



Scheme Ref. SSZ			
Sign Ref.	Plate	x-height	85
Letter Colour	Black	<u>Sign Face</u>	
Background	White	Width	820mm
Border	N/A	Height	1495mm
Material	Class RA2 (12899-1:2007)	Area	1.23sq.m
Backing Board: Yellow			

Post and Foundations			
Mounting Height	1800mm	Bases	Combined
Number	2	Base Width	1100mm
Size	88.9x4CHS 1xWB	Base Length	800mm
Length	3895mm	Base Depth	600mm
Centres	500mm	Base Vol. o/a	0.528m3
Illumination	No	Earth Cover	125mm

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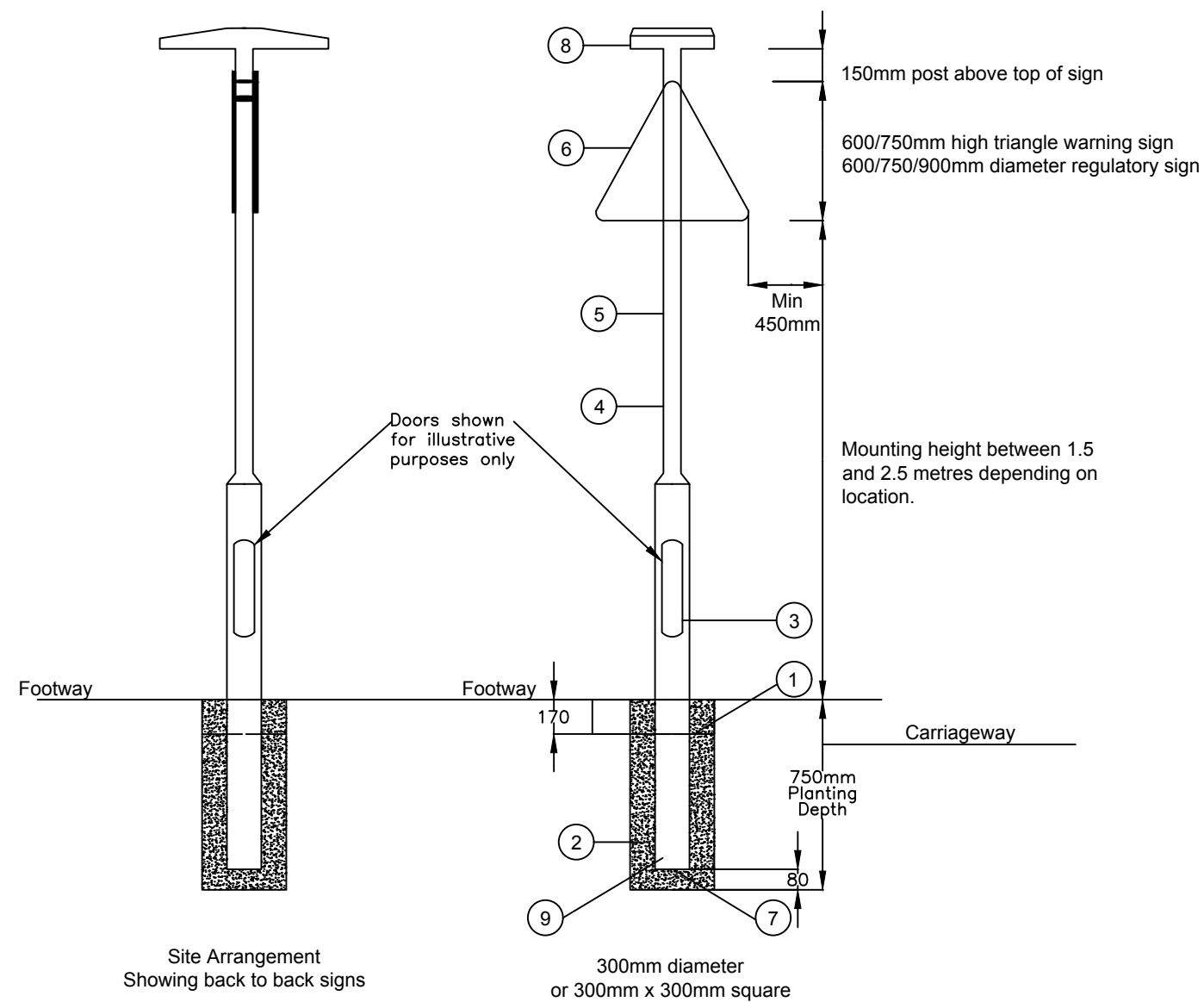
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J Humm,
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Client: Swindon Borough Council

SCHOOL SAFETY ZONE SIGN

Designed DW	Scale NTS	Date MAR 2017	Revision A
Drawn MA	Drawing no.		
Checked SG	SBC/STD/1200/01		



- ① Reinstatement in like for materials and thicknesses
- ② ST2 Concrete
- ③ Wherever practicable the access door shall face downstream to the traffic flow
- ④

Post Details		
Shaft diameter	76mm	89mm
Base diameter	140mm	140mm
Planting diameter	750mm	750mm
Overall length	3.75m	4.76m
- ⑤ Post colour: galvanised or as specified
- ⑥ Colour of rear of sign: aircraft grey to BS381C:693
- ⑦ Base Plate
- ⑧ Post top mounted signlight/sto approved specification with LED light source and miniture photocell 55/28lux.
- ⑨ 50mm dia. duct through foundation (one per cable). Duct to be Black for statutory supply or Orange for private supply.

