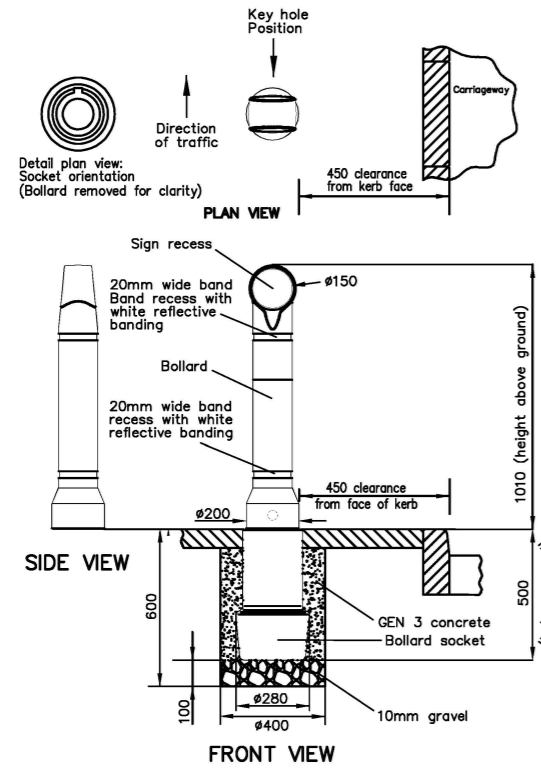
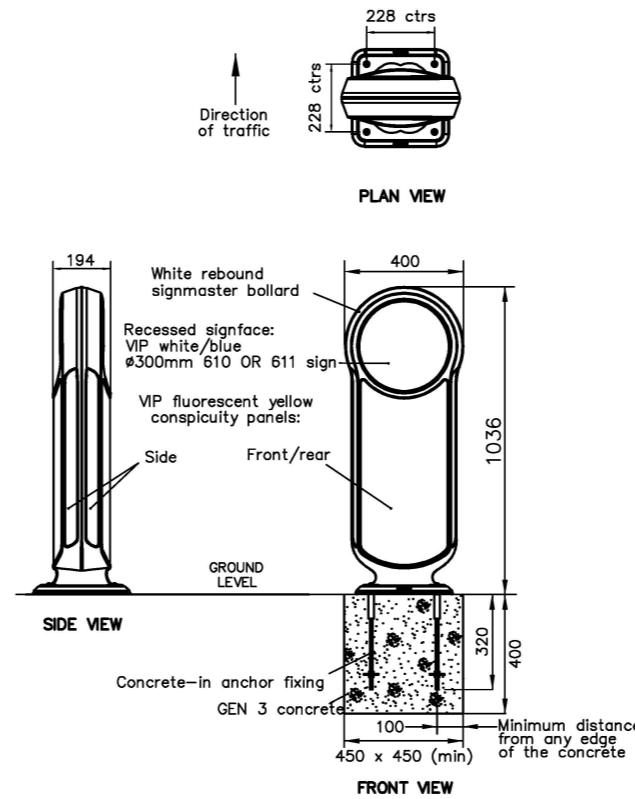


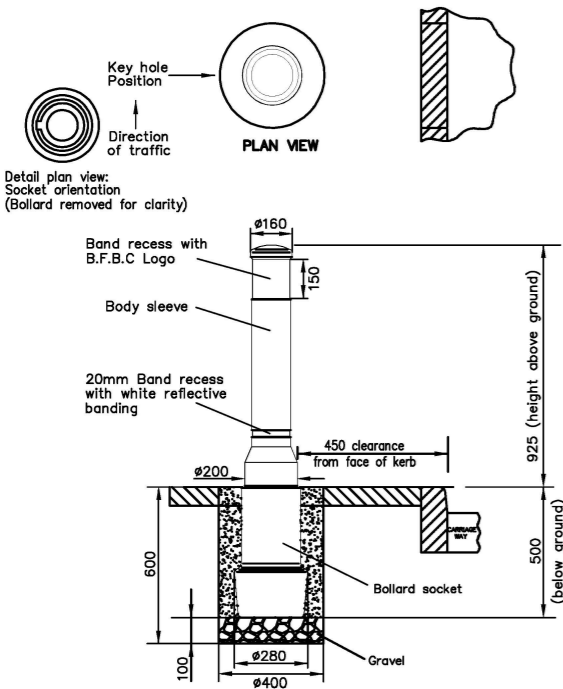
- Notes
1. All dimensions in millimetres.
  2. All signs applied to bollards to comply with the Traffic Signs Regulations and General Directions 2002 unless otherwise specified.
  3. Sign positions to comply with the requirements of the Director.
  4. Key hole on removable bollards to face away from direction of traffic.
  5. Where red and white banding is applied, the red should be on the nearside facing oncoming traffic.
  6. Care should be taken to avoid hot bituminous material coming into contact with plastic bollards.
  7. If the fixing depth for the Glasdon Signmaster bollard is restricted, the anchor fixings may be cut down to a minimum length of 150. The concrete may be reduced to a minimum depth of 200, but the area should be increased to give the same volume of concrete.
  8. When using anchor fixings, a cruciform catchplate should be used to position the fixings within the excavation to ensure correct orientation and rigidity of the bollard.



