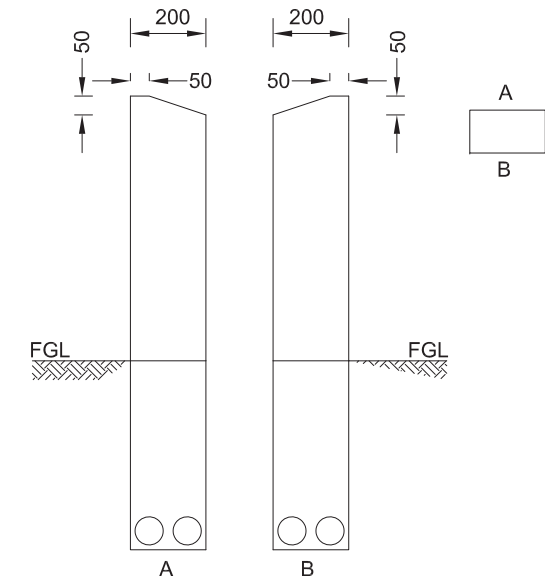
**GENERAL NOTES:**

**BOLLARDS**

- ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE. SIZE AS INDICATED - VARIANCE NOT TO EXCEED 1.5%.
- MATERIALS TO HAVE FLAMMABILITY TESTING TO AS/ISO 9239 AND/OR FIRE HAZARD RATING TO AS/NZS 1530, AND TO HAVE DEMONSTRATED CHEMICAL RESISTANCE. POROSITY TO BE A MAXIMUM OF 15% OF CROSS SECTION.
- SECTIONS TO BE FORMED FROM A SINGLE CONTINUOUS EXTRUDED PIECE.
- MATERIAL FINISH TO BE RECYCLED PLASTIC, COLOUR 'BLACK', UV STABILISED, FINISH TO BE SMOOTH AND FREE OF ANY MAJOR VOIDS OR VISIBLE DEFECTS.
- ACCEPTABLE BOLLARD VARIANTS INCLUDE: 150 DIAMETER WITH TAPERED TOP 100 X 200 RECTANGULAR "BROLGA" BOLLARD SUPPLIED BY "REPLAS" (AS SPECIFIED IN MRC STYLE MANUAL) OR APPROVED EQUIVALENTS MEETING THE MATERIAL AND DESIGN REQUIREMENTS SPECIFIED IN THIS DRAWING
- BOLLARDS TO BE PLUMB AND SPACED AT 1700 CENTRES MEASURED FROM CENTRE OF BOLLARDS
- WHERE POSITIONED ALONG PROPERTY BOUNDARY ALIGNMENTS, OUTER FACE OF BOLLARDS TO BE ALIGNED TO INSIDE OF PROPERTY BOUNDARIES AS SHOWN
- FOOTINGS ARE TO BE A MINIMUM 1000 CLEAR OF WATER, SEWER AND OTHER UNDERGROUND SERVICE LINES.
- BOLLARDS SHALL BE OFFSET A MINIMUM 1000 FROM LONGITUDINAL PATH ALIGNMENTS TO PROVIDE A SAFETY CLEARANCE IN ACCORDANCE WITH AUSTRROADS PART 6A; WHERE BOLLARD ALIGNMENTS CROSS/TRANSECT PATH ALIGNMENTS, BOLLARDS EITHER SIDE OF PATH SHALL ACHIEVE A MINIMUM OFFSET OF 500 AND INCLUDE DELINEATORS AS NOTED THIS SHEET.
- WHERE SPACE PERMITS BOLLARDS ARE TO BE INSTALLED WITH A MINIMUM 2500 OFFSET FROM ADJACENT KERBS, TREES, STRUCTURES AND OTHER HARD EDGES/ELEMENTS TO PROVIDE FOR DECK MOWER ACCESS