NOTES

1. All dimensions in millimeters unless otherwise stated.

Revisions



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CONCRETE BASE FOR SMALL SIGNS

Designed DW	Scale NTS	Date MAR 2017	Revision
Drawn MA	Drawing no. SBC/STD/1200/03		A
Checked SG			



1. All dimensions in millimeters unless otherwise stated.
2. Light source to be with modubel or midubel unless specified otherwise by Street Lighting Engineer
3. For approved equipment refer to HES approved material list.
4. Mounting height of 3100mm is equal to 7No. stripes of 300mm

[illegible]

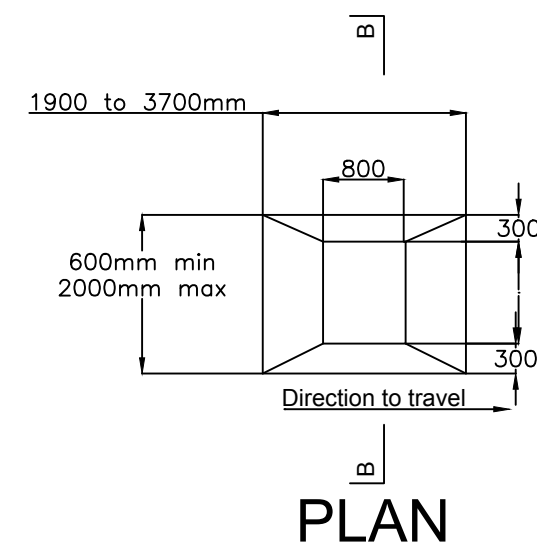
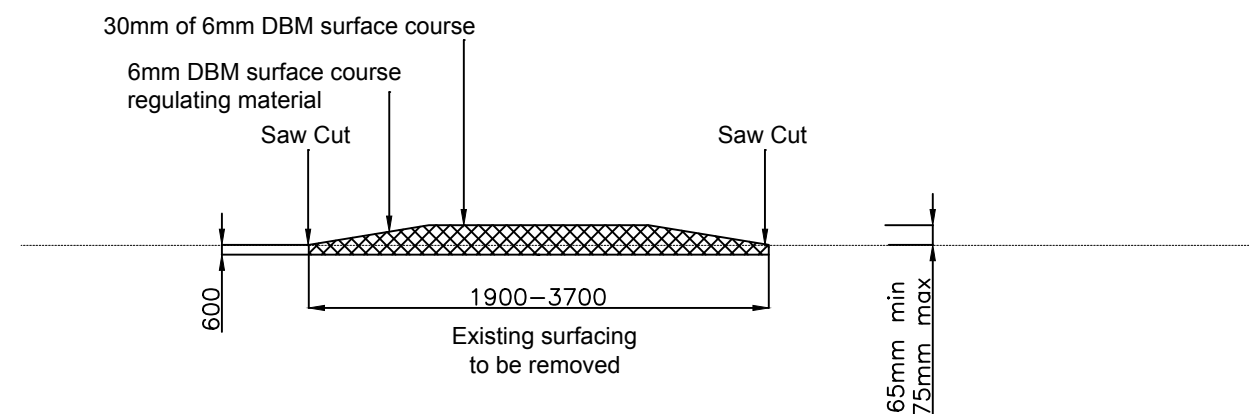
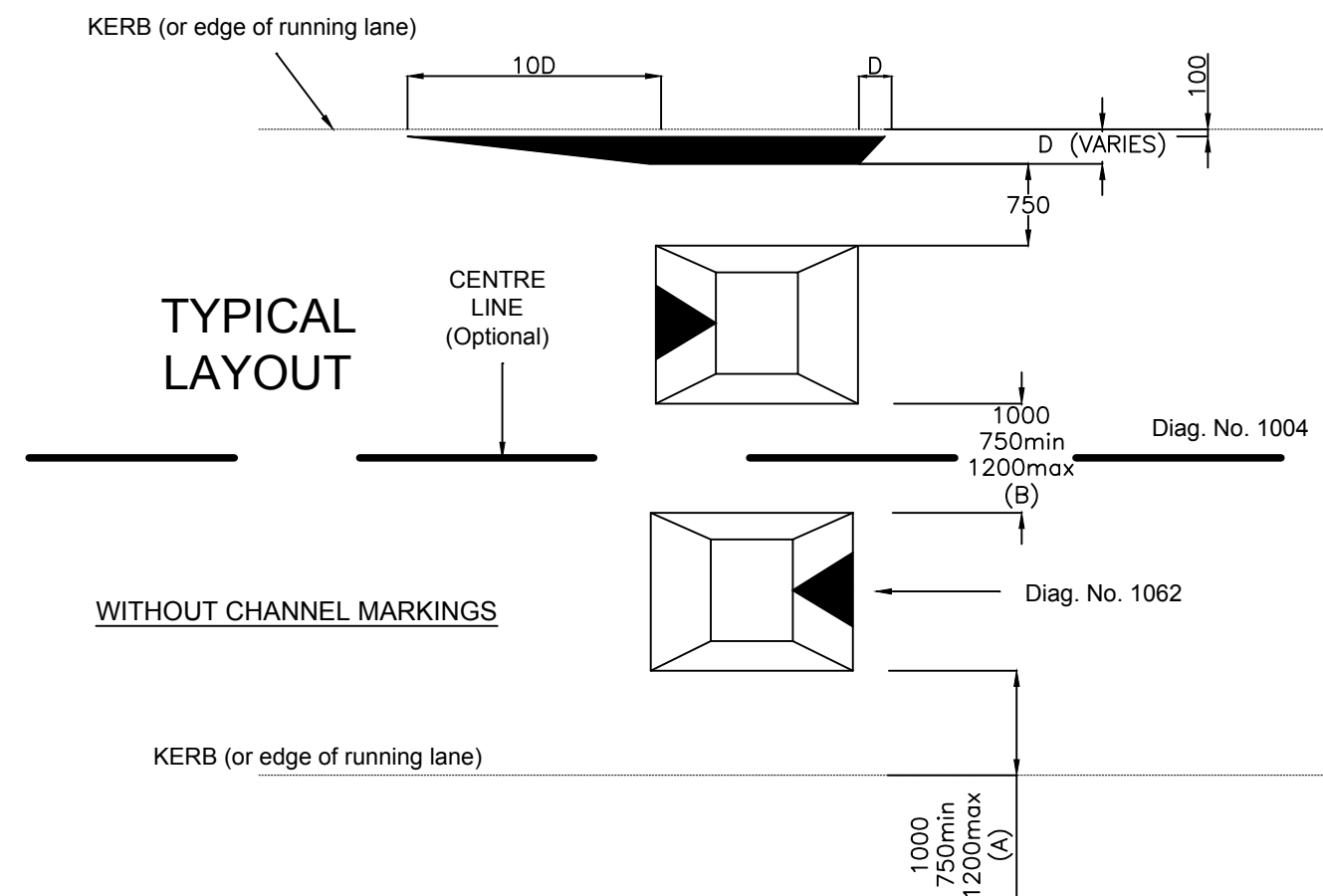
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ZEBRA CROSSING BEACON