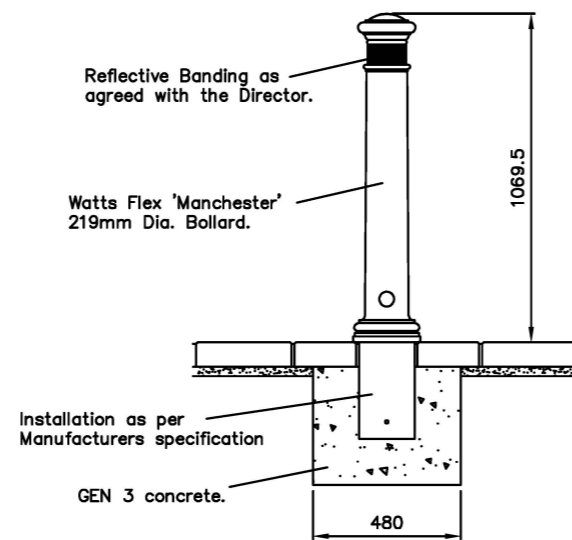
GLASDON MINI-ENSIGN BOLLARD  
(or similar approved product)  
BLACK WITH WHITE REFLECTIVE BANDING  
AND SOCKET FIXING



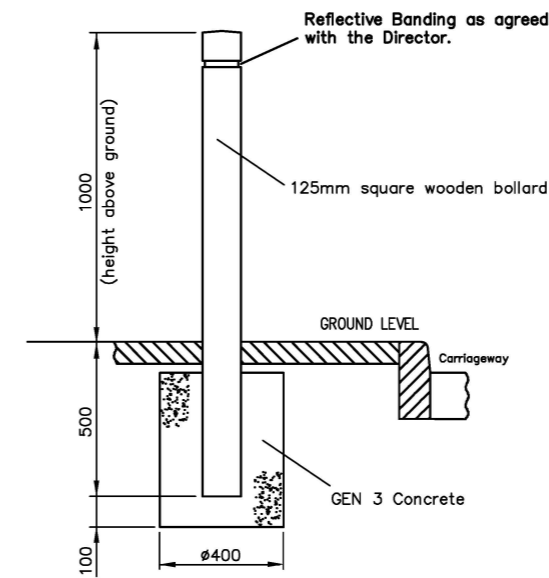
GLASDON SIGMASTER REBOUND  
(or similar approved product)  
BOLLARD - TYPE C  
WITH GROUND ANCHOR SYSTEM



GLASDON NEAPOLITAN BOLLARD TYPE: 150  
(or similar approved product)  
BLACK WITH WHITE REFLECTIVE BANDING  
AND SOCKET FIXING



WATTS MANCHESTER FLEXIBLE BOLLARD  
(or similar approved product)



WOODSCAPE SG'R' TIMBER BOLLARD  
(or similar approved product)

Do not scale this drawing

B	APR 19	Updated title block	NR
A	MAY 13	Concrete grade revised. Flex bollard added	KPT
Rev	Date		Checked



Project	STANDARD DRAWING
Title	BOLLARDS

Drawing No.	SD/1200/03B
Scale	NOT TO SCALE
Date	MAR 11
Department of Place, Planning & Regeneration	