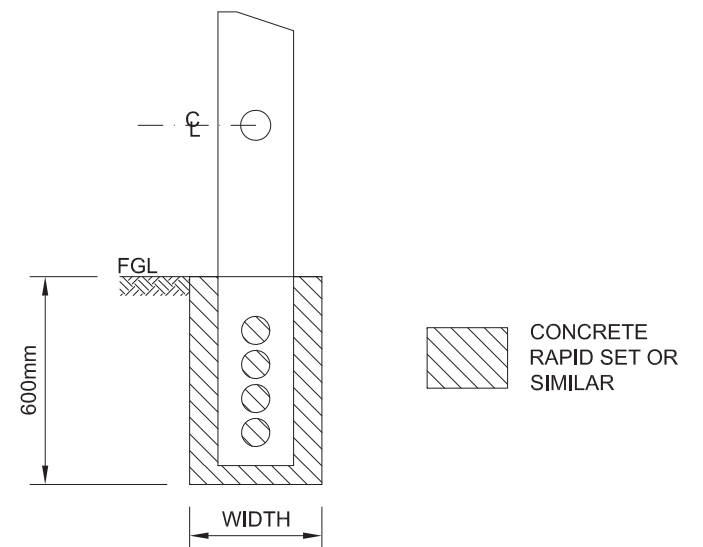
**DELINEATORS**

- DELINEATORS SHALL BE INSTALLED TO EACH SIDE OF BOLLARD (ORIENTATED FACING IN A LINE PARALLEL TO THE ROAD) WHERE INSTALLED WITHIN ROAD RESERVES (TREE PROTECTORS FOR EXAMPLE) OR ALONG ROADS AND WITHIN 1500 OF THE MARKED OUTER CARRIAGE LINE, OR EDGE OF PAVEMENT WHERE AN UPSTAND KERB IS NOT PRESENT
- WHERE REQUIRED, DELINEATORS SHALL BE INSTALLED AT A MAXIMUM OF 6 BOLLARD SPACINGS (APPROX. 8.5M SPACINGS FOR BOLLARDS, 12M SPACINGS FOR VEHICLE BARRIERS)
- WHERE BOLLARDS ARE INSTALLED TO CARPARK PERIMETERS, DELINEATORS (RED) SHALL BE INSTALLED FACING DIRECTION OF CARPARK BAYS
- DELINEATORS ARE TO BE TYPE 'A' (CORNER CUBE) MATERIALS WHICH CONFORM WITH THE REQUIREMENTS OF AS/NZS 1906.2, SUNK INTO PRE-ROUTED RECESSES, DEPTH OF RECESS TO ENSURE EDGES OF DELINEATOR DO NOT PROJECT BEYOND CURVED FACE OF BOLLARD. FIX TO BOLLARDS WITH GRADE 316 STAINLESS STEEL BLIND RIVET AND CONTACT ADHESIVE AS PER MANUFACTURERS SPECIFICATIONS.
- DELINEATORS SHALL BE INSTALLED RED DELINEATORS TO BOLLARD FACE FACING ONCOMING TRAFFIC, WHITE DELINEATORS FACING LEAVING TRAFFIC.
- WHERE LINE OF BOLLARDS TRANSECT PATHS, DELINEATORS SHALL BE INSTALLED TO EITHER SIDE OF NEAREST BOLLARDS ADJACENT PATHS; RED DELINEATOR TO LEFT HAND SIDE AND WHITE TO RIGHT HAND SIDE (FACING DIRECTION OF TRAVEL)



- COLOUR : BLACK
- WALL THICKNESS: 16mm
- INSTALLATION DEPTH: 450 - 600mm
- MAX BOLLARDS PER PALLET: 55

MEASUREMENTS ARE SUBJECT TO A 2-3mm VARIANCE DUE TO EXPANSION/CONTRACTION OF RECYCLED PLASTIC



PT#	BO090	BO100	BO125	BO145	BOR150	MB215	BO2010
BOLLARD SIZE	90X90	100X100	125X125	145X145	150 ROUND	200X75	200X100
HOLE WIDTH	140X140	200X200	225X225	245X245	250 DIA.	300X175	300X200

HOLE WIDTH MUST BE A MINIMUM OF 50mm WIDER THAN BOLLARD SIZE  
 ALL UNITS IN mm UNLESS OTHERWISE SPECIFIED

**'REPLAS' RECYCLED PLASTIC BOLLARD**  
**RECTANGULAR PROFILE ("BROLGA"), FRONT ELEVATION**  
 (Extract from 'REPLAS' Product Specification Brochure)

D	09.07.25	ELEVATION AMENDED	GH	SURVEY	DRAWN R.Mohorko	SIGNED R.Mohorko	DATE 25.2.15	DIRECTOR COMMUNITY AND CLIENT SERVICES		<p><b>STANDARD BOLLARD</b> RECTANGULAR PROFILE</p>	SHEET 1 OF 1	
C	02.2024	NOTES AMENDED	GH	SURVEY FILE No	DESIGNED GT	SIGNED GT	DATE 25.2.15	<p>G.CARLYON GERARD CARLYON</p>			WORKS JOB No.	
B	09.2020	AMENDMENTS MADE	GH	LEVEL DATUM	CHECKED RW	SIGNED RW	DATE 9.3.15				<p>DATE 18.3.15</p>	DRAWING No.
A	18.3.15	ORIGINAL ISSUE	GC	AHD	MANAGER PARKS AND ENVIRONMENT							A3-00915
AMENDMENTS AND REVISIONS				MERIDIAN	P.OWEN		17.3.15					
STANDARD DRAWINGS/PARKS/A3-00915.DWG				MGA 55	PETER OWEN		DATE					