Designed DW	Scale AS SHOWN	Date MAR 2017	A
Drawn MA	Drawing no.		
Checked SG	SBC/STD/1200/05		



NOTES

1. Channel markings are not used when "D" is less than 100mm.
2. Channel markings may be forshortened to avoid gully grates.
3. The existing road surface should be sound under the proposed road cushions and for a distance of 5 metres on eiter side of them.
4. The prepared road surface below the proposed cushions should be treated with bituminous spray prior to laying the regulating material.
5. The minimum road width for two cushions is 5.5m.
6. Where the road width exceeds 8.1m, three cushions may be used. The middle cushion shall have a triangle painted on both sides, and tapered hatching to Diag No. 1040 over a length of 10m on both sides.
7. Where road cushions are used in conjunction with build-outs and chicanes, refer to the Contract Drawings for additional dimensions.

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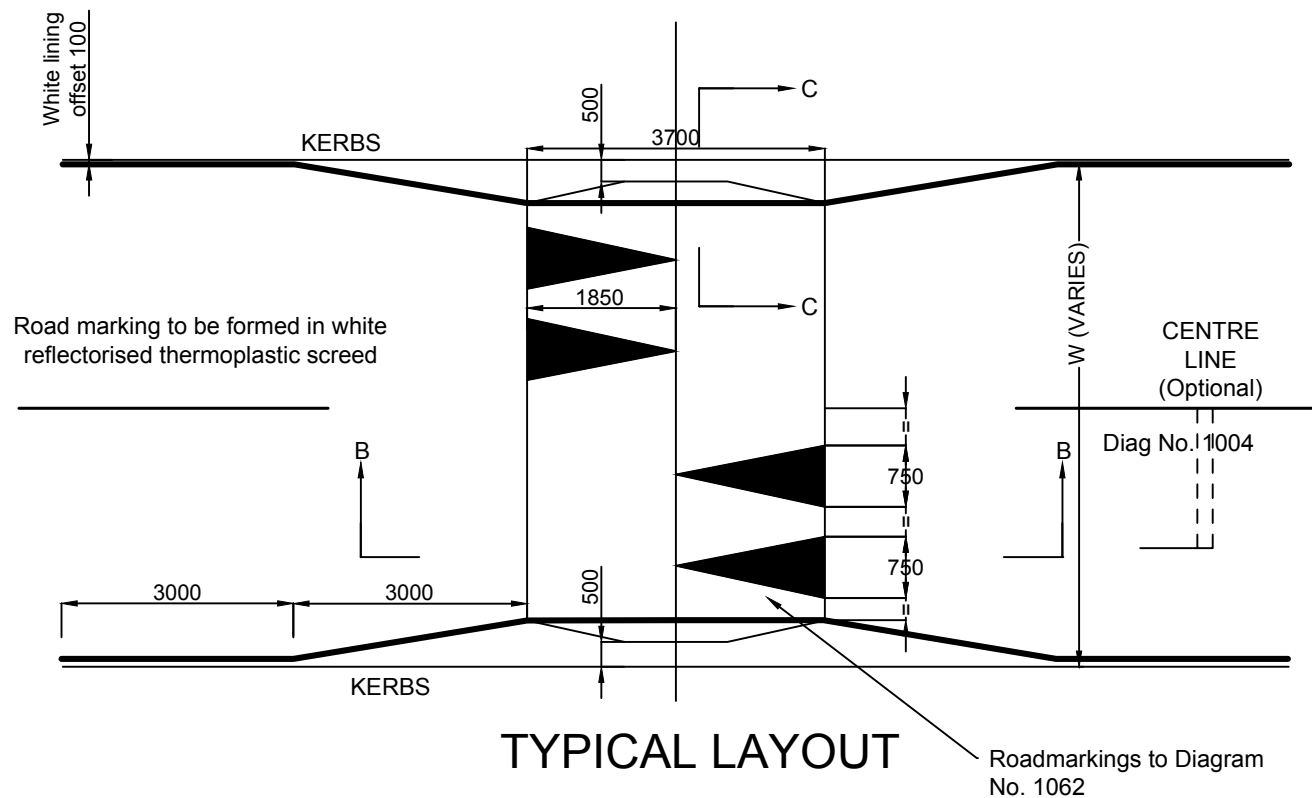
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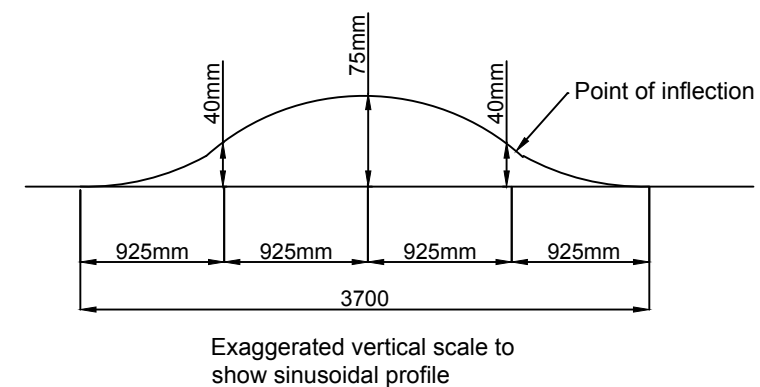
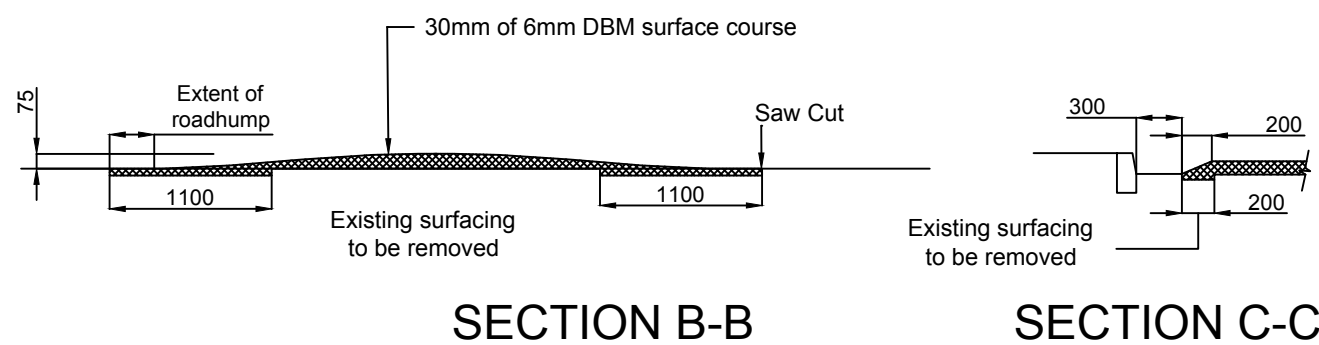
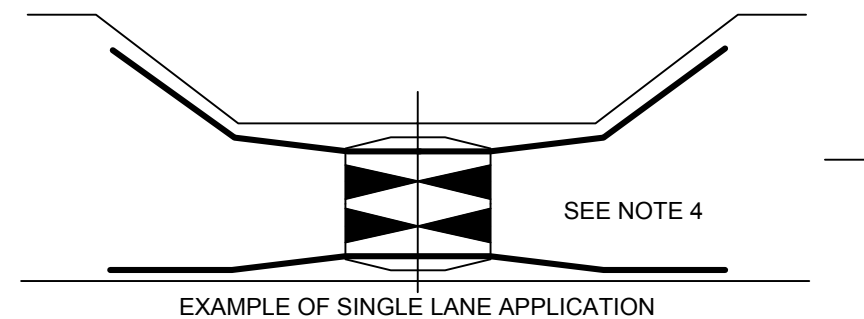
ROAD CUSHION

Designed DW	Scale NTS	Date MAR 2017	Revision A
Drawn MA	Drawing no.		
Checked SC	SBC/STD/1200/06		



NOTES

1. The existing road surface should be sound under the proposed road cushions and for a distance of 5 metres on either side of them.
2. The prepared road surface below the proposed cushions should be treated with bituminous spray prior to laying the regulating material.
3. The longitudinal white line may be foreshortened to avoid gully grates.
4. The centreline marking is omitted and the arrows are positions opposite each other where the traffic can pass either direction at a calming feature where the road narrows to a single lane such as a gateway feature or a chicane.



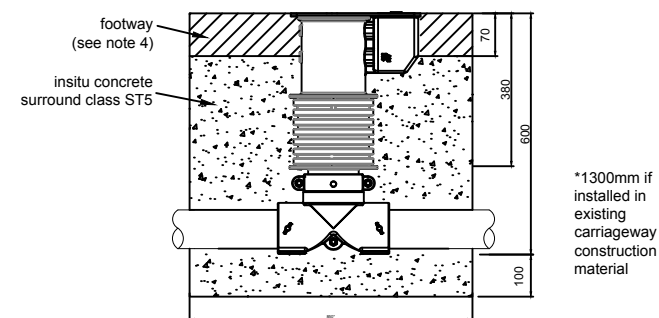
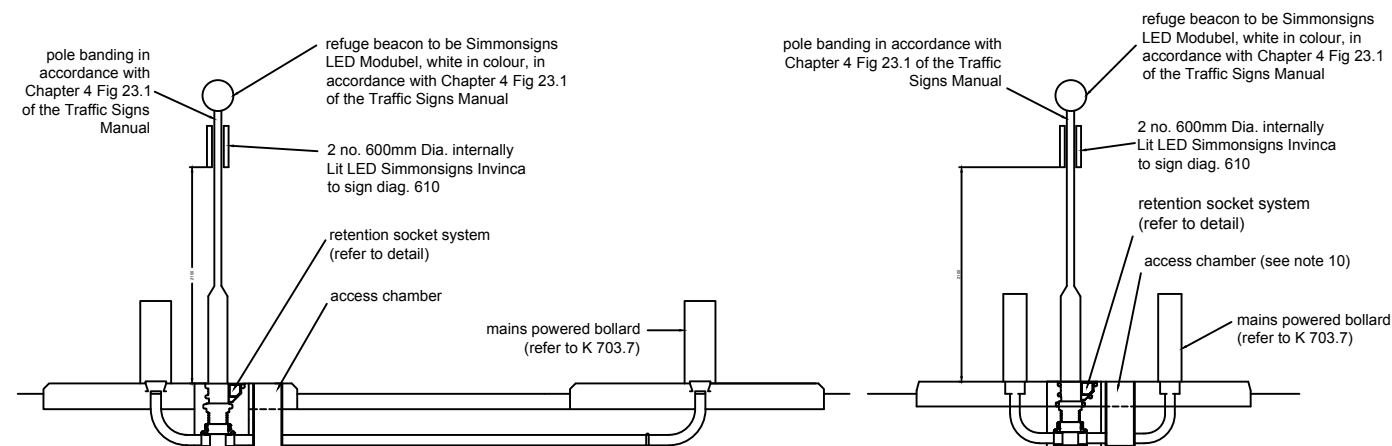
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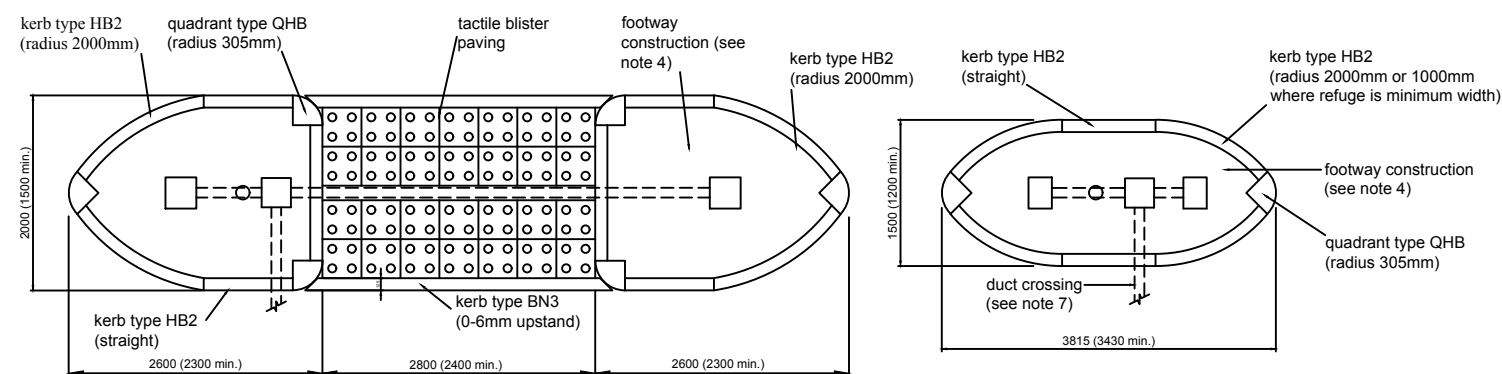
Client: Swindon Borough Council

ROAD HUMP

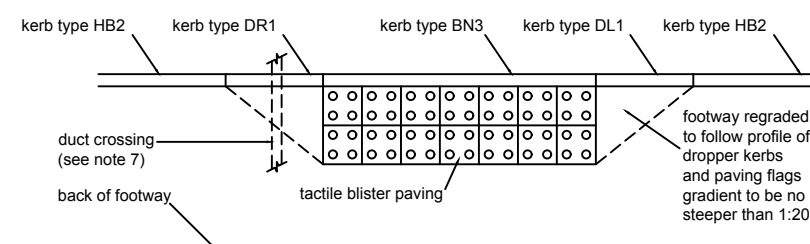
Designed	Scale	Date	Revision
DW	NTS	MAR 2017	
Drawn	MA		
Checked	SG		
SBC/STD/1200/07			A



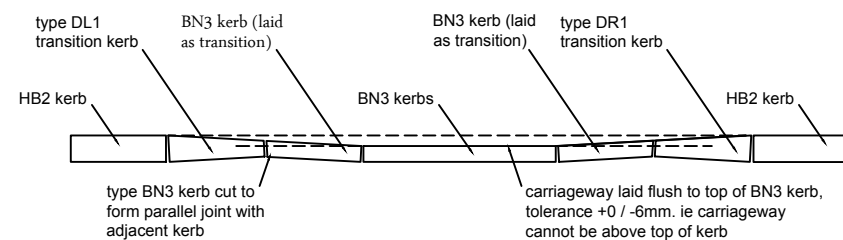
**RS140 RETENTION SOCKET SYSTEM
WITH TEE BASE OR SIMILAR APPROVED**



**REFUGE WITH MAINS POWERED
BOLLARDS AND SIGNS**



**PEDESTRIAN REFUGE
WITH MAINS POWERED
BOLLARDS AND SIGNS**



**KERB DETAILS TO ACHIEVE
GRADIENT OF 1:11 OR FLATTER**

NOTES

1. Refer to B 702.1 for kerbing details.
2. Dropper kerb Types DR1 and DL1 shall be cut to form a vertical joint with adjacent Type HB2 kerbs.
3. Type BN3 kerbs shall be laid with a maximum upstand of 6mm above carriageway.
4. Refuge islands shall be of Type 1 footway construction. Refer to B 704.1 for details.
5. Tactile blister paving shall be buff in colour, unless stated otherwise, and shall comprise 400mm x 400mm x 65mm precast concrete paving bedded on 25mm moist sand/cement mortar (3:1), joints filled with 4:1 mix to within 2mm of the paving surface. Paving shall be Type A as defined in Fig. 2 of the Department of Transport's 'Guidance on the use of Tactile Paving Surfaces'.
6. Alternative proposals to the pole mounting system shown on this detail shall be approved in advance by Swindon Borough Council.
7. Duct crossing shall comprise 1 No. 100mm internal diameter high density polyethylene, smooth single wall orange service duct, across carriageway in concrete surround with drawcord (minimum cover 600mm).
8. Pedestrian refuges narrower than 2000mm shall only be provided in locations where the full 2000mm cannot be achieved. Subject to SBC approval.
9. Access chamber units shall be NAL 300x300mm STAKKAbOX unless approved in advance by the Overseeing Organisation. Refer to I 702.1 for details.
10. The frame type shall be EN 124 B125 black anti-slip composite cover. Frame shall be galvanised steel raising frame provide with 85mm bedding depth for surrounding surface course to frame flange. Additionally the frame shall be fixed to the chamber wall with 4 x 8mm coach bolt.
11. Composite lids to be secured by fixing screws on completion.

Revisions



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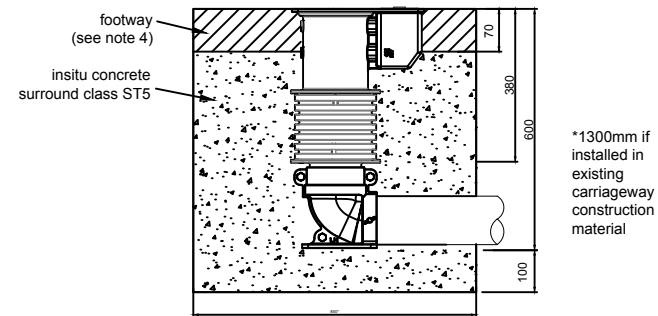
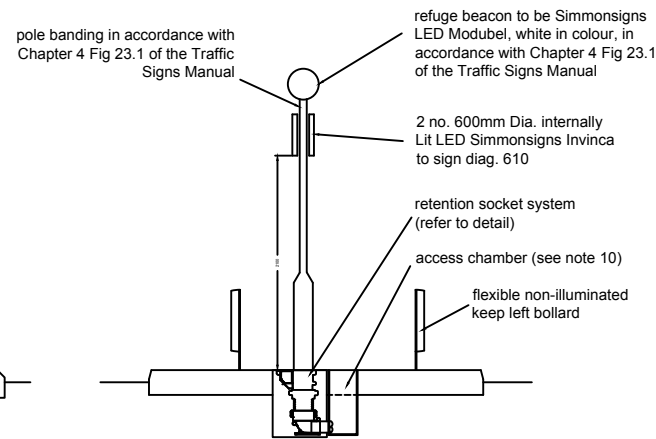
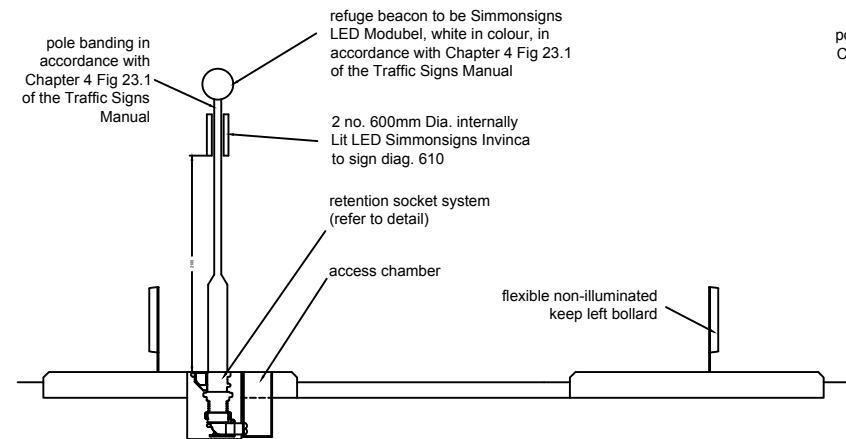
J Humm,
Head of Highways & Transport

Client: Swindon Borough Council

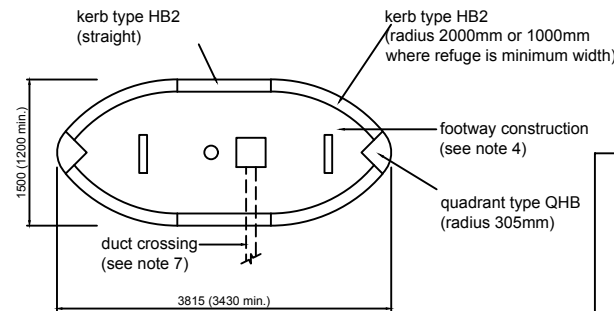
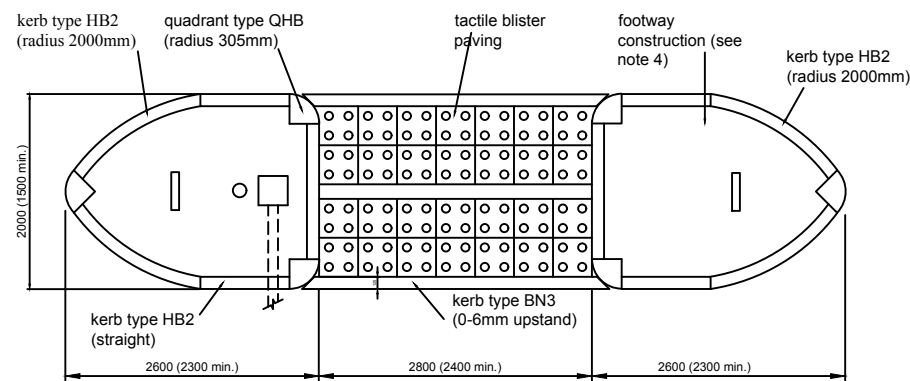
**TYPE 1 PEDESTRIAN
REFUGE:
MAIN POWERED
BOLLARDS AND SIGNS**

Designed DW	Scale NTS	Date MAR 2017	Revision
Drawn MA	Drawing no. SBC/STD/1200/08		
Checked SG			

A



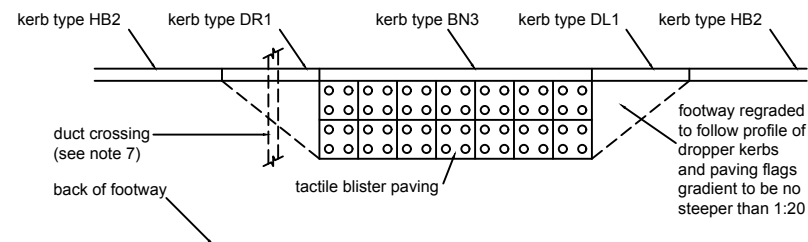
RS140 RETENTION SOCKET SYSTEM WITH DUCKFOOT BEND OR SIMILAR APPROVED



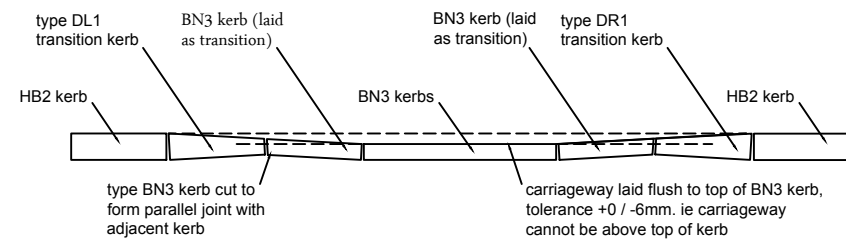
REFUGE WITH FLEXIBLE SIGNAGE AND BEACON

NOTES

- Refer to B 702.1 for kerbing details.
- Dropper kerb Types DR1 and DL1 shall be cut to form a vertical joint with adjacent Type HB2 kerbs.
- Type BN3 kerbs shall be laid with a maximum upstand of 6mm above carriageway.
- Refuge islands shall be of Type 1 footway construction. Refer to B 704.1 for details.
- Tactile blister paving shall be buff in colour, unless stated otherwise, and shall comprise 400mm x 400mm x 65mm precast concrete paving bedded on 25mm moist sand/cement mortar (3:1), joints filled with 4:1 mix to within 2mm of the paving surface. Paving shall be Type A as defined in Fig. 2 of the Department of Transport's 'Guidance on the use of Tactile Paving Surfaces'.
- Alternative proposals to the pole mounting system shown on this detail shall be approved in advance by the Swindon Borough Council.
- Duct crossing shall comprise 1 No. 100mm internal diameter high density polyethylene, smooth single wall orange service duct, across carriageway in concrete surround with drawcord (minimum cover 600mm).
- Pedestrian refuges narrower than 2000mm shall only be provided in locations where the full 2000mm cannot be achieved. Subject to SBC approval.
- Access chamber units shall be NAL 300x300mm STAKKAbOX unless approved in advance by the Overseeing Organisation. Refer to I 702.1 for details.
- The frame type shall be EN 124 B125 black anti-slip composite cover. Frame shall be galvanised steel raising frame provide with 85mm bedding depth for surrounding surface course to frame flange. Additionally the frame shall be fixed to the chamber wall with 4 x 8mm coach bolt.
- Composite lids to be secured by fixing screws on completion.



PEDESTRIAN REFUGE WITH FLEXIBLE SIGNAGE AND BEACON



KERB DETAILS TO ACHIEVE GRADIENT OF 1:11 OR FLATTER

Revisions



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TYPE 3 PEDESTRIAN

REFUGE:

WITH FLEXIBLE BOLLARDS AND

MAIN POWERED SIGNS

Designed DW	Scale NTS	Date MAR 2017	Revision
Drawn MA	Drawing no.		
Checked SG	SBC/STD/1200/10		A



1. All dimensions in millimetres unless otherwise stated.
2. See Drawing No SBC.STD/1100/01 for details of kebs, channel and edgings, haunch bedding and mortar.
3. See Drawing No. SBC/STD/700/01 to 09 for details of pavement specification and construction thickness.

[illegible]

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Head of Highways & Transport

Client: NTS

MORPETH BOLLARDS

Designed DW	Scale AS SHOWN	Date MAR 2017	Revision A
Drawn MA	Drawing no.		
Checked SG	SBC/STD/1200/13		

The drawing consists of two main views: a Plan View at the top and a Front View at the bottom.

Plan View: Shows a top-down view of the bollard. It features a central circular hole surrounded by concentric circles. A dashed line indicates the "Key hole position". To the right, a cross-section of the bollard's base is shown, labeled "Carriage Way".

Front View: Shows a side elevation of the bollard. The total height is 925 (Height Above Ground). The base is 500 (Depth Below Ground). The bollard has a diameter of Ø160 at the top and Ø200 at the base. The base is divided into three sections: Item 1 (top), Item 2 (middle), and Item 5 (bottom). The base is also divided into three sections: Item 3 (top), Item 4 (middle), and Item 5 (bottom). The base is labeled "Carriage Way".

Detail Plan View: A circular detail view of the bollard's base, showing the "Socket Orientation" and "Bollard removed for clarity". It includes a "Direction of Traffic" arrow.

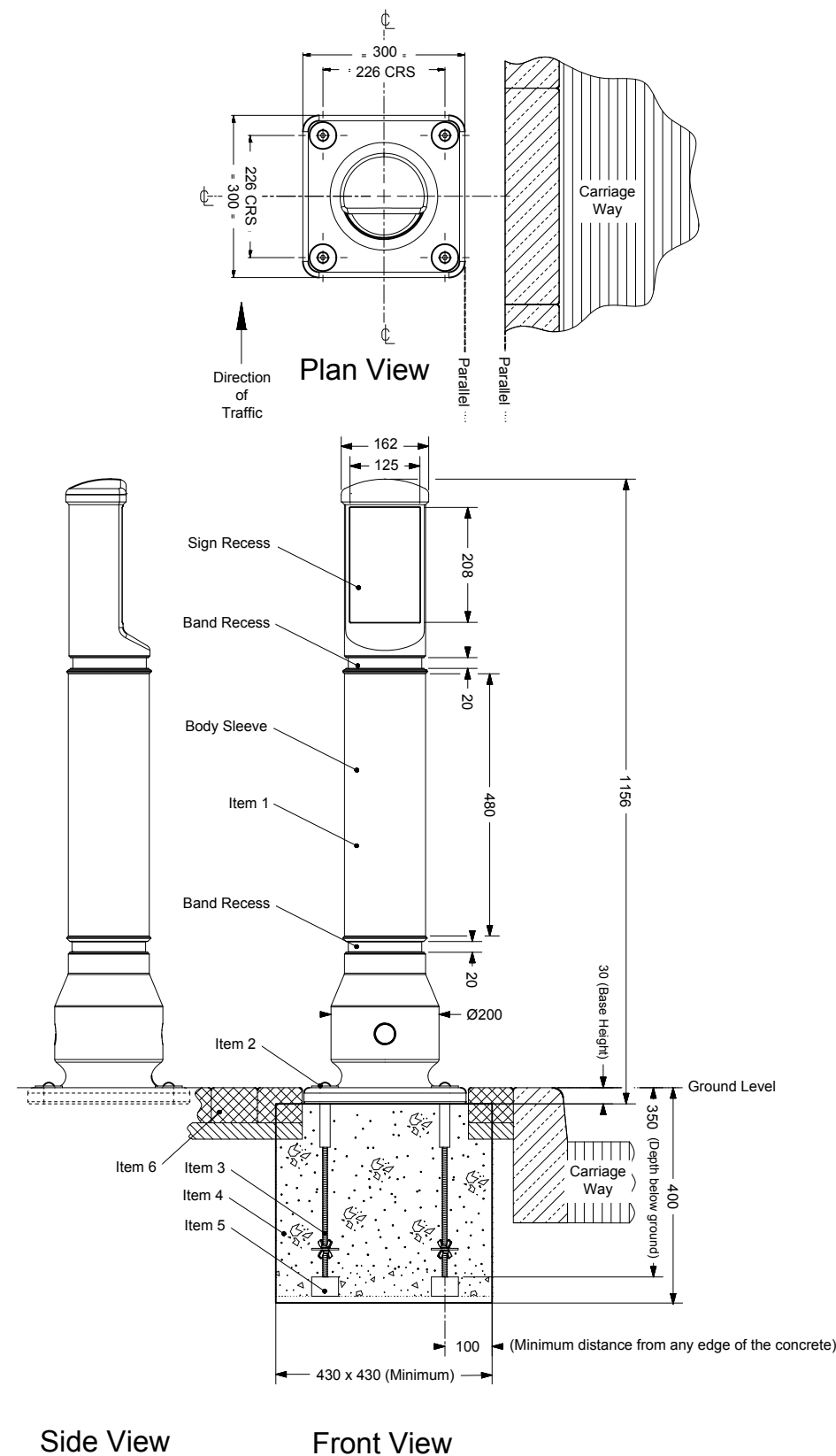
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NEOPOLITAN BOLLARD
(SOCKETED)

Designed DW	Scale NTS	Date MAR 2017	Revision
Drawn MA	Drawing no.		A
Checked SC	SBC/STD/1200/14		

Model Specification

Bollard - Bolt Down Below Ground Anchor



Product Information:

Weight	Bollard 5.0 kg
	Fixings 1.3 kg
	Total 6.3 kg

Material	Bollard: Durapol
Fixings:	Screws, Stainless Steel
	Washers, Stainless Steel
	Spacers, Rigid PVC
	Concrete-in fixing, MS BZP

Colours Black, White, Aircraft Grey, Stone, Dark Blue, Millstone or Sandstone.

Dimensions All dimensions in mm unless otherwise stated

Installation Guide:

Item 1 Removable Bollard

Item 2 Ground Fixings (4 off):
M10 x 100mm Socket Head Screw
M10 x Ø50 x 3mm Washer
M10 x Ø19 x 28mm Spacer

Item 3 Concrete-in Fixing (4 off)

Item 4 Quick Setting Concrete (eg. Grade QC10)

Item 5 Support Block:
Can be anything solid to ensure bollard is
supported at the correct height until the
concrete has set.

Item 6 Block Paving:
Can be positioned level with the bollard base.

Fix the four 'concrete-in fixings' to the bollard before installation, as this will ensure fixing centre's are correct and prevent the needs to revisit the site once concrete has set.

To ensure correct orientation of retroreflective band(s) the foot of the bollard should be sited parallel to the carriageway as shown (see plan view).

Ensure that the red retroreflector faces towards oncoming traffic or yellow if on a central reservation.

Recommended minimum hole size: 430x430x385mm deep.

If depth is restricted to less than 400mm then the 'concrete-in fixings' can be cut down if required. However we recommend using the same volume of concrete by increasing the width of the hole to compensate.

Avoid contact with hot tarmac as this will seriously impair the performance of the bollard.

For speed we recommend installing with quick setting concrete (eg. grade QC10) but exact installation requirements should be assessed from a site survey.

Optional Parts:

208 x 225mm retroreflective and non-reflective sign faces are available.

Aluminum backed retroreflective banding (to BS EN 12899-1:2007, fixed, vertical road traffic) or decorative banding may be fitted.

Standard Banding Sets:
2 x 19mm Band (within two band recesses)
1 x 480mm Body Sleeve

Spares are available, which included:

- Bollard C/W fixings& retroreflective bands
- Bollard Only
- Range of Banding
- Fixings

All retroreflective materials supplied by Glasdon are as recommended in table NA1 of the national annex of BS EN 12899-1:2007 fixed vertical road signs.

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NEOPOLITAN BOLLARD
(SIGNHEAD)

Designed DW	Scale NTS	Date MAR 2017	Revision
Drawn MA	Drawing no.		A
Checked SC	SBC/STD/1200/15